

Resettlement and Indigenous Peoples Plan (RIPP)

Document Stage: Draft for Consultation

Project No.: NEP-54107-001

NEP: Electricity Grid Modernization Project (EGMP)

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CURRENCY EQUIVALENTS

Currency unit	-	Nepali rupee/s (Rs)
Rs1.00	=	\$0.0082236
\$1.00	=	Rs121.6

ABBREVIATIONS

ADB	Asian Development Bank
AH	Affected household
AP	Affected person
APs	Angle Point
CDO	Chief District Officer
CDC	Compensation Determination Committee
CFC	Compensation Fixation Committee
CPR	Common Property Resources
EA	Executing Agency
EM	Entitlement Matrix
SSEMD	Social Safeguard and Environmental Management Department
FGD	Focus Group Discussion
Ft	foot / feet (3.28 ft = 1 m)
GESI-AP	Gender Equality and Social Inclusion Action Plan
GRM	Grievance Redress Mechanism
Ha	Hectare
HH	Household
km	kilometer
kV	Kilo Volt
MVA	Megavolt Amperes
MW	Meghawatt
NEA	Nepal Electricity Authority
NGO	Non-Government Organization
PIU	Project Implementation Unit
PMU	Project Management Unit
RIPP	Resettlement and Indigenous Peoples Plan
RoW	Right-of-Way
Sft	Square feet
Sqm	Square meter
SPS	Safeguard Policy Statement 2009
SS	Substation
STs	Suspension Tower
TL	Transmission Line
ToR	Terms of Reference
USD	United States Dollar

WEIGHTS AND MEASURES

1 ha	= 2.47 acre
1 ha	= 10,000 sq. m
1 ha	= 1.48 bigha
1 acre	= 100 decimal
1 bigha	= 20 katta
1 bigha	= 6772.63 sq. m
1 katta	= 20 dhur
1 bigha	= 0.68 ha
1 Ropani	= 0.05 ha
16 ana	= 1 Ropani
16 ana	= 0.05 ha

NOTE: In this report, "\$" refers to US dollars.

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GLOSSARY

Affected Person (AP) includes any person, affected households (AHs), firms or private institutions who, on account of changes that result from the Project will have their (i) standard of living adversely affected; (ii) right, title, or interest in any house, land (including residential, commercial, agricultural, forest, and/or grazing land), water resources, or any other moveable or fixed assets acquired, possessed, restricted, or otherwise adversely affected, in full or in part, permanently or temporarily; and/or (iii) business, occupation, place of work or residence, or habitat adversely affected, with or without displacement.

Affected Household (AH) it includes all members residing under one roof and operating as a single economic unit, who are adversely affected by the project. For example, those sharing the same kitchen and cooking food together as a single-family unit.

Assistance means support, rehabilitation and restoration measures extended in cash and/or kind over and above the compensation for lost assets.

Compensation includes payments in cash or kind for assets acquired or affected by a Project at replacement cost or current market value.

Cut-off date. The completion date of the census of the project affected persons is usually considered the cut-off date. A cut-off date is normally established by the borrower government procedures that establishes the eligibility for receiving compensation and resettlement assistance by the project affected persons. In the absence of such procedures, borrower/client will establish a cut-off date for eligibility.

Dalits The group of people defined and recognized by National Dalit Commission Nepal. Dalits refer to "communities, by virtue of atrocities of caste-based discrimination and untouchability, are most backward in social, economic, political and religious fields, and deprived of human dignity and social justice."

Elderly Headed Household the project will adopt the Nepal government definition of senior citizens as elderly (citizens who are 60 or above years in age).

Eminent Domain refers to the regulatory authority of the Government to obtain land for public purpose/interest.

Entitlements include the range of measures comprising cash or kind compensation, relocation cost, income restoration assistance, transfer assistance, income substitution, and business restoration which are due to AHs, depending on the type and degree /nature of their losses, to restore their social and economic base.

Grievance Redress Committee (GRC). The committee established under the projects to document, hear, and resolve the project related grievances/concerns.

Indigenous People refers to the ethnic groups and communities having distinct social and cultural characteristics such as distinct language/mother tongue, traditional customs, cultural identity, social structure from those of dominant populations and culture. 59 indigenous communities have been officially and legally recognized by the Nepal Government under the National Foundation for

Development of Indigenous Nationalities (NFDIN) Act-2002. They live across the country – the mountains, the hills and the plains in Nepal.

Inventory of losses includes assets listed during the survey/census as a preliminary record of affected or lost assets.

Non-titled refers to persons who have no recognizable rights or claims to the land that they are occupying and includes people using private or public land without permission, permit or grant i.e., those people without legal title to land and/or structures occupied or used by them. ADB's policy explicitly states that such people cannot be denied resettlement assistance.

Relocation means displacement or physical moving of the APs from the affected area to a new area/site and rebuilding homes, infrastructure, provision of assets, including productive land/employment and re-establishing income, livelihoods, living and social systems.

Replacement cost refers to the value of assets to replace the loss at current market price, or its nearest equivalent, and is the amount of cash or kind needed to replace an asset in its existing condition, without deduction of transaction costs or for any material salvaged. The calculation of full replacement cost will consider; (i) transaction costs; (ii) interest accrued, (iii) transitional and restoration costs; and (iv) other applicable payments, if any.

Replacement Land refers to land affected by the Project that is compensated through provision of alternative land, rather than cash, of similar nature and quality and/or productive capacity as the land lost and is acceptable to the AP.

Resettlement refers to mitigation of all the impacts associated with land acquisition including restriction of access to, or use of land, acquisition of assets, or impacts on income generation as a result of land acquisition.

Squatters (Informal settlers) include non-titled and other households, business and common establishments on land.

Structures include all buildings including primary and secondary structures including houses and ancillary buildings, commercial enterprises, living quarters, community facilities and infrastructures, shops, businesses, fences, and walls.

Vulnerable Households include households that are include those that are (i) households that are headed by women; (ii) household headed by persons with disabilities; (iii) households falling under the generally accepted indicator for poverty¹ (iv) elderly headed households, (v) indigenous households; (vi) households who are landless, and (vii) who are without legal title to land.

¹ Nepal's GDP Per Capita reached 1,034.11 USD in Jul 2019 and per capita poverty is 19,261 (source: National Account of Nepal CBS,2019)

EXECUTIVE SUMMARY

1. This draft Resettlement and Indigenous Peoples Plan (RIPP) is for the proposed Electricity Grid Modernization Project (hereafter ‘the project’). The project is categorized as B for both involuntary resettlement and indigenous peoples safeguards. This combined draft Resettlement and Indigenous Peoples Plan (RIPP) has been prepared to ensure that the project complies with application social safeguards requirements under ADB’s 2009 Safeguard Policy Statement and the country safeguard systems of Nepal. The Nepal Electricity Authority is the Executing Agency (EA) for the project and is responsible for all project activities.
2. The Project aims to achieve three main outputs:
Output 1: Electricity transmission capacity in project areas strengthened and modernized.
Output 2: Electricity distribution system in project areas modernized.
Output 3: Capacity of NEA and electricity users in project areas strengthened.
3. To help increase and modernize power transmission [**Output 1**] the project will:
 - a) Construction of 25 km of 220 kV and 88 km of 132 kV transmission line and associated substations;
 - b) Automate 34 existing grid substations
 - c) Upgrading of 150 km of 132 kV and 35 km of 66 kV transmission lines with more efficient high-temperature-low-sag conductors (Pathalaiya-Dhalkebar 120 km, Duhabi-Kusaha 30 km and 35 km in Kathmandu valley);.
4. To help modernize power distribution [**Output 2**], the project will:
 - a) Distribution control and command system operationalized
 - b) 350,000 smart meters promoted in Kathmandu Valley.
 - c) Construction of 132/33/11 kV substations in Keraun of Morang district, Pantang of Sindhupalchowk district and Birendranagar of Surkhet district; construction of 30 km of 33 kV distribution line in Keraun substation area; and Barabise substation extension in Sindhupalchock district.
5. To strengthen the capacity of NEA staff and electricity users [**Output 3**], the project will:
 - a) At least 40 eligible NEA staff (including 30% eligible women) on automation of grid substations;
 - b) At least 30 eligible NEA staff (including 30% women) on NEA’s organizational development;
 - c) At least 20 eligible NEA staff (including 30% women) on putting in place improved billing and collection measures; and
 - d) At least 2,000 electricity consumers in project areas (40% women and disadvantaged group on safe and efficient use at distribution centers.

- e) The project will also support implementation of key actions from NEA's gender equality and social inclusion (GESI) strategy and operational guidelines in its regional offices, to complement corporate level activities covered under a forthcoming project.
6. Project outputs will result in the following outcome: access, reliability and efficiency of power supply in Nepal improved.² The project will be aligned with the following impact: investments in industrial and commercial hubs promoted.³ For directly-affected communities, the extension of improved, more reliable energy supply across Nepal is expected to help affected people, including Indigenous Peoples, to indirectly access further livelihoods improvement opportunities. Directly affected households will receive energy-based livelihood and skill development training that will mitigate adverse impacts due to land acquisition and resettlement and will enhance the livelihoods of local communities, a large proportion of which are Indigenous Peoples households.

Subprojects

7. Based on outputs and activities the proposed project comprises 6 major subproject components.

Output 1:

Electricity transmission capacity in project areas strengthened and modernized.

Subproject 1: New Transmission Lines and Substations

25 km of 220 kV and 88 km of 132 kV new transmission line and associated substations in Lapang, Borang, Dandakhet, Rahughat and Madichaur.

Subproject 2: Transmission Line Upgrading

150 km of 132 kV existing transmission line (Pathalaiya-Dhalkebar 120 km DC and Duhabi-Kusaha 30 km SC line) outside Kathmandu Valley and 35 km of 66 kV transmission line in Kathmandu valley will be upgraded with more efficient high-temperature-low-sag conductors.

Subproject 3: Grid Substation Automation

34 existing grid substations outside Kathmandu Valley automated.

Output 2:

Electricity distribution system in project areas modernized.

Subproject 4: Construction Of 132/33/11 KV New Substations In 3 Locations And Associated Distribution Lines And Extension Of Existing Substation

A total of 3 units of 132/33/11 kV substations at Kerung, Pangtang, and Birendranagar of Morang, Sindhupalchok and Surkhet districts respectively will be constructed. 30 km of 33 kV associated distribution lines in Keraun, Morang district substation area and Barabise substation in Sindhupalchok district will be constructed and upgraded. NEA confirmed that required land for substation construction have already acquired.

³ Government of Nepal, Ministry of Energy, Water and Irrigation. 2017. White Paper – Current Situation and Future Road Map of Energy, Water Resources and Irrigation Development in Nepal. Kathmandu.

Subproject 5: Power Distribution System Modernized

This subproject will construct distribution command and control center and installation of 350,000 smart meters in Kathmandu Valley.

Output 3:

Capacity of NEA and electricity users in project areas strengthened.

Subproject 6: Capacity of NEA and Electricity users Strengthened

Under this subproject involves two activities. (i) 2000 persons (40% women) proposed to be provided knowledge on safe and efficient energy use and (ii) at least 90 NEA eligible staff (30% women) will be trained on automation of grid substations, organizational development and improved billing and collection measures.

Anticipated Project Impacts

8. Anticipated physical impacts resulting from the project are presented in Table E-1. In addition to these impacts, other impacts to affected households and communities may arise as a result of the project and will be mitigated following this RIPP.

Table E- 1: Summary of Physical Impacts

S. No	Impacts	Quantity	Measure
1	Total area to be acquired for substations and tower footings	20.65	hectares
2	Total land for transmission line right-of-way (RoW) [areas with limited restrictions]	119.14	hectares
3	Total area required for distribution poles erections area	0.009	hectares
4	Total households affected due to land acquisition for substations, tower footing and transmission line RoW restrictions	253	households
5	Total population affected due to substations, tower footing and transmission line RoW restrictions	1,295	people
6	Total households surveyed	205	households
7	Total absentee households during survey	48	households
8	Total Indigenous Peoples households affected	108	households
9	Total Indigenous Peoples population affected	625	people
10	Total permanent residential structures affected by substations, tower footing and transmission line RoW restrictions	15	structures
11	Total households displaced due to loss of residential structures	15	Households
12	Total households losing more than 10% of their land holding	9	households
13	Total Indigenous Peoples households losing more than 10% landholdings	2	households
14	Total non-residential structures (cowsheds, kitchen and toilets)	17	structures
15	Total loses of standing/seasonal crops along the RoW of new transmission line and associated substations (subproject 1)	302	metric tons
16	Total estimated cultivated land affected due to upgrading of	55	hectares

	existing transmission line		
17	Total loses of standing/seasonal crops due to upgrading of existing transmission line	132	metric tons
18	Total affected private trees timber and grass trees (different species and sizes)	7,880	trees
19	Total fruit trees affected	1,438	trees

Subproject 1: New Transmission Lines and Substations

9. Subproject 1 involves the following components: (i) 25 km of Ratamate-Lapang 220 kV and 23 km of Lapang-Borang 132 kV transmission lines and associated substations 220/132/33 kV at Lapang and 132/33 kV at Borang, (ii) 25 km of Dandakhet-Rahughat 132 kV transmission line and associated substations 220/132 kV GIS at Rahughat and 132/33 kV at Dandakhet and (iii) 40 km of Ghorahi-Madichaur 132 kV transmission line and 132/33 kV substation at Madichaur and extension of Ghorahi substation.
10. Subproject 1 will require a total of a total of 139.79 ha, comprising 20.65 ha of privately-owned land that will be acquired permanently for substations and tower footings and 119.14 ha of land that is required for maintaining transmission line right-of-way (RoW) on which some restrictions will be placed (e.g. limitations on crop height and restrictions on construction of structures). Total 253 households will be affected and out of which 48 households were absentee and survey of 205 households with 1,295 persons (51.30% male and 48.70% female) have been conducted. 15 households will be physically displaced due to loss of residential structures but no households will lose their entire residential land. Preliminary assessments result shown that 9 households will lose more than 10% of their current total land holding. Due to intervention of subproject 1, a total of 32 residential and non-residential structures will be fully impacted. Out of which, 15 are residential structures belonging to fifteen households and 7 toilets, 7 cowsheds and 3 kitchen will also be fully affected. The field studies confirmed that all 15 affected households will need to be relocated around the area. All affected households who lose their residential land have their sufficient land for construction of new residential buildings.
11. Major crops cultivated in proposed alignment and substations sites are paddy, maize, wheat, millet, beans, potato, and oilseed—mostly for subsistence agricultural production. Based on average production of seasonal crops in all subproject sites, it is estimated that total 302 MT of crops may be lost to Project activities. An estimated total of 7,880 of private trees and 1,438 fruit trees would be removed or trimmed due to permanent and temporary land acquisition for Project transmission lined and substations.

Subproject 2: Existing Transmission Line Upgradation

12. Existing 150 km of 132 kV and 35 km of 66 kV transmission line will be upgraded outside and in Kathmandu valley. In case of 132 kV lines the existing RoW and tower will be follow where new lines will be strung. During construction period there are anticipated to have temporary crop impacts in the existing RoW. Standing one seasonal crops anticipated to be affected because farmers will not be able to cultivate the crops for one season. 35 km of 66 kV transmission line in Kathmandu, Lalitpur and Bhaktapur districts will also be upgraded

under this subproject. Existing pole will be used for replacing lines. During construction period there will be disturbances of electricity supply (maximum 1 day in one location) but before starting the work in specific locations customers will be announced about blocking electricity supply.

Subproject 3: Grid Substation Automation Outside Kathmandu Valley

13. Subproject 3 includes substation automation and modernization of 34 unit of existing 400/220/132/66/33/11 kV grid substations across the country. NEA will select proposed number of substations to be automated from the existing substations throughout the country. The proposed activities will be carried out within the existing substations and no any impacts due to substation automation activities anticipated. The proposed subproject will not construct any physical infrastructures within and around the substation area. Existing substation building will be equipped with installation of new panels and computers and other new hardware for automation. Further assessment will be undertaken (if any) after finalization list of substations to be automated.

Subproject 4: Substation Construction Outside Kathmandu Valley

14. Subproject 4 which includes construction of new three (3) units of 132/33/11 kV substations at Keraun in Morang District, Pantang in Sindhupalchock District, Birendranagar in Surkhet District including construction of 30 km of associated 33 kV distribution lines in surrounding area of Keraun, Morang substations and extension of Barahbise substation in Sindhupalchock. NEA has its own land for substation construction in all three locations. Existing area of Barahbise substations will be used for extension work. The new 33 distribution overhead lines will follow mostly existing roads and access road of irrigation channel and will not require additional land but still there is unknown exact route of distribution lines and in some sections it may require small amount of land for erecting distribution poles. Further assessment will be undertaken once the engineering design and route be finalized.

Subproject 5: Power distribution system modernized.

15. The subproject 5 includes i) system modernization through construction of distribution command and control center and (ii) installation of 350,000 smart meters and develop metering network of Kathmandu Valley. System modernization work will be carried out within existing substation grounds at Suichatar substation and smart metering work will be undertaken at customers premises and existing substations. No additional space will require for system modernization work and existing substations area are free from encumbrances such as non-titled occupation.

Subproject 6 : Capacity of NEA and electricity users strengthened.

16. The subproject 6 includes the capacity strengthening activities to NEA staff and electricity users. At least 90 eligible NEA staff (including 30% eligible women) on automation of grid substations, organizational development and improved billing and collection measures will be trained; 2,000 electricity consumers in project areas (40% women and disadvantaged group) on safe and efficient use of energy will be capacitated; and key actions from NEA's GESI strategy and operational guidelines implementation.

Impacts on Livelihoods and Income Sources

17. The livelihoods and income sources of affected households have been assessed through preliminary survey and consultations, and the project is not expected to involve significant impacts to the income sources and livelihoods of most affected households except. Twenty four (24) households are considered to be significantly impacted by involuntary land acquisition: 15 households losing residential structures and 9 households losing more than 10% of their productive assets. The project will support significantly affected households and those households who are below the national poverty by providing energy-based livelihood and skill enhancement training and support for income generating activities through which affected people can be self-employed and establish their own businesses. The project will also provide additional resettlement assistance based on severity of impacts and vulnerability. Acquired lands and lost assets and limited restricted Row area will be compensated. Restrictions on the RoW generally do not affect agricultural activities after the end of construction activities and ownership of restricted areas for the RoW remains with land owners, however new permanent structures and other permanent types of activities will not be permitted. Land owners will be compensated for these restrictions.

Affected Indigenous Households

18. The proposed subprojects traverse Hill and Terai regions of Province 1, Bagmati (Province 3), Gandaki (Province 4), Province 5, and Karnali (Province 6). Different Terai and Hill Indigenous People and other minority caste/ethnicity groups inhabit areas through which the subproject will pass. Total 108 number of Indigenous households (625 persons) will be affected due to land acquisition along the transmission line and in substation sites. Out of total affected Indigenous households, 2 households will lose more than 10% of their productive assets. Affected 5 structures (1 residential building, 2 cowsheds and 2 toilets) belong to indigenous households.
19. Out of total affected indigenous households, as of preliminary field studies finding, one Indigenous Household anticipated to be relocated around the area due to loss of residential structure and 2 will be economically displaced. The project is not anticipated to affect the traditional customary rights, cultural identity and other cultural practices of Indigenous Peoples. Consultation with affected households and separate consultation with Indigenous households, it is found that the Indigenous and non-indigenous peoples living around and along the project locations are sharing the similar socioeconomic and political systems and are not significantly different from each other. All mitigation measures proposed including energy-based livelihoods and skill development activities will be implemented at same time. Compensation and mitigation measures for all affected households (Indigenous and non-indigenous) and other mitigation measures will be implemented combinedly considering relevancy to Indigenous Peoples. The project facilities proposed under this project, the adverse impacts on Indigenous is not expected and a combined Resettlement and Indigenous Peoples Plan (RIPP) have been prepared.

Vulnerable Households

20. Affected households have been assessed for different dimensions of vulnerability for all subprojects [Table E-2]. Resettlement-related impacts are anticipated for subproject 1. Field survey identified a total of 253 households with 1,295 persons will be affected due to land acquisition and limited restrictions to land use for lands along transmission line RoW. Of these, 140 are considered to severely affected and/or vulnerable. Out of the total affected households, 15 households will be displaced due to loss of residential structures (including 1 indigenous household) and 9 households will be severely affected due to loss of more than 10% of their productive assets (including 2 indigenous households). These households are considered to be 'severely affected'. In addition to the 21 households affected by loss of residential structures and significant loss of lands, the project will also consider 108 indigenous households (625 persons), 3 women headed households (7 persons) and 5 elderly headed households (25 persons) to be vulnerable households. Severely affected households and vulnerable households will receive additional support to restore livelihoods and to obtain new/additional sources of income.

Table E- 2: Total HHs with applicable types of vulnerability indicators.

S. No.	<u>Level of Vulnerability</u>	Total Households	Total population
1	Indigenous Peoples and below poverty line	28	162
2	Indigenous Peoples and losing more than 10% of productive assets	2	11
3	Indigenous Peoples and displaced due to loss of residential structure	1	5
4	Indigenous Peoples without other vulnerabilities	77	447
5	Losing more than 10% of productive assets and below poverty line	2	12
6	Losing more than 10% of productive assets only	5	31
7	Displaced due to loss of residential house and below poverty line only	6	30
8	Displaced only	8	40
9	Women headed and below poverty line	3	7
10	Elderly headed and below poverty line	5	25
11	Below poverty line only	3	17
	Total	140	787

Mitigation

21. Measures to avoid and mitigate project risks and impacts include the following design principles, which have guided initial planning and will continue to guide final engineering design of the proposed new transmission lines and substations.
- Ensure RoW has minimal impacts on land and environment.
 - Select shortest straight route that minimizes the number of affected peoples
 - Avoid dense settlements and productive land to the greatest possible extent.
 - Avoid permanent residential structures; in case of unavoidable circumstances, explore alternatives.
 - Minimize number of private as well as public structure crossings.
 - Avoid displacing affected people and causing involuntary land acquisition.
 - Minimize impacts on livelihoods and income sources of APs.
 - Identify a short, easy, safe and economical route for access roads and easy access for construction and maintenance works.
22. The construction period will be scheduled to avoid crop planting and harvesting seasons (i.e. schedule after the harvest) to avoid and mitigate impacts to crops. Information about the construction schedule will be disseminated to affected households at least 2 months in advance of the start of construction activities.
23. Preliminary survey has identified that the owners of affected land are titleholders, with legal rights to land conferred through land ownership certificates. The transmission line right-of-way and proposed substations sites including existing substation sites are free of squatters/informal dwellers and encroachers. None of the affected residential structures are inhabited by leaseholders and renters but during implementation if such types of households will be identified adequate compensation with other vulnerability assistance will be provided to them (if any). Further assessment with land owners will be carried out after engineering design finalization.
24. Project design will avoid impacts to public structures or properties, cultural and religious places. If impacts are unavoidable, these structures will be reinstated as in the previous or better conditions consulting and close coordination with local peoples.
25. Assistance for affected households will be paid as specified in Entitlement Matrix. Severely affected households and vulnerable households—including women-headed households and those headed by the elderly, households below poverty line, and Indigenous Peoples households—will receive cash assistance equivalent to 90 days wage rate plus one time cash assistance to compensate for immediate impacts to livelihoods. For longer-term support, the project will provide severely affected households and vulnerable households with energy-based livelihood and skill enhancement training aimed at helping affected people to diversify their sources of income.
26. Efforts to identify and mitigate project impacts on affected households (both Indigenous Peoples and non-Indigenous Peoples) will continue throughout finalization of engineering design and project implementation. The project will undertake socio-economic confirmation studies to verify the composition of household incomes and to finalize selection of benefits-sharing measures together with affected people. Confirmation studies will also explore

indigenous cultural values and how such might influence project benefits-sharing arrangements.

Information Dissemination and Stakeholders Consultation

27. Preparation of this draft RIPP involved Total of 42 consultations meetings and public hearings between March 31, 2019 to January 11, 2020 in locations of proposed transmission and substation sites. A total of 612 persons (69.12% male, 28.8% and female) participated in the drafting process. Out of total participants the representation of IP groups was 21.4%. Project related information has been disseminated to the participants verbally and queries of participants were addressed.
28. Additional consultation will take place with affected households as the design is finalized and will inform updates to this draft RIPP. The draft and updated RIPP will be disclosed as per disclosure requirements laid out in ADB's SPS. A Resettlement Brochure (based on the draft RIPP and subsequently updated for the final RIPP) is contained in Appendix G, which will be translated into Nepalese and in local languages and distributed to all affected households as well as other general customers to ensure they understand their entitlements and other associated matters.

Entitlements

29. All affected households and persons who are identified in the project-impacted areas before the cut-off date will be entitled to compensation for their affected assets and to rehabilitation measures sufficient to assist them to improve or at least maintain their pre-project living standards, income-earning capacity and production levels. Cash compensation will be paid at replacement cost for affected land and non-land affected assets. No physical and economic displacement will occur until compensation of affected land and other structures will be paid to each affected households. Entitlement matrix for this project is presented in Table 4.1 that sets out the type of loss and the definition of the entitled person or the unit of entitlement including compensation and rehabilitation measures for each type of loss resulting from the involuntary resettlement.

Livelihood Enhancement Skill Training

30. As of findings of socioeconomic survey result of surveyed households total 140 having 787 persons including 108 Indigenous households are vulnerable due to different vulnerability. The restoration of livelihoods and source of income of project affected vulnerable households is crucial. However, vulnerability assistance for one time will be provided and in addition to this the project has planned for providing energy-based skill training to at least one persons from each vulnerable households based on their interest, capacity and level of education. Training need assessment of target participants based on market demands and possibilities of best opportunities and that will support to create for self-employment as well as employment in local markets even in foreign country. During consultation meeting with affected persons, the participants were demanded to organize different types of income generating and skill enhancement training. Based on demand of affected persons 9 types of

income generating and skill development trainings having total of 935 participants have been proposed to be implemented. Instead of this, project has proposed energy-based skill enhancement trainings to those who are vulnerable and severely affected persons. Based on socioeconomic assessment 140 vulnerable households identified and energy -based training will be targeted to them. Before conducting such types of training required process-conducting TNA, market demand and possible opportunities, viabilities and desirability of targeted participants will be followed. The proposed trainings will be at least Level-I certified by the National Skill Testing Board (NSTB) and the training curriculum prepared by Council for Technical Education and Vocational Training (CTEVT) will be followed. The duration of Level-I training will be 390 hours (about 66 days). Short term awareness raising training on human trafficking, HIV/AIDs, STI and health and safety will also be organized in project affected areas. Required budget have been proposed.

Gender Equality and Social Inclusion in the Project

31. Total 1,295 persons will be affected from the subproject 1 implementation. Out of total population 48.72% is women and total 3 households are headed by women. During consultation meeting total 180 women out of 612 were participated and they raised their concerns during consultation. Consultation with women groups separately have also been made and they were asked about access to property especially land, decision making power, access to opportunity/occupation and education, women's involvement in community level activities etc. Land ownership is primarily by men in Nepal but now days it is slowly increasing. Total 19% women in Nepal own land may be a result of Government of Nepal's progressive policy regarding tax incentives for women owners. The affected land plots are almost owned by men during the period of survey.
32. Alternatives measures for avoiding, minimizing mitigating the severity of vulnerable households have been explored and will also be explored during the implementation period through design alternatives. Besides this, cash compensation for affected assets with full replacement cost and other resettlement assistance will be provided to eligible vulnerable households for immediate relief. Further long term such as vocational training on market oriented subjects and entrepreneurship development skill including facilitation support will be provided. These types of vocational training will be provided based on need assessment of each vulnerable households.

Grievances Redress Mechanisms

33. The EA will establish a project-specific Grievance Redress Mechanism (GRM) having suitable and appropriate grievance redress procedures to receive and facilitate resolution of affected peoples' concerns, complaints, and grievances. For this, EA will establish three tiers of GRM to hear and address the complains related to land acquisition, compensation and other concerns of affected persons locally. Representation of Indigenous People in each level of GRM will be ensured by which Indigenous Households feel comfortable in approaching the project GRM. The proposed mechanism does not impede access to the country's judicial or administrative remedies. The affected person has the right to refer the grievances to appropriate courts of law at any stage of the process. The EA will ensure that affected

persons have the right to approach courts of law any time during the process of grievances redress.

Monitoring and Reporting

34. NEA will submit quarterly reports during construction and semi-annual reports during operation concerning the status of Resettlement and Indigenous Peoples Plan implementation and safeguard compliance to ADB. Project monitoring reports will be disclosed on the ADB website. During project implementation period internal monitoring mechanism will be established and regular monitoring will be carried out by SSEMD under PMD.

Institutional Arrangements

35. NEA will serve as the executing agency and the Project Management Directorate (PMD) will be the responsible for overall implementation, monitoring and supervision of all project-related activities. Under the PMD will be set up a SSEMD headed by director level staff. Required human resources will be fulfilled internally and SSEMD will be responsible for implementing and monitoring and supervision of all resettlement related activities close coordination with SSEMD and Project Supervision Consultant.

Resettlement Budget

36. The estimated cost in this budget is indicative which needs further update after finalization of the project design and during finalization of the RIPP. The total estimated cost for this Resettlement and Indigenous Peoples Plan is NPR 1286.62 million including 10 percent contingency. The source of funds will be managed by EA from GoN.

Implementation Schedule

37. RP implementation will take place over 6 years (March 2021 to March 2026), starting from draft RIPP preparation to payment of compensation and implementation of livelihood restoration measures commencing in 2020 and anticipated to be completed in 2026. The RIPP implementation schedule will be adjusted with procurement plan and final engineering design. Internal Monitoring of this RIPP is the responsibility of NEA through its SSEMD/PMD.

1. INTRODUCTION

1.1 Summary of the Project

1. This draft combined Resettlement and Indigenous Peoples Plan (RIPP) is for the proposed Electricity Grid Modernization Project (hereafter ‘the Project’). The project is categorized as B for both involuntary resettlement and indigenous peoples safeguards. This draft combined Resettlement and Indigenous Peoples Plan (RIPP) has been prepared to ensure that the project complies with application social safeguards requirements under ADB’s 2009 Safeguard Policy Statement and the country safeguard systems of Nepal.
2. The proposed project will finance to increase and modernize the power transmission system capacity in Kathmandu valley and outside valley which will increase the access of connectivity of electricity grid power of those parts where people are facing low quality and unreliable electricity supply. It will also be helpful to evacuate the electricity power generated from different projects. For directly-affected communities, the extension of improved, more reliable energy supply across Nepal is expected to help affected people, including Indigenous Peoples, to indirectly access further livelihoods improvement opportunities. Directly affected households will received energy-based livelihood and skill development training that will mitigate adverse impacts due to land acquisition and resettlement and till enhance the livelihoods of local communities, a large proportion of which are Indigenous Peoples households.
3. The Executing Agency (EA) for the Project, Nepal Electricity Authority (NEA) will be responsible for implementing the all project activities. The Project Management Directorate (PMD) will be established within NEA headed by a Project Management Director with overall responsibility for executing the project. A Supervision Consultant will be procured to support for implementing project activities including social and environment safeguard components. The Social Safeguard and Environmental Management Department (SSEMD) will be established headed by director level having 18 number of other supportive staff within PMD and this team will be responsible for updating, implementing and supervision and monitoring this RIPP close coordination with Supervision Consultation.
4. The project is expected to be completed by 2026. Turkey contract will be tendered. The total time for project implementation after loan effectiveness is estimated at 6 years for detailed design, engineering, tender preparation, evaluation and contract award. The government will also set up a high-level coordination committee representing key government agencies and other stakeholders to ensure proper coordination during implementation.

1.2 Project Outputs

5. The project has three outputs:⁴

Output 1: Electricity transmission system capacity strengthened and modernized.

6. The project will finance (i) construction of Dandakhet to Rahughat 25 km long 132 kV transmission line and associated substations of 220/132 kV in Rahughat and 132/33 kV in

⁴ Draft Aide-Memoire, Nepal (54107-001): EGMP, Fact Finding Mission, 22–26 June 2020, Asian Development Bank.

Dandakhet of Myagdi district, Gandaki Province; (ii) construction of Ghorahi to Madichaur 40 km long 132 kV transmission line in Rolpa, Pyuthan and Dang districts in Province 5 and associated substation of 132/33 kV in Madichaur in Province 5; (iii) construction of Ratamate in Nuwakot district to Lapang in Dhading district 25 km long 220 kV and Lapang to Borang in Dhading district 23 km long 132 kV and associated substations of 220/132/33 at Lapang and 132/33 kV at Borang in Bagmati Province. (iv) automation of 34 grid substations outside Kathmandu Valley; and (v) upgradation of existing 120 km 132 kV from Pathlaiya to Dhalkebar in Province 2, 30 km 132 kV Duhabi to Kusaha in Province 1, and 35 km 66 kV inside Kathmandu Valley in Bagmati Province transmission lines with more efficient high-temperature-low-sag conductors.

Output 2: Electricity distribution system modernized.

7. This will include (i) construction of distribution control and command center in Kathmandu; (ii) installation of 350,000 smart meters in Kathmandu Valley; (iii) construction of 132/33/11 kV substations in Keraun of Morang district, Province 1, Pantang of Sindhupalchowk district, Bagmati Province and Birendranagar of Surkhet district, Province 5 and construction of 30 km of 33 kV distribution lines around Keraun substation in Morang district and upgrading of Barabise substation.

Output 3: Capacity of NEA and electricity users strengthened.

8. Considering the importance of continued support to NEA and users, the project will support increasing knowledge of (i) at least 40 eligible NEA staff (including 30% eligible women) on automation of grid substations; (ii) at least 30 eligible NEA staff (including 30% women) on NEA's organizational development; (iii) at least 20 eligible NEA staff (including 30% women) on putting in place improved billing and collection measures; and (iv) at least 2,000 electricity consumers in project areas (40% women and disadvantaged group on safe and efficient use at distribution centers and (v) The project will also support implementation of key actions from NEA's gender equality and social inclusion (GESI) strategy and operational guidelines in its regional offices, to complement corporate level activities covered under a forthcoming project.
9. These outputs will result in the following outcome: access, reliability and efficiency of power supply in Nepal improved.⁵ The project will be aligned with the following impact: investments in industrial and commercial hubs promoted.⁶

1.3 Subprojects

10. The proposed Project comprises 6 major subprojects.

S. No.	Subproject	Alignment with Project Outputs
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⁵ A preliminary design and monitoring framework.

⁶ Government of Nepal, Ministry of Energy, Water and Irrigation. 2017. White Paper – Current Situation and Future Road Map of Energy, Water Resources and Irrigation Development in Nepal. Kathmandu.

1	Construction of New Transmission Lines and Associated Substations	Output 1 (i) Output 1 (ii) Output 1 (iii)
2	Transmission Line Upgrading in and outside Kathmandu Valley	Output 1 (v)
3	Grid Substation Automation	Output 1 (iv)
4	Substation Construction Outside Kathmandu Valley	Output 2 (iii)
5	Power Distribution System Modernized	Output 2 (i) Output 2 (ii)
6	Capacity of NEA and electricity users strengthened	Output 3 (i) Output 3 (ii) Output 3 (iii) Output 3 (iv) Output 3 (v)

11. Subprojects under EGMP and location map is shown in Figure 1.1 and a list of sub-projects and details of each subproject proposed to be financed under EGMP are provided in Table 1.1 below.

Figure 1. 1: Subproject locations map

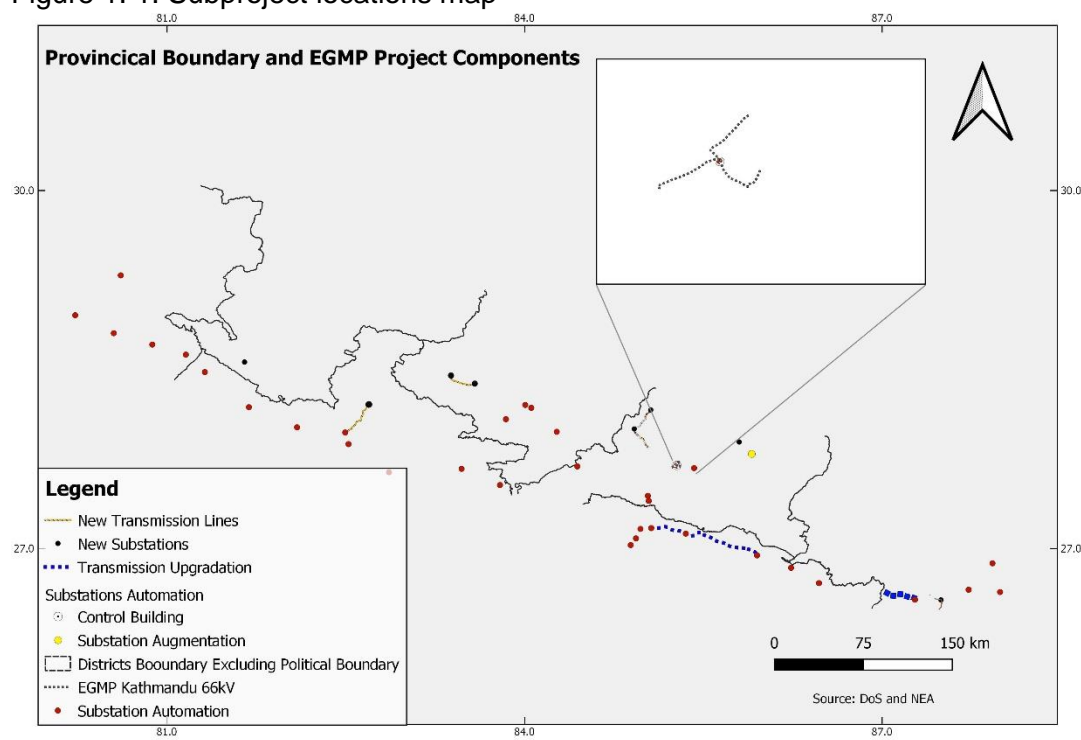


Table 1. 1: List of sub-projects in the project.

S. No	Subproject Component	Voltage (kV)	Affected RM, Municipality & Ward(s)	Affected District	Province
1	Subproject 1: Construction of new transmission Lines and associated Substations				
1.1	25 km of 220 kv Ratamate-Lapang and 23 km 132 kv Lapang-Borang TL and substations at Lapang and at Borang	- 220 and 132 TL - 220/132/33 (Lapang SS) - 132/33/11 (Borang SS)	- Ruby Valley RM, ward 4 (Borang SS) - Khaniyabas RM, ward 1-5, - Netrawati Dabjong RM, ward 1, 4 & 5. - Tripurasunsari RM, ward 7 (Lapang SS) - Neelakantha ward 1 and 14.	Nuwakot and Dhanding	Bagmati
1.2	25 km of 132 kv Dandakhet – Rahughat TL and substations at Dandakhet and Rahughat.	- 132 kV TL - 220/132/33 (Rahughat SS) - 132/33 (Dandakhet SS)	- Beni M, ward 4 and 9. - Rahuganga RM, ward 3 (Rahughat SS). - Malika RM, ward 6, 7 (Dandakhet SS). - Mangala RM, ward ward 2.	Myagdi	Gandaki
1.3	40 km of 132 kV Ghorahi-Madichaur TL and Substation at Madichaur and extension of Ghorahi SS	- 132 kV TL - 132/33/11(Madichaur SS)	- Sunil Smirti RM ward 2 (Madichaur SS). - Sworgadwari Municipality, ward 1-3. - Ghorahi SMPC, ward 1-4. - Bangalachuli RM, ward 1-2.	Rolpa, Pyuthan and Dang	5
2.	Subproject 2: Existing Transmission line upgrading				
2.1	Construction of 120 km Pathlaiya-Dhalkebar DC TL	132 kV/66 kV TL	Jitpur Simara SMC, Nijgad M, Gujara M, Chandrapur M, Bagmati M, Hariwan M, Lalbandi M, Ishworpur M, Bardibas M, Gaushala M, Mithila M.	Bara, Rautahat, Sarlahi, Mahottari, Dhanusha	2
2.2	Construction of 30 km of Duhabi-Kushaha SC TL	132 kV TL	Koshi RM, Bokraha RM, Inaruwa M, Gadhi RM, Duhabi M	Sunsari	1
2.3	Upgrading conductors (DC) on 35 km TL inside Kathmandu valley	66 kV TL	- Suichatar- Matatirtha (7 km) - Suichatar-Balaju (5 km) - Suchatar-Teku (8.5 km) - Suichatr-Patan (13 km)	Kathmandu and Lalitpur	Bagmati
3	Subproject 3: Grid Substation Automation				

3.1	Installation of 34 grid substations automation outside Kathmandu valley.		Nagarjun M, Bhaktapur M, Hetauda SMC, Bharatpur MC, Birgunj MC, Jitpur Simara SMC, Lahan M, Chandrapur M, Mithila M, Mirchaiya M, Duhabi M, Birtamod M, Kamal RM, Illam M, Butwal SMC, Bardhaghat M, Shivaraj M, Lamahi M, Byas M, Pokhara MC, Godawari M, Kohalpur M, Lamkichula M, Bedkot M, Thakurbaba M.	Kathmandu, Bhaktapur, Makwanpur, Chitwan, Parsa, Bara, Siraha, Rautahat, Dhanusha, Siraha, Sunsari, Jhapa, Illam, Rupandehi , Nawalparasi (Bardhaghat Susta West), Kapilvastu, Dang, Tanahu, Kaski, Kailali, Banke, Kanchanpur, Bardiya	Bagmati, 2, 1, 5, Gandaki and Far Western
4	Subproject 4: Substation Construction Outside Kathmandu Valley.				
4.1	Construction of Keraun Substation and 30 km of 33 kV distribution lines	132/33/11 kV	Kanepokhari RM, ward no 2.	Morang	1
4.2	Construction of Pantang Substation and extension of Barabise SS.	132/33/11 kV,	Jugal RM, ward no 4.	Sindhupalchock	Bagmati
4.3	Construction of Surkhet Substation	132/33/11 kV	Birendranagar M, ward no 11	Surkhet	Karnali
5	Subproject 5: Power Distribution System modernized.				
5.1	Construction of distribution command and control center in Kathmandu Valley.	Nagarjun Municipality		Kathmandu	Bagmati
5.2	Installation of 350,000 smart meters in Kathmandu Valley;	Smart metering of electricity consumption for 350,000 customers in Thimi, Pulchowk, Bhaktapur, Kirtipur, Kuleshwor, Lagankhel, Baneshwor, Jorpati, Balaju areas.		Kathmandu, Lalitpur, Bhaktapur	Bagmati
6	Subproject 6: Capacity of NEA and electricity users strengthened.				
6.1	At least 90 eligible NEA staff (including 30% eligible women) on automation of grid substations; organizational development improved billing and collection measures				

6.2	At least 2,000 electricity consumers in project areas (40% women and disadvantaged group on safe and efficient use at distribution centers	
6.3	The project will also support implementation of key actions from NEA's gender equality and social inclusion (GESI) strategy and operational guidelines.	

Source: Draft Aide-Memoire, Nepal (54107-001): EGMP, Fact Finding Mission, 22–26 June 2020, Asian Development Bank

Note: SMPC= Sub metro Politian City, M= Municipality,

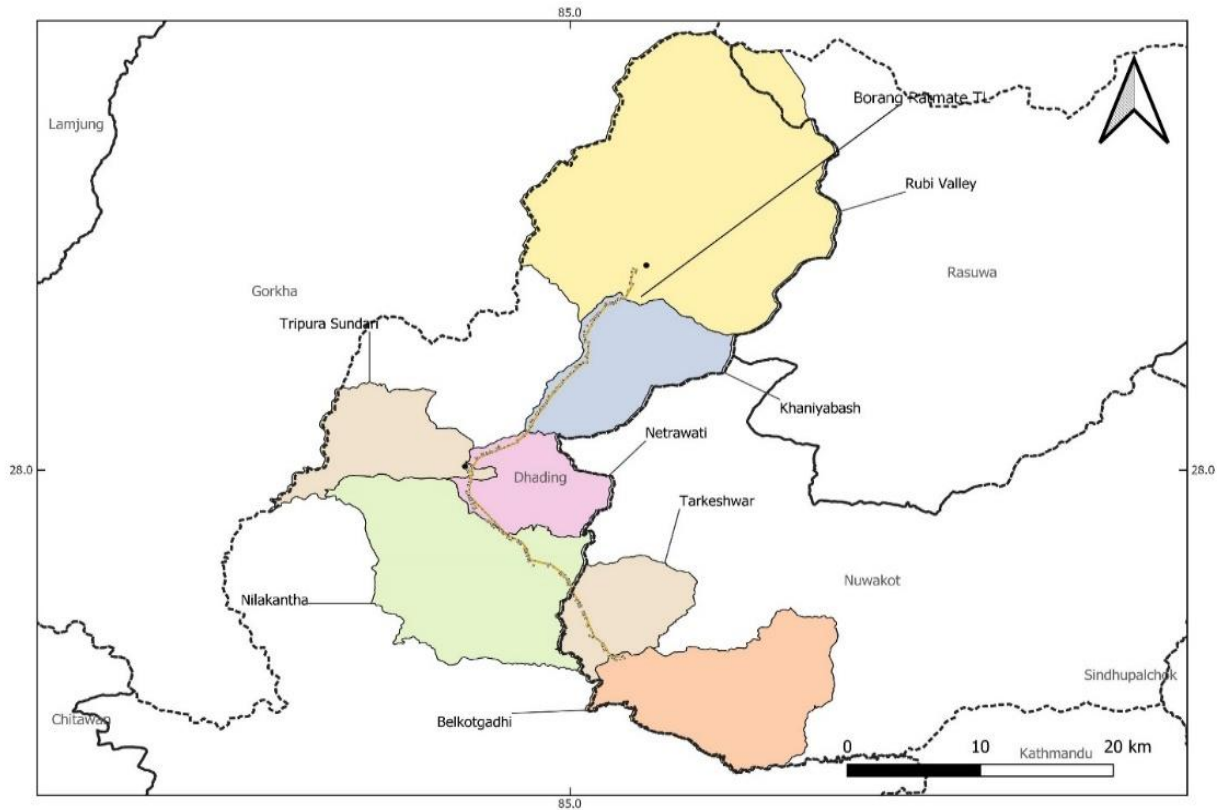
1.4 Subproject 1: Construction of New TL and Associated SS Outside Kathmandu Valley

12. Subproject 1 **[Project output 1 (i, ii, iii)]** includes modernization and strengthening the electricity transmission system capacity outside Kathmandu valley through construction of new 25 km of 220 kV and 88 km of 132 kV transmission line and 6 associated substations:

- (i) 25 km of Ratamate-Lapang 220 kV and 23 km of Lapang-Borang 132 kV transmission lines and associated substations 220/132/33 kV at Lapang and 132/33 kV at Borang.
- (ii) 25 km of Dandakhet-Rahughat 132 kV transmission line and associated substations 220/132 kV GIS at Rahughat and 132/33 kV at Dandakhet.
- (iii) 40 km of Ghorahi-Madichaur 132 kV transmission line and 132/33 kV substation at Madichaur and extension of Ghorahi substation.

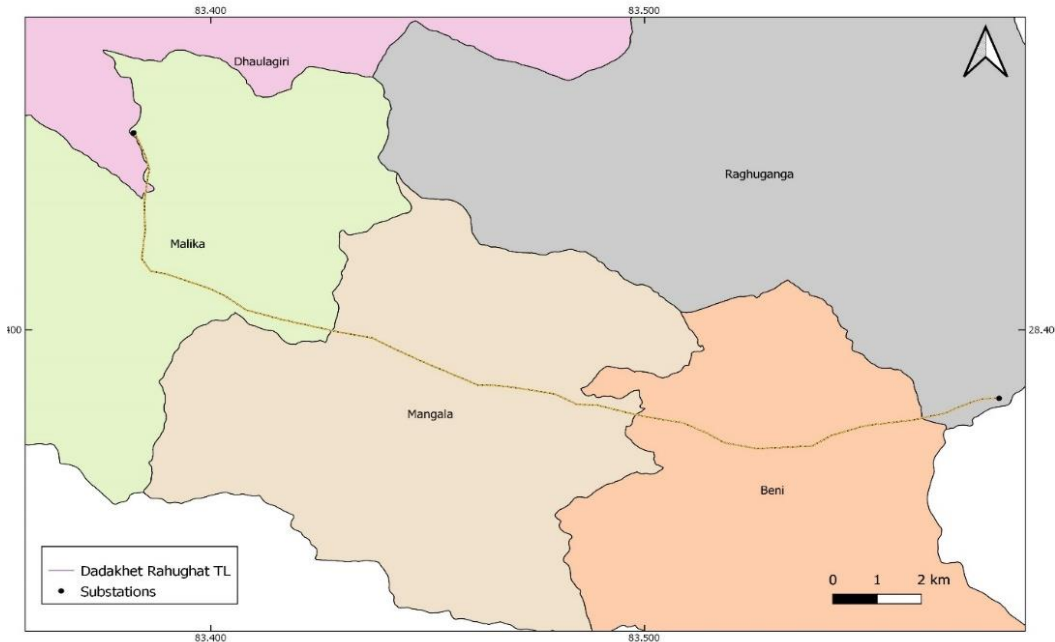
(i) Ratamate-Lapang 220 kV and Lapang-Borang 132 kV DC Transmission line and associated substations: This subproject component is about 48 km in length consisting of 23 km of 132 kV and 25 km of 220 kV overhead transmission line and 220/132/33/11 substations at Lapang, Tripurasundari Rural Municipality ward no 7 and 132/33/11 kV substation at Borang, Ruby Valley Rural Municipality ward no 4 will be constructed. The subproject is located in Bagmati Province of the Central Nepal. The alignment of subproject lies within the districts of Dhading and Nuwakot. The alignment passes through two municipalities and five Rural Municipalities (RMs). Neelakantha municipality, Ruby Valley RM, Khaniyabas RM, Tripurasundari RM and Netrawati Dabjong RM are in Dhading district and Belkotgadhi Municipalities and Tarkeshwar RM are in Nuwakot district. The starting points of the subproject is Borang substation of Ruby Valley RM-4 and ends at the Ratamate substation of Belkotgadhi Municipality 7. The standard tower base dimensions for 220 kV and 132 kV transmission lines will be 20mx20m (400m²) and 12mx12m (144m²) respectively. Similarly, Electricity Regulation 2050 (1993) provisioned that the right of way (RoW) of the proposed 220 kV and 132 kV transmission is 15 meter and 9 meter each side from the centerline respectively. Throughout the alignment of both transmission lines, total 157 towers (69 APs and 88 STs) will be used/erected.

Figure 1. 2: Alignment of Ratamate-Lapang and Lapang-Borang TL



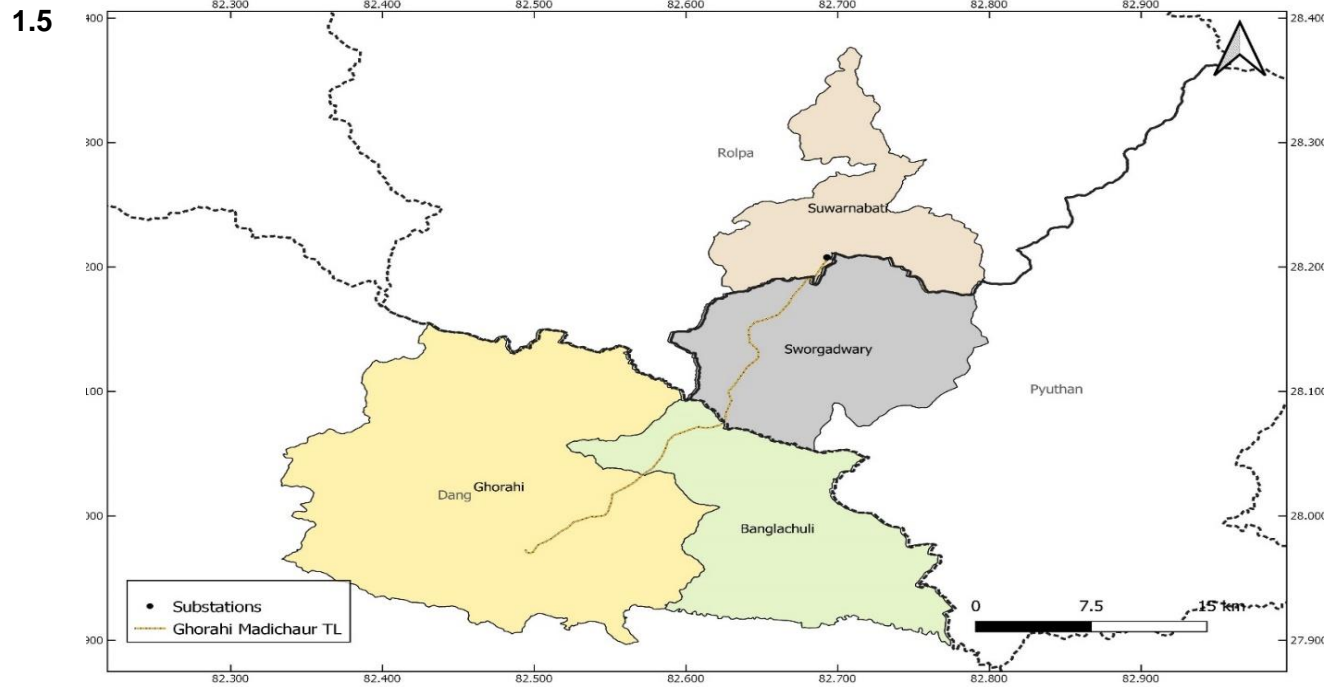
- (ii) Dandakhet - Rahughat 132 kV Transmission Line and associated substations:** Total length of this overhead transmission line from Dandakhet to Rahughat is 25 km. This transmission line connects Rahughat and Dandakhet substations where 220/132//33 kV in Rahughat and 132/33 kV in Dandakhet will be constructed. This alignment lies in Myagdi district of Gandaki Province. The alignment passes through 4 rural municipalities- Rahuganga, Mangla, Malika and Dhaulagiri, and one Beni municipality. Starting points is Rahugaht substation of ward no 3 of Rahuganga rural municipality and ends at Dandakhet substation of ward no 7 of Malika rural municipality. Total 86 towers will be erected throughout the alignment. NEA has its own land in Dandakhet and Rahughat for substation construction.

Figure 1. 3: Alignment and substation site of Dandakhet-Rahughat TL.



(iii) Ghorahi-Madichaur 132 kV Transmission Line: This transmission line is about 40 km of length and the starting point is Madichaur substation, Rolpa and ends at existing Jhingani substation in Dang (Ghorahi Submetro Politian City ward no 3). This alignment crosses Sunil Smirti Rural Municipality in Rolpa, Sworgadwari Municipality in Pyuthan, Banglachuli Rural Municipality and Ghorahi Sub Metro Politian City in Dang districts of Province 5. Total 112 towers estimated to be erected and area of each tower is 225 sqm (15mx15m). This project will also construct 132/33/11 kV substation in Madichaur where NEA has its own land for substation construction.

Figure 1. 4: Alignment and substation site of Ghorahi-Madichaur TL



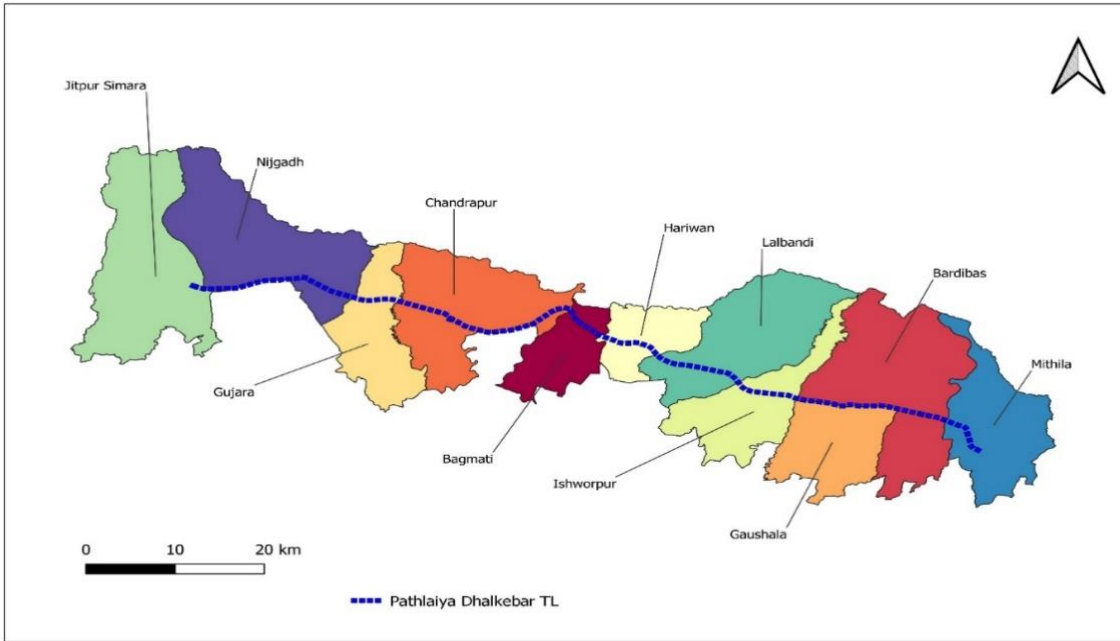
Subproject 2: Existing Transmission Line Upgrading.

13. Subproject 2 includes upgradation of about 150 km length of 132 kV transmission line outside and in Kathmandu valley and 35 km of 66 kV existing transmission line within Kathmandu with more efficient high-temperature-low-sag conductors following existing RoW.

14. Details of existing transmission line under this subproject are:

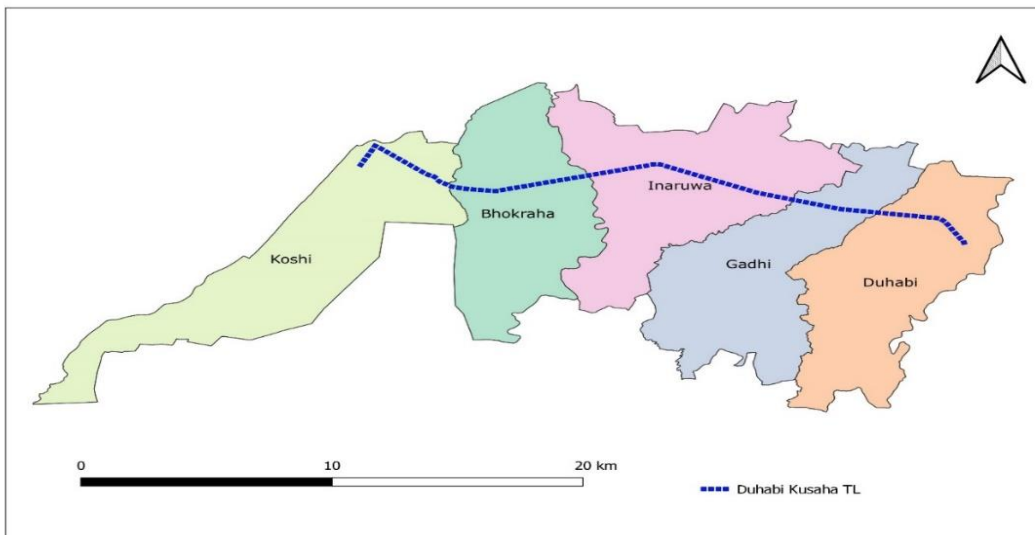
(i) **Pathalaya-Dhalkebar 120 km 132 kV DC transmission line:** This transmission line subproject was established 30 years ago. About 247 ha of land is occupied by existing 400 numbers of towers and RoW of which 242 ha is occupied by RoW and 5 ha is tower footing area. Out of total land occupied by RoW of transmission line and tower, it is estimated that about 126 ha of area is existed in forest, road, government land, rivers, community forest, open barren land etc and remaining is agricultural as well as newly developed market/commercial areas. It is estimated that about 50 ha of cultivated land will be impacted during construction period. Required land had been acquired by NEA during previous period. Double circuit line will be upgraded using the existing tower and RoW. The existing conductor will be replaced by ACCC HTLS conductor.

Figure 2. 1: Alignment of Pathalaiya- Dhalkebar TL route.



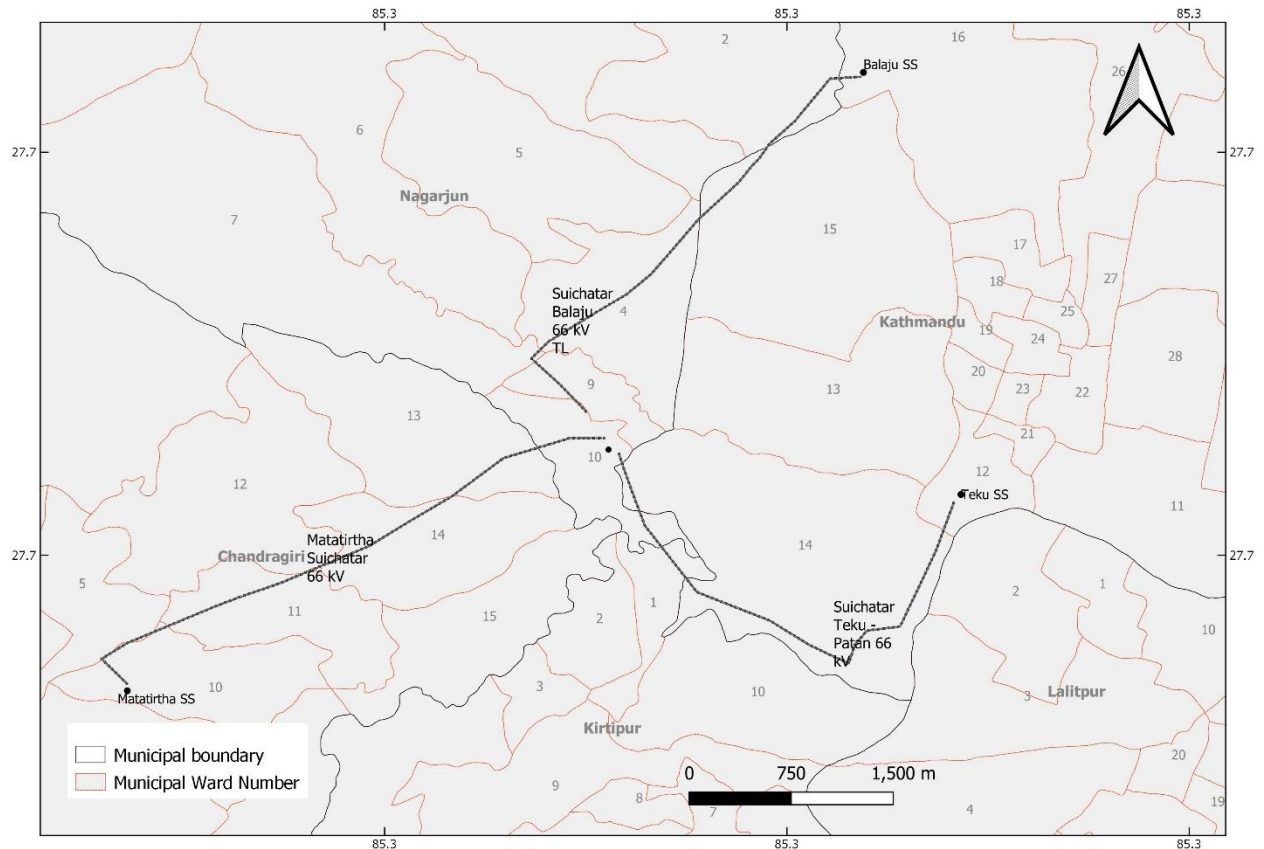
(ii) **Duhabi-Kusaha 30 km 132 kV transmission:** This subproject was constructed in 15 years ago and now to increase the power transfer capacity through upgrading existing transmission line. The existing conductor will be replaced by ACCC HTLS conductor. The upgradation work will be followed the same 75 towers where only existing cables will be replaced by new one. The land required for tower footing and RoW was acquired by NEA during previous project period. Now, no additional land will be required for upgradation works. The due diligence of this subproject, total land occupied by RoW and tower footing is 50.4 ha and 1.08 ha respectively. It is estimated that total 5 ha of land is existed in cultivated land.

Figure 2. 2: Alignment route map of Duhabi-Kusaha TL.



(iii) Upgrading 35 km of 66 kV transmission line in Kathmandu valley: This subproject is scattered in Kathmandu, Lalitpur and Bhaktapur districts. They are: Suichatar-Matatirtha (7 km), Suichatar-Balaju (5 km), Suichatar-Teku (8.5 km) and Suchatar-Patan (13 km). Upgrading work will be carried out following existing RoW and only existing cable will be replaced by new one. No additional land will be required for upgrading this transmission line.

Figure 2. 3: Alignment route map of 66 kV TL in Kathmandu.

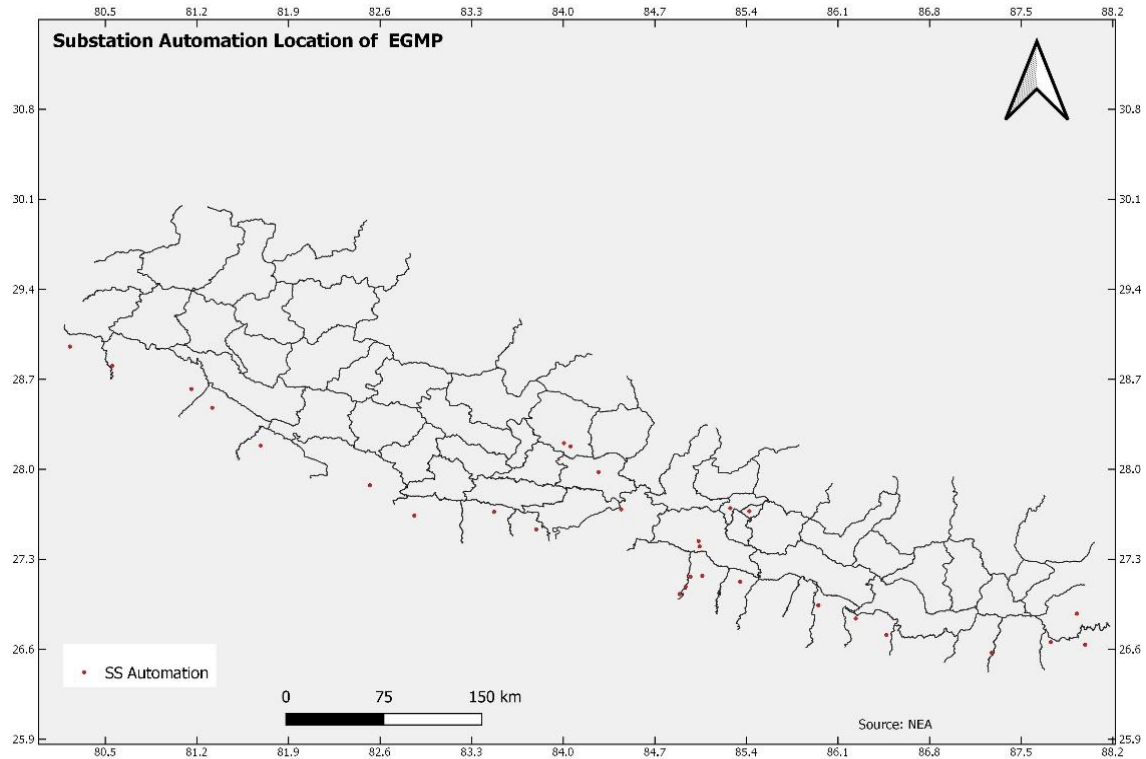


1.6 Subproject 3: Grid Substation Automation Outside Kathmandu Valley

15. Subproject 3 includes substation automation and modernization of 40 unit of existing 400/220/132/66/33/11 kV grid substations across the country as in continuation of realization of smart grid concept of electricity supply system in Nepal. NEA has proposed the substations to be automated from 23 districts of the country. After automation of proposed substations the national electricity network will be strengthened and also will be more easy for future network extension and upgrade. The proposed activities will be carried out within the existing substations and no any impacts due to substation automation activities anticipated. The proposed subproject will not construct any physical infrastructures within and around the substation area. Existing substation building will be equipped with

installation of new panels and computers and other new hardware for automation. Further assessment will be undertaken (if any) after finalization list of substations to be automated.

Figure 3. 1: Location map of Grid Substation Automation



1.7 Subproject 4: Substation Construction Outside Kathmandu Valley

16. Subproject 4 which includes construction of new three (3) units of 132/33/11 kV substations at Keraun in Morang District, Pantang in Sindhupalchok District, Birendranagar in Surkhet District including construction of 30 km of associated 33 kV distribution lines in surrounding area of Keraun substation, Morang district and extension of Barahbise substation in Sindhupalchok district. NEA has its own land for substation construction in all three locations. The new 33 kV distribution overhead lines will follow mostly existing roads and access road of irrigation channel and will not require additional land but in some sections of distribution line required land for pole erection will need to be acquired from private source. Existing area of Barahbise substations will be used for extension work.

Figure 4. 1: Surkhet Substations location map

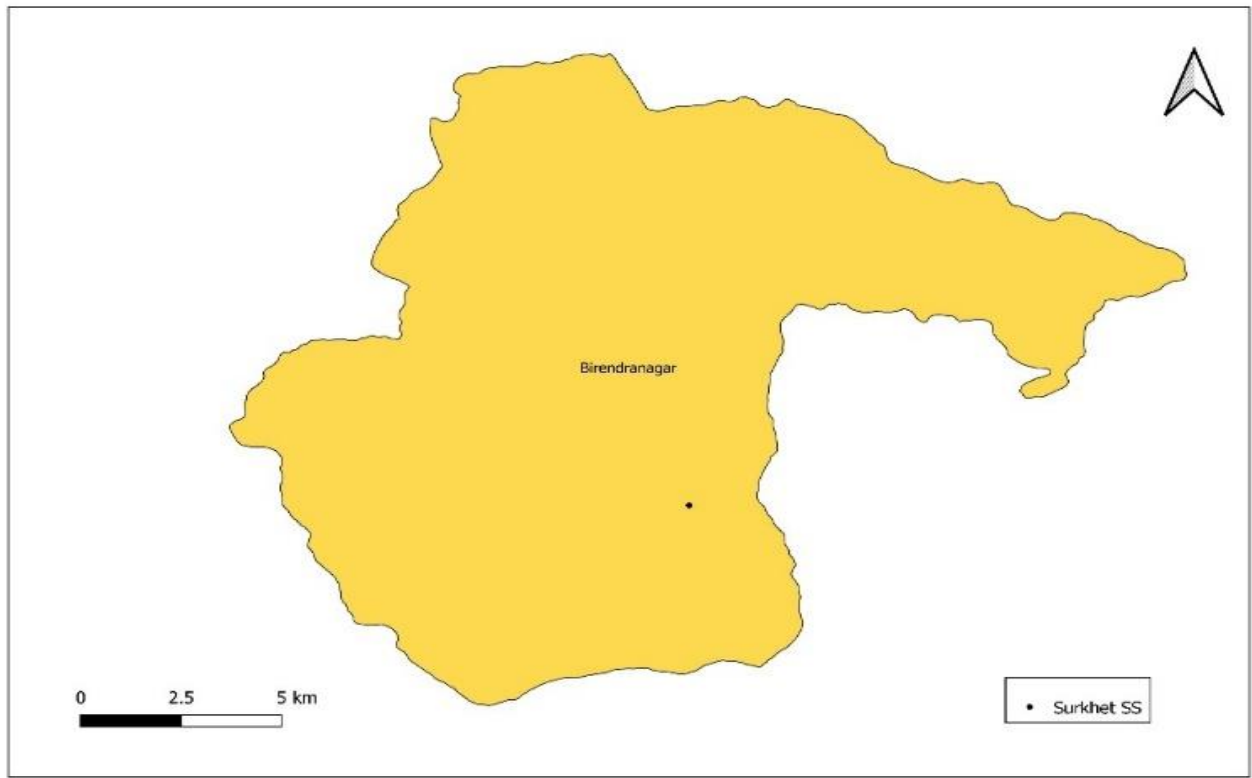


Figure 4. 2: Pantang Substation location map

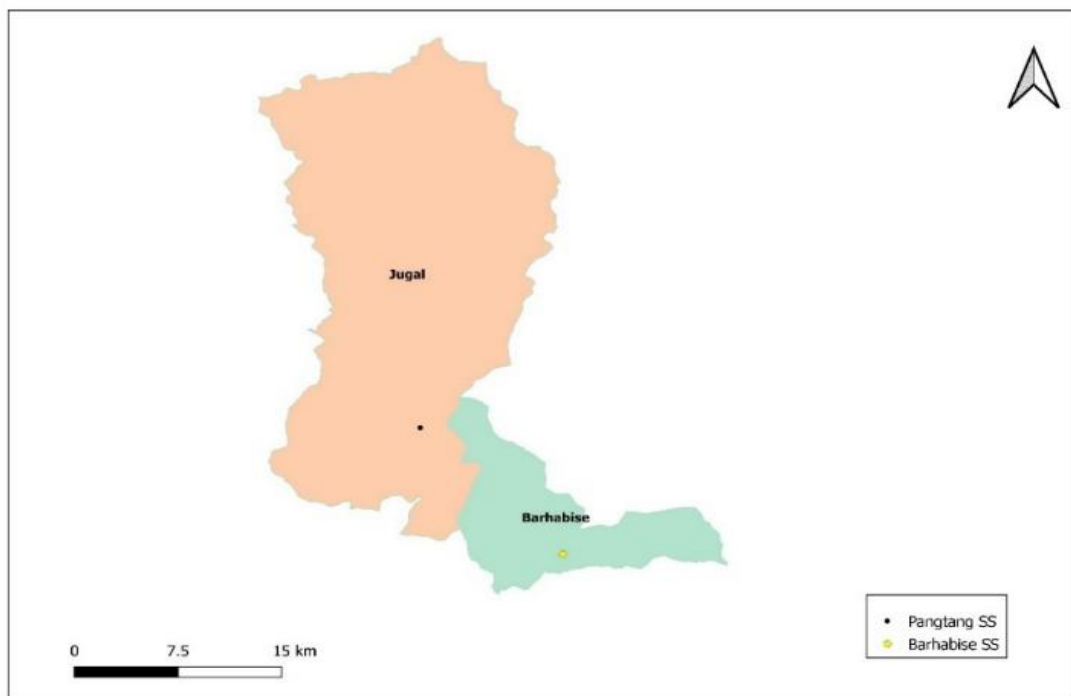
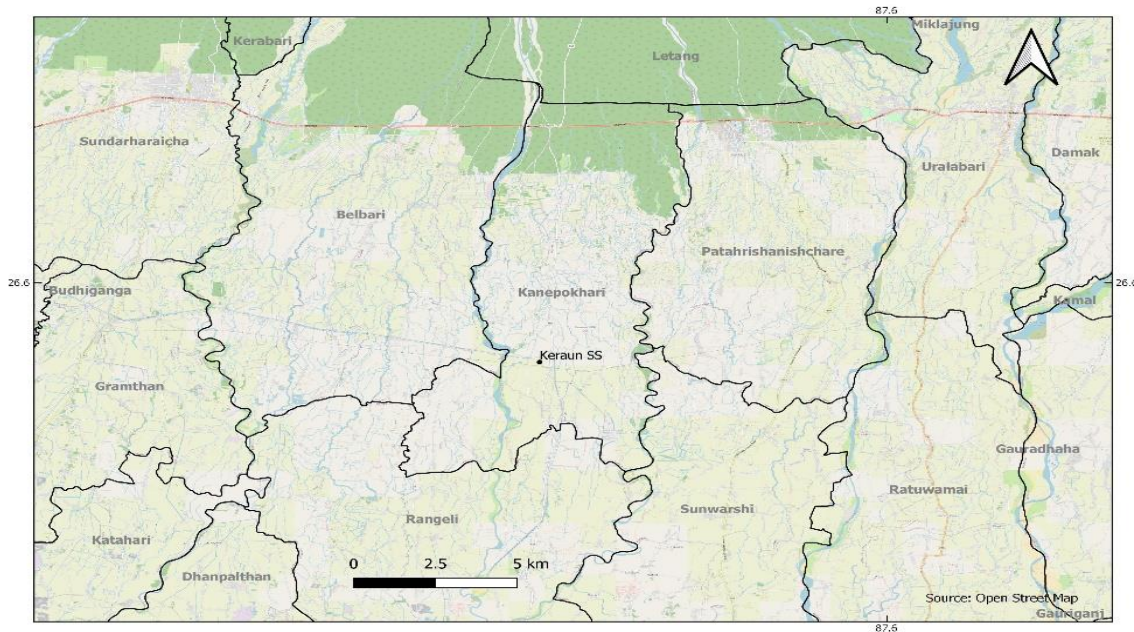


Figure 4. 3: Keraun substations location map.



1.8 Subproject 5: Power distribution system modernized.

17. The subproject 5 will be financed for modernization of power distribution system with high level technology includes i) system modernization through construction of distribution command and control center for automation of distribution network in Kathmandu; and (ii) installation of 350,000 smart meters and develop metering network of Kathmandu Valley.

(i) System modernized through construction of distribution command and control center building and associated infrastructures including software and hardware. Construction and system installation work will be carried out within existing substation grounds at Suichatar, Kathmandu.

(ii) Smart metering of electricity consumption for 350,000 customers in Thimi, Pulchok, Bhaktapur, Kirtipur, Kulweshwor, Jorpati and Balaju area will be installed. This system modernization work will be undertaken at customers premises and existing substations. No additional space will require for system modernization work.

1.9 Subproject 6 : Capacity of NEA and electricity users strengthened.

18. Considering the importance of continued support to NEA and users, the project will support increasing knowledge of (i) at least 40 eligible NEA staff (including 30% eligible women) on automation of grid substations; (ii) at least 30 eligible NEA staff (including 30% women) on NEA's organizational development; (iii) at least 20 eligible NEA staff (including 30% women) on putting in place improved billing and collection measures; and (iv) at least 2,000 electricity consumers in project areas (40% women and disadvantaged group on safe and efficient use at distribution centers and (v) The project will also support implementation of key actions from NEA's gender equality and social inclusion (GESI) strategy and

operational guidelines in its regional offices, to complement corporate level activities covered under a forthcoming project.

2. ANALYSIS OF PROJECT IMPACTS

2.1. Impact Assessment Methodology

19. Potential impacts of all subproject have been assessed based on nature of the project and review of engineering design. This RIPP was prepared based on information qualitative and quantitative collected during a preliminary field assessment carried out jointly with Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA) team from 31 March 2019 to 11 January 2020 and is informed by secondary source data. Preliminary field assessment involved transect walks, household survey, community consultations meetings, and focus group discussions with affected households. The objective of this preliminary assessment was to identify the present and future resettlement impacts and risks for all EGMP subprojects. A team of experienced field staff facilitated these activities. The following sections discuss subproject-wise social impacts.

2.2. Scope of Impacts

20. Preliminary field assessment identified that only Subproject 1 (constructions of new transmission lines and associated substations) and potentially also Subproject 4 (distribution pole erection) will involve involuntary resettlement impacts. Subprojects 2, 3, 5 and 6 will be carried out in areas with existing infrastructure and on lands already owned by NEA. Subproject activities involve no involuntary land acquisition or involuntary restrictions on land and will not otherwise use or develop lands or natural resources. All subprojects are anticipated to involve some temporary, minor and mitigable impacts such as more vehicle movement and disturbances to local community during construction period, dust pollution, disturbance in electricity supply, influx of outsiders, increase risk exposure to HIV/AIDs and human trafficking. etc.
21. Inventory of losses have been carried out in subproject 1 area. For the remaining subprojects have also been assessed through transect walk and draft technical design and it is anticipated that there will be very limited, minor and temporary impacts anticipated during construction period. Unanticipated IR related impacts and risk will be assessed if any and RIPP will be updated. In case of subproject 1 an inventory of all affected assets located within the designated alignment of the facilities including land of various types (residential, commercial and agricultural) and other immovable property have been assessed through discussion with available affected households using checklist, consultation meetings and other secondary source of information.
22. Further details of loss of inventory and census survey of all subprojects will be done, if required, once the engineering design is finalized and during project implementation period if unanticipated adverse impacts will arise same process will be followed for the impact assessment. The summary of impacts is presented in Table 2.1 below.

Table 2. 1: Summary of impacts

S. No	Impacts	Quantity	Measure
1	Total area to be acquired for substations and tower footings	20.65	hectares
2	Total land for transmission lines RoW [areas with limited restrictions]	119.14	hectares
3	Total area required for distribution poles erections area	0.009	hectares
4	Total households affected due to land acquisition for substations, tower footing and transmission line RoW restrictions	253	households
5	Total population affected due to substations, tower footing and transmission line RoW restrictions	1,295	people
6	Total households surveyed	205	households
7	Total absentee households during survey	48	households
8	Total Indigenous Peoples households affected	108	households
9	Total Indigenous Peoples population affected	625	people
10	Total permanent residential structures affected by substations, tower footing and transmission line RoW restrictions	15	structures
11	Total households displaced due to loss of residential structures	15	Households
12	Total households losing more than 10% of their land holding	9	households
13	Total Indigenous Peoples households losing more than 10% landholdings	2	households
14	Total non-residential structures (cowsheds, kitchen and toilets)	17	structures
15	Total loses of standing/seasonal crops along the RoW of new transmission line and associated substations (subproject 1)	302	metric tons
16	Total estimated cultivated land affected due to upgrading of existing transmission line	55	hectares
17	Total loses of standing/seasonal crops due to upgrading of existing transmission line	132	metric tons
18	Total affected private trees timber and grass trees (different species and sizes)	7,880	trees
19	Total fruit trees affected	1,438	trees

Source: Field survey, 2019.

2.3 Subproject 1: Impacts on Land for New Transmission Lines and Associated Substations

23. Subproject 1 involves the construction of 25 km of 220 kV and 88 km of 132 kV new transmission lines, as well as the construction of two associated substations in Borang and Lapang. A total of 20.65 ha land will be permanently acquired for the substation and tower

footing areas and 119.14 ha of land will be restricted for maintenance of the RoW (i.e., limits on crop heights and restrictions on construction of new structures). NEA has already acquired land for the other 3 locations: Dandakhet, Rahughat, and Madichaur. NEA confirmed these sites were acquired previously by NEA—not in anticipation of ADB financing—and that the sites are uninhabited, free of encumbrances and wbsent of any pending legacy issues.

24. . Subproject details of land acquisition is presented in Table 2.2 below.

Table 2. 2: Impacts on land for subproject 1.

Subprojects	Required land (ha)			No of Affected households	Number of Affected Persons
	Total land affect ed	Permanent land acquisition for substations and tower footing	Land for maintain ing RoW ⁷		
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 132/33/11 kV SS at Borang and 220/132/33/11 SS at Lapang	92.615	16.395	76.22	149	754
Dandakhet – Rahughat 132 kV D/C TL & 220/132/33 kV SS at Rahughat and 132/33 kV SS at Dandakhet	19.18	.78	18.40	57	315
Ghorahi-Madichaur TL, 132/33 kV, and 33/11 kV SS at Madichaur	28.004	3.48	24.524	47	226
Total	139.79	20.65	119.14	253	1,295

Source: Field survey, 2019.

25. The field studies confirmed that all affected land is owned by title holders. No renters, leaseholders and other types of ownership on land found. Further assessment will have to be carried out once the engineering design finalized.

26. Transmission line alignment will require permanent land acquisition for tower footing and substations while the required land for RoW area (especially in agricultural land) will be

⁷ Land required for RoW will not be acquired permanently nor the ownership of land for RoW area will transfer but for the safety purpose RoW area is restricted for permanent activities and farmers can continue their agricultural activities in that land and the non-residential structures along the RoW area will not acquire. NEA generally pays only 10% or more of total value for compensation for RoW affected area.

restricted only for constructing permanent structures to maintain RoW under transmission cable for safety purpose but agricultural farming activities will not be restricted and farmers can continue their agricultural activities after completion of construction work. From the initial engineering design it has been estimated that a total of 248 angle towers and 175 suspension towers will be erected along 3 transmission line subproject alignments. As per standard of tower footing area of 220 kV and 132 kV transmission line and construction of substations total 20.65 ha of land will have to be acquired permanently. 119.14 ha of land will be restricted for maintaining RoW. During construction period standing crops and crop harvesting as well as other activities under cable may be impacted for limited period.

27. The whole process for overhead transmission line, tower foundations to stringing may take about one month per 1 km sections. This means that if the construction work will be carried out during dry season the agricultural activities of respective areas will not be hampered. But during operation and maintenance period activities will include routine monitoring and inspection by NEA of towers, lines and transformers and trimming of trees and vegetation in forest areas to maintain the required safety clearances. These activities shall be done manually without the use of heavy equipment and with minimal damages to seasonal crops.
28. Subproject wise required land to be acquired permanently and maintaining RoW and other resettlement related impacts for subproject 1 are summarized in Table 2.3. Total area may vary with changes to planned route of transmission line and footing location.

Table 2. 3: Locations, required land and other impacts for subproject 1

Subprojects	Details of location, required land and impacts
Ratamate-Lapang 220 kV & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	Throughout the alignment total 92.615 ha private land will be affected. Out of total private land 16.395 ha land will be permanently acquired for tower pad and substation construction. For maintaining RoW total 76.22 ha will be required where involved limited restriction. Borang and Lapang substations will be constructed in Rubi Valley RM ward no 4 and Tripurasundari RM ward no 7 respectively. Land acquisition process for substation is in process and for the transmission line will be started once the engineering design finalized. Based on the preliminary survey total 149 households with 754 persons will be affected. 12 residential structures, 3 kitchens, 6 cowsheds and 7 toilets will also be fully affected. As of preliminary estimation total 157 towers will be erected.
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	Total 19.18 ha privately owned land will be affected. Out of which 0.78 ha for tower footing which will be acquired permanently and 18.40 ha for restricted RoW area where limited restriction will be applied. NEA has its own land for substation construction in Dandakhet of Malika RM-7 and Rahughat of Rahuganga RM-3 where total 7.79 ha land is available for both sites. Total 57 households with 315 persons will be affected. 3 residential structures and 1 cowshed (may be increased after final design) will be affected. Total 86 towers will be erected (as of preliminary design)
Ghorahi-Madichaur 132 kV DC	Total 28.004 ha of land will need to be acquired from private source. Out

TL and 132/33/11 kV SS at Madichaur, Rolpa	of which 3.48 ha land will be permanently acquired for tower footing area and remaining 24.524 ha will be for restricted RoW. NEA has its own land for substation construction in Sunil Smirti RM, ward no 2, Madichaur, Rolpa, Province 5. Total 47 households with 226 persons will be affected due to land acquisition. Total estimated tower is 122 to be erected.
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Source: Field survey and discussion with affected households, 2011

29. Along the RoW, tower footing and substation areas will require removing or trimming different types of timber and fruit trees due to permanent and temporary land acquisition for transmission line and substations. From the findings of survey of respective alignment and substations sites, it is estimated that total 9,318 number of private trees will need to be removed. Out of which 1,438 number of trees are fruits. Subproject wise affected number of timber as well as fruit trees to be removed is shown in Table 2.4 below

Table 2. 4: Loss of different types of tress

Subprojects	Loss of different types trees				
	Grass trees	Timber trees	Fruit trees	Bamboo trees	Total
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	1880	583	518	1200	4,181
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	1496	561	540	1145	3,742
Ghorahi-Madichaur TL, 132/33/11 kV SS at Madichaur	315	300	380	400	1,395
Total of subprojects 2	3,691	1,444	1,438	2,745	9,318

30. During the consultation meetings and discussion with local stakeholders it is estimated that about 40 community forest users will be affected. Consultation and discussions with related Forest Users Groups (FUG) have been made and their concerns related to forest product have been discussed. Major demands and concerns that recommended by FUGs to project are training to be provided on forest product utilization and market linkages and nursery establishment to those people who are depending on forest partially or fully. The very common issues raised by the FUGs was grass tree or herbal tree plantation under transmission cable and its right to existing FUG. During discussion it has been observed that no one household will be economically affected due to tree cutting of community forest.

31. Mainly three types of land will be affected due to transmission line and associated substations construction which include Khet (Irrigated land), Bari (Non-irrigated land) and Kharbari (Barren land). From the survey findings, the dominant cropping pattern in all

subproject locations are Paddy and Wheat followed by Maize, Oil seeds, Potato etc. It has also been observed that most of the households practices subsistence agricultural production systems. One season of crops of affected households will be affected. The household survey data shows that the average annual production of paddy, wheat, maize, millet, bean, potato is 10.77, 6.6, 6.03, 2.4, 2.31, 0.96 and 5.72 metric ton per ha respectively. Total production of crops on affected land will be calculated based on average production of seasonal crops in all subproject sites. Throughout the corridor of impact of new transmission line subprojects, major crops cultivated and average production yields have been calculated from the field surveys and details of average annual production of different crops is presented in Table 2.5 below.

Table 2. 5: Annual loss of crops due to impact on land.

Subprojects 2	Crops loss (MT)						
	Paddy	Wheat	Maize	Millet	Beans	Potato	Oilseeds
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	58.22	21.46	46.21	6.73	2.23	19.9	-
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	33.74	3.12	17.26	2.24	-	-	-
Ghorahi-Madichaur TL, 132/33/11 kV SS at Madichaur	15.68	25.38	25.75	1	.5	3	12.86
Total of subprojects 2	112.81	50.96	90.22	9.97	2.73	22.9	12.86
Total of all crops	302.45 MT						

Source: Field survey, 2019.

32. A total of 32 residential and non-residential structures will be fully affected due to permanent acquisition of land for substations and tower footings in Lapang-Ratamate 220 kV and 132 kV and Dandakhet-Rahughat 132 kV transmission line and associated substations: 15 are residential structures belonging to 15 households, 3 kitchens, 7 cowsheds and 7 toilets. The affected structures were assessed based on nature of impacts on structure because a structures may be affected partially or fully. Partially affected structures need to be reassessed whether the remaining portion of the structures would be viable for use or not. Out of total affected structures, 5 structures (1 residential building, 2 kitchens and 2 toilets) belong to Indigenous People. Field studies confirmed that those households who lose their residential building will be displaced from original placed and they have to relocate around the area. It was also observed that all have their sufficient land for construction of new residential buildings. Subproject wise details of affected structures is presented in Table 2.6 below.

Table 2. 6: Loss of Structures Under Subproject 1

Subprojects	Total no of structures		Types of affected structures				
	Fully	Partial ly	Reside ntial house	Kitchen	cowshed	Toilets	Other
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	28	-	12	3	6	7	-
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	4	-	3	-	1	-	-
Ghorahi-Madichaur TL, 132/33/11 kV SS at Madichaur	-	-	-	-	-	-	-
Total	32		15	3	7	7	-

Source: Field survey, 2019

33. Field survey identified a total of 253 households—comprising 1,295 persons—that will be affected by land acquisition and by limited land use restrictions. Out of total affected households, 15 will be displaced due to loss of residential structures and 9 households will lose more than 10% of their productive assets. Of the 15 households losing residential structures, 1 household is indigenous and 6 households are below poverty line. Field survey indicates that no households will lose their entire residential land and that all displaced households have their own land in surrounding area where they can rebuild their residential structures. Of the 9 households losing more than 10% of productive assets: 2 households are Indigenous and 2 households are below poverty line. These households are considered to be severely affected by the project. Additionally, the 108 indigenous households (625 persons), the 3 women headed households (7 persons), and the elderly headed households (25 persons) affected by the project will be considered to be vulnerable households.
34. The preliminary survey assessed the livelihoods and income sources of affected households and found that income sources and livelihoods of most affected households will not be significantly disrupted due to involuntary land acquisition, restrictions on productive agricultural land, or other asset loss. It has been observed that more than 30 percent or more land is barren land (*Kharbari*; no potential for agricultural production). Loss of land

and assets will be compensated in replacement cost. The RoW area for transmission lines will be restricted only for construction of new permanent structures as well as for some other permanent types of activities such as establishing small industries, children play ground, establishing schools, small business, etc, but most agricultural farming activities will not be affected and farmers can continue agricultural activities after construction. Other household income sources (remittance, jobs and pension, which are major income sources with which many affected households maintain their livelihoods) will not be affected by project activities. Those households losing more than 10% of their total land holdings and those losing residential structure will be provided additional assistance in the form of energy-based livelihood skill enhancement activities. Land losses are grouped between those losing less or more than 10% of their land holdings is presented in Table 2.7 below.

Table 2. 7: Land holding and Loss of land in percent under subprojects 1

Subprojects	Total households	Absentee households ⁸	Surveyed households	Households losing land by % out of total holdings	
				<10%	10-25%
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	149	38	111	105	6
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	57	3	54	52	2
Ghorahi-Madichaur 132 kV TL, 132/33/11 kV SS at Madichaur	47	7	40	39	1
Total	253	48	205	196	9
Percent				95.60%	4.39%

Source: Field survey, 2019

35. Households Below Poverty Line: The poverty situation has been calculated based on the national poverty line (National Planning Commission 2011). The 2010–2011 poverty line is set at NPR. 19,261. The food poverty line is NPR. 11,929; the non-food poverty line NPR. 7,332. The average annual income of the affected households is NRS 25,993; 47 of 205 surveyed households (22.92% of surveyed total) can be categorized as below the poverty line (BPL) according to the 2011 threshold.

36. During the survey in Ratamate-Lapang-Borang and Dandakhet-Rahughat transmission lines it has been observed that almost economically active population could not be found in villages either they migrated in Kathmandu or Pokhara for education and best employment opportunity or are in abroad mostly in gulf countries for employment and only elderly population are staying in village. As of findings of affected households survey the average monthly income of 205 surveyed households is NRS 25,993. Out of total income from different sources, remittance contributed about 24.74%. Agriculture consisted 23.16% and

⁸ All absentee households are existed in RoW area.

followed by job, business, pension/old age allowance and wage labor respectively. This indicates that the income sources of major population of affected households depends on remittance and due to permanent acquisition of land will not be significantly affected the income sources and livelihoods. Out of total affected land, some portion of affected land is situated in barren area which is known as Kharbari and in economic term it is considered less productive land. It means that the major source of income of households will not be affected significantly due to acquisition of barren land. In case of productive agriculture farming land, yearly loss of seasonal crop production will be calculated and compensated. Besides this, those households who will loss more that 10% of their land holdings including those households who fall below poverty line and Indigenous Peoples will be considered vulnerable households and appropriate mitigation measures to minimize the impact of project on them will be provisioned and implemented accordingly.

2.4 Subproject 2: Impacts from Upgradation of Transmission Lines

37. Subproject 2 includes upgrading of 132 and 66 kV existing transmission line outside and in Kathmandu valley: (1) Upgrading of 120 km of 132 kV DC Pathalaiya-Dhalkebar and 30 km 132 kV SC Duhabi-Kushaha existing transmission lines with more efficient high-temperature-low-sag conductors; and (ii) upgrading conductors (DC) on 35 km 66 kV transmission lines within Kathmandu Valley (7 km Suichatar- Matatirtha, 5 km Suichatar-Balaju, 8.5 km Suichatar-Teku and 13 km Suichatar- Patan).
38. Pathalaiya-Dhalkebar (120 km) and Duhabi-Kusaha (30 km) transmission lines were established 30 and 15 years ago respectively. NEA confirmed that there are no outstanding complaints in both transmission line with regards to lands which were acquired during the period of previous project. Within the Kathmandu valley 35 km of 66 kV transmission lines will be upgraded following the existing towers/alignment. Additional land will not be required but unanticipated adverse impacts during construction period may be identified, if any, will be addressed or mitigated based on the scope of this RIPP.
39. It is estimated that about 298 ha land occupied by RoW. Tower erection area occupied about 7 ha which had been acquired permanently. No additional land will be acquired. Findings of due diligences shown that seasonal standing crops may be impacted during construction period. Due to this upgradation work it is anticipated that there will impacted on standing seasonal crops fall under transmission cable because farmers will be unable to cultivate one seasonal crops during cable replacement period. It is estimated that approximately one season crops cultivated in 55 ha land anticipated to be affected because farmers will not be able to cultivate the crops for one season. NEA confirmed that no permanent and temporary structures are constructed along the existing transmission line.

2.5 Subproject 3: Impacts from Automation of Existing Substations

40. Subproject 3 involves automation of 34 existing grid substations outside Kathmandu Valley through installation of new physical equipment and software required for automation.
41. Automation work will be carried out within the premises of existing substations and will not be occurred any adverse impacts due to project intervention. During this project

preparation period total 29 out of 34 existing substations have been selected for automation and remaining will be listed by NEA. The scope of automation works are installation of new equipment and software required for automation where do not anticipate any adverse impact on automation locations. Considering the unanticipated adverse impacts during construction period further necessary assessment will be undertaken if require before installation of equipment.

2.6 Subproject 4: Impacts on Land for New Substation Infrastructure

42. In three locations Keruan, Pantang and Surkhet 132/33/11 kV new substations will be constructed. NEA confirmed that in all 3 locations NEA has already land for substation construction. In Keraun substation associated 30 km of 33 kV distribution line will be developed and Barahbise substation in Sindhupalchock district will be extended.
43. It is anticipated that the 33 kV distribution lines mostly run following the existing roads and access roads of irrigation channel and distribution poles will be erected in the ease of roads but at present the engineering design still remain to be finalized and the pole erection location is unknown. Design alternatives to avoid the private land will be explored close coordination with local peoples but in unavoidable condition some poles will need to be erected in private land. However, very small portion of land will be required for a 33 kV pole having 400 mm diameter and 11 meter height and transfer installation area but owner will not be able to construct and operate any permanent types of structures and activities under the 33 kV line and around pole. In this condition further impacts assessment will need to be carried out once the engineering design finalized and exact amount of impacts will be measured and RIPP will be updated. No other impacts are anticipated from construction of 33 kV distribution line. It is estimated that .009 ha land will be required. The summary status of substations site is presented in Table 2.8 below.

Table 2. 8: Summary of substation sites under subproject 4

Subproject 4 (substation sites)	Site specific details
Keraun 132/33/11 kV substation and 30 km associated 33 kV distribution lines	This substation is located in Kanepokhari Rural Municipality ward no 2, Keraun, Morang. NEA has already acquired 3.5 ha for substation construction. The boundary wall and staff quarter building construction within premises is in progress. 30 km of 33 kV associated distributions lines will also be constructed. It is anticipated that the distribution lines mostly run following the existing roads and access roads of irrigation channel and in some sections of the distribution line will require land that will be acquired from private source. It is estimated that total .009 ha land will be required for installation of 30 km of 33 kV distribution lines including transfer.
Pantang 132/33/11 kV substation extension of Barahbise	NEA has its own land (2.7 ha) for substation construction in Jugal Rural Municipality ward no 4, Pantang, Sindhupalchock, Bagmati Province. Construction of approach road, compound wall and protection works has been completed in substation site. Additional land will not be required for substation construction but during construction period unanticipated impacts of construction activities will be assessed

substation	through frequent field visit. To evacuate the power from Tamakoshi, Barahbise substation will also be extended within the premises of existing Barahbise substation.
Surkhet 132/33/11 kV substation	NEA has its own land (3.7 ha) for substation construction. The land is situated in Birebdranagar Municipality ward no 11, Surkhet, Karnali Province. No additional land will be required. Substation location is connected with gravel road with sufficient width. If unanticipated impacts felt by locals due to constructions activities will be assessed through site visit and consultation with people living surrounding areas.

2.7 Subproject 5: Impacts from Power Distribution System Modernization

44. Subproject 5 will modernize the power distribution system by installing 350,000 smart meters and constructing distribution command control center in Kathmandu valley;
45. The smart meters will be installed in Thimi, Pulchok, Bhaktapur, Kritipur, Kuleshwor, Lagankhel, Baneshwor, Jorpati and Balaju areas in Kathmandu valley. The installation work will be within premises of customers. Therefore, no any adverse impacts anticipated.
46. For the distribution command and control center, a building and associated infrastructures including software and hardware system will be installed within existing substation ground of Suichatar, Kathmandu

2.8 Subproject 6: Capacity of NEA and Electricity Users strengthened

47. Subproject 6 consists training to at least 90 eligible NEA staff (including 30% eligible women) on automation of grid substations; NEA's organizational development; and improved billing and collection measures; and at least 2,000 electricity consumers in project areas (40% women and disadvantaged group) on safe and efficient use at distribution centers. The project will also support implementation of key actions from NEA's gender equality and social inclusion (GESI) strategy and operational guidelines in its regional offices, to complement corporate level activities covered under a forthcoming project.

2.9 Affected Households

48. A total of 253 households (1,295 people) are assessed to be impacted by the project. Of these, 97 households (670 people) belong to non-indigenous mainstream populations.
49. Preliminary survey has identified that the owners of affected land are titleholders, with legal rights to land conferred through land ownership certificates. The transmission line right-of-way and proposed substations sites including existing substation sites are free of squatters/informal dwellers and encroachers. None of the affected residential structures are inhabited by leaseholders and renters. Preliminary survey was unable to reach 48 households; these affected people will be surveyed once they are contacted.
50. Preliminary survey found that most households live in either mud and stone/brick houses or cement and stone/brick houses, with a minority of houses built from mud and straw and wooden flag (Table 2.9).

Table 2. 9: Summary of types of houses by wall and roof of affected households.

House type by wall	Total Households	House types by roof	Total household
Cement and Stone/brick	47 (22.92%)	Zinc Plate	124 (60.48%)
Mud and stone/brick	146 (71.21%)	Stone	56 (27.31%)
Mud and straw	1 (.48%)	RCC	11 (5.36%)
Wooden flag	11 (5.36%)	Thatched	14 (6.82%)
Total	205		205

Table 2. 10: Subproject wise types of house by wall and roof.

Subprojects 1	Types of Houses by wall types	No of Households	Types houses of by roof types	No of households
Ratamate-Lapang 220 kV TL& Borang-Lapang 132 kV TL & 132/33/11 kV SS at Borang and 220/132/33/11 SS at Lapang	Cement and Stone/brick	33	Zinc plate	102
	Mud Stone and brick	67	Stone	5
	Wooden flags	11	RCC	4
Dandakhet – Rahughat 132 kV D/C TL & 220/132/33 kV SS at Rahughat and 132/33 kV SS at Dandakhet	Cement and brick stone	4	Zinc	5
	Stone and brick and mud	50	Stone	44
			RCC	5
Ghorahi-Madichaur TL, 132/33 kV, and 33/11 kV SS at Madichaur	Mud and stone	29	Zinc plate	17
	Cement and stone and bricks	10	Stone	7
	Mud and straw	1	RCC	2
			Thatched roof	14
Total		205		205

Source: HHs survey, 2019.

51. Preliminary survey found that agricultural production, small business, foreign jobs (remittance), jobs within country, labor work, pension are the main livelihood strategies and source of income of affected households.

52. Out of total surveyed households 16.09% (33) HHs have sufficient food for the year and surplus amount of food can sell for cash and remaining households are facing food deficit

for the whole year. Households that fall below the poverty line (BPL) have food sufficiency only up to 9 months of the year. During the remaining months, these households seek alternative food sources, including by relying on local natural resources. There are several reasons to have food deficit even for those families with sufficient agricultural land to produce food, including absence of family members to help with agricultural duties due to out-migration for employment (primarily to India and the gulf countries), lack of supportive agricultural policies, and lack of agricultural inputs such as irrigation and fertilizer.

Table 2. 11: Food sufficiency level of affected HHs

Food sufficiency level	Khas/Arya				IPs					Dalit	Total households
	Brahmin	Chhetri	Thakuri	Sanyasi	Newar	Magar	Gurung	Tamang	Tharu		
Food sufficiency more than 12 months	8	8	-	-	2	2	1	10	-	2	33
Food sufficiency 9-12 months	9	10	8	1	4	7	5	15	-	3	62
Food sufficiency 6-9 months	8	10	3	1	4	7	2	18	3	7	63
Food sufficient 3-6 months	5	5	4	-	2	6	2	9	1	4	38
Food sufficiency less than 3	-	1		-				8			9
Total	30	34	15	2	12	22	10	60	4	16	205

Source: HH Survey, 2019

Note: Status of food sufficiency calculated based on agricultural production only.

Table 2. 12: Educational Attainment among the Literate Surveyed Population by Caste

S. N.	Cast ethnicity and Educational Attainment	Level of Education			Total	%
		Lower Secondary	Secondary	Bachelors and Above		
1	Brahmin	33	57	15	105	18.29
2	Chhetri	46	35	6	87	15.16
3	Newar	14	9	2	25	4.36
4	Magar	49	30	1	80	13.94
5	Gurung	14	10	1	25	4.36
6	Tamang	88	60	5	153	26.66
7	Tharu	13	12	-	25	4.36
8	Thakuri	14	20	2	36	6.27
9	Dalits	29	4	-	33	5.75

10	Sanyasi/	3	1	1	5	0.87
Total		303	238	33	574	100.00
%		52.79	41.46	5.75		

Source: HH Survey, 2019

53. Regarding access to health services, each affected ward and municipality/ rural municipality has at least one health post with one MBBS doctor. Other supporting staff are provisioned by Government and now local Government Authorities are operating these health facilities with support of Federal Government. All affected Municipalities and Rural Municipalities are connected by motorable roads, although road access can be impeded during the rainy season. In case of critical situations, people of the project affected area have easy access to Kathmandu, Pokhara, Beni of Myagdi district and Ghorahi of Dang district for health facilities.
54. The project anticipates direct and indirect impacts to affected people due to construction activities. In addition to loss of land, the project anticipates that implementation will involve minor, limited temporary impacts related to construction activities, such as disturbances to small business along the transmission line, for example temporary restrictions to community forest and on grazing land and, noise pollution due to heavy equipment and vehicle movement, visual impacts of material storage in open ground, influx of outsiders with associated risks of introducing communicable diseases (HIV/AIDS and other Sexually Transmitted Infections; COVID-19), human trafficking and other unanticipated risks
55. Further assessment with directly-affected people will be carried out after engineering design is finalized.

2.9 Affected Indigenous Peoples

56. The proposed subprojects traverse Hill and Terai regions of Province 1, Bagmati (Province 3), Gandaki (Province 4), Province 5, and Karnali (Province 6). Different Terai and Hill Indigenous People and other minority caste/ethnicity groups inhabit these areas. This combined Resettlement and Indigenous Peoples Plan (RIPP) has been prepared to identify, avoid, and mitigate impacts on Indigenous Peoples and compensate accordingly for impacts that cannot be avoided.
57. The Government of Nepal recognizes 59 indigenous nationalities (equivalent to ADB's definition of Indigenous Peoples) under the National Foundation for Development of Indigenous Nationalities (NFDIN) Act, 2002, and in 2004 the Nepal Federation of Indigenous Nationalities (NEFIN) published a categorization of indigenous nationalities based on their levels of marginalization and vulnerability.⁹ Subproject locations are comprised mainly Brahman, Chhetri, Thakuri, Dalit, Newar, Magar, Gurung, Tharu and Tamang caste/ethnic groups. Based on preliminary assessment, an estimated total of 108 households, comprising 625 persons, are project-affected Indigenous Peoples under

⁹ NEFIN. 2004: *Classified Schedule of Indigenous Nationalities of Nepal* [Prepared by the Janajati Classification Task Force and approved by the Federal Council of NEFIN, March 1, 2004]

subproject 1. Field survey confirmed that two (2) households of Indigenous Peoples will lose more than 10% of their land holdings and that 5 affected structures (1 residential building, 2 kitchens and 2 toilets) belong to five (5) Indigenous households—with one (1) affected indigenous household losing a residential structure. Project implementation may, however, involve unanticipated impacts on Indigenous Peoples and other affected people. The project will continue to assess project social impacts as part of RIPP implementation. The project will produce an update to this RIPP that further elaborates on culturally appropriate mitigation measures agreed with affected Indigenous Peoples during final engineering design.

58. Details of affected IP households under this project are presented in Table 2.13 below.

Table 2. 13: Population of Indigenous Peoples affected under this project

IPs	Transmission line Subprojects			Indigenous Peoples households	Indigenous Peoples population
	Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	Dandakhet – Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	Ghorahi-Madichaur TL, 132/33/11 kV SS at Madichaur		
Magar	3	11	8	22	127
Tamang	60			60	348
Gurung	3	7		10	58
Newar	7	5		12	69
Tharu			4	4	23
Total	73	23	12	108	625

Source: Field survey 2019

59. Consultation with affected Indigenous Peoples confirms that these communities self-identify as indigenous and that they have their own languages and cultural institutions. During consultation with affected persons, other local people, and separately with Indigenous Peoples, stakeholders were asked about distinctive habitats or ancestral territories or natural resources that are used by Indigenous Peoples or others living in the project area. Consultations confirmed that none of the areas to be impacted by the project are characterized by distinctive habitats or ancestral territories. Indigenous Peoples were not assessed as utilizing or natural resources differently than other ethnic groups living in the project area. Land is not collectively owned. The project is not assessed to adversely impact on the traditional customary rights, cultural identity and other traditional cultural practices of affected Indigenous Peoples

60. The field survey consulted with Indigenous Peoples residing along the transmission line who will be affected due to involuntary land acquisition about their cultural practices, sources of

income, and other livelihood practices. All affected Indigenous Peoples practice similar economic and livelihood activities as other mainstream caste groups in the project area, wherein most household livelihoods are constituted by a mix of agricultural subsistence farming, jobs/wage-based employment, business/entrepreneurship and tourism (especially in the in case of Myagdi).

2.10 Vulnerable Households

61. Vulnerability of affected households has been assessed based on different dimensions of vulnerability. The following 8 demographic categories are considered to be vulnerable: (i) households that are headed by women; (ii) household headed by persons with disabilities; (iii) households falling under the generally accepted indicator for poverty¹⁰ (iv) elderly headed households, (v) indigenous households; (vi) households who are landless, (vii) affected persons without legal title to land, and (viii) households who losses more than 10% of land holding and impacted on livelihoods.
62. To identify the vulnerability of affected households who falls under the above mentioned category, the Project carried out household surveys and consultation meetings focusing on socioeconomic conditions, sources of income, and livelihoods. Socioeconomic survey have been conducted with 205 of 253 affected households.
63. Of those surveyed, a total 140 households with 787 persons are found to be vulnerable 15 households will lose their residential houses and 9 households will lose more than 10% of their total land holdings. Among the affected households 3 households are headed by woman, 5 households are elderly headed and 108 households are IPs. 2 indigenous households will lose more than 10% of their land holdings. Out of total affected households 47 falls below poverty line. Project due diligence found the areas to be acquired by the project and those of existing substations to be absent of squatters or encroachers. Multiple vulnerabilities are faced by vulnerable households. Vulnerabilities faced by affected households are presented in Table 2.14; reporting avoids double counting.

Table 2. 14: Total HHs with applicable types of vulnerability indicators.

S. No.	Level of Vulnerability	Total Households	Total Population
1	Indigenous Peoples and below poverty line	28	162
2	Indigenous Peoples and losing more than 10% of productive assets	2	11
3	Indigenous Peoples and displaced due to loss of residential house	1	5
4	Indigenous Peoples only	77	447
5	Losing more than 10% of productive assets and below poverty line	2	12
6	Losing more than 10% of productive assets only	5	31
7	Displaced due to loss of residential house and below poverty line only	6	30
8	Displaced only	8	40

¹⁰ Nepal's GDP Per Capita reached 1,034.11 USD in Jul 2019 (source: CBS: National Account of Nepal, 2019)

9	Women headed and below poverty line	3	7
10	Elderly headed and below poverty line	5	25
11	Below poverty line only	3	17
	Total	140	787

Source: field survey, 2019

2.11 Gender Equality and Social Inclusion

64. Total 1,295 persons will be affected from the subproject 1 implementation. Out of total population 48.72% is women and total 3 households are headed by women (1.46%) whereas national average is 31% (NDHS 2016). During consultation meeting total 180 women out of 612 were participated they raised their concerns consultation with women groups separately have also been made and they were asked about access to property especially land, decision making power, access to opportunity/occupation and education, women's involvement in community level activities etc. Land ownership is primarily by men in Nepal but now days it is slowly increasing. Total 19% women in Nepal own land may be a result of Government of Nepal's progressive policy regarding tax incentives for women owners. The affected land plots of this project are almost owned by men during the course of survey.
65. Among the affected population, literate women population is 49.51% which is little bit less compared to national and provincial level average female literacy rate 57.39% (national) 67.04% (Bagmati), 67.72% (Gandaki) and 57.33% (province 5), (CBS: Census Survey 2011). As per the Census Survey 2011, the literate percentage in Dhading, Nuwakot, Myagdi, Dang, Pyuthan and Rolpa is 62.86%, 59.8%, 71.87%, 70.32%, 67.5%, and 60.0% respectively. The female literate population in Dhading (55.70%, Nuwakot 52.41%, Myagdi (64.43%) Pyuthan (58.63%), Rolpa (50.48% and Dang (62.78%) is respectively. Among the project affected provinces there is no more gaps with district level literate population but compared with sub-project affected households level education status is found very poor.
66. Caste based discriminatory practices also existed in all project locations which limit the opportunities of Dalits and other deprived groups to have limited access to resources due to different constraints. Similarly, due to these gender and caste/ethnicity-based differentials, infrastructure projects impact women and men differently. The employment opportunities are greater for men than for women, men of advantaged social groups have higher required skills, access to information is easier for selected groups. Women headed households are usually poorer with limited opportunities to participate in project benefits. Field work for this project and discussion with potential affected households confirms 3 households are women-headed.

3. DESIGN MEASURES TO MITIGATE PROJECT SOCIAL IMPACTS

67. Prior to implementation, during the detailed design phase, the EA will finalize design alternatives to avoid or minimize project impacts. The following measures have and will continue to be observed for the design of transmission lines, substations and other subproject components under this project:
- Ensure RoW has minimal impacts on land and environment.
 - Select shortest straight route that minimizes the number of affected peoples
 - Avoid dense settlements and productive land to the greatest possible extent.
 - Avoid permanent residential structures; in case of unavoidable circumstances, explore alternatives.
 - Minimize number of private as well and public structure crossings.
 - Avoid displacing affected people and causing involuntary land acquisition.
 - Minimize impacts on livelihoods and income sources of APs.
 - Identify a short, easy, safe and economical route for access roads and easy access for construction and maintenance works.
68. The proposed project design avoids impacts on structures to the greatest extent possible, including by avoiding impacts to public structures, properties, and cultural and religious places. If finalization of detailed project design determines such impacts to be unavoidable, the project will minimize damages and will restore lost assets in accordance with this RIPP.
69. Construction will be scheduled to avoid the crop plantation and harvest seasons and to mitigate the impacts on standing crops along the restricted RoW, at substations, as well as when working in areas of existing transmission lines. Information about construction schedules will be disseminated to affected people ahead of construction activities.
70. Based on the nature of impacts and vulnerability of households, appropriate measures are planned to avoid, minimize, mitigate or compensate for any adverse impacts of sub-projects. Compensation is provided for loss of assets at full replacement costs through the form of offsets for fees and additional resettlement assistance for eligible severely affected and vulnerable households. Along the RoW of transmission line, the final count of vulnerable people will be finalized with detailed engineering design. Further assessment of these areas will confirm the direct and indirect impacts of project activities. If households are identified as vulnerable during RIPP updating or during the project construction period, they shall be compensated according to the provisions of the project Entitlement Matrix and adequate and appropriate support will be provided to vulnerable households.
71. Gender Equality and Social Inclusion Action Plan (GESI-AP) will be prepared separately for this project. Based on assessments and analysis, targeted programs will be designed to support and empower women and disadvantaged groups. In addition, the executing agency will pay special attention during the DMS and consultation activities to ensure participation of women and men and of different social groups. Affected households will be informed about resettlement activities and decide what livelihood options would be most suitable for them. Compensation funds and other allowances due to the household for affected assets would be provided to both husband and wife who would open joint bank accounts for this.

Orientation regarding the use of compensation funds will be provided to couples and family gatekeepers so that best use of the funds is done by the affected families.

72. To help mitigate health risks, NEA will organize awareness campaigns in for construction works and local communities about project risks avoidance and mitigation measures, contractor responsibilities, risk management options, and available services. Affected people will be informed about specific project-related risks and impacts in advance of construction activities. Notice will be provided 30 days in advance on 1) on the duration and type of disruption; 2) contractor's actions to prevent income/access loss through provision of access etc; 3) procedures for receiving compensation for lost income, if any, based on one month lost income or minimum wage rates; and 5) project plans for restoration of affected land, structure, utilities, common property resources. Affected people will also be informed about the project GRM and how to access it.
73. On the basis of further consultation and experience from initial RIPP implementation, the project will update the RIPP to reflect more detailed impact and risk analysis for subprojects. If the scope of project changes, affected Indigenous Peoples households will be consulted on these changes. The project will also ensure participatory, inclusive and culturally appropriate methods to involve Indigenous Peoples in project activities. The project will also review the Grievance Redress Mechanism with affected Indigenous Peoples to ensure that it is culturally-appropriate and gender and intergenerationally inclusive to receive concerns from affected Indigenous Peoples and other community members and to facilitate for resolution. Representation of Indigenous Peoples in GRM mechanism will be ensured.

4. COMPENSATION, ASSISTANCE AND BENEFITS

4.1 Eligibility

74. All affected households and persons who are identified in the project-impacted areas before the cut-off date (see below) will be entitled to compensation for their affected assets and to rehabilitation measures sufficient to assist them to improve or at least maintain their pre-project living standards, income-earning capacity and production levels. Those entitled for compensation for losses are:

- (i) All APs losing land either covered by legal title/traditional land rights, legalizable, or without legal status;
- (ii) Tenants and sharecroppers whether registered or not;
- (iii) Owners of buildings, crops, productive trees, or other improvements attached to the land; and
- (iv) Renters and leaseholders (rented land or building) for agreed timeframe.
- (v) APs whose income and/or salaries are affected.

4.2 Cut-off Date

75. Eligibility to receive compensation and resettlement assistance is limited by cut-off dates. For the asset owners who have legal title, the dates of public notice for land acquisition by CDC/ concerned District Administration Offices will be treated as the cut-off-date. For non-titleholders, the census of affected land and others assets, owners who have no legal title conducted for finalization of project technical design will be treated as the cut-off date. Notices will be published in national newspapers, project areas, public common places, office of Rural/Municipalities and in ward offices and other common places where affected people can see and read the notice easily. Notices will be published in Nepal and noting that the Project is willing to with translation to AP dialects on request. The persons who settled or constructed new any types of structures in the affected areas after cut-off date will not be eligible for compensation or other resettlement assistance.

4.3 Compensation

76. Project field surveys with affected land owners included discussion of cash compensation versus land-for-land replacement. All surveyed land owners confirmed their preference for cash compensation because in most cases (except 9 households who loses more than 10% of their total holdings) only small portion of land their plots will be affected and land replacement options would yield small, non-viable land parcels. The project will re-confirm preference for replacement of other affected assets (toilets, sheds, etc) versus cash compensation after engineering design finalization, during final verification studies.

77. Land acquisition and involuntary resettlement impacts will be compensated in accordance with the provisions of the Entitlement Matrix in Table 4.1. In accordance with the preferences of affected people, cash compensation will be paid at replacement cost for permanently acquired agricultural, residential, commercial lands needed for transmission line tower footing and substation areas. Compensation for restrictions to the project RoW

are expected to vary from minimum 10% and maximum 30% (depends on location and value of land) of amount of total valuation will be compensated to land owners. Compensation of non-land assets will also be paid at replacement cost to the asset owners. If the owners cannot be present, or in the event of death, an authorized family member will be eligible to receive the compensation amount, but process of ownership transfer would require additional legal approvals. If the remaining land parcel after the permanent acquisition is rendered economically inviable for use or too small, then the entire area of plot will be acquired at replacement cost. Ownership of permanently-acquired land will be transferred to NEA after compensation. Land restrictions to maintain the RoW will not involve transfer of ownership and continued cultivation of land will be allowed. Entitlement provisions for affected people and households losing land and income and rehabilitation allowance include provisions for permanent or temporary land losses, buildings losses, crops and trees losses, livelihood and income losses etc.

78. The project will rely on the country safeguard systems of the Government of Nepal for determining the value of assets affected by involuntary resettlement. Details of the process for determining values for compensation rates of different types of assets are elaborated below. It is noteworthy that, as jurisdiction of the CDO is limited to the boundary of each respective district, compensation rates will vary by administrative locality as each CDC Chairman is independently tasked with determining rates.
79. In Nepal, the Land Acquisition Act (LAA), 1977, is the core document guiding resettlement activities, including with respect to determining compensation rates, valuing affected assets, and regulating distribution of compensation. Under LAA 1977 Clause 7, compensation rates for land and assets are determined by a Compensation Determination Committee (CDC) under the Chairmanship of Chief District Officer (CDO) of respective district through a process of verifying rates for affected lands.
80. Decision-Making Authorities: Generally, compensation rates are determined based on i) Rate duly recorded in Land Revenue Office (government registered rate for tax), ii) transaction rate during for similar assets sold in the latest 6 months that has to verify by formed subcommittee under CDC, iii) rates negotiated with the affected persons. CDC can form a sub-committee for verifying land prices and the committee reviews current market prices through inquiry, documentation and field verification. Information considered by the Committee includes prevailing land transaction rates in the area, local market rates, productivity of land, etc, and is informed by consultation with relevant stakeholders at local and district levels. Typically, Committees consult with relevant local bodies and representatives of affected families. After an initial level consensus on the rate the process is then formally submitted to the CDC. CDC, which in turn makes a final determination on compensation rates, with or without amendment on recommended rate.
81. Process for Valuation of Land: During fixation of compensation rate of titled lands replacement cost principles of affected land will be adopted by CDC wherever possible and project management team shall also explain to CDC about ADB's SPS requirements and project policy on compensation determination. Affected land owners are also invited in the meeting as invitees if decided rate will not be acceptable for land owners and can put their

dissatisfaction during meeting for further discussion and consideration of higher value of land. The CDC's determination is also meant to ensure that compensation rates are inclusive of transaction, capital gain taxes, fees and duties. Project proponent can play facilitation role during the valuation process.

82. Process for Valuation of Structures: The project management team will coordinate with competent authority in the local level for assessment and valuation of affected structure. The valuation will follow the replacement cost principle. The valuation shall be done without deducting depreciation and salvaged material. The affected person will be allowed to take salvaged material.
83. Process for Valuation for Crops and Trees: Compensation for crops and fruits trees will be based on market price for the current year as calculated by the concerned Agricultural Office. Matured Non-fruit trees or timber bearing trees will follow the rate calculated in cubic meter (height multiplied by girth and diameter) by concerned Forest Offices/Department. For immature, non-bearing fruit/crop trees this amount is calculated as average annual harvest values for the same fruit/crop multiplied by the years that the tree must grow before reaching productive age. For mature fruit/crop bearing trees, the amount is calculated by the average years of crops lost according to the average productive life of the tree, plus cost of purchase of seedlings/planning materials required to replace trees. The respective Agricultural Office calculates existing market price.
84. Process for Other Common and Private Assets: Compensation for assets attached to land (such as water supply pipelines, wells, tube-wells, pumps, tanks, irrigation channel etc.) will be based on replacement value. Depreciation will not be factored into the valuation.

4.4 Resettlement Assistance

85. Assistance for affected households will be paid as specified in Entitlement Matrix, which provides allowances and resettlement assistant beyond asset replacement costs to all affected people and makes special provisions for severely affected and vulnerable households. Cost of deed transfers and other government taxes of affected land will not be incurred to the land owners.
86. The project will also provide for shifting allowances and transitional support to displaced households for the temporary loss of income sources and livelihoods based on duration and severity of impacts. Severely affected and vulnerable households—including women-headed households and those headed by other vulnerable groups, households below poverty line, and Indigenous Peoples households—are entitled to cash assistance equivalent to 90 days wage rate plus a one-time cash assistance prior to relocation to offset any unforeseen costs incurred during the transitional period.

4.5 Livelihood Enhancement Skill Training

87. The project will extend livelihood enhancement skill training to the 140 severely affected and vulnerable households. Consultations with project stakeholders have identified income generating and skill development trainings suited to local resources and opportunities, and

the project has estimated a potential 935 interested beneficiaries.¹¹ During implementation, the project will undertake training needs assessment (TNA) with affected households and will finalize identification of participants for each type of training offered. TNA will account for market demands that will support to create opportunities for self-employment, employment in local markets, foreign country, etc, and will be specifically linked to the preferences expressed by severely affected and vulnerable households. The project will reach an final agreement with severely affected and vulnerable groups on training objectives, content, and will enroll participants from each household. The project will also agree to a schedule for conducting trainings and to the total duration of training initiatives.

88. The project will additionally extend energy-based skills enhancement trainings—targeting at least one person from each directly affected household, including severely affected and vulnerable households. TNA for energy-based skills training will identify market demands for energy-based livelihoods. Market assessment and employment opportunities after achieving the proposed trainings will also be assessed by engaging an experienced training expert or organization (training providers). The proposed trainings will be at least Level-I certified by the National Skill Testing Board (NSTB) and the training curriculum prepared by Council for Technical Education and Vocational Training (CTEVT) will be followed. The duration of Level-I training will be 390 hours (about 66 days). These types of training will be organized to help disseminate knowledge on how affected people can restore or improve livelihoods through non-agricultural activities. Short term awareness raising training on human trafficking, HIV/AIDs, STI and health and safety will also be organized in project affected areas. SSEMD will also identify potential participants through TNA.

4.6 Benefits

89. The project will extend benefits to affected communities by supporting maintenance, improvements, and extensions of public infrastructure such as school buildings, religious temples, community drinking water supply schemes and irrigation schemes, etc. Affected people, including Indigenous Peoples, indicated strong preference for such benefits-sharing arrangements, which they understood to be a form of development assistance for affected communities. During implementation, NEA will prioritize development assistance options with each directly-affected village community areas of project impact. Exact number and benefited population of such facilities will be verified as part of project confirmation studies during final engineering design.
90. After the project implementation, common benefits or intended positive impacts for example electricity supply systems will be improved and all groups will be benefited directly from the better and reliable supply of electricity which will play supportive role to improve the living standard of Indigenous Peoples including other caste groups along the transmission route and surrounding area of high capacity of substations.

¹¹ 1) Agricultural intensification, 2) Community Livestock, 3) Micro enterprise creation, 4) Skill development training, 5) Light Vehicle driving, 6) House wiring training, 7) Banana farming training, 8) Hospitality management, 9) Citrus Species farming, 10) Social Awareness, 11) Estimated Cost for Proposed Energy-Based Livelihood Skill Trainings.

4.7 Confirmation of Compensation, Assistance and Benefits

91. All project compensation and mitigation measures will be reviewed and confirmed before the construction schedule are being drawn up and prior to any civil works. Impacts will be tabulated and changes will be recorded along with rationale. The project will update the RIPP after finalization of project design and alignment. Further consultations with APs will be carried out to confirm impacts and to finalize impact mitigation agreements with affected stakeholders. All information will be submitted to ADB when updating the RIPP.

4.8 Appeals-based Review of Replacement Cost

92. Affected people are entitled to appeal for ad hoc adjustments to formal project offers for compensation. Complainants will be asked to submit a rationale and any evidence supporting their claim. The project will consider appeals on a case-by-case basis.

4.9 Project Payment Mechanism

93. The disbursement of compensation payment mechanism will have following procedures: Disbursement of compensation payment will have to be completed simultaneously with Land acquisition. Payment will be made after the ownership of land will be transferred to NEA's name. The compensation payment will be made through bank cheque or compensation amounts will be deposited directly in the bank account of the affected households. NEA can request land owners to open joint account for husbands and wives. If they do not have a bank account, concerned project staff will support and facilitate affected households to open one.

Table 4. 1: Entitlement Matrix

S. No	Type of Impact	Application	Entitled Person	Entitlement	Responsibility
Land Acquisition					
EM-1	Permanent land acquisition for titleholders	Agricultural/ residential/ commercial land and/or any land with legal title.	Persons with legal title or recognized ownership rights	<p>EM-1, E1. Titleholding households receiving cash compensation for loss of land are entitled to replacement value as set by Nepal country systems, which includes consideration of current market price.</p> <p>EM-1, E2. Titleholding households receiving cash compensation for agricultural lands are entitled to additional allowances for 3 years of the agricultural productive value of lands including all crops in a year. Determination of agricultural production and market price for agricultural products will follow Agriculture Office rates. For titleholders whose lands are being utilized by tenants/sharecroppers 50% the 3-year productive value compensation amount will be deducted by the project and diverted to payment of the tenants/sharecroppers. For titleholders whose lands are being utilized by leaseholders, 100% of 3 years of productive value will be paid to leaseholders and three years of lease rent will be paid to land owners from the productive value.</p> <p>EM-1, E3. For households receiving cash compensation, the project will compensate any fees, taxes (including capital gains tax), and other charges as applicable under relevant laws and regulation.</p> <p>EM-1, E4. Affected households will receive project resettlement assistance and will be relocated prior to the start of construction</p>	<p>NEA/PMU/SSE MD</p> <p>NEA/PMU/SSE MD & Concerned Agricultural Office</p> <p>NEA/PMU/SSE MD</p> <p>NEA/PMU/SSE MD</p>

				activities. EM-1, E5. Households being relocated will be notified of a target date to vacate lands when issuing notice to receive compensation. Households will receive at least 60 days advance notice to vacate occupied land/place.	NEA/PMU.SSE MD
Land Use Restrictions					
EM-2	Permanent restrictions to land use (including residential, agricultural, commercial and other private uses) for titleholders	Lands where restriction are imposed on land use to maintain RoW	Title holders / persons owning land	EM-4, E1. One-time cash compensation for of 10% of the land value to compensation for restricted usage, according to values for land set by CDC of the concerned district under Nepal's country safeguards systems. Land value depends on productivity of land (irrigated and non-irrigated land, connected with road, agricultural farming land or in commercial area etc will be considered). EM-4, E2. For titleholders whose lands are being utilized by tenants 50% amount will be deducted by the project and diverted to payment of the tenants; EM-4, E3. 60 days advance notice to before start of construction activities	NEA/PMU/SSE MD & CDC NEA/PMU/SSE MD NEA/PMU/SSE MD
EM-3	Permanent restrictions to land use (including residential, agricultural, commercial and other private uses) for tenants	Lands where restriction are imposed on land use to maintain RoW	Tenants	EM-5, E1. One-time cash compensation for restrictions to land use at 50% of the land value set by CDC. EM-5, E2. After receiving compensation, 60 days advance notice to before start of construction activities	NEA/PMU/SSE MD & CDC NEA/PMU/SSE MD
EM-4	Temporary adverse impacts on land due to	Land adversely impacted by activities	Titleholders/ persons owning land and	EM-6, E1. Compensation equivalent to 1 year of productive value of land assets in compensation for damages to the land incurred during construction.	NEA/PMU & CDC

	construction activities for titleholders			<p>EM-6, E2. For titleholders whose lands are being utilized by tenants, leaseholders or sharecroppers, 50% for areas cleared for new substations and/or transmission line right-of-way equaling 50% of annual productive value of the land, as set by CDC, will be paid to tenants/sharecroppers and for leaseholders 100% loss of disturbance period will be compensated.</p> <p>EM-6, E3. 60 days advance notice to before start of construction activities</p>	<p>NEA/PMU & CDC</p> <p>NEA/PMU/SSE MD</p>
EM-5	Temporary adverse impacts on land due to construction activities for non-titleholders	Land adversely impacted by project activities	<p>Forest Resource User Groups</p> <p>Tenants/sharecropper and leaseholders</p> <p>Squatters / encroachers (defined as those utilizing the land with no recognized legal title)</p> <p>All APs</p>	<p>EM-7, E1. Compensation equivalent up to 1 year of productive value of land assets in compensation for damages to the land incurred during construction</p> <p>EM-7, E2. One-time cash compensation for areas cleared for new substations and/or transmission line right-of-way equaling 50% of annual productive value of the land, as set by CDC will be paid to tenant sharecroppers and for leaseholders 100% of loss will be paid as of lease rate of affected areas.</p> <p>EM-7, E3. One-time cash compensation for annual loss of household income resulting from land clearing for new substations and/or transmission line right-of-way equaling 1 year of average household income derived from the land.</p> <p>EM-7, E4. 60 days advance notice to before start of construction activities</p>	<p>NEA/PMU/SSE MD</p> <p>NEA/PMU/SSE MD & CDC</p> <p>NEA/PMU/SSE MD</p> <p>NEA/PMU/SSE MD</p>
Impacts to Structures					
EM-6	Loss of residential, commercial and non-	Loss of residential, commercial and non-residential	Owners of structures having legal title;	<p>EM-8, E1. The project will re-confirm the preferences of displaced households for replacement of structure or cash compensation.</p> <p>EM-8, E2. All AP titleholders losing structures will</p>	<p>NEA/PMU/SSE MD</p> <p>NEA/PMU</p>

	residential structures for asset owners	structures (e.g., cow shed), commercial	Encroachers (defined as who has a legal title holding to land but illegally extended structured; also applies to those occupying structures on government land)	<p>receive a one-time shifting grant of NPR 30,000.00 or as per goods transportation rate fixed by Local government (whichever is greater)</p> <p>EM-8, E3. All households losing residential structures will be provided up to 6 months transitional subsistence allowances to meet the cost of renting for accommodation and other management cost (allowance will be provided based on estimated time for rebuilding the house and market survey for rent) @ NPR 20,000.00 per months i.e. total 120,000.00 per affected/displaced household.</p> <p>EM-8, E4. For households receiving cash compensation, structures will be compensated at replacement value determined by CDC, which considers prevailing market values. Valuation of assets will not be depreciated for structural age or condition. Displaced households will be allowed to reuse salvageable materials.</p> <p>EM-8, E5. Owners of affected structures will be notified giving 30 days advanced notice to take their salvageable materials for reuse.</p>	<p>NEA/PMU/SSE MD</p> <p>NEA/PMU/SSE MD & CDC</p> <p>NEA/PMU/SSE MD</p>
EM-7	Loss of cultural & community structures /facilities	Community/ cultural/ religious structures/ resources affected by the project	Temple/Monastery/Religious tree/Graveyard and etc.	<p>EM-9, E1. The project will re-confirm the preferences of displaced community for replacement of structure or cash compensation.</p> <p>EM-9, E2. Prior to displacement, the project will restore/re-establish the affected structure or provide cash compensation equivalent to replacement value to the affected community or the recognized patron /custodian of communal properties.</p> <p>EM-9, E3. 30 days advance notice to before start of construction activities</p>	<p>NEA/PMU/SSE MD</p> <p>NEA/PMU/SSE MD</p> <p>NEA/PMU</p>
Economic Displacement					

EM-8	Impacts on livelihoods	Loss or change of livelihood/ source of income	All affected people, households, including agricultural workers, business owners, employees, , mobile vendors, wage laborers.	EM-10, E1. All affected households are eligible to enroll at no cost in energy-based livelihood enhancement program, according to the preferences of affected households and aligned to opportunities in the local market. Project-provided skill enhancement trainings will aim at helping affected people to diversify their sources of income. Specific topics will be finalized in consultation with affected households.	NEA/PMU/SSE MD
				EM-10, E2. Affected households losing lands will receive a transitional allowance for the duration of construction activities (period of disruption), which is estimated to last on average for a period 60 days. Amounts will be calculated using the current years' agricultural labor rate fixed by local government or other competent authority or NRs 60,000 (whichever greater). Households receiving additional cash assistance as a severely affected households or vulnerable households will not be eligible for this assistance.	NEA/PMU,SSE MD
				EM-10, E3. Business affected by construction activities will receive a transitional allowance of one-time cash assistance of NRs 60,000, which is based on current labor rates fixed by local government [equivalent to 60 days @ of NRs 1,000/day] , or the equivalent amount for the duration of construction activities.	NEA/PMU,SSE MD
				EM-10, E4. If any employees of businesses being economically impacted will be paid a transitional allowance equivalent to NRs 60,000, or the equivalent amount for the duration of construction activities.	NEA/PMU,SSE MD
				EM-10, E5. Mobile vendors/hawkers will receive a transitional cash assistance to shift economic activity; this amount will ensure that affected people's livelihoods are not lower than the	NEA/PMU,SSE MD

				<p>current agricultural labor rates fixed by concern local government [NRs 1,000/day] for the duration of construction activities.</p> <p>EM-10, E6. Contractor's will ensure there no areas being utilized for project activities impede local access to lands and natural resources, etc.</p> <p>EM-10, E8. 30 days advance notice regarding construction activities, including duration and type of disruption.</p>	<p>NEA/PMU,SSE MD</p> <p>NEA/PMU,SSE MD</p>
EM-9	Loss of crop, fruit, and timber trees	Standing crops, fruits and timber tress	Asset owners (including eligible tenant farmers, forest users, and encroachers who depend on crop, fruit and timber for their livelihoods)	<p>EM-11, E1. For immature, non-bearing fruit/crop trees, asset owners will receive replacement value calculated as the average annal harvest values/ yearly production for the same fruit/crop multiplied by the years that the tree must grow before reaching productive age. Where tenants or leaseholders claim rights to trees, the project will divide compensation payments equally between asset owners and tenants/leaseholders.</p> <p>EM-11, E2. For mature fruit trees, asset owners will receive replacement value calculated as average annual harvest values/ yearly production value for lost productive life of the crop plus cost of seedling and required input to replace the asserts; values will be calculated based on rate established by the concerned local level Kirshi Gyan Kendra¹² Office and will account for existing market rate.</p> <p>EM-11, E3. Matured non-fruit trees or timber bearing trees will follow the rate calculated in cubic meter (height multiplied by girth and diameter) by concerned Forest Offices/Department; market rate including cost of cutting and shifting will be provided. For the</p>	<p>NEA/PMU,SSE MD & CDC</p> <p>NEA/PMU,SSE MD & CDC</p> <p>NEA/PMU,SSE MD & CDC</p>

¹² Kirshi Gyan Kendra (Agriculture Knowledge Centre). Federal government restructured all district level offices and Kirshi Gyan Kendra is established against District Level Agricultural Office in each Rural/Municipal level to provide services to the farmers directly.

				<p>immature timber trees cost of seedling and required input to grow and replace new trees will be calculated.</p> <p>EM-11, E4. Provision for 60 days' notice to harvest standing seasonal crops. If Harvest is not possible in given time frame, cash compensation for crops/ share of crops equivalent to prevailing market price calculated by concern Local level Krishi Gyan Kendra.</p>	NEA/PMU,SSE MD
Vulnerability Offsets					
EM-10	Severely affected households	Households losing residential home and over 10% of their productive land or income sources	Household losing 10% or more of their productive land	<p>EM-12, E1. Severely affected households and vulnerable households are entitled to information about the project in a language understandable to them. The project commits to working in good faith with stakeholders to clearly communicate projects impacts, mitigation measures, and entitlements.</p> <p>EM-12, E2. Severely affected households are entitled to cash assistance equivalent to 90 days of average national minimal wage rate to offset loss of income. Assistance will be paid prior to the start of civil works.</p> <p>EM-12, E3. Additional one-time cash assistance of Nrs.100,000.00 will be provided to for each severely affected household to offset stresses of resettlement and the help ensure maintenance of daily subsistence during the transitional period. Those households will receive one-time cash assistance in this category will not be eligible for vulnerability assistance.</p> <p>EM-12, E5. To restore the livelihood of severely affected persons livelihood related energy-based skill enhancement training and other income-</p>	<p>NEA/PMU,SSE MD</p> <p>NEA/PMU,SSE MD</p> <p>NEA/PMU,SSE MD</p> <p>NEA/PMU,SSE MD</p>

				<p>generating and market-orientated trainings will be provided to one person of each severely affected households as per the need assessment.</p> <p>EM-12, E6. The project will additionally extend energy-based skills enhancement trainings—targeting at least one person from each affected household, including severely affected households.</p> <p>EM-12, E7. The project will ensure at least one person from each affected household is enrolled in gender and social inclusion capacity development.</p> <p>EM-12, E8. 60 days advance notice to before start of construction activities</p>	<p>NEA/PMU,SSE MD</p> <p>NEA/PMU,SSE MD</p> <p>NEA/PMU,SSE MD</p>
EM-11	Vulnerable households	All affected vulnerable households	Households headed by women; disabilities; elderly people; households falling under poverty; indigenous households; landless, Dalits and without legal title to land	<p>EM-13, E1. Vulnerable households are entitled to information about the project in a language understandable to them. The project commits to working in good faith with stakeholders to clearly communicate projects impacts, mitigation measures, and entitlements.</p> <p>EM-13, E2 The project will ensure that indigenous cultural values influence project benefits-sharing arrangements. Project benefits as of demand of Indigenous Peoples will be implemented appropriately.</p> <p>EM-13, E3 All vulnerable households will receive cash assistance equivalent to 90 days national minimum wage rate (as per local agricultural wages).</p> <p>EM-13, E4 Additional onetime cash assistance of 60,000 NRs per household.</p> <p>EM-13, E5 No-cost enrolment of at least one family member in energy-based livelihood</p>	<p>NEA/PMU,SSE MD</p> <p>NEA/PMU,SSE MD</p> <p>NEA/PMU,SSE MD</p> <p>NEA/PMU,SSE MD</p> <p>NEA/PMU,SSE MD</p>

				income generation or skill enhancement training. EM-13, E6 No cost enrollment in project trainings for gender and social inclusion capacity development. EM-13, E7 During construction period, project construction contractors will give preference to vulnerable households for project-related employment and labor opportunities, according to alignment of job requirements and local skills and capacities EM-13, E8. 60 days advance notice to before start of construction activities	NEA/PMU,SSE MD NEA/PMU,SSE MD NEA/PMU,SSE MD
Other Entitlements					
EM-12	Unanticipated impacts	Affected households and individuals	Affected households and individuals	EM-16, E1. During construction period if any resettlement related impacts identified mitigation measures will be implemented as provisioned in RIPP.	NEA/PMU,SSE MD

5. ONGOING CONSULTATION & INFORMATION DISCLOSURE

5.1 Consultation During Project Preparation

94. The objective of consultation meeting is to share the project information to affected people and other stakeholders and to involve affected persons actively in project activities. For this project, at the early stage of preparation, 49 consultation meetings and 2 public hearings were held in in subproject 1 areas with APs and other project stakeholders from 31st March 2019 to 11 January 2020 in the rural/ municipalities of Dhading, Nuwakot, Myagdi, Dang, Pyuthan and Rolpa districts to inform this Resettlement and Indigenous Peoples Plan. A total of 612 persons participated:, 432 men and 180 women; 134 of these participants were Indigenous People.
95. During the consultations and public meetings, project interventions and their likely impacts on the environment and on communities and households were shared with stakeholders. In Borang-Lapang and Lapang-Ratamate transmission line alignment, altogether 15 consultation meeting were held in and around affected Municipalities and Rural Municipalities. 20 consultation meetings were held in Dandakhet-Rahughat TL alignment and proposed substation area. In Ghorahi-Maduchaur TL subproject, 24 consultation meetings and two public meetings were held in Dang, Pyuthan and Rolpa area. During consultation meetings and public meetings, concerned district level stakeholders, concerned local government official and their representatives, Ward Chairpersons, representatives of local NGOs, local peoples, local media and other interested organizations and persons were invited. During consultation, project information—objectives of project, nature and likely impacts of projects, possible mitigation measures to minimize adverse impacts, role and responsibilities of local government bodies, etc.—was disseminated to the participants and queries and questions of participants were also clarified through verbally and ensured that a project brochure with key project information will be distributed in local languages (see Appendix G). The venue, date and number of participants of consultation meetings is presented in Table 5.1 below.

Table 5. 1: Consultations by locations and participants

Location	Total	Male	Female	IPs	Location of consultations meetings held	Consultation Date
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	156	105	51	54	<ul style="list-style-type: none"> - Tripurasundari-7 (1 location) - Tarkeshwor-3 (2 locations) - Belkotgadhi-7 (1 location) - Netrawati Dabjong- 1, 4, 5 (4 locations) - Nilkantha-1 (1 location) - Khaniyabash-3, 4, 9 (4 locations) 	31 st March 2019 to 3 rd July 2019

					- Ruby Valley-4 (1 location)	
Dandakhet – Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	205	137	68	56	- Malika- 6, 7 (8 locations) - Mangala-2 (4 locations) - Rahuganga- 3 (2 locations) - Beni Muni.- 5,9 (3 locations)	24 th Dec 2018 to 5 th January 2019
Ghorahi-Madichaur TL, 132/33/11 kV SS at Madichaur	251	190	61	28	- Ghorahi Metro Politian City- 4 (1 location), - Sworgadwari -2, (1 location) - Bangalachuli RM-	13 th Dec 2019 to 11 th January 2010
Total	612	432 (71%)	180 (29%)	138 (22.54%)		

Source: Consultation meetings in TL sub-projects.

5.2 People's Perceptions, Opinions and Suggested Measures

96. Consultation meetings have been conducted in different locations of the transmission alignment and substations location and the participants were verbally informed about the objectives of the Project, implementation modality and support of local government as well as local people. Perception, opinion and suggestions made by local government representatives and officials and local people including affected people have also been collected. Stakeholders were found to be generally supportive of the project. The major issues raised during consultations along the corridor of transmission line and substations locations outside Kathmandu Valley were adequate compensation of affected land and associated assets, compensation to non-land assets, mitigation measures if a dense settlement area is affected, full compensation of RoW restricted area, etc. Peoples' concerns were clarified by the project team. During consultation meetings, the mayors/ representative of affected municipalities and rural municipalities have emphasized to NEA that the concerns of affected as well as other local people have to be assessed and addressed early in the project planning stage. Stakeholder emphasize that NEA should disseminate positive information and should keep everyone informed of future actions. They further added that local government will play the supportive role for implementing the project effectively. All stakeholders consulted were found positive and supportive for transmission line project. Their expectations are after completion of project the electricity related problems will be improved with reliable power supply. Details of issues and suggestions made by participants have been summarized as listed in Appendix C.

5.3 Consultation During Updating of the RIPP

97. The engineering design of the proposed infrastructures are yet to be finalized. This draft RIPP will be updated and will be addressed following the this RIPP.
98. Once the design is finalized, changes to the transmission route and tower pad locations and number of towers will require additional consultations with the affected households, including local level stakeholders. Where further detail measurement surveys of affected assets are required during implementation, data will be collected from individual households affected by changes in scope. Changes in project scope will require an update to this draft RIPP.

5.4 Consultation During Implementation of the RIPP

99. Project implementation will involve several rounds with the affected people and communities. Future consultations include providing individual “mini” compensation plans to Affected Households, presenting the affected assets and compensation for each household with signatures of the affected people. Attached to these mini plans will be a computation Table (see Appendix G) which displays how their compensation is calculated. For example, how many trees were counted for their household. As complaints of affected peoples affected by resettlement often relate to compensation of land and other assets, ongoing meaningful consultation between the Project and the community will be carried out with regard to reinstate of infrastructures for example local road, irrigation cannel, religious infrastructures, water supply and sanitation schemes. Any unintended issues that arise during RIPP implementation will also involve meaningful consultation. Such consultations will be carried out by the SSEMD team under PMD with support of Social Safeguard Specialist in coordination with field-based staff.

5.5 Disclosure of the Resettlement and Indigenous Peoples Plan

100. The draft and final RIPP will be disclosed to affected households in the form of a booklet summarizing the key impacts, entitlements, payment processes, grievances redress procedures and contact information. The booklet will be prepared in Nepali language and provided to all affected households. On request and with appropriate timing to locate qualified translators, this booklet (see Appendix F) may be translated into dialects of project-affected people (Tamang, Gurung, Magar and Tharu). In addition to this, a short video covering all required information will be prepared which will be more effective to disseminate the RIPP related information.
101. The draft and final updated RIPP (post DMS) will be disclosed on the EA's (summary of RIPP should be Nepali) and ADB's website. Semi-annual Resettlement Monitoring Reports will be disclosed on ADBs website.

6. BUDGET

102. The Resettlement budget is based on technical designs and land requirements calculations for physical components and include compensation for loss of land and other assets, compensation of temporary livelihood losses and assistance for rehabilitation, cost for implementation of project social awareness campaigns, livelihoods improvement trainings, community health and safety trainings, an allocation for resolution of unanticipated and temporary impacts, etc. This resettlement budget is indicative and will be revised based on the outcomes of the socio-economic confirmation and verification studies. RIPP updating and budget finalization will be completed before civil works starting in the field. NEA will manage and allocate the required budget available in its annual program for the disbursement of compensation and assistance.

6.1 Calculation of Estimated Costs

103. The resettlement budget is estimated according to rates supplied by concerned Land Revenue Offices, which take into account prevailing market price and rate fixed by each rural municipality / municipality for tax purposes—a process that involves consultation with local peoples.
104. Total cost for land acquisition are summarized below.

Table 6. 1: Summary of Resettlement Budget

S.No	Items	Measures	Losses	Amount NRs in million
A. Compensation				
1	Compensation for permanent land acquisition -substations and tower footing (subproject 1)	Ha.	20.65	381.49
2	RoW restricted area (subproject 1)	Ha.	119.14	146.98
3	Distribution poles (subproject 4)	Ha.	0.009	5.4
4	Compensation cost for standing crops	metric ton	302.45	6.75
5	Compensation cost for permanent and temporary structures	structure	32	15.49
6	Compensation cost for private trees	tree	9318	5.13
7	Community infrastructures/ structures reinstate cost	structure	Tbd.	5.00
8	Compensation for temporary adverse construction impacts	households	253	22
9	Ad hoc adjustments	LS		10
Total of A				591.49
B. Resettlement Assistance and Vulnerability				
10	Supplementary compensation to titleholders losing land	Ha.	20.65	381.49
11	Resettlement assistance	households	140	4.2
12	Transitional subsistence allowances	households	15	1.80
13	One-time shifting grant	households	21	0.63
14	Cash Assistance of 90 day national minimum wage to vulnerable and severely-affected households	households	140	5.67
15	One time cash Assistance for severely-affected households	households	21	2.10
16	One time cash Assistance for vulnerable households	households	119	7.140
Total of B				403.03
C. Cost for Conducting Skill and Awareness Training				
17	Project Risk and Impact + GRM Awareness	LS		15
18	Livelihood Improvement Programs for Affected Households and Communities	LS		17.3
19	Energy-Based Livelihood Skill Trainings	LS		12.6
20	Gender and Social Inclusion Capacity Development Training	LS		15

21	Other implementation costs	LS		5
Total of C				64.9
D. RIPP Implementation Cost				
22	Project socio-economic data verification study	LS		60
23	Ongoing consultation and engagement with affected people	LS		20
24	Energy-based livelihoods training needs awareness study			20
25	Administrative cost for RIPP implementation (tax, duties, transportation etc).	LS		1.00
26	GRC management cost.	LS		8
27	Project information disclosure materials.	LS		1.50
28	RP monitoring	LS		5.00
Total of D				90.5
Subtotal of (A+B+C+D)				1169.92
D. Contingency 10% of total cost				116.70
Grand Total Million (NRs)				1286.62

Table 6. 2: Estimated Cost for Loss of Land

Subproject 1	Land required for	Required area in (ha)	Average rate ¹³ /ha	Total cost (NRs)	Total cost in Million (NRs)
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	Tower footing	3.305	9,918,608	32,781,000	32.78
	Borang SS	7.55	13,730,903	103,668,320	103.66
	Lapang SS	5.54	35,337,314	195,768,720	195.76
	RoW ¹⁴	76.22	960,790	73,231,480	73.23
Dandakhet – Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	Tower footing	.78	-	2,290,000	2.29
	RoW	18.40	388,540	7,149,143	7.14
Ghorahi-Madichaur 132 kV TL and 132/33/11 kV SS at Madichaur	Tower footing	3.48	13,507,079	47,004,636	47.00
	RoW	24.52	2,716,622	66,611,580	66.61
Distribution poles (subproject 4)	Pole erection area	.009	-	5,400,000	5.4
Total		139.79		533,904,879	533.9

Source: Field survey, consultation and estimation, 2019.

¹³ There are number parcels having different rates could not be possible to include different rate and here presented average rate based on total calculated cost.

¹⁴ For RoW only 10% of land value calculated.

Table 6. 3: Compensation cost for Loss of Standing Crops

Subproject 1	Major crops	Crop production losses in (MT)¹⁵	Total cost for loss (NRs)
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	Paddy, Wheat, Maize, Millet, Bean, Potato	154.75	3,303,800
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	Paddy, Wheat, Maize, Millet	56.36	5,07,084
Ghorahi-Madichaur 132 kV TL and 132/33/11 kV SS at Madichaur	Paddy, Wheat, Maize, Millet, Oilseeds	81.17	1,442,900
Subproject 2			
Pathalaiya-Dhalkebar 132 kV TL	LS	LS	1,000,000
Duhabi-Kusaha 132 kV TL	LS	LS	500,000
Total		302.45	6,753,784
Total NRs in Million			6.75

Source: Rate of Respective District Agricultural Offices, estimation, 2019.

Table 6. 4: Compensation Cost for Loss of Structures in TL Route

Subproject 1	No of structures¹⁶	Total Cost of structures with Plinth area (NRs)
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	12 residential structures 6 Cow shed, 7 toilets 3 kitchen	11,121,450
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	3 residential structures 1 cowshed	4,372,578
Ghorahi-Madichaur 132 kV TL and 132/33/11 kV SS at Madichaur	-	-
Total		15,494,028
Total (NRs in Million)		15.49

¹⁵ Area of crops cultivated is calculated based on area of permanent and temporary acquisition.¹⁶ Detail of cost estimate of permanent and temporary structures is presented separately in Annex G.

Table 6. 5: Compensation Costs for Private Trees and Fruit Trees

Sub-projects	Estimated Number of Trees	Total cost (NRs)
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	4181	2,540,000
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	3742	1,649,000
Ghorahi-Madichaur 132 kV TL and 132/33/11 kV SS at Madichaur	1395	944,500
Total	9,318	5,133,500
Total cost in Million (NRs)		5.13

Source: Field survey and estimation, 2019.

Table 6. 6: Estimated Cost for Vulnerability, Severity and Resettlement Assistance

S. No	Description of cost	Quantity	Rate (NRs)	Total Cost (NRs)
1	Cash Assistance of 90 day national minimum wage to vulnerable and severely-affected households	140 households	40,500	5,670,000.00
2	One time Cash Assistance for severely-affected households	21 households	100,000	2,100,000.00
3	One time Cash Assistance for vulnerable households	119 households	60,000	7,140,000.00
Total				14,910,000.00

Table 6. 7: Awareness, Income Generating and Livelihood Enhancement Trainingⁱ

Training subjects	No of events	Total participants	Total cost in (NRs)	Remarks
Project Risk and Impact + GRM Awareness	15	500	15,000,000.00	
Agricultural Intensification	23	230	2,343,000	
Community Livestock	4	60	1,550,000	
Citrus Species Farming	1	10	605,000	
Banana Farming Training	1	10	518,000	
House Wiring Training	1	10	7,000,000	
Light Vehicle Driving	1	10	350,000	
Hospitality Management	1	15	1,050,000	
Skill Development Training	3	45	2,700,000	
Micro-Enterprise Creation	3	45	1,150,000	
Gender and Social Inclusion Capacity Development	15	500	15,000,000.00	
Energy-Based Livelihood Skill Trainings	7	140	12,600,000.00	In each group 25 trainees
Total cost of all trainings	64	1,105	31,466,000.00	
Total in Million (NRs)			31.46	

7. GRIEVANCES REDRESS MECHANISM

105. NEA will establish a project-specific Grievance Redress Mechanism (GRM) to receive and manage any grievances (complaints) that may arise from the project and facilitate prompt resolution of affected persons' issues, concerns, problems, or claims. Affected persons may include members of the local community or construction workers. The project-wide GRM will address both environmental and social safeguard and other related eligible grievances/complaints raised by affected persons, in a timely and culturally appropriate manner.

A **grievance** is an issue, concern, problem, or claim (perceived or actual) that an individual or community group wants to see resolved by the project.

The **Grievance Redress Mechanism** is a locally based, project-specific extra-legal way to deal with and resolve project-related grievances/complaints faster than legal mechanisms and thus enhance project performance standards in terms of environmental and social safeguards.

106. The GRM will ensure that:
- (i) physically or economically displaced people receive appropriate compensation in accordance with the Resettlement Plan;
 - (ii) the basic rights and interests of every person affected by the environmental and social performance of NEA and their contractors on the project are protected; and
 - (iii) issues, concerns, problems, or claims arising from any poor environmental or social performance of NEA and their contractors during the conduct of pre-construction, construction, operation & maintenance activities are promptly and effectively addressed.
107. Recourse to the project's GRM does not impede access to the country's judicial or administrative remedies. Affected peoples can approach the court of law at any time and independently of the project's grievance redress process. Affected peoples may (subject to eligibility criteria) also access ADB's Accountability Mechanism¹⁷ whereby people adversely affected by ADB-financed projects can express their grievances, seek solutions, and report alleged violations of ADB's operational policies and procedures, including environmental and social safeguard policies.
108. The GRM will be set up upon loan effectiveness and be operationalized prior to the commencement of any civil works, including enabling works. PMD and the Contractor will appoint community engagement officers/GRM focals (focals): PMD will appoint a full-time

¹⁷ There are two parts to ADB's Accountability Mechanism, problem solving led by ADB's special project facilitator can assist the complainant in finding solutions to their problems, while compliance review, led by a three-member panel, can investigate alleged violations of ADB's operational policies and procedures, including safeguard policies, and recommend corrective actions to ensure project compliance.

project-wide focal, and the Contractors will appoint one full-time focal for each contract package/lot. All staff of NEA, PMD and the Contractors, as well as local and central government and other entities directly involved in the GRM process will receive a training prior to the start of works to fully grasp their roles and responsibilities within the GRM as well as approaches to constructively resolve project-related grievances/complaints.

109. Communities within the project's area of influence will be made aware of this GRM as well as how to access it, including addresses and contact numbers, through (i) community awareness raising during community or one-on-one meetings, (ii) pamphlets distributed to the general public in the direct vicinity of the project site, in Nepali and translated in local languages as applicable, (iii) notices on the radio and/or local newspaper, as well as notice boards on project-sites, at local NEA offices, and on NEA's website etc. Any concerned person or group of people can file a complaint through the project's GRM, at any time and at no cost.
110. PMD's and contractor's focals will actively engage with the affected local communities and construction workers throughout pre-construction, construction and at the onset of operation, providing an opportunity for community members or workers to approach them with any grievance/complaint. Affected peoples may also lodge grievances/complaints online through NEA's website¹⁸, by phone at numbers provided, by submitting a note in a suggestion box kept on site, by sending a letter, or in person at a project-site office or at the closest NEA office. All staff and workers of NEA, PMD, Contractors and Subcontractors, will also be made aware of the existence of the GRM and must know who to direct any complainant to, if approached regarding a grievance. The local ward chief, District Forest Office, community forest groups, protected area managements, etc. will also be made aware of the GRM and will be able to provide appropriate contacts and redirect people to the focals.
111. The GRM will follow the three-tier structure. Figure 7.1 summarizes the process, while Table 7.1 lists key members and timelines.
112. An exhaustive grievance log must be kept at all times on-site by the contractor's focal. Any grievance/complaint received, whether minor or major, whoever it was first addressed to, must be reported to the contractor's focal and documented, including: name of the person making the complaint; date and time the complaint was received; relation of the complainant to the project; nature of the complaint; details of all meetings held, including participants, date, issues discussed and decisions taken; details of all actions taken towards resolution of the grievance; log of all formal communication sent to the complainant informing of the evolution of the process etc. Table 7.2 provides a template for a grievance/complaint register; it is recommended that a project-wide grievance handling database be set up by the PMD focal replicating the site logs at project-level.
113. Once a resolution has been proposed to the complainant, they will be asked to sign a form acknowledging receipt of that proposal and providing their approval or refusal, as applicable;

¹⁸ The PMD web page has a dedicated space to send a message.

this form will be added to the grievance/complaint register and once all actions are taken the associated entry will be closed but not deleted.

Site-level grievance handling protocol:

114. The contractors will define a site-level grievance handling protocol, as initial input to the GRM. For any urgent matter, in particular emergency and health and safety issues, the contractor's site-level focal will take note of the grievance/complaint and get immediately in contact with the Environment, Health and Safety (EHS) Officer on site or with the EHS site supervisor for immediate action. Short-term issues (e.g. dust, noise, leaks, inappropriate behavior, conflict, etc.) may be corrected immediately under the direction of the focal, in collaboration with respective construction workers. In case of impending damage to structures, flora or fauna, or physical cultural resources, the focal shall get in immediate contact with the EHS Officer, biodiversity expert, or heritage expert who shall have the power to halt works until corrective action is taken. Whatever the source and the form in which the grievance/complaint is received and its nature, it should be accepted by the focal and registered in the grievance register¹⁹.

First level of GRM:

115. For longer-term grievances, the formal first level of GRM will be triggered. The contractor's site-level focal is in charge of this first level. All grievances/complaints will be sorted by the focal for their eligibility, level of urgency and by nature (suggestions or comments, grievances/complaints related to adverse impacts of the project on an individual or group, violations of law, etc.). The focal will send a formal reply to the complainant within 3 working days of the receipt of the grievance/complaint, to acknowledge receipt, provide the complaint's registration number, and set up a meeting in presence of the contractor's project manager. Through the first formal reply²⁰, the complainant will be informed of the process and of his/her possibility to subsequently escalate the complaint in case no resolution were found at this stage; contacts to the second level GRM will be included.
116. During the meeting other participants may be called upon, including but not limited to: contractor's environment, health and safety, biodiversity or heritage officer, subcontractor's representative, PMD's junior EHS officer when on-site, etc. The affected person(s) may come in presence of two representatives of their choice (selected so as to be gender inclusive), including a representative of their IP group if applicable. To keep this first level simple, the number of meeting attendees will be kept as much as possible to between 4 and 8, but ideally 4, for flexibility and ease of dialogue.

¹⁹ If the complaint is not eligible, the complainant should be informed of the reasons in writing and directed onto other appropriate mechanisms if applicable.

²⁰ Same template of this first communication is recommended to be followed project-wide.

117. This first meeting shall take place no later than one week after receipt of the grievance/complaint²¹. During the meeting, the complainant and contractor's site-level focal will agree on the course of action to be taken and timeline to resolution. Details of the meeting will be documented; minutes of meeting will be signed by both complainant and the contractor's site-level focal and annexed to the grievance's file. If both parties do not agree on a resolution, the complaint may be escalated to the second level of GRM. If both parties agree, the contractor (and subcontractors, as applicable) will take remedial action, keeping the complainant informed at each stage or every fortnight, whichever the shortest. Such actions should be taken in the briefest delay, within a maximum timeframe of 30 days. However, all simple complaints, will be resolved within 7 days of the meeting being held. Following resolution, if the complainant is not happy with the resolution or if no action has been taken within the agreed timeframe, they can escalate the grievance to the second level of GRM.
118. A log of all active complaints, even if resolved within the first level of GRM, must be communicated to PMD's focal fortnightly by the contractor's on-site focal.

Second level of GRM:

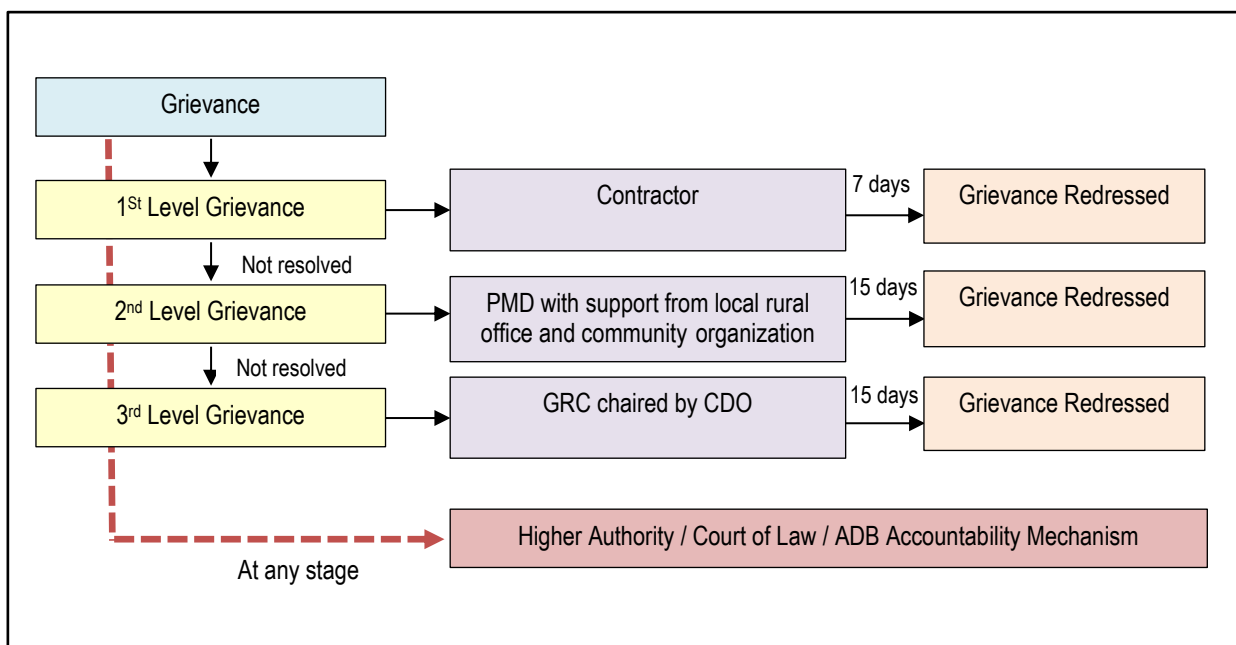
119. The second level of the GRM is headed by the PMD's project manager, supported by PMD's project-wide focal. If a complaint has not been resolved at the first level of GRM, it is escalated to the second level. If workers wish to file a complaint and are not comfortable logging it with the first level GRM, they can file it directly to this second level of GRM. All complaints will be sorted by eligibility and level of urgency and by nature (suggestions or comments, grievances/complaints related to adverse impacts of the project on an individual or group, violations of law, etc.). Just as for the first level, all grievances will be properly recorded, and the concerned person or group will be informed formally of receipt; timeline; and resolution. PMD's focal will send within 3 days of receipt a letter to the complainant acknowledging receipt; within 15 days a meeting should be held and resolution action plan and timeline agreed upon with the complainant.
120. The meeting should aim to have between 4 and 8 members, including PMD's project manager, PMD's focal, the complainant who may be accompanied by or represented by two representative including one IP representative if applicable, PMD's senior environment, health and safety, biodiversity and/or social officer, as well as other members if applicable, including contractor's representative, local rural office representative, community organization representative etc. As for the first level, the second level may have two outcomes: if the parties found a resolution and the complainant signed their approval of the resolution, such actions should be taken in the briefest delay, within a maximum timeframe of 30 days. However, all simple complaints, will be resolved within 7 days of the meeting

²¹ This timeline may only be extended if the affected person/group requests for a later date for the meeting based on availability. If the complainant has difficulty to travel to meeting location upon short notice, the location of the meeting may be flexible.

being held. If no resolution has been reached, the grievance is forwarded to the third level of the GRM.

Third level of GRM:

121. The same process of logging the grievance/complaint, communicating with the complainant and reporting will be followed. The third level of GRM is handled by NEA's EGMP project manager who will form a grievance redress committee chaired by the Chief District Officer, District Administration Office and made up of PMD's focal and environment or social officers (depending on the nature of the complaint), two representatives of the complainant including indigenous peoples representative if applicable, as well as, as applicable, a representative of the contractor, government representatives for environment or social issues (such as but not limited to land revenue, survey, forest office, agriculture office, municipality representatives etc.), NGOs or CSOs representatives, etc. For ease of discussion, the meeting will try to gather no more than 10 participants.
122. The grievance redress committee will agree on the resolution approach and action plan, inform concerned parties about actions to be taken and their timeline, and will monitor progress through regular follow-ups. Resolution will be as prompt as possible; receipt of complaint will be acknowledged to the complainant within 3 days, the resolution approach agreed upon within 15 days and actions taken within 45 days. However, all simple complaints, will be resolved within 7 days of the meeting being held. Approval of the resolution by the complainant will be sought in writing. If the complainant is still dissatisfied after this stage, they may avail of the court of law or ADB's Accountability Mechanism.
123. All entries to the site's grievance/complaints register, whether resolved at initial informal level on site or at any of the three levels of the GRM, along with updates on ongoing or completed actions taken to address the grievance/complaint, will be included in monthly reports by the Contractor to PMD and in periodic monitoring reports from PMD to ADB. PSC will monitor the overall grievance resolution process along with PMD and will recommend any improvements to increase the efficiency, timeliness, and fairness of the process.
124. **Budget.** NEA and the contractor will need to provide staff for and allocate budget for the GRM that will sufficiently cover the costs of its operations including initial awareness raising, capacity development trainings, support services, field inspections, meetings, documentation, and supplies etc.

Figure 7.1: Grievance Redress Mechanism Process Flowchart

CDO= Chief District Officer, GRC = Grievance Redress Committee, PMD = Project Management Department

Table 7. 1: GRM Composition and Timeline for Addressing Grievances

GRM Level	Composition	Maximum timeline
First Level of GRM (site-level)	<p>Responsibility: Contractor's project manager supported by contractor's community engagement officer/GRM focal</p> <p>Other parties involved, as applicable:</p> <ul style="list-style-type: none"> - 2 representatives of affected person (gender inclusive, including 1 representative of IP group as applicable) - Contractor's representative - Subcontractor's representative - PMD Junior EHS officer when on-site <p>Total meeting members: 4-8</p>	<p>3 days: confirmation of receipt to complainant</p> <p>7 days: meeting between contractor's project manager and complainant and action plan agreed upon (or escalation to level 2)</p> <p>Maximum 30 days: action taken and grievance resolved, although any environment safeguard grievances that are an emergency or pose a health and safety risk to workers or community members must be resolved immediately by the contractor</p> <p>Information and reporting</p>

GRM Level	Composition	Maximum timeline
		to PMD community engagement officer/GRM focal on two-weekly basis by contractor.
Second Level GRM (project-level)	<p>Responsibility: PMD's project manager supported by PMD community engagement officer/GRM focal</p> <p>Other parties involved, as applicable:</p> <ul style="list-style-type: none"> - 2 representatives of affected persons (gender inclusive, including 1 representative of IP group as applicable) - Representative of the contractor - PMD senior environment, health and safety, biodiversity and/or social officer as applicable depending on environment or social issues being resolved - Local rural office and community organization representative <p>Total meeting members: 4-8</p>	<p>3 days: confirmation of receipt to complainant</p> <p>15 days: meeting between EGMP project manager and complainant and action plan agreed upon (or escalation to level 3)</p> <p>Maximum 30 days: action taken and grievance resolved</p> <p>Information and reporting to NEA board and management by PMD community engagement officer/GRM focal.</p>
Third Level of GRM (committee-level)	<p>Responsibility: Chief District Officer, District Administration Office as chair; PMD EGMP project manager as facilitator</p> <p>Other parties involved, as applicable:</p> <ul style="list-style-type: none"> - 2 representatives of affected persons (gender inclusive, including 1 representative of IP group as applicable) - PMD community engagement officer/GRM focal - Representative of the contractor - Government representatives as applicable depending on environment or social issues being resolved (e.g. land revenue, survey, forest office, agriculture office, municipality representative, etc.) - NGOs/CSOs representatives depending on environment or social issues being resolved - Other as applicable 	<p>3 days: confirmation of receipt to complainant</p> <p>15 days: grievance redress committee meeting and action plan agreed upon</p> <p>Maximum 45 days: action taken and grievance resolved</p> <p>Information and reporting to NEA board and management by PMD community engagement officer/GRM focal.</p>

GRM Level	Composition	Maximum timeline
	Total meeting members: <10	

Table 7. 2: Template for Grievance/Complaints Register Entries

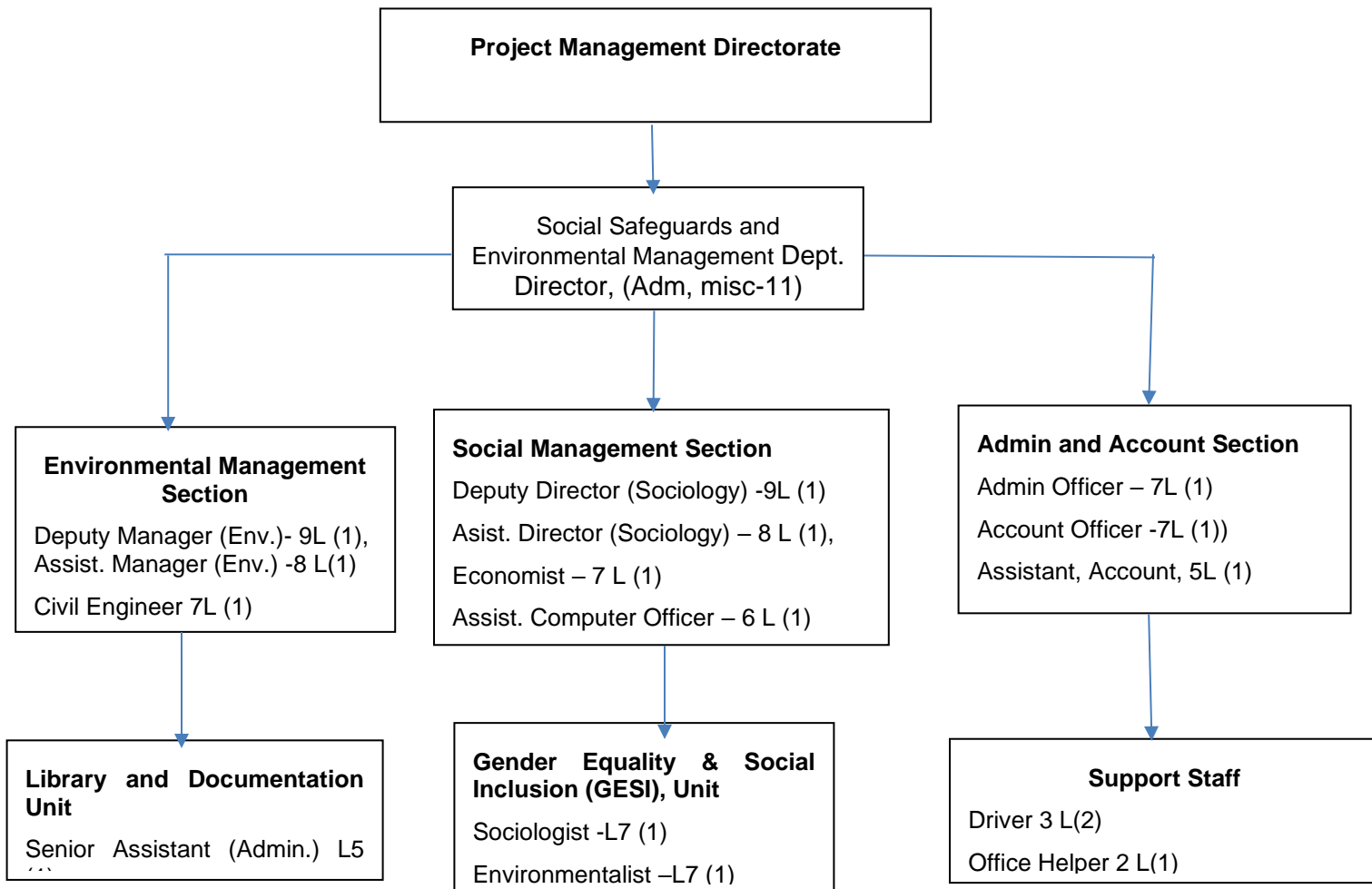
Registration number	Date of complaint	Details of complainant (name, address, email, contact number). If confidentiality is requested, highlight here.	Entry point of complaint (person/entity)	Description of complaint	Date and content of communication to complainant (date complaint acknowledged by level 1/2/3, feedback sent, etc.)	Date of meetings held and outcome (attach minutes of meetings)	Timeline agreed upon for resolution and action plan	Status (outstanding, overdue, solution agreed upon, solution under implementation, resolved)	Other remarks

8. INSTITUTIONAL ARRANGEMENTS

125. The NEA will serve as a executing agency and will implement all ADB-funded project components through its Project Management Department (PMD), which is responsible for planning, designing, implementing, monitoring and supervising all NEA projects funded by ADB. PMD usually hires its own project-specific Supervision Consultants to supervise and monitor both the technical as well as environmental and social safeguard aspects of projects. To more effectively implement the environmental and social safeguard activities, PMD will establish its own dedicated Social Safeguard and Environmental Management Department (SSEMD)²² headed by a director and supported by dedicated environmental and social safeguards, GIS, civil engineering, accounting and other support staff. SSEMD will be responsible for implementing and updating the RIPP and monitoring and supervising the environmental and social safeguard related activities.

126. The proposed organizational structures of ESSDM is presented in Figure 8.1 below.

Figure 8. 1: Proposed Organizational Structures



²² PMD has submitted a proposal to NEA for approval

127. Considering the volume of works carried out by NEA-PMD-SSEMD, additional human resources will also be engaged to support project implementation. Specifically, a Project Supervision Consultant (PSC) to assist NEA in supervising, managing and implementing the project and to ensure that the project will be completed according to the schedule and in compliance with ADB social and environmental safeguard requirements. To support the social safeguards team tasked with RIPP implementation, the PSC will include: a senior international social specialist and senior national social specialist with experience in managing resettlement and consultation with Indigenous Peoples, preferably in linear projects; a national community engagement specialist; and a national safeguards compliance data management specialist to (i) ensure that affected people are adequately consulted; (ii) track project safeguards performance; and (iii) maintain a socio-economic indicators database. Depending on need, SSEMD may also recruit additional expertise at the departmental level and field levels, including via outsourcing to individual consultants or firms. Depending on the size and scope of projects, either key E&S staff or consultants will be deployed to site to seek assurances of project environmental and social performance.

8.1 Roles and Responsibilities of SSEMD

128. Overall responsibilities of the Social Safeguard and Environmental Management Department are: (i) effective implementation and monitoring of project specific social and environmental safeguard activities in close coordination with the Project Supervision Consultant; (ii) updating the RIPP to reflect further feedback from affected people, supplemental livelihoods analysis and refinement of performance monitoring frameworks, and reflecting adjustments required during finalization of project engineer designs; (iii) recruiting or hire supplemental experts if internal human resources are insufficient; (v) establish monitoring and reporting mechanism within project as well as within PMD (vi) preparing quarterly and semiannual social safeguard monitoring report and submit to ADB through PMD.

129. Further details on agencies responsible for RIPP activities are in Table 8.1.

Table 8. 1: Institutional Roles and Responsibilities

Activity	Responsible Agency
Sub-project Initiation Stage	
Fulfill staff positions of SSEMD	PMD/NEA
Finalization of draft RIPP	SSEMD/PMD-NEA
Disclosure of draft RIPP in appropriate locations including in ADB website	SSEMD/PMD-NEA and ADB
Consultation meetings with APs at community/household level	ESSDM and field level staff
Draft RIPP Updating	
Conducting Census HHs survey of AHs	SSEMD/PMD/NEA
Conducting FGDs/consultations meetings	Field level staff with guidance of SSEMD
Computation of value of land and other associated assets	CDC with support of

Activity	Responsible Agency
	SSEMD staff
Categorization of APs for finalizing entitlements	SSEMD/Social Safeguard Specialist
Formulating compensation and rehabilitation measures	CDC/SSEMD/Social Safeguard Specialist
Conducting discussions/meetings/consultation with APs and other stakeholders	Social Safeguard specialist with support of field level staff
Fixing compensation for land/property with asset holders	PMD/CDC
Finalizing entitlements and rehabilitation packages	SSEMD/Social Safeguard Specialist
Updating RIPP	SSEMD/Social Safeguard Specialist
Disclosure of final entitlements and rehabilitation packages	SSEMD/PMD
Approval of updated RIPP	PMD/NEA
RP Implementation Stage	
Implementation of proposed rehabilitation measures	SSEMD/Social Safeguard Specialist
Distribution of compensation amount to APs and deed transfer of affected land	CDC/PMD/Land Survey and Revenue Office/SSEMD
Consultations with APs and Indigenous Peoples during implementation of rehabilitation activities	PMD/SSEMD/Social safeguard Specialist
Grievances redressal	SSEMD/PMD/NEA Safeguard Specialist, local government authority, CDO, Land Revenue Office.
Internal monitoring	SSEMD/PMD

8.2 Capacity Enhancement Training to SSEMD Staff

130. SSEMD staff and other concerned experts will be orientated and trained about the ADB's social and environment safeguard requirements and involved in other capacity enhancement programs organized before the implementation of resettlement activities.

9. IMPLEMENTATION SCHEDULE

131. Implementation of the Resettlement and Indigenous Peoples Plan will be scheduled as per the overall project implementation schedule. The project will be implemented over 6 years, with construction activities expected to start from 2021 and be completed by the end of 2026. All activities proposed in this RIPP such as determining and disbursing compensation

and entitlements for project land acquisition and involuntary resettlement will be completed prior to economic and physical displacement. Public consultation, internal monitoring, livelihood restoration activities and grievance redress will be undertaken throughout the project duration. However, the schedule is subject to modification depending on the progress of the project activities. The civil works contract for transmission line and substations will start only after all compensation is paid and rehabilitation measures are implemented.

132. The proposed RIPP implementation activities are divided into three broad phases. Project preparation phase; RIPP implementation phase; and monitoring and reporting phase. A tentative implementation schedule of compensation for land acquisition and resettlement activities in the project including various sub tasks and time line matching with civil work schedule is provided in Table 9.1.
133. **Project Preparation Phase:** The activities to be performed in this phase include fulfilling SSEMD staffing commitments, establishing a field level office with a designated officer in charge of safeguards; updating the RIPP; recruiting the project supervision consultants; and establishing the GRC. The information dissemination and stakeholder consultations will commence in this stage and continue till the end of the project.
134. **RIPP Implementation Phase:** In this phase, key activities will be carried out including payment of compensation for land and other assets including crops and trees; payment of other rehabilitation assistances; livelihood enhancement skill training; needs assessments for other benefits measures and training trainings; and obtaining all necessary site clearance certificate to enable commencement of civil works.
135. **Monitoring and Reporting Phase:** Internal monitoring will commence from the project preparation phase and will continue until the end of RIPP implementation. Monitoring reports will be submitted to ADB and disclosed on ADB website.

Table 9. 1: Schedule of Resettlement Activities

S. No.	Activities	Timeline																											
		2020		2021				2022				2023				2024				2025				2026					
		3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
A.	Project Preparation Phase																												
1	Screening sub-project impacts																												
2	On site public consultation for substations and transmission line alignment																												
3	Carry out final cadastral survey and DMS																												
4	Carry out Census survey																												
5	Prepare the draft RIPP																												
6	Update of RIPP																												
7	NEA's endorsement and disclosure of the final RIPP																												
B.	RP implementation Phase																												
1	Full fill all SSEMD staff																												
2	Public disclosure and information dissemination																												
3	Establish Grievance Redress Mechanism																												
4	Coordination with district authority for LA																												
5	Compensation Payment for land and other assets																												

10. MONITORING AND REPORTING

10.1 Overview

136. Monitoring is a major part of the resettlement management system to ensure its goals are adequately met. Activities agreed in Resettlement and Indigenous Peoples Plan will have to implement in timely manner with close supervision of SSEMD and performed activities will be monitored internally. The safeguards staff within the SSEMD will implement and monitor all the RIPP activities. The progress status will prepare quarterly basis and each quarterly progress reports will be submitted to PMD. These reports will describe the progress of the implementation of resettlement activities and compliance issues, if any, and corrective actions taken to address them. These reports will closely follow the involuntary resettlement monitoring indicators agreed at the time of resettlement plan approval.
137. SSEMD will prepare quarterly reports safeguard monitoring and will submit these reports to PMD. PMD will submit safeguard monitoring report to ADQ quarterly during construction and semi-annually during operation the semi-annual social safeguard monitoring report to NEA management and ADB. This report will cover: (i) progress on compensation payments and payments for all types of impacts and losses; (ii) performance indicators data to help assess whether the planned resettlement activities are producing the desired outcomes; (iii) progress of livelihood life skill training; (iv) status of consultations and redress of grievances; (v) consultation, communication and participation with vulnerable groups including affected Indigenous People(IPs); and (vi) to make corrective actions if unanticipated impacts or non-compliance will be noted during monitoring and to assess the unanticipated problems raised during project implementation. Monitoring components and performance indicators relevant to social performance monitoring to be addressed in quarterly and semi-annual monitoring reports will be prepared. During the monitoring period both qualitative and qualitative information will be monitored. Resettlement activities to be carried out monitoring indicators for measuring the activities are given in Table 10.1.

Table 10. 1: Monitoring Indicators

Category	Indicative Indicators	Responsible Party
Consultation, Participation and Disclosure	<p>Is a summary of the RIPP disclosed locally so that all affected households may easily access it, including women and Indigenous Peoples?</p> <p>Have consultations taken place as scheduled, including personal and household meetings, focus groups, and community forums?</p> <p>Have leaflets about resettlement impacts been prepared and distributed to affected persons in local dialects?</p> <p>How many consultation meetings are being held, and how many people participated, disaggregating by cast, ethnicity, gender?</p> <p>Have consultations been made separately with Indigenous Peoples and other vulnerable</p>	SSEMD/PMD/NEA

	<p>persons?</p> <p>How many APs are aware of their entitlements?</p> <p>How many Affected Households confirm receipt of the proposed entitlements plan?</p> <p>How many Affected Households agree to the proposed entitlements plan?</p> <p>How many complaints regarding entitlements have been registered in the grievance redress mechanism?</p> <p>How many overall complaints have been registered in the grievance regress mechanism?</p> <p>How has further consultation been carried out during project implementation?</p>	
Compensation disbursement and budget allocation	<p>Have all APs received compensation as provided under the Entitlement Matrix?</p> <p>Have all APs received compensation for the land of RoW restricted areas?</p> <p>Have all APs received additional assistances according to type of impact?</p> <p>Have all APs received payments on time?</p> <p>Was allocated budget sufficient to compensate for loss of land and other assets and to provide resettlement assistance? Were financial resources made available in time?</p>	CDC and SSEMD/PMD/NEA
Resettlement Assistance and other allowance	<p>Have all vulnerable households, including Indigenous Peoples households and women headed households, received resettlement assistance?</p> <p>Have all displaced households received transitional assistance as set out in the Entitlement Matrix</p> <p>Have all severely affected households received cash assistance as provided under the Entitlement Matrix?</p> <p>How many affected households rebuild their residential structures and have received amounts sufficient or not to construct a new and similar building?</p>	CDC and SSEMD/PMD/NEA
Livelihood and income restoration	<p>How many APs including severely affected, Indigenous and other vulnerable persons under rehabilitation program received energy-based livelihoods skills training (disaggregated by cast, ethnicity, male, female, vulnerable and IPs)?</p>	SSEMD/PMD

	<p>How many persons have been self-employed or become a job holder in local markets after getting the skill training?</p> <p>How many persons started new enterprises after getting livelihood enhancement training (disaggregated by cast, ethnicity, male, female, vulnerable and IP)?</p> <p>How many numbers of affected persons are employed in project activities including as targeted in Entitlement Matrix?</p> <p>Have all severely affected households been able to restore their livelihoods and sources of income?</p>	
Grievances Redress Mechanism	<p>Was the project GRM constituted for the resolution of complaints as anticipated in the RIPP?</p> <p>How complaints/grievances have been lodged and resolved?</p> <p>Are complainants satisfied with decisions made and time taken for to resolve grievances through the GRC?</p>	SSEMD/PMD
Institutional arrangement and capacity enhancement of safeguard staff	<p>Have all proposed staff in SSEMD been fulfilled before project implementation?</p> <p>Have all social safeguard related staff of SSEMD received Capacity Enhancement training on Social Safeguard?</p>	SSEMD/PMD and ADB

10.2 Reporting Arrangements

138. Reporting of monitoring will be the responsibility of The NEA PMD and SSEMD. Quarterly and semi-annual social safeguard reports will be prepared by SSEMD and submitted to PMD. PMD will review and approve SSEMD reports and will submit to ADB and NEA. The semi-annual monitoring report will be disclosed at the ADB website.

Appendices

APPENDIX A: LEGAL AND POLICY FRAMEWORK

Overview

1. The legal and policy framework of the resettlement plan is based on national laws and legislations of Nepal and the ADB Safeguard Policy Statement 2009 (SPS, 2009). This chapter focused on the relevant national legal framework and ADBs policy requirements relevant to the project.

2. Constitution: The Constitution of Republic of Nepal (2015) guarantees fundamental rights and duties of citizens. Article 30(1) establishes the right to property for every citizen of Nepal, whereby every citizen is entitled to earn, use, sell and exercise their right to property under existing laws. Article 30(3) states shall not except in the public interest, requisition or acquire, or otherwise create any encumbrance on, the property of the people. But not apply to any property acquired in an illicit manner. Article 30 (4) in requisition of private land for public interest according to sub-article (3), it shall be done on the basis of compensation and procedural law. Article 30 (5), Nothing in sub –articles (3) and (4) shall be deemed to prevent the state in enforcing land reform, management and regulation for the purpose of increasing production and productivity of land, modernization and commercialization of agriculture, environment preservation, organized housing and planned urbanization.

National Laws and Regulations of Nepal

3. Land Acquisition Act 1997 (LAA): The key legal framework for land acquisition in Nepal are the provisions of the Land Acquisition Act 1997 (LAA). The and its subsequent amendment in different period specify procedures of land acquisition and compensation. The Act empowers the Government to acquire any land, on the payment of compensation, for public purposes or for the operation of any development project initiated by government institutions. There is a provision of Compensation Determination Committee (CDC) chaired by Chief District Officer to determine compensation rates for affected properties. The Act also includes a provision for acquisition of land through negotiations. It states in Clause 27 "notwithstanding anything contained elsewhere in this Act, the Government may acquire any land for any purpose through negotiations with the concerned land owner. It shall not be necessary to comply with the procedure laid down in this act when acquiring land through negotiations." This Act has been amended and supplemented by the following:

- Administration of Justice Act, 2048 (1977);
- Act Amending Some Nepal Acts, 2048 (1992);
- Act Amending Some Nepal Acts, 2055 (1998); and
- Republic strengthening and Amending Some Nepal Acts, 2066 (2010).

4. Land Reform Act 1964: This act is also relevant when government entities requires land acquisition. As per the Act, a landowner may not be compensated for more land than s/he is entitled to under the law. This Act also establishes the tiller's right on the land which s/he is tilling. The land reform act additionally specifies the compensation entitlements of registered tenants on land sold by the owner or acquired for the development purposes. The Act

amendment most recently in 2001 has established a rule that when state acquires land under tenancy, the tenant and the landlord will each be entitled to 50 percent of the total compensation amount.

5. The Land Revenue Act (1977) is also applicable, as the land acquisition involves change of ownership of land. Article 8 of the Act states that registration, change in ownership, termination of ownership right and maintenance of land records are done by Land Revenue Office. Similarly article 16 says, if land revenue is not paid by the concerned owner for long period of time, the revenue can be collected through auction of the parcel of the land for which revenue has been due.

6. Guthi Corporation Act 1976: Land acquisition must also comply with the provisions set out in the Guthi Corporation Act 1976 if Guthi land need to be acquired. The Section 42 of the Act states that Guthi (religious/trust) land acquired for a development must be replaced with other land.

7. The National Policy on Land Acquisition, Resettlement and Rehabilitation in Infrastructure Development Projects 2017 provides clear guidelines to screen, assess and plan land acquisition and resettlement aspects in development projects. The Policy highlights the need to handle resettlement issues with utmost care and forethought particularly in the case of vulnerable groups. There are provisions for voluntary land donation by non-poor. Voluntary donation will be accepted if a) donation of land is < 10% of the landowner's agriculture land b) the donation is unforced, not the result of community pressure and MOU should be signed and is witnessed by third party c) land donating households should not be from vulnerable groups and poor families d) APs are fully consulted informed about their rights. Non-titled (encroachers/squatters) are eligible for compensation for their property except land. Compensation for structure, crops and tree should be calculated scientifically not less than market price.

8. The Forest Act 1993, Section 68(1) empowers the GoN to permit the use of any part of government managed forests, community forests, leasehold forests, etc., if there is no alternative except to use that area for the implementation of a plan or project of national priority without significantly affecting the environment. According to the Forest Act, Community Forest User Groups (CFUGs) will be responsible for the preparation of a management plan that must include forest development conservation, use and management.

9. Electricity Act 2049 (1992) and The Electricity Regulation, 2050 (1993): Section 33 of Electricity Act 1992 and Rule 66 of Electricity Regulation 1993 specifies that the impact on local land holders due to project implementation, as well as estimates of displaced population and resettlement and rehabilitation measures, must be elaborated and clearly explained and the amount of compensation at lump sum of such land owners as determined by the compensation fixation committee which is formed as per Rule 88 of Electricity Regulation 1993 should be paid.

10. Indigenous Peoples: Nepal does not have a standalone policy on Indigenous Peoples. The Constitution of Nepal 2072 (2015), Article 18, Right to Equality, states that all citizens shall be equal before law. No person shall be denied the equal protection of law. However, the article also mentioned that nothing shall be deemed to bar the making of special provisions by law for the protection, empowerment or advancement of the women lagging behind socially and

culturally, Dalits, Adibasi, Madhesi, Tharus, Muslims, oppressed class, backward communities, minorities, marginalized groups, peasants, laborers, youths, children, senior citizens, sexual minorities, persons with disability, pregnant, incapacitated and the helpless persons, and of the citizens who belong to backward regions and financially deprived citizens including the Khas Arya.

11. ILO Convention 169 (ratified by Nepal in 2007): These constitutional, legal and policy provisions are supplemented with the provisions under the United Nations Declaration on the Rights of Indigenous Peoples (2007) and International Labor Organization (ILO) Convention (169), 1989 in 2007 since Nepal is a signatory to these international legal instruments. The ILO Convention no. 169 of 1989 is the most comprehensive legally binding treaty on the rights of Indigenous Peoples. The Convention includes provisions on cultural integrity, land and resource rights and non-discrimination, and instructs states to consult Indigenous Peoples in all decisions affecting them. Articles 1-4 of the United Nations Declaration on the Rights of Indigenous Peoples (2007) ensures the individual and collective rights of Indigenous Peoples, as well as their rights to culture, identity, language, employment, health, education and other issues while implementing any development activities in the traditional territory of the IP.

12. The NFDIN Act 2002 established the first comprehensive policy and institutional framework pertaining to Adivasis/Janajatis. The act defines indigenous groups or Adivasi Janajati in Nepali as "a group or community having its own territory, own mother tongue, traditional rites and customs, distinct cultural identity, distinct social structure and written or unwritten history". The government, through NFDIN, has identified and officially recognized 59 such indigenous communities. This list was updated in 2009 to include 81 groups for official recognition but yet to be approved by the Government of Nepal.

ADB Safeguard Policy Statement, 2009 (SPS, 2009)

13. The objectives of SPS with regard to involuntary resettlement are: (i) to avoid involuntary resettlement wherever possible; (ii) to minimize involuntary resettlement by exploring project and design alternatives; (iii) to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and (iv) to improve the standards of living of the displaced poor and other vulnerable groups. The SPS covers physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. It covers displaced persons whether such losses and involuntary restrictions are full or partial, permanent or temporary.

14. For any ADB operation requiring involuntary resettlement, resettlement planning is an integral part of project design, from the early stages of the project cycle, taking into account the following basic principles:

15. Involuntary resettlement (IR) will be avoided or minimized as much as possible and where IR is unavoidable, displaced persons (DPs) will be compensated by full replacement cost for their losses;

16. Improve, or at least restore, the livelihoods of all DPs and provide physically and economically displaced persons with needed assistance;
17. Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status;
18. Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets;
19. Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards.
20. Prepare and disclosure a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule; and
21. Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. Pay compensation and provide other resettlement entitlements before physical or economic displacement. Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.
22. ADB policy on Safeguards requirement for Indigenous Peoples recognizes the right of Indigenous People to direct the course of their own development. For operational purpose, the term Indigenous People is used by ADB to refer to a distinct, vulnerable, social and cultural group with following characteristics:
 23. Self-identification as members of a distinct indigenous cultural group and recognition of this community by others;
 24. Collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in the habitats;
 25. Customary, cultural, economic, social or political institutions that are separate from those of dominant society and culture, and
 26. A distinct language, often different from the official language of the country or region.
27. According to ADB policy, Indigenous Peoples safeguards are triggered if a project directly or indirectly affects the dignity, human rights, livelihood systems or culture of Indigenous People or affects the territories, natural or cultural resources that Indigenous People own, use, occupy or claim as their ancestral property.
28. The SPS sets out the following principles for IP safeguards in all projects in which ADB is involved:

29. Screen early on to determine (i) whether Indigenous Peoples are present in, or have collective attachment to, the project area; and (ii) whether project impacts on Indigenous Peoples are likely.

30. Undertake a culturally-appropriate and gender-sensitive assessment of social impacts or use similar methods to assess potential project impacts, both positive and adverse, on IPs. Give full consideration to options the affected Indigenous Peoples prefer in relation to the provision of project benefits and the design of mitigation measures. Identify social and economic benefits for affected Indigenous Peoples that are culturally appropriate and gender and inter-generationally inclusive and develop measures to avoid, minimize, and/or mitigate adverse impacts on IPs.

31. Undertake meaningful consultations with affected Indigenous Peoples communities and concerned Indigenous Peoples organizations to solicit their participation (i) in designing, implementing, and monitoring measures to avoid adverse impacts or, when avoidance is not possible, to minimize, mitigate, or compensate for such effects; and (ii) in tailoring project benefits for affected IP communities in a culturally appropriate manner. To enhance IPs' active participation, projects affecting them will provide appropriate and gender inclusive capacity development. Establish a culturally appropriate and gender inclusive grievance mechanism to receive and facilitate resolution of the Indigenous Peoples' concerns.

32. Ascertain the consent of affected IP communities to the following project activities: (i) commercial development of the cultural resources and knowledge of IPs; (ii) physical displacement from traditional or customary lands; and (iii) commercial development of natural resources within customary lands under use that would impact the livelihoods or the cultural, ceremonial, or spiritual uses that define the identity and community of Indigenous Peoples communities refers to a collective expression by the affected representatives, of broad community support for such project activities. Broad community support may exist even if some individuals or groups object to the project activities.

33. Avoid, to the maximum extent possible, any restricted access to and physical displacement from protected areas and natural resources. Where avoidance is not possible, ensure that the affected IP communities participate in the design, implementation, and monitoring and evaluation of management arrangements for such areas and natural resources and that their benefits are equitably shared.

34. Prepare an Indigenous Peoples plan (IPP) that is based on the assessment of social impacts with the assistance of qualified and experienced experts and that draw on indigenous knowledge and participation by the affected IP communities.

35. Disclose a draft IPP, including documentation of the consultation process and the results of the assessment of social impacts in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected Indigenous Peoples communities and other stakeholders. The final IPP and its updates will also be disclosed to the affected IP communities and other stakeholders.

36. Monitor implementation of the IPP using qualified and experienced experts; adopt a participatory monitoring approach, wherever possible; and assess whether the IPP's objective

and desired outcome have been achieved, taking into account the baseline conditions and the results of IPP monitoring. Disclose monitoring reports.

Gaps between SPS and the Legal Framework for Indigenous Peoples

37. ADB will not finance the project if it does not comply with its SPS nor will it finance the project if it does not comply with its host country's social and environmental laws. Where discrepancies between the ADB and government policies exist, ADB's policy will prevail. Moreover, the SPS applies to all ADB-financed and/or ADB-administered sovereign projects and their components regardless of the source of financing, including investment projects funded by a loan; and/or a grant; and/or other means.

38. Impacts on IPs, whether positive or negative, are anticipated to be the same as those on the mainstream population as temporary displacement impacts. The IP households impacted have the same socio-economic status and land size as Terai Dalits or poor Madhesi because most IP livelihoods are the same as for those other groups. There will be no project infrastructure on traditional or customary land. After final engineering design, detail socioeconomic status of Indigenous Peoples will be further assessed and the extent of impacts confirmed. Indigenous Peoples will be compensated as other displaced persons, with consideration for their vulnerability.

39. Key gaps between ADB's SPS and the legal framework of Nepal center around the preparation, disclosure, supervision and monitoring of an Indigenous Peoples Plan. For this project, a combined Resettlement and Indigenous Peoples Plan (RP) has been developed. Other key gaps include assessing social impacts and minimizing and mitigating impacts on IPs. As such, the project has worked to mitigate impacts on IP communities through the design process and incorporated a screening of impacts on Indigenous Peoples in Chapter 2 on the scope of resettlement.

40. Consultation, another gap, will continue to be addressed through meaningful consultation activities outlined in Chapter 4 of this RIPP. In addition, an information booklet (see Appendix G) will be translated into local dialects (including Nepali, Terai languages-Maithili, Bhojpuri) to ensure all affected, including ethnic minorities can understand the project displacement impacts and their entitlements.

41. A grievance redress mechanism for all project impacts will be established as outlined in Chapter 5, which will include measures to ensure IP households feel comfortable in raising their issues through the project GRM, this will be achieved by discussing on IP's issues separately with them and in each GRM level one Indigenous Peoples representative will be invited/included.

A summary of key gaps with SPS and the applicable legal framework for this project are incorporated in the Table 6.1 below.

Table A.1: Summary of Key Gaps with ADBs SPS and Gap Filling Measures

ADB Safeguard Policy Principles	Legal Framework of Government of Nepal	Gap and Gap filling measures
All title holders and non-title holders will be eligible for receiving compensation and other resettlement assistance including relocation cost to all displacement persons.	Legal ownership is required for compensation eligibility under The LAA; however, tenants registered with the Land Revenue Office are also recognized. Encroachers/Squatters/ illegal occupants/ non-titled are not entitled to compensation.	Provisions are included in the Entitlement Matrix to pay compensation to non-titleholders (informal and non-registered) for their lost (non-land) assets at replacement cost including relocation cost to all.
Provide cash compensation at replacement cost for land and assets that cannot be restored without depreciating the value of lost assets.	The LA Act, determines compensation by use of the CDC. Annual government decisions on the value of land are used, this is decided each year via a 'land registration fee' through the publication of a notice of land acquisition under Section 9. There is often a gap with this rates and market value and no consideration for taxes and duties. In order to bridge such gaps there is also practice of determining based on local market rate by reviewing and accessing current market rate and transaction practices with the support of CDC members.	The calculation of full replacement cost will be based on the following elements- fair market value, transaction cost, interest accrued, transitional and restoration cost and other applicable cost if any will be considered. Provisions have been made in this RIPP to ensure payment of replacement cost, inclusive of all fees and gain tax as per the entitlement matrix.
Depreciation of the value for of the structures and other assets to be acquired should not be taken into account in determining compensation for lost assets.	Depreciation is often included as a practice for valuing structures and other assets.	Provision have been made in entitlement matrix and process of valuing the assets is detailed in this RIPP.
Relocation cost to all displaced persons should be provided.	No provision for relocation related costs.	All displaced persons including tenants, employees are entitled to receive financial assistant to cover physical and economic displacement. Provision have been made for transitional and

		shifting allowance in this RIPP and financial assistance to tenants and others.
Meaningful consultations with affected persons, host communities and concerned nongovernment organizations.	There are no particular consultation provisions related to meaningful consultation with displaced households.	Consultations with affected communities and households are detailed in chapter 4 and will continue throughout the project cycle ensuring that participation of Affected persons, vulnerable, women, Indigenous Peoples as of requirements for the project benefits
Improve, or at least restore, the livelihoods of all displaced persons.	The Policy on Land Acquisition, Resettlement and Rehabilitation 2015 (Policy 2015) provides for resettlement/ rehabilitation plans for displaced persons ensuring their better living standards at least not inferior than that of their previous conditions. However, implementation of this policy is not mandatory and there are no other laws that provide consideration for those severely affected by income or more than 10% of land holdings. However, there is also a provision in the LAA, according to which the CDC may fix different compensation rate even in accordance to extent of loss.	<p>Cash compensation in replacement value will be provided to the affected households for their lost. Lost assets that can't be restore, compensation in full replacement cost for these assets will be provided. They will be assisted additional revenues and services through benefit sharing schemes where possible. So that their economic and social future is as favorable as compared to how it would have been before the Project.</p> <p>Provisions have been made in this RIPP for severely affected households, as contained in the entitlement matrix, such that they can restore or improve their livelihoods. Also provisioned that livelihood restoration packages such as skill development trainings and entrepreneurship counselling.</p>

ADB's SPS requires that the displaced poor and vulnerable groups have their standards of living improved including women to at least national minimum standards.	As per the Policy 2015, displaced disadvantaged and deprived groups (Dalit, Aadibasi and Janajati or Indigenous People, single headed women, households headed by senior citizen, households having disabled persons, economically vulnerable households) additional economic rehabilitation/development plan will be incorporated in the resettlement plan. As mentioned previously, implementation of this policy is not mandatory.	RP provisioned that livelihood restoration activities will be implemented to restore and improve the living standard of these group who are below poverty line. For this, project/NEA will made regular follow up and support to vulnerable households for best utilization of received money. These households will also be assisted through providing income generating schemes, skill development training and ensure employment opportunity during the project period based on their skill and capacity.
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APPENDIX B: SOCIOECONOMIC INFORMATION OF AFFECTED HOUSEHOLDS

This chapter provides an overview of the socioeconomic status and profile of the affected households based on the findings of preliminary assessments. Field studies and discussions with households were conducted from 14 August 2019 to 16 August 2019 in new transmission line subprojects and further consultations with APs and other stakeholders will be made during implementation period, if necessary. Households survey have been conducted with affected households using checklist which includes questions about impacts of project, compensation options, mitigation measures to avoid or minimize the adverse impacts, overall socioeconomic status of affected households, gender issues, employment and livelihoods status of affected households. Socioeconomic information with absentee households will be collected when they will be available in the village and further assessment will be under for the absentee households. Further survey will be conducted if the scope of project will be change due to technical reason. All information presented here is based on preliminary assessments and consultations and discussion with affected households survey jointly undertaken by social and environment team of NEA.

New transmission line and associated substations infrastructures are situated within the Bagmati, Gandaki and Province 5 which are scattered from Central Region to Mid-eastern Region of the country. Within the three provinces there are 6 districts Nuwakot, Dhading (Bagmati Province), Myagdi (Gandaki Province), Dang, Pyuthan and Rolpa districts (Province 5). As per CBS Census Survey 2011, total population of Bagmati Province, Gandaki Province and Province 5 comprises 5,529,452 (m 45.38% and f 54.62%), 2,403,757 (m 49.69% and f 50.31%) and 4,499,27 (m 47.57% and f 52.43%) respectively and Bagmati is the largest province by population (20.87% of Nepal's total population) and Gandaki and province 5 represents 9.07% and 16.98% of country's population. The male and female ratio among three provinces are 83.08, 98.77 and 90.73 in Bagmati and Gandaki Provinces and Province 5 respectively. Likewise, the average households size in Bagmati, Gandaki and 5 is 4.35, 4.16 and 5.08. The average households size of province 5 is comparatively high than the national average households size (4.8). The economically active population in the Provinces are 62.88% (Bagmati), 56.88% (Gandaki province) and 55.8% (Province 5) respectively. The economically active age group 15-59 years in Bagmati is almost equivalent with same age group of country's population (56.96%). Major caste/ethnic groups are Braman, Chhetri, Tamang, Magar, Gurung, Rai, Newar, Thakuri, Tharu, Dalits and other are living there.

1. Demography characteristics of affected households:

Out of total 253 Household affected by projects, households survey of 205 available households was conducted throughout alignment. The total population of the surveyed households is 1,295 with 51.27% male and 48.72% female. The average household size is 6.3 which is comparatively higher with national average size 4.8 (CBS: Census Survey 2011). Table B.1 below presents details of demography characteristics of surveyed households.

Table B. 1: Demography Characteristics of affected households

Subprojects	Population by sex		Total	Below 15 years	15-59 years	60 years & above	Sex Ratio
	M	F					
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	384	370	754	191	453	110	104
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	171	144	315	75	181	59	119
Ghorahi-Madichaur 132 kV TL and 132/33/11 kV SS at Madichaur	109	117	226	45	148	33	93.16
Total	664	631	1,295	311	782	202	105
Percent	51.27	48.72	-	24.01	60.38	15.59	-

Source: Field studies, 2019

2. Population distribution by age group:

In terms of age distribution of the affected households, 60.38% falls within the age group of 15-59 years followed by 24.01% are below 15 years where as 15.59% are above 60 years and above of age. The population below 15 years of age among affected households is far below with average for age group in province 2 (38.55%). Similarly, 15-59 years of age amount affected households is higher than the same age group for Gandaki Province (56.88%) and Province 5 (55.8) and almost equal to Bagmati Province (62.88%). The population above 60 years and above is almost equal when compared with provincial averages (Census Survey: 2011, CBS Nepal). The 15-59 years age group is referred to as the economically active population. Below 15 years and above 60 years is referred to as the dependent population. The age-wise distribution of the households members is given in Table B.1 above.

3. Population distribution by Caste and Ethnicity:

The proposed sub-projects are scattered in 6 districts of 3 provinces and throughout the alignment of three new transmission line and substation sites, total 10 different caste and ethnic groups are affected. Out of total 205 surveyed households, major castes are Tamang 60 (29.26%) and followed by Chhetri 34 (16.58%), Bramin 30 (14.63%) and Thakuri 14 ((6.8%). Newar constitutes 12 (5.8%) and other cast followed by Magar 23 (11.2%), Gurung 10 (4.8%),

Dalits 16 (7.8%), Tharu 4(1.9%) and Sanyasi 2 (.97%) respectively. Details of Households caste/ethnicity of affected households is presented in Table B.2 below.

Table B. 2: Household distribution by caste and ethnicity

Subprojects	Khas/Arya				IPs					Dalit	Total hous	Aver age
	Brahmin	Chhetri	Thakuri	Sanyasi	Newar	Magar	Gurung	Tamang	Tharu			
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	16	15	-	-	7	3	3	60	-	7	111	6.3
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	4	11	11	1	5	12	7	-	-	3	54	5.7
Ghorahi-Madichaur 132 kV TL and 132/33/11 kV SS at Madichaur	10	8	3	1		8	-	-	4	6	40	5.7
Total	30	34	14	2	12	23	10	60	4	16	205	6.3
Percent	14.63	16.58	6.8	.97	5.8	11.2	4.8	29.26	1.9	7.8		

Source: Field survey 2019.

4. Indigenous People:

Indigenous Peoples of Nepal are officially described as Indigenous Nationalities (Adivasi/Janajati). They make up for 35.81 percent of the country's total population (approximately 8.5 million out of the 26 million Nepalese). As per the 2011 census, Nepal has 126 castes and ethnic groups speaking as many as 123 languages. As many as 59 indigenous communities have been officially and legally recognized by the Nepal Government under the National Foundation for Development of Indigenous Nationalities (NFDIN) Act-2002. They live across the country –18 of them are in mountains, 23 in the hills, 7 in Inner Terai and 10 in Terai. National Foundation for Development of Indigenous Nationalities (NFDIN, 2005) has classified them into five broad categories based on the level of their socioeconomic development status or the degree of marginalization.

Table B. 3: Indigenous Peoples and their Level of Marginalization

Region	Endangered	Highly Marginalized	Marginalized	Disadvantaged	Advantaged
Mountain	-	Shiyar, Shingsawa (Lhomi), Thudam	Bhote, Dolpo, Larke, Lhopa, Mugali, Topkegola, Walung	Bara Gaunle, Byansi (Sauka), Chhaintan, Marphali Thakali, Sherpa, Tangbe, Tingaule Thakali	Thakali
Hill	Bankariya, Hayu, Kusbadiya, Kusunda, Lepcha, Surel	Baramu, Thami (Thangmi), Chepang	Bhujel, Dura, Pahari, Phree, Sunuwar, Tamang	Chhantyal, Gurung(Tamu), Jirel, Limbu (Yakthung), Magar, Rai, Yakkha, Hyolmo	Newar
Inner Terai	Raji, Raute,	Majhi Bote, Danuwar	Darai, Kumal	-	-
Terai	Kisan, Meche	Dhanuk (Rajbansi), Jhangad, Santhal(Satar)	Dhimai, Gangai, Rajbanshi, Tajpuriya, Tharu	-	-

Source: NFDIN. 2005.

Based on the the socioeconomic survey result of 205 households in three transmission line and associated substations, 108 households are belong to different 5 IP groups. They are Tamang, Magar, Newar Gurung and Tharu. Among the Indigenous Peoples of Nepal, Newar is considered advantage group. Out of total affected Indigenous Peoples under this project, the Tamang constitute 55.55% (60 households) and Magar represent 20.37% (22 households) and followed by Newar, Gurung and Tharu. Details of Indigenous Peoples affected under this project is presented in Table B.4 below.

Table B. 4: Indigenous Peoplespopulation affected by project

Subprojects	Total households of IP				
	Newar	Magar	Gurung	Tamang	Tharu
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	7	3	3	60	-
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	5	11	7		-
Ghorahi-Madichaur 132 kV TL and 132/33/11 kV SS at Madichaur		8			4
Total	12 (11.11%)	22 (20.37%)	10 (9.25%)	60 (55.55%)	4 (3.7%)
Total population of each IP group	69	127	58	348	23
Total population	625				

Source: Field Survey, 2019

5. Family Structure:

Average size of the family in Nepal is 4.8 person which is 4.2 in Urban and 4.8 in Rural. There are 17.1% nuclear households (family size 1-2) in Nepal. Nearly half (47.2%) of the household heads are in the age group 30 to 49 years and 25.9% households are headed by female members which must be due to the high proportion of male labour migration (CBS: Annual households survey, 2015/16). Two types of family structures are found among 205 households. Joint and nuclear families. Joint family is a family that consists of grandfather, father/mother and their children who share a common kitchen in a single roof and household is headed by grandfather or father. A nuclear family where parents and unmarried children are living together and sharing a kitchen in a single roof. The survey findings of 205 households shown that about 45.85% households have nuclear family structure which is nearly about equal to national average and 54.14% affected households have a joint family. The average family size of affected households is 6.3 which is comparatively higher than the average household size of national (4.6 person) and below the average size of 3 Provinces. Family structures of surveyed households is given in Table B.5 below.

Table B. 5: Types of family structures of surveyed households

Subprojects	Households by Family Type				Total households
	Nuclear	%	Joint	%	
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	51	45.95	60	54.05	111
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	25	47.17	29	52.83	54
Ghorahi-Madichaur 132 kV TL and 132/33/11 kV SS at Madichaur	18	45	22	55	40
Total	94	45.85	111	54.14	205

Source: Field survey, 2019.

6. Religion and Language:

Out of 205 households surveyed, Majority of households that is 181 (84.87%) follow Hindu religion and followed by Buddhism and Cristian 10.24% and 4.8% respectively. The Nepali language can speak all Nepalese people but out of surveyed households 98 (46.8%) households speak only Nepali language and followed by Tamang, Magar, Newar, Gurung and Tharu respectively. Details of Language and religion is presented in Table B.6 below.

Table B. 6: Household by Language and Religion

Subprojects	households by Language						households by Religion		
	Nepali only	Newar+ Nepali	Magar+ Nepali	Gurung+ Nepali	Tamang+ Nepali	Tahru+ Nepali	Hindu	Buddhist	Cristian
Ratamate-Lapang 220 kV TL & Borang-Lapang 132 kV TL & 220/132 kV SS at Lapang and 132/33/11 kV SS at Borang	38	7	3	3	60	-	85	20	6
Dandakhet - Rahughat 132 kV TL & 220/132 kV SS at Rahughat & 132/33 kV SS at Dandakhet.	30	5	12	7	-	-	51	1	2
Ghorahi-Madichaur 132 kV TL and 132/33/11 kV SS at Madichaur	28	-	8	-	-	4	38	-	2
Total	96	12	23	10	60	4	174	21	10
Percent	46.8	5.8	11.2	4.8	29.26	1.9	84.87	10.24	4.8

Source:

Field

survey,

2019.

7. Literacy status of affected households:

Along the corridor of impacts of transmission line and substations, total 212 households were interviewed and total 1,235 population were counted for measuring the literacy status of affected population. Among the population, literate population is 16.84% (male 50.48% and female 49.51%) and illiterate is 14.41%. The literate population of affected households is far below compared with national literate population (65.94%). The country's male literacy rate is 74.2% and the female literacy rate is 58.2% (CBS: Census Survey 2011) whereas among the affected population there is no more gap between male and female literacy rate. Likewise, the educational status of project affected districts is better than the affected households. As per the Census Survey 2011, the literate percentage in Dhading, Nuwakot, Myagdi, Dang, Pyuthan and Rolpa is 62.86%, 59.8%, 71.87%, 70.32%, 67.5%, and 60.0% and respectively and also in provincial level there is no big gap with district level literate population but compared with sub-project affected households level education status is found very poor. The educational status in three Provinces are 74.81% (Gandaki), 74.85% (Bagmati) and 66.43% (Province 5). The level of education completed by the population is presented in Table B.7.

Table B. 7: Literacy Statues of surveyed households of age 5 years and above

S. No	Level of education	Male	Female	Total	
				No	%
1	Illiterate	76	102	178	14.41
	Literate only	105	103	208	16.84
2	1-8 class	223	185	408	33.03
3	9-12 class/secondary level	243	148	391	31.65
4	Bachelors and above	31	19	50	4.04
Total		678	557	1,235	100

Source: Household Survey, 2019.

8. Occupation of surveyed households:

The main occupation of the rural Nepal is Agricultural The main occupation of surveyed household is agriculture (29.17%) followed by foreign job (9.22%), Job (8.43), business and labor work. Women are engaged mainly in household works including agricultural, business, job and in small unit women are found in all sector as men.

Table B. 8: Occupation of the affected population

Occupation	Male	Female	Total	
			No	%
Agriculture	141	191	332	29.17
Business	68	21	89	7.2
Job	78	18	96	8.43
Foreign job	95	10	105	9.22
Household work	40	133	173	15.20
Pension	39	6	45	3.95
Labor	61	23	84	7.38
Student	109	105	214	18.80
Total	631	507	1,138	100
Percent	(55.45%)	(44.55%)		

Source: households survey, 2019

9. Annual income:

The overall livelihood strategy of the affected household is characterized by a mixture of farm and nonfarm activities. The majority of households carried out agricultural activities for food supply and as a source of income for other requirements. Out of total income of 205 surveyed households, 25.2% income comes from service which is followed by business (9.1%), agricultural (23.4%) and remittance (26.0%), However, majority of surveyed population is found depending on agriculture sector for fulfillment of their foods and income and livelihoods but households annual income indicates that remittance is in the top rank and agricultural and service are also in good position in terms of source of households. Pension and old ageing allowances also covers about 11% of source of income. Source of income of surveyed population is varied depending on location, caste and ethnicity and level of poverty within the districts but overall source of income is mixed types of activities such as business, employment in private sector as well as in government sector, foreign job, pension and labor work within district and outside district. Sub-project wise source of annual income is presented in Table B.9 below.

Table B. 9: Annual income surveyed households.

Subprojects	Annual income from different sources						
	Agriculture and animal husbandry income	Business	Remittance	Pension and Old aged pension	Service	Wages labor	Total Annual Income
Ratamate-Lapang 220 kV Double Circuit TL, & Lapang-Borang 132 kV DC TL & SS at Lapang and Borang	97,369	39,459	93,153	19,910	57,775	28,919	336,585
Dandakhet – Rahughat 132 kV TL and SS at Dandakhet	55,000	10,519	100,000	60,000	108,033	5,651	339,203
Ghorahi-Madichaur 132/33 kV TL and SS at Madichaur	62,766	33,964	45,920	20,922	65,755	23,454	252,781
Total	215,135	83,942	239,074	100,832	231,563	58,024	918,569
%	23.4	9.1	26.0	11.0	25.2	6.3	100

Source: Household survey, 2019

10. Annual expenditure of affected households:

Survey data suggest that affected households spend their income mainly in food, agricultural or farming, festivals, education, clothing medicine, communication and energy and transport. Sub-project wise households expenditure details is presented in Table B.10 below.

Table B. 10: Annual Expenditure of surveyed households

Subprojects	HHs Average Annual Expenditures in Different Items								
	Food items	Festival	Education	Clothing	Medicine	Transportation	Communication, electricity, fuel	Agriculture	Total
Ratamate-Lapang 220 kV Double Circuit TL, & Lapang-Borang 132 kV DC TL & SS at Lapang and Borang	158,392	33,750	27,756	29,877	21,332	11,772	24,498	20,000	307,377
Dandakhet – Rahughat 132 kV TL and SS at Dandakhet	430,184	151,232	93,391	89,535	55,771	45,426	74,957	350,000	940,496
Ghorahi-Madichaur 132/33 kV TL and SS at Madichaur	45,188	26,277	49,369	25,082	18,155	8,759	6,171	20,106	199,107

Total	633,764	211,259	170,516	119,412	95,258	65,957	105,626	390,106	1,791,898
%	35.37	11.79	9.52	6.66	5.32	3.68	5.89	21.77	35.37

Source: Households survey, 2019.

11. Access to Water, Sanitation and Electricity:

Nepal have been declared Open Defecation Free (ODF) on 30 September 2019 but quality of toilets and adequate water supply system still need to be improved in rural as well as in urban areas. As of the Nepal Demographic and Health Survey (NDHS) 2016, overall 62% of households (63% in rural areas and 61% in urban areas) use improved toilet facilities and as data shown that about 15% of households have no toilet facility (21% in rural areas and 11% in urban areas (NDHS: 2016). Under this project, out of total surveyed households, 61.46% households are using piped water for drinking and other uses and remaining are using tube well or well. About 98.53% households have their own toilets and 1.4% households have no toilet facility. The households survey report also stated that out of total 96.5% households connected with national grid and using electricity mainly for lighting and operating small industries and remaining households are still using solar energy or kerosene for lighting. Details of improved water supply system toilet facilities and access and connection to electricity with national grid is presented in Table B.11 below.

Table B. 11: Access to Water, Sanitation and Electricity

Sub-projects	Total house holds	Water supply			Toilet facility		Electricity	
		Piped water	Public tap	Well/tube well	Own toilet	No toilet	Connect ed with National grid	Not conne cted
Lapang-Ratmate 220 kV & Lapang-Borang 132 kV TL & SS at Lapang and Borang	111	71 (63.96%)	38 (34.23%)	2 (1.8%)	109 (98.2%)	2 (1.8%)	111 100%	
Dandakhet – Rahughat 132 kV TL and SS at Dandakhet and Rahughat	54	32 (59.26%)	12 (22.22%)	-	54 (100%)		54 (100%)	
Ghorahi-Madichaur 132/33 kV TL and SS at Madichaur	40	23 (57.5%)	15 (37.5%)	2 (5%)	39 (97.5%)	1 (2.5%)	33 (82.5%)	7 (17.5%)
Total	205	126	65	4	202	3	198	7
Percent		61.46	31.70	1.90	98.53	1.4	96.50	3.40

Source: Field study, 2019.

Appendix C: Consultation Meeting Report

Ratamate-Lapang 220 kV and Borang-Lapang 132 kV Transmission Line Subproject and Consultation Summaries by Location

In Ratamate-Lapang and Borang-Lapang transmission line and associated substation area altogether 15 number of consultation meetings were held in different locations of the alignment. During the consultation meetings local level stakeholders (local government officials, affected persons, forest user groups, school teachers, women groups, farmers, community-based organizations, social workers etc) were participated and put their queries and concerns about project and project related activities. Most common issues raised by the participants were potential impacts of project on land and provision of compensation for affected land. Most of the issues and concern of people were found very common and similar and based on issues summary of consultation meeting have been presented only of 8 consultations meetings are as follows.

Date and Place of Consultation	Participants, Issues discussed and opinion and recommendation about the project
28th March 2019, Borang of Rubi Valley RM, ward no 4, Dhading district.	<p>The consultation meeting was held in Borang village. Total 12 participants (9 female and 3 male) were participated and meeting was facilitated by Ward Chair Mr Prasanta Tamang.</p> <p>Major Issues: Project team disseminated the project information to participants about project objective and implementation modalities in the beginning and number of queries were raised. Major issues were: compensation of affected land (both Row and tower erection area), Life Skill Training based on market demand and financial as well as logistics support to local school.</p> <p>The consultation meeting was concluded summarizing the major issues and suggestions made by participants. Ward Chair suggested to project regarding the demand of local peoples must be addressed before project implementation. They further recommended that to avoid adverse impacts on poor people, project should have explored alternative ways and adequate compensation for affected land and other assets to be paid. Finally, Ward Chair assured that local people including local government will support to project for timely completion and without any dispute.</p>
2nd April 2019. Dundure Dharke Bajar, Khaniyabs RM, ward no 3, Dhading.	<p>Total 12 participants (7 male and 5 female) were participated in the consultation meeting. Mainly local small business operator and farmers were participated.</p> <p>Issues: Compensation of affected land, private as well as community tress were the major issues raised in the meeting. Although they have no objection about project activities but project should have to consider for poor and severely affected households for restoring their livelihood and for this Skill enhancement training on forest product utilization and livestock will be the relevant training.</p>

The project team assured that compensation of land and other affected assets will be provided as per the provision of Land Acquisition Act 2034 (1997) before project work starting in the field. Project team further explained that Life Skill training will also be organized based on demand assessment of whole project.

During consultation, the participants were recommended that before project implementation, more consultation will have to be organized with the local peoples and demand of affected as well as other people have to be addressed providing the adequate compensation amount and other technical as well as financial support.

2nd April 2019, Ghamsa, Khaniyabs RM ward no 4, Dhading

Consultation meeting was held under the chairmanship of Mr Gambhir Tamang, Ward Chair, Khaniyabs RM, ward no 4. Total 10 participants were participated (7 m and 3 f) in the meeting.

Major issues discussed: Very common issues raised by the locals was compensation of affected land and associated assets. During consultation participations were raised the concern of health and safety of high tension power and insurance plan if happened electricity hazards along the transmission line for those people who are residing under transmission cable.

The participants especially Ward Chair recommended that close coordination with all stakeholders (forest groups, farmers, school teachers, and affected people) must be consulted and impacts anticipated to be affected have to be assessed with adequate compensation. Ward chair assured that required support from ward will be provided.

8th April 2019, Tarakeshwor ward no 3, Nuwakot

A total 11 participants (2 f and 9 m) were participated in the consultation meeting. Meeting was chaired by Ward Chair Mr Surya Mand Shrestha.

Major issues: The meeting was started presenting the project objectives, modalities, impact area and other project related information. The participants were put their queries about compensation of land, tress (private and community) and other community infrastructures and queries were clarified by project team.

At the end of consultation, the participants were suggested to the project that if the farmers will lose their agricultural land, compensation of affected land and crops shall have to provide based on yearly production. They further suggested that project will be explored to avoid the residential buildings and productive land during construction period and local people will play supportive role. Finally, Ward Chair recommended that compensation of each affected assets both individual and community owned shall be provisioned by project but before demolishing or shifting the public infrastructures consultation with local stokeholds will be the must.

5th April 2019, Dabjong village of Netrawati RM,

Total 11 participants (7 male and 4 female) were participated and the consultation meeting was facilized by school teacher.

ward no 1, Dhading	Issues: Main concern of participants were impacts of project on private land and public properties and their suggestion were these affected assets have to be restored or compensated based on market price. Besides this, as informed by project team, one transmission tower will be erected within the school compound and recently school has no alternative land and building for continuing the school. If the circumstances could not be altered by project, alternative ways for operating school should be managed by project itself. The participants further suggested that during construction period project should be given priority for safeguarding the environmental and socio-cultural parts.
3rd July 2019, Tarakeshwor RM ward 4, Budhasing Dhakal Thok, Nuwakot.	<p>Total 9 male participants were participated in the consultation meeting. Meeting was chaired and facilitated by Ward Chair Mr Rammani Adhikari.</p> <p>Issues: (i) Equal compensation for tower footing and RoW area; (ii) Life Skill training to be organized coordinating with local government bodies; and (iii) private or community trees cutting and compensatory plantation plan of project should be prepared and submitted to ward office.</p> <p>Recommendations: The main focus of the meeting was on compensation rate of permanent acquisition and RoW for transmission line should be treated in equal basis. Alternative mitigation measures to avoid or minimize the adverse impacts of project both technically as well as socially should be considered during design as well as implementation phase. Local government will support fully if needed.</p>
1st July 2019. Tripurasunsary RM, ward no 7, Lapangbesi, Dhading	<p>12 participants (1 f and 11 m) participated and discussed.</p> <p>Issues and recommendations: The fertile land in Lapangbesi affected due project intervention and the participants suggested that these fertile lands should be avoided if possible because farmers can produce 4 crops in a year and depended on their land. They further suggested that if unavoidable condition compensation rate should be higher than normal land (where only two crops cultivated). They suggested that before acquiring land, project will be undertaken further consultation.</p>
3rd July 2019. Tarakeshower Municipality ward 3, Jor Chautara, Nuwakot.	<p>Total 7 participants (5 male and 2 female) joined the consultation meeting organized in Jor Chautara, Nuwakot. Chairperson of Tarakeshower RM, ward no 3, Mr Suryaman Shrestha chaired and facilitated the meeting.</p> <p>Issues: In the meeting participants put their queries and dissatisfaction regarding compensation rate of land and other affected private properties. They proposed that project have to provide full compensation of these land which will be affected due to transmission cable. The project team clarified about these issues but participants were not agreed in this regard. They suggested that before determining the compensation rate, Ward Chair or representatives, APs representatives should be there during CDC meeting for fixation compensation rate. Likewise, during project implementation period close coordination with local level stakeholders will be required to resolve the environmental and social</p>

issues.

Ghorahi-Madichaur (Khungri) 132 kV Transmission Line: Consultation Summary by Locations

Total 24 consultation meetings and 2 public hearing programs have been organized along this transmission line sub-project area. Summary of issues and recommendations were presented here only of 9 consultations meeting and two public hearing programs. The following are the major findings of local level consultations with different segment of communities and affected households.

Date and Place of Consultation	Participants, Issues discussed and opinion and recommendation about the project
13th December 2019, Swargadwari Municipality ward no 3, Neware, Pyuthan	<p>This consultation meeting was held with Chhenda Community Forest User Group (CFUG) and other local people. A total 10 participants (8 male and 2 female) were participated in the meeting. Meeting was chaired and facilitated by Mr Chandra Prasad Subedi.</p> <p>In the beginning, project team briefly informed about project objectives, implementation modalities, likely impact of project on land and associated assets and participants were raised their queries and issues related to project impacts and mitigation measures. Mainly four issues were raised: i) Grass trees plantation for livestock, ii) Herbal plantation training, iii) tree plantation in open barren land, iv) compensation of affected land including other assets.</p> <p>Recommendation: The participants suggested to the project team that project will finalize the design work using the best alternatives that will helpful to reduce impacts on public as well as private owned properties. Livestock farming is very common and self-subsistence livelihoods of community or sub-community and their demand was for transforming the traditional livestock system to modern one through commercializing the traditional way. This can be possible when the farmers will have sufficient knowledge and skill and proper market network. The participants requested to project team to provide the trainings and skill enhancement activities on aforesaid subject. The last and very common recommendation was adequate compensation of affected land and community trees.</p>
13th December 2019, Swargadwari Municipality ward no 2, Khala, Pyuthan	<p>Participants: 8 male participants participated in the consultation meeting. The meeting was organized under the chairmanship of Ward Chair Mr. Min Raj Rana Magar.</p> <p>Issues: meeting was focused mainly on impacts of transmission line, mitigation measures and provisions for severely affected households and public structures. The project team clarified the queries of participants. Ward chair summarized the issues were: (i) Employment opportunity to affected households, (ii)</p>

Financial, logistic and physical infrastructure support to local schools, and (iii) Skill training to affected persons.

Recommendation: Issues were discussed in details and basic information of project on project objectives, potential impacts and provisions of compensation, mitigation measures to avoid adverse impacts on vulnerable households and skill enhancement provision to affected households and public concerns were disseminated. They made some recommendations to project, they are: Employment should be provided to those households who loses their productive land to restore their livelihoods, as project informed project will not provide full compensation of land which will fall under transmission cable, if so, especial provision like skill training or other economic enhancement packages should be provided and support to improve infrastructure of local school should also be provided and finally they also emphasized that during project implementation period project will make close coordination with local government and other stakeholders.

13th December 2019, Sunil Smirti RM, ward no 2, Khungri, Rolpa. 10 (9 male and 1 female) participants were participated from different segments. The consultation meeting facilitated by Mr Prem Bahadur Mahara. The major issues discussed were: support to local secondary school, support to lift irrigation, maintenance of local temple, employment to locals as of skill and capacity and adequate compensation of affected land.

Suggestions/recommendations: Their suggestions were to avoid the agricultural and adequate compensation for affected assets. They further suggested that strong coordination with Rural Municipality and ward will require during implementation period.

14th December 2019, Swargadwari Municipality ward no 2, Malapani, Pyuthan A total 9 (8 male and 1 female) participants were attended the consultation meeting and the participants were from different segment of community. Major issues discussed: Affected people's income source should restore, priority to affected households for employment generated by project, support to school, local material-based skill training, adequate compensation and compensatory tree plantation if affected.

Suggestions: The participants suggested to implement the above discussed issues before project implementation and their support to implement the project will be continue as per requirement.

14th December 2019, Bangalachuli RM ward no 2, Takura, Dang The participants: The consultation meeting held in ward no 2 of Bangalachuli RM, Takura, Dang district and meeting was chaired by Ward Chair Mr Bhim Kumar Budha. Total 9 participants (8 m and 1 f) were participated the consultation meeting.

Issues discussed: Full compensation of affected land, employment opportunity and skill enhancement training packages were the major issues discussed.

The discussion was mainly focused on compensation of affected land and

associated assets and participants were also given more emphasis on compensation and employment. At last they suggested to project that their first priority was compensation of affected land should be evaluated both tower footing and RoW area as well. Contractor and project will be given priority for employment and skill enhancement activities will be implemented.

- 15th December 2019, Bangalachuli RM ward no 1, Teng Teng Khola, Dang
- 8 participants (7 m and 1 f) were participated in the consultation and all participants were Dalit and minority groups.
- The issues discussed: During construction of tower and other project related activities, priority should be given to Dalit people as of their capacity and skill. Project will have to be emphasized to increase the capacity of local through providing skill trainings. Compensation of affected land and grass tree must be provided to them.
- This community people have made only one recommendation to project that is employment to local people through enhancing their skill.
- 15th December 2019, Bangalachuli RM, ward no 1, Kalimati, Dang
- Total 7 participants with one female were participated.
- The issues discussed were: Compound wall of Janaki Temple will be affected due to tower erection and this should be reinstated if impacted. The compensation of affected land including RoW area to be provided adequately.
- The participants demanded financial support for Janaki Temple and they also suggested that all proposed support will have to be completed before project work started. Their recommendation were two types of compensation rate will not be acceptable to the affected households and before land acquisition resettlement related information should be disclosed locally.
- 16th December 2019, Ghorahi Sub-metro Politian City, ward no 4, Laxmipur, Dang
- Total 8 participants (6 male and 2 female) were participated.
- Issues: major issues discussed were: Local primary school, temples, rest places and small cross culverts and irrigation channel must be supported. Compensation rate of permanently as well as temporary acquired land and employment opportunity to affected HH's members and required coordination with local government bodies required.
- After discussions on the issues above the participants suggested that due to lack of adequate resources with community local schools, temples, rest places, irrigation channel and cross culverts are in very poor condition and could not be maintained and they requested to transmission line project to support for improving these things. Another important thing they suggested to project was safety and health requirement and provision of insurance if electricity hazards happened along the transmission cable.
- 17th December 2019, Ghorahi Sub-metro Politian City, ward no 2,
- Total 10 participants (3 female and 7 male) were participated in the consultation and the meeting was organized in Office of Ward No 2 and meeting chaired by Ward Chairperson Mr Keshav Raj Acharya.
- Issues discussed: Major issues discussed during consultation were: Agricultural

Kalimati, Dang related skill development training (specially off seasonal vegetable producing), poultry farming and other potential training based on need assessment and market demand to be provided by project, supporting to schools and community organizations and compensation of affected land and other assets.

Recommendations: Timely compensation of affected land, priority for health and safety should be given during construction and operational period. Training need assessment of affected households including other deprived groups need to be organized before organizing skill trainings.

Public Hearing Program

10th January 2020, Ghorahi Sub-metro Politian City, ward no 4, Sunpur, Dang Two public hearing programs were organized in two locations by NEA project team. This first program was in Ghorahi Metro Politian City ward no 4, Sunpur. A total 143 participants with 41 female participants were join the public hearing program from different organizations, local community, representative from concern wards and respective rural municipalities.

The public hearing program: Main objective of the program was to disseminate the following project related information and collect feedback and people's concern. They are: the project objectives, potential impacts on land and other livelihoods, project implementation modality, role and responsibilities of project proponent and local governments, provision of compensation of acquired land etc. The program was started by briefly presenting the above-mentioned information and then floor opened for participants to raise queries and concerns. Major issues raised by the participants were benefit of project to local peoples, impact assessment results, tower erection locations and other support to fulfill the people's expectations and compensation rate fixation methods ect.

The issues and queries were discussed and clarified by concern person and recommendations made by participants were collected. There were so many recommendations but only major and important were listed. They are: (i) tower erection area should be disclosed before implementation, (ii) Compensation rate must be fixed based on location and productivity of land and the land under transmission cable will not be valuable in the future, therefore, RoW areas should also be treated equally as tower erection area. After accomplishment of transmission line there may be risk of electricity leakage and could be electrical hazards, therefore, awareness campaign should be organized in different locations because rural people never seen these types of high-tension line and they do not know its negative impacts. Skill enhancement training will also be very helpful to boost up the income generating and development of entrepreneurship within the poor community.

11th January 2020, Swarthgadwari Municipality, ward no 2, Adebas, The next public hearing program was held in Adebas of Swaragadawri Municipality. Total 107 with 17 female participants were participated in the public hearing program from different organizations, local community, representative from concern wards and rural municipalities.

Pyuthan

Issues discussed: The program was started by briefly presenting the project information and then floor opened for participants to put their queries and concerns. Major queries were benefit of project to local peoples, impact and compensation and other support to construct supplementary infrastructures etc.

The issues and queries related to project were discussed and clarified by project team and local level issues were explained by concern Ward Chairs and local leaders. After discussion on the subject matters some suggestions were listed based on priority and relevant. They are: (i) all procedures and process of project preparation, designing, and implementation should be disclosed in understandable language and people's concerns or grievances should be heard and addressed wherever possible, (ii) adequate compensation amount should be provisioned and RoW areas should also be treated equally as tower erection area. Skill training at least one person from affected households should provide that will be helpful for self-employment within the country or abroad.

Dandakhet-Rahughat Transmission Line : Consultation Summary by Locations: To collect issues, opinion, perceptions, views, concern, recommendation and suggestions, formally and informally discussion with affected people and concern stakeholders have been held in 18 different locations of Dandakhet-Rahughat transmission line subproject route. In all consultation meetings most of the issues were common. Here, based on the major issues and recommendations made by participants, summary of only 9 consultation meeting is presented.

Date and Place of Consultation	Participants, Issues discussed and opinion and recommendation about the project
9th March 2018, Mangala RM ward no 2, Babiyachaur, Myagdi.	<p>A total 6 female participants were participated in the consultation meeting. Project staff briefed about project and project's potential impacts on land, livelihoods and other economic activities, mitigation measures to avoid, minimize and compensation and grievance mechanism etc. Based on information provided to participants, queries and questions were raised.</p> <p>Issues discussed: (i) health and safety awareness training to project affected area, (ii) compensation rate fixation and distribution procedures, and (iii) employment opportunities.</p> <p>Regarding above raised issues, the participants were suggested that project have to organize a short term awareness training in each settlement of project affected area because rural people have often misconception about transmission cable and they further added that people are unknown about high tension power and electricity hazards, therefore, project should display information notice board in people movement or gathering area. In addition to this, construction work will be carried out close coordination with local government as well as with affected people.</p>
10th March 2018,	9 participants (7 male and 2 female) were attended the consultation meeting.

Malika RM ward no 7, Dandakhet, Myagdi.	<p>The meeting was started with briefing on project information by project staff and then the participants were put their queries and questions on unclear matters.</p> <p>The issues raised by the participants were allocation of adequate compensation amount for affected land and other assets including activities for restoration of livelihoods and income sources and benefits sharing of project to affected households. Project team explained about compensation provision and livelihood restoration activities that will be implemented during construction period based on need assessment.</p> <p>The participants were recommended that equal payment of permanently acquired land and restricted area should be paid. They further suggested that construction period of transmission line should be scheduled considering the crop plantation and harvesting period. Their another concern was the need of close coordination with local level stakeholders will be required for completing the construction work smoothly without time overrun.</p>
11th March 2018, Rahuganga RM ward no 3, Ambang, Myagdi	<p>8 male participants were attended this consultation meeting. Project team briefly described the projects outputs and outcomes in the begging and then floor discussion was started.</p> <p>During discussion participants were raised the compensation issues of affected land. Their concern was the land affected due to tower footing, substation and RoW should have treated equal footing that is compensation rate should be equal. In addition, the participants were demanded for rehabilitating local foot trail near to substation site. In general, the people participated in the meeting were found supportive for project.</p>
11th March 2018, Mangala RM, ward no 2, Simalchaur, Myagdi	<p>Total 10 participants (5 male and 5 female) were participated in the consultation meeting. The meeting was facilitated by Mr Yem Bahadur Bhandari. The objective of consultation meeting was briefed by Poonam Pokharel, Team leader, NEA. She highlighted on project objectives, potential project impacts on environment and social aspects, compensation and other mitigation measures to be applied for affected households etc.</p> <p>After short presentation, the participants were raised their queries and put questions about the project and potential impacts. The major issues raised by the participants were: (i) compensation of affected land and land valuation process; (ii) compensation of timber trees and fruit trees and compensation and compensatory plantation of community trees; (iii) health and safety provisions under transmission cable; (iv) support for the severely affected and poor households; and (v) employment opportunities.</p> <p>The issues and questions were clarified by the project staff. They were informed about compensation rate determination and distribution process, entitlement, resettlement assistant including livelihood restoration and skill enhancement activities. The project team further explained that health and safety awareness campaign will also be implemented through different ways, compensation will be</p>

paid to affected trees and fruit trees and priority will be given to locals for local level construction work based on their skill and capacity.

Finally, the participants were suggested to the project that the contractor will inform to local people about construction schedule that will be helpful for plantation or harvesting of seasonal crops.

12th March 2018,
Rahuganga RM,
ward no 3,
Ratobhir, Myagdi

9 participants (5 male and 4 female) were attended the consultation meeting.

Major issues discussed: (i) project information should be disclosed publicly; (ii) financial support for health, education and foot trails; (ii) adequate compensation for affected land; (iv) skill enhancement trainings.

These concerns were discussed in detail and they were informed that project will be distributed a broacher with detail of project component and potential impacts and they were further informed that s summary of RIPP will also be disclosed in common places and full text will be uploaded in ADB and NEA website. If required further consultation will be undertaken during construction period. Skill enhancement training will be organized based on need assessment to the vulnerable and severely affected households.

At the end of meeting the participants suggested that during construction period there should be an easy grievance redress mechanism to be established where APs could complain their concern and resolved appropriately.

12th March 2018,
Rahuganga RM
ward no 3,
Agenatole, Myadi

Total 7 (3 male and 4 female) were participated in the consultation meeting.

Compensation of affected privately owned land and associated assets, rein stead of public properties (if affected), compensation in cash or kind health and safety for those area which falls under transmission cable, employment opportunities for affected persons etc were the major concern of participants. Project team clarified all these queries of participants.

The concern of participants was to know the exact location of tower footing area and they suggested that productive land and residential land should be avoided wherever possible and in case of unavoidable circumstances adequate compensation rate should be determined for the productive land and local people will play supportive role for development but their concern will have to address in timely manner.

12th March 2018,
Malika RM ward no
7, Dandakhet,
Myagdi.

Total 8 male participants were participated in the consultation meeting. The participants were from the surrounding area of Rahughat SS and they were informed about objectives of this consultation meeting and also informed briefly about project activities to be undertaken.

Their major concern were the transmission cables over the surrounding area of substation and compensation of land that fall under cable. Though they have no objection for providing required land but adequate compensation of affected land must be provided. Another issue but important was if the small portion of land will be remained and will not be viable for agricultural activities and in such

cases, project should be acquired whole portion of land.

13th March 2018, Total 10 (5 male and 5 female) participants were attended the consultation
Malika RM, ward meeting.

no 6, Tolabang, Myagdi During discussion they were raised bundle of issues and relevant issues were:
need of agricultural related skill enhancement training to affected persons
including local farmers, area required for tower footing area and compensation
of RoW of transmission line and other support provisions for severely affected
households etc. The queries of participants were very relevant and during
discussion all queries were clarified and informed them about provision of
resettlement assistance and skill enhancement training.

16th March 2018, Total 7 participants (4 male and 3 female) were attended the consultation
Mangala RM ward meeting.

no 2, Mangala, Myagdi Major issues raised by the participants were: (i) compensation of affected land;
(ii) capacity enhancement schemes; (iii) logistics support to schools; and (iv)
project information dissemination or disclosure.

The above issues were discussed and clarified in detail. Project staff assured
that a booklet of project with full information and summary of RIPP will be
distributed and disclosed in Nepalese language or in other local understandable
dialect. Capacity enhancement activities will also be implemented based on
need assessment and market demand.

Finally, the participants were suggested that all agreed action will be
implemented in time and in case of unanticipated issues and coordination with
local government will be needed.

Appendix D: Photographs of Consultation Meeting

Photos of Ratamate-Lapang 220 kV and Borang-Lapang 132 kV Transmission line



Proposed Borang Substation site



Proposed Lapang Substation site (5.68 ha)









Consultation meeting with local people at Borang on 31st March 2019



Consultation meeting with representatives of RM and Municipalities and local people looking public notice on 4th March 2019

Photos of Dandakhet- Rahughat 132 kV Transmisson Line

	
<p>Beni Municipality-5 on 28 December 2018</p>	<p>Consultation meeting at Rakhupiple, Rahuganga RM-3 on 26 December 2018</p>
	
<p>Consultation meeting with locals at Rahughat SS area, 25th December 2018</p>	<p>Private tree counting along the TL alignment</p>
	
<p>Rahughat 220/132kV SS, in Ambawang village, Rahuganga RM-3 of Myagdi district</p>	<p>Dandakhet 132/33kV SS at Dadadhet, Darwang, Malika RM-7 of the Myagdi district</p>

	
<p>Darwang Malika ward No 7, 5th January 2029</p>	<p>HHs survey along the TL alignment</p>
	
<p>HHs survey along the TL</p>	<p>Pulachaur, Beni Municipality- 5, on 2nd January 2019</p>
	
<p>Women Participation during consultation meeting, Kaulegauda, Beni Municipality-9, 27th Dec 2018</p>	<p>Kauligauda, Beni Municipality – 9, on 27th Dec 2018</p>

Photographs of Ghorahi-Madichaur 132 kV transmission line



Public Hearing program in Ghorahi Sub-metro Poitian City, Ward no 4, Shree Aadharbhut Bidyalaya, Sunpur, Dang on 10th January 2020.



Consultation meeting with local peoples at Malarani, wad no 2 of Sworgadwari M on 14 December 2019



Consultaion with local people at Bangalachuli RM, Teng Teng Khola, 15th December 2019



Public Hearing program in Sworgadrawi Municipality-2, Bal Madhyamik Bidyalaya, Adewas, Pyuthan district, collecting peoples from Sunilsmriti RM, Rolpa (on 11th January 2020)



Proposed Ghorahi sub-station bay extension site at Jhingani Ghorahi, Dang district (March, 2018)



Proposed Madichaur (Khungri) sub-station site inside gate at Liwang highway at Sunilsmriti RM, Rolpa district, 21 May, 2020 (Land area = 47.18 Ropani, in hectre = 2.407)

Photographs of Ghorahi 132 kV Substation, Jhingani, Ghorahi Submetropolitan City, ward No 3, Dang



Photographs of 3 new substations outside Kathmandu valley



Keraun substation site, Morang



Keraun SS site showing access road,
Morang



Pantang substation site, Sindhupalchock (under
construction)



Surkhet substation site

Appendix E: Process and Responsibilities for Ensuring Provision of Entitlements Matrix

Project Actions	Responsible Agency
Land Acquisition	
<p>EM-1, A1. Complete socio-economic confirmation study / verification survey. Determine stakeholder preference for either asset replacement or cash compensation. Record all socio-economic survey data and assessment findings.</p> <p>EM-1, A2. Obtain rates for productive assets claimed by APs from CDC of the concerned district</p> <p>EM-1, A3. Agree with owner on compensation package (replacement values, compensation for additional costs). Document this process.</p> <p>EM-1, A4. Prior to construction activities, ensure payments are made. Disburse compensation directly in bank account (preferably in joint account of husband and wife if married).</p> <p>EM-1, A5. Seek to engage stakeholders using multiple avenues for outreach, as necessary. Disclose summary of project impacts, entitlements, and avenues for filing grievances.</p>	<p>NEA, PMD/PMU/SSEMD</p> <p>PMD/PMU/SSEMD & CDC</p> <p>PMD/PMU/SSEMD & landowner</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU NEA & supervisory organization</p>
Land Use Restrictions	
<p>EM-2, A1. Complete socio-economic confirmation study / verification survey to identify affected by restricted land use; determine contribution of land value to household livelihood composition and ascertain if land lands are being utilized by tenants/leaseholders.</p> <p>EM-2, A2. Cooperate with CDC of the concerned district to determine productive values of lands being affected.</p> <p>EM-2, A3. Make formal offer to APs and seek acceptance and verification. Record this process. For those that disagree, note reason for non-agreement.</p> <p>EM-2, A4. Where there are disputes, meet with stakeholder to negotiate and resolve. Adjust project design to avoid impacts to stakeholder if necessary.</p> <p>EM-2, A5. Prior to construction, ensure compensation payments are made. Disburse compensation directly in bank account (preferably in joint account of husband and wife if married).</p> <p>EM-2, A6. Seek to engage stakeholders using multiple avenues for outreach, as necessary. Disclose summary of project impacts, entitlements, and avenues for filing grievances.</p>	<p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU & CDC/CDO</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p>

<p>EM-3, A1. Complete socio-economic confirmation study / verification survey to identify tenants/sharecroppers and leaseholder affected by restricted land use.</p> <p>EM-3, A2. Cooperate with CDC of the concerned district to determine productive values of lands being affected.</p> <p>EM-3, A3. Make formal offer to APs and seek acceptance and verification. Record this process. For those that disagree, note reason for non-agreement.</p> <p>EM-3, A4. Where there are disputes, meet with stakeholder to negotiate and resolve. Adjust project design to avoid impacts to stakeholder if necessary.</p> <p>EM-3, A5. Prior to construction, ensure compensation payments are made. Disburse compensation directly in bank account (preferably in joint account of husband and wife if married).</p> <p>EM-3, A6. Seek to engage stakeholders using multiple avenues for outreach, as necessary. Disclose summary of project impacts, entitlements, and avenues for filing grievances.</p>	<p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD & CDC</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA,PMD/PMU/SSEMD & supervision organization</p> <p>NEA, PMD/PMU/SSEMD</p>
<p>EM-4, A1. Complete socio-economic confirmation study / verification survey to identify affected households and ownership status of affected lands.</p> <p>EM-4, A2. Make formal offer to APs and seek acceptance and verification. Record this process. For those that disagree, note reason for non-agreement.</p> <p>EM-4, A3. Where there are disputes, meet with stakeholder to negotiate and resolve. Adjust project design to avoid impacts to stakeholder if necessary.</p> <p>EM-4, A4. Prior to construction, ensure compensation payments are made. Disburse compensation directly in bank account (preferably in joint account of husband and wife if married).</p> <p>EM-4, A5. Seek to engage stakeholders using multiple avenues for outreach, as necessary. Disclose summary of project impacts, entitlements, and avenues for filing grievances.</p>	<p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU</p> <p>NEA, PMD/PMU/SSEMD</p>
<p>EM-5, A1. Complete socio-economic confirmation study / verification survey; identify affected householder, titleholders and non-titleholders, including Forest User Groups, squatters and encroachers, and other informal land users. Collect socio-economic data on livelihoods, including amounts of annual income derived from land use activities.</p> <p>EM-5, A2. Cooperate with CDC to determine productive values of lands being affected.</p>	<p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD & CDC</p>

<p>EM-5, A3. Make formal offer to APs and seek acceptance and verification. Record this process. For those that disagree, note reason for non-agreement.</p> <p>EM-5, A4. Where there are disputes, meet with stakeholder to negotiate and resolve. Adjust project design to avoid impacts to stakeholder if necessary.</p> <p>EM-5, A5. Prior to construction, ensure compensation payments are made. Disburse compensation directly in bank account (preferably in joint account of husband and wife if married).</p> <p>EM-5, A6. Seek to engage stakeholders using multiple avenues for outreach, as necessary. Disclose summary of project impacts, entitlements, and avenues for filing grievances.</p>	<p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p>
Impacts to Structures	
<p>EM-6, A1. Complete socio-economic confirmation study / verification survey; identify affected religious/ cultural/ community structure /facilities, if any. Where there are anticipated impacts, ascertain community preference for asset replacement or cash compensation.</p> <p>EM-6, A2. Cooperate with CDC to determine productive values of lands being affected.</p> <p>EM-6, A3. Make formal offer to APs and seek acceptance and verification. Record this process. For those that disagree, note reason for non-agreement.</p> <p>EM-6, A4. Where there are disputes, meet with stakeholder to negotiate and resolve. Adjust project design to avoid impacts to stakeholder if necessary.</p> <p>EM-6, A5. Prior to construction, ensure compensation payments are made. Disburse compensation directly in bank account (preferably in joint account of husband and wife if married).</p> <p>EM-6, A6. Seek to engage stakeholders using multiple avenues for outreach, as necessary. Disclose summary of project impacts, entitlements, and avenues for filing grievances.</p>	<p>NEA, PMD/PMU/SSEMD, CDC</p> <p>NEA, PMD/PMU/SSEMD & CDC</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p>
<p>EM-7, A1. Complete socio-economic confirmation study / verification survey; identify affected religious/ cultural/ community structure /facilities, if any. Where there are anticipated impacts, ascertain community preference for asset replacement or cash compensation.</p> <p>EM-7, A2. Where communities express a preference for asset replacement, agree and implement restoration/rehabilitation measures in consultation with affected communities.</p> <p>EM-7, A3. Where communities express a preference for cash compensation, agree to compensation amount for restoring/ reestablishment of the affected cultural/community structures. Ensure that compensation is paid prior to the start of construction activities.</p>	<p>SSEMD/PMD/NEA, local Community and contractor</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p>

EM-7, A4. Seek to engage stakeholders using multiple avenues for outreach, as necessary. Disclose summary of project impacts, entitlements, and avenues for filing grievances.	NEA, PMD/PMU/SSEMD
Economic Displacement	
EM-8, A1. Complete socio-economic confirmation study / verification survey; determine household livelihoods composition and project impacts on livelihoods by a combination of survey, document review, consultation with stakeholders. Obtain information on local business revenues/profits, remuneration rates for different job types of affected people / businesses / employees.	NEA, PMD/PMU/SSEMD
EM-8, A2. Set transitional allowance for each household based on verification survey. Request that affected people/ households/ businesses substantiate claims with tax receipts or other legal forms to verify income. Where no records are available, compensation of affected business/shops will be determined based on proxy measures and will ensure that no affected person has an income below the national poverty line.	NEA, PMD/PMU/SSEMD
EM-8, A3. Make formal offer to affected people/ households/ businesses and seek acceptance and verification. Record this process. For those that disagree, note reason for non-agreement.	NEA, PMD/PMU/SSEMD
EM-8, A4. Where there are disputes, meet with stakeholders to negotiate and resolve them. Adjust project design to avoid impacts to stakeholder if necessary.	NEA, PMD/PMU/SSEMD
EM-8, A5. Agree on compensation amount with affected people/households; ensure the livelihood of affected people and households are above district and national poverty levels throughout the duration of construction activities (period of disruption).	NEA, PMD/PMU/SSEMD
EM-8, A6. Ensure that compensation is paid prior to the start of construction activities.	NEA, PMD/PMU/SSEMD
EM-8, A7. Ensure that energy-based livelihood and skill enhancement training are planned and implemented in a timely and inclusive manner.	NEA, PMD/PMU/SSEMD
EM-8, A8. Seek to engage stakeholders using multiple avenues for outreach, as necessary. Disclose summary of project impacts, entitlements, and avenues for filing grievances.	NEA, PMD/PMU/SSEMD
Economic Displacement	
EM-9, A1. Complete socio-economic confirmation study / verification survey.	NEA, PMD/PMU/SSEMD, & CDC
EM-9, A2. Obtain asset valuation data from concerned Kirshi Gyan Kendra Office and/or Forest Office, as appropriate.	NEA, PMD/PMU/SSEMD & concerned Kirshi Gyan Kendra / Forest Office

<p>EM-9, A3. Make formal offer to affected people/ households/ businesses and seek acceptance and verification. Record this process. For those that disagree, note reason for non-agreement.</p> <p>EM-9, A4. Where there are disputes, meet with stakeholders to negotiate and resolve them. Adjust project design to avoid impacts to stakeholder if necessary.</p> <p>EM-9, A5. Agree on compensation amount with affected people/households; ensure the livelihood of affected people and households are above district and national poverty levels throughout the duration of construction activities (period of disruption).</p> <p>EM-9, A6. Ensure that compensation is paid prior to the start of construction activities.</p> <p>EM-9, A7. Schedule land clearing activities to avoid impacts.</p> <p>EM-9, A8. Seek to engage stakeholders using multiple avenues for outreach, as necessary. Disclose summary of project impacts, entitlements, and avenues for filing grievances.</p>	<p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p>
Vulnerability Offsets	
<p>EM-10, A1. Complete socio-economic confirmation study / verification survey to finalize identification of severely affected households.</p> <p>EM-10, A2. Undertake training needs assessment (TNA). Examine list of community-preferred training and skills activities gathered during survey against market demands and short, mid, and long-term income-earning opportunities. Consult affected people on their current options self-employment, employment in local markets, foreign country, etc. Propose back to affected households a final schedule of training options that link to the preferences expressed by severely affected and vulnerable households.</p> <p>EM-10, A3. Plan and document the consultation process with affected households for finalizing project trainings for energy-based livelihood income generation or skill enhancement and gender and social inclusion capacity development. Agree with severely affected and vulnerable groups on training objectives, content, and schedule for conducting trainings and the total duration of training initiatives.</p> <p>EM-10, A4. Finalize identification of participants for each type of training offered; , nominate at least one participant from each household to join a training.</p> <p>EM-10, A5. Ensure that the project engages communications support to facilitate disclosure of project information in local languages on request.</p>	<p>SSEMD/PMD/NEA,</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p>

<p>EM-10, A6. Ensure that project contractors maintain records to show where and how the project can employ affected people. Communicate labor issues with affected communities.</p> <p>EM-10, A7. Ensure assistances are paid prior to starting civil works.</p> <p>EM-10, A8. Seek to engage stakeholders using multiple avenues for outreach, as necessary. Disclose summary of project impacts, entitlements, and avenues for filing grievances.</p>	<p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p>
<p>EM-11, A1. Complete socio-economic confirmation study / verification survey to finalize identification of vulnerable households.</p> <p>EM-11, A2. Plan and document the consultation process with affected households for finalizing project trainings for energy-based livelihood income generation or skill enhancement and gender and social inclusion capacity development.</p> <p>EM-11, A3. Measure whether income generation and skill enhancement training are helping affected vulnerable households. Solicit AP feedback and request training to participants check in with updates on livelihoods during and after construction period.</p> <p>EM-11, A4. Finalize identification of participants for each type of training offered; , nominate at least one participant from each household to join a training.</p> <p>EM-11, A5. Ensure that project contractors maintain records to show where and how the project can employ affected people. Communicate labor issues with affected communities.</p> <p>EM-11, A6. Ensure that the project engages communications support to facilitate disclosure of project information in local languages on request.</p> <p>EM-11, A7. Ensure assistances are paid prior to starting civil works.</p> <p>EM-11, A8. Seek to engage stakeholders using multiple avenues for outreach, as necessary. Disclose summary of project impacts, entitlements, and avenues for filing grievances.</p>	<p>SSEMD/NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p> <p>NEA, PMD/PMU/SSEMD</p>

Appendix F: Mini Plan & Computation Template

The Project will pre-populate the form below based on analysis of official records. Form data will be taken to affected land owners for verification. Land owners will have the opportunity to offer corrections for reconsideration. Consultants will be informed with adequate tools to make adjustments to compensation offers based on corrections offered in the field.

Form Number:	
Plot Number:	
Land Owner:	

Land Compensation

S.N	Type	Plot Size (unit)	Unit Rate*	Compensation Amount
Sub Total (A)				

*The source of the unit rate is presented in the section 9.

Structure Compensation

S.N	Type	Structure Size (unit)	Features	Market Rate	Compensation Amount
Sub Total (B)					

*The source of the unit rate is presented in the section 9.

Assets Compensation

S.N	Type	Number	Productive Period	Year Yield	Unit Rate per year	Amount
	Fruit Trees					
	Timber Trees					
	Other Trees					

	Crops					
Sub Total (C)						

*The source of the unit rate is presented in the section.

Assistance and Allowances

S.N	Particular	Eligibility (yes/no)	Entitlement	Measure	Amount
	Livelihood				
	Vulnerable				
Sub Total (D)					

*The source of the unit rate is presented in the section 9.

Total compensation, assistance and allowance amount from subtotals (A)+(B)+(C)+(D).

Payment method:

Reference Data

[Data demonstrating that the unit rate is based on a fair market price, for example:]

S.N	Particular	Official registered rate	Market rate	Determined rate	Remarks
	Land unit rate				
	Structure unit rate				
	Fruit tree unit rate				
	Timber tree unite rate				

The information indicated above is explained, discussed and agreed between the owner and the THL, and it is observed by the consultant(s) engaged with Asian Development Bank.

Upon receipt of the compensation and allowances agreed, the owner will permit THL to take over the land and/or asset and transfer its ownership to the THL.

Date:

For agreement

Signature of the owner

Signature of the THL

For acknowledgement

Signature of the consultant 1

Signature of the consultant 2

APPENDIX G: BOOKLET/INFORMATION BROCHURES

Project Description

The proposed project will finance to increase and modernize the power transmission system capacity in Kathmandu valley and outside valley which will increase the access of connectivity of electricity grid power of those parts where people are facing low quality and unreliable electricity supply. Nepal Electricity Authority (NEA) will be responsible for implementing the all project activities..

The project is expected to be completed by 2026. The total time for project implementation after loan effectiveness is estimated at 6 years for detailed design, engineering, tender preparation, evaluation and contract award.

This draft Resettlement and Indigenous Plan (RIPP) is for the proposed Electricity Grid Modernization Project (hereafter 'the Project'). The Nepal Electricity Authority is the Executing Agency (EA) for the Project and is responsible for all project activities.

The Project aims to achieve three main outputs:

Output 1: Electricity transmission capacity in project areas strengthened and modernized.

- a) Construction of 25 km of 220 kV and 88 km of 132 kV transmission line and associated substations;
- b) Automate 40 existing grid substations
- c) Upgrading of 150 km of 132 kV and 35 km of 66 kV transmission lines with more efficient high-temperature-low-sag conductors (Pathalaiya-Dhalkebar 120 km, Duhabi-Kusaha 30 km and 35 km in Kathmandu valley);.

Output 2 Electricity distribution system in project areas modernized:

- d) Distribution control and command system operationalized
- e) 350,000 smart meters promoted in Kathmandu Valley.
- f) Construction of 132/33/11 kV substations in Keraun of Morang district, Pantang of Sindhupalchowk district and Birendranagar of Surkhet district; construction of 30 km of 33 kV distribution line in Keraun substation area; and Barabise substation extension in Sindhupalchock district.

Output 3:: Capacity of NEA and electricity users in project areas strengthened

- f) At least 40 eligible NEA staff (including 30% eligible women) on automation of grid substations;
- g) At least 30 eligible NEA staff (including 30% women) on NEA's organizational development;
- h) At least 20 eligible NEA staff (including 30% women) on putting in place improved billing and collection measures; and

- i) At least 2,000 electricity consumers in project areas (40% women and disadvantaged group on safe and efficient use at distribution centers.
- j) The project will also support implementation of key actions from NEA's gender equality and social inclusion (GESI) strategy and operational guidelines in its regional offices, to complement corporate level activities covered under a forthcoming project.

Summary of Impacts:

S. No.	Impacts	Quantity	Mitigation Measures
1	Physical relocation (not applicable to majority of affected people).	15 HHs	Due to loss of residential building, few individuals would need to be resettled for the Project. Practice throughout Nepal indicates that cash compensation plus resettlement assistance is preferred by most stakeholders, with fewer interested in land for land. Both options will be consulted with affected stakeholders. The Project will analyze for alternative siting options.
2	Loss of land.	20.65 ha	Few households will lose land to the Project. Practice throughout Nepal indicates that cash compensation plus resettlement assistance is preferred by most stakeholders, with fewer interested in land for land. Both options will be consulted with affected stakeholders. The Project will analyze for alternative siting options.
3	Loss of access to land.	NA	People and communities living in the areas near to the Project will experience temporary impacts from loss of access to land and resources. After Project construction, those living near to the Project will regain use all lands except for those physically occupied by Project infrastructure.
4	Diminished or altered access to natural resources	NA	The Project will have little consequence for access to natural resources. While access to Project area will be restricted during installation of new transmission lines, substation construction, and extension of new substations, these activities are not anticipated adversely impact on affected people.
5	Loss of productive economic resources and livelihood impacts.	9 HHs loss	Tower siting will be pre-consulted with affected stakeholder to avoid requiring greater than 10% of the affected person's total land holdings.
6	Loss of cultural heritage resources.	NA	The Project is not anticipated to affect cultural heritage resources. The project will put into place a 'Chance Finds Protocol' (or similar) and will ensure construction contractors are trained in the mitigation of risk to physical cultural

S. No.	Impacts	Quantity	Mitigation Measures
			heritage.

Entitlements, Assistance and Benefits

Type of Loss	Entitled Person	Entitlement
Loss of land	Legal title or legalizable right	Cash compensation at replacement value
	Tenant/sharecroppers and leaseholders	50% amount will be paid to tenant and and sharecroppers and for leaseholders 100% rental value of land will be provided.
	Owner without legal title (squatters, informal dwellers, encroachers	Cash compensation of non-land assets (no compensation for land)
	Contractor use land temporarily	Based on MoU between contractor and land owner,
Loss of structures: commercial and residential	Having legal title, non-titleholders or encroachers/squatters.	Cash compensation at replacement value, one time shifting allowances @ NPR 30,000 or at the transport rate of concern local government and All households losing residential structures will be provided up to 6 months transitional subsistence allowances to meet the cost of renting for accommodation and other management cost (estimated time for rebuilding the house) @ NPR 20,000.00 per months i.e. total 120,000.00 per affected/displaced household
Loss of livelihood	Business, tenants, leaseholders, employee, agricultural workers, mobile vendors, wage labors	<p>All affected households are eligible to enroll at no cost in energy-based livelihood enhancement program, according to the preferences of affected households and aligned to opportunities in the local market. Project-provided trainings will aim at helping affected people to diversify their sources of income. Specific topics will be finalized in consultation with affected households.</p> <p>Affected households losing lands will receive a transitional allowance for the duration of construction activities (period</p>

		<p>of disruption), which is estimated to last on average for a period 60 days. Amounts will be calculated using the current years' agricultural labor rate fixed by Local government or NRs 60,000 (whichever greater). Households receiving additional cash assistance as a severely affected households or vulnerable households will not be eligible for this assistance.</p> <p>Business affected by construction activities will receive a transitional allowance of one-time cash assistance of NRs 60,000, which is based on current district labor rates [equivalent to 60 days @ of NRs 1,000/day] , or the equivalent amount for the duration of construction activities.</p> <p>Employees of businesses being economically impacted will be paid a transitional allowance equivalent to NRs 60,000, or the equivalent amount for the duration of construction activities whichever is greater.</p> <p>Mobile vendors/hawkers will receive a transitional cash assistance to shift economic activity; this amount will ensure that affected people's livelihoods are not lower than the current district labor rates [NRs 1,000/day] for the duration of construction activities.</p>
Loss of crops, fruits and timber tress	owners with legal title, tenants, leaseholders, squatters	<p>For immature, non-bearing fruit/crop trees, asset owners will receive replacement value calculated as the average annal harvest values/ yearly production for the same fruit/crop multiplied by the years that the tree must grow before reaching productive age. Where tenants claim rights to trees, the project will divide compensation payments equally between asset owners and tenants.</p> <p>For mature fruit trees, asset owners will receive replacement value calculated as average annual harvest values/ yearly production value for lost productive life of the crop plus cost of seedling and required input to replace the asserts; values will be calculated based on rate established by the concerned Kirshi Gyan Kendra and will account for existing market rate.</p> <p>Matured non-fruit trees or timber bearing trees will follow the rate calculated in cubic meter (height multiplied by girth and diameter) by concerned Forest Offices/Department; market rate including cost of cutting and shifting will be provided. For the immature timber trees cost of seedling and required input to grow and replace</p>

		new trees will be calculated.
Severely Affected Households	HHs losing residential home and over 10% of their productive land or income sources and displaced households	Severely affected households and vulnerable households are entitled to information about the project in a language understandable to them. The project commits to working in good faith with stakeholders to clearly communicate projects impacts, mitigation measures, and entitlements. Additional one-time cash assistance of Nrs.100,000.00 will be provided to for each severely affected household to offset stresses of resettlement and the help ensure maintenance of daily subsistence during the transitional period
Vulnerable Households	Households headed by women, persons with disabilities, elderly, indigenous HHs, those households who will lose more than 10% of productive assets and residential houses.	90 days wage rate cash assistance and additional onetime cash assistance of 60,000 NRs per household will be provided. One time assistance will be provided based on vulnerability but not double counting. Enrolment of the family members in income generation or skill training activities for the improvement of household income. Priority to them for local contractor's work.
Loss of cultural & community structures /facilities/resources	Community/cultural/ religious structures/ resources affected by the project	Cash compensation for restoring/ reestablishment of the affected cultural/community structures and installations, to the recognized patron/custodian.

Cut-off Date

For each of the following areas affected HHs have already been identified and a cut-off date will be posted once the engineering design finalized.

Location/Subproject	Cut-off Date
Ratamate-Lapang 220 kV and Borang-Lapang 132 kV transmission lines and Substations 220/132/33 kV at Lapang and 132/33 kV at Borang .	Affected HHs have been identified. Land acquisition process will be started after finalization of engineering design. Deadline of land acquisition notice will be cut-off date and for non-title holders final engineering design will be the cut-off date
Dandakhet- Rahughat 132 kV transmission line and 220/132/33 kV and 132/33/11 kV SS at Rahughat and Dandakhet	Substations in Dandakhet and Rahughat where NEA has its own land. For transmission line APs have been identified. Cut-off date will be the deadline of land acquisition notice published by CDC and for non-title holders final engineering design will be the cut-off date
Ghorahi- Madichaur 132 kV transmission line and substation at	Substation in Madichaur where NEA has its own land. For transmission line APs have been identified. Cut-off date will

Madichaur	be the deadline of land acquisition notice published by CDC and for non-title holders final engineering design will be the cut-off date
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Correction to the cut-off date will be determined on a case-by-case basis among those engaging the project with a claim. Few claims are expected for this project.

For those areas where the cut-off date is not posted, this information will be available from your Rural/Municipalities and Ward offices.

Eligibility

Information for public notification:

Notification of Eligibility for Project Compensation
<p>You may be eligible for benefits if:</p> <ul style="list-style-type: none"> You lived in, or had connections to, the project area prior to the cut-off date. You utilized the project area for productive purposes (income/livelihood) prior to the cut-off date. You are being resettled due to the project. You are being losing land to the project. You are losing access to land or natural economic resources because of the project (e.g. Forest Users). <p>If the project has not contacted you about your benefits and you feel that you are impacted, you may request to be included in project planning. Claims are examined on a case by case basis and decided more expediently where the claimant prepares supporting evidence of entitlements.</p>

Compensation

Compensation of land and other assets will have to be paid to affected persons prior to contractors mobilization in field. The compensation payment will be made through bank cheque or compensation amounts will be deposited directly in the bank account of the affected households. NEA can request land owners to open joint account for husbands and wives

Information Dissemination and Stakeholders Consultation

During the project preparation period several round of consultation meetings with local level stakeholders and affected households have been organized in different locations of subprojects. Project information including social and environmental requirement were disseminated to the stakeholders and issues and queries of participants were also discussed and clarified

Additional consultation will take place with affected households as the design is finalized and will inform updates to this draft resettlement and Indigenous Peoples Plan. The draft and updated RIPP will be disclosed as per disclosure requirements laid out in ADB's SPS. A

Resettlement Brochure (based on the draft RIPP and subsequently updated for the final RIPP) will be translated into Nepalese and in local languages and distributed to all affected households as well as other general customers to ensure they understand their entitlements and other associated matters.

Grievances Redress Mechanisms

[Note: This section to be revised before disclosure to include all relevant contact information.]

A project-specific three tiers Grievance Redress Mechanism (GRM) having suitable and appropriate grievance redress procedures to receive and facilitate resolution of affected peoples' concerns, complaints, and grievances will be established. Representation of Indigenous People in each level of GRM will be ensured by which Indigenous Households feel comfortable in approaching the project GRM. The proposed mechanism does not impede access to the country's judicial or administrative remedies. The affected person has the right to refer the grievances to appropriate courts of law at any stage of the process. The EA will ensure that affected persons have the right to approach courts of law any time during the process of grievances redress.

Institutional arrangement

The NEA will serve as a executing agency and will implement all ADB funded project through its Project Management Department (PMD). PMD will be established its own dedicated Environment and Social Safeguard Management Department (SSEMD) headed by director level and supported by 18 staff. If required SSEMD will hire required number of Environmental and Social Safeguard Specialist.

Resettlement Budget

The estimated cost for implementing this RIPP has been provisioned and as per requirement cost will be updated and revised. The source of funds will be managed by NEA in annual program.

APPENDIX H: DETAILS OF COST ESTIMATE OF AFFECTED STRUCTURES

1. Lapang-Ratamate 220 kV and Borang Lapang 132 kV Transmission Line and Associated Substation

Type of structure	Project component	Name of Owner	Plinth Area (sq. ft.)	No. of story	Total area (sq.ft.)	Cost for land occupied by structure based on plinth area		Construction Cost of Structure based on total area		Total Compensation Cost (NRs)
						Rate (NRs/sq.ft.)	Amount (NRs)	Rate (NRs./sq.ft.)	Amount (NRs)	
1. House	Lapang Substation	Toran Adhikari	364	2	728	-	-	1500	1092000	1092000
		Lekh Bd Thapa Magar	140	2	280	-	-	900	252000	252000
		Chandra Bd Pulami Thapa Magar	240	2	480	-	-	1500	720000	720000
		Ful Maya Adhikari	300	1	300	-	-	1500	450000	450000
		Ganga Devi Magar	143	1	143	-	-	1500	214500	214500
		Dhan Kumari Adhikari	500	1	500	-	-	1500	750000	750000
		Kabindra Adhikari	448	1	448	-	-	2000	896000	896000
		Yam Bd Thapa Magar	234	1	234	-	-	900	210600	210600
		Check Bd Simkhada	255	2	510	-	-	1500	765000	765000
	AP34-	Khum Bd Sapkota	288	2	576	250	86400	1500	864000	950400

Type of structure	Project component	Name of Owner	Plinth Area (sq. ft.)	No. of story	Total area (sq.ft.)	Cost for land occupied by structure based on plinth area		Construction Cost of Structure based on total area		Total Compensation Cost (NRs)
						Rate (NRs/sq.ft.)	Amount (NRs)	Rate (NRs./sq.ft.)	Amount (NRs)	
	AP34A									
	AP34-AP34A	Beg Bd Sapkota	330	1	330	250	99000	1500	495000	594000
	AP34-AP34A	Dhan Bd Sapkota	288	2	576	250	86400	1500	864000	950400
	Total (1)		3530		5105		271,800		7,573,100	7,844,900
2. Cowshed	Lapang Substation	Toran Adhikari	48	1	48	-	-	600	28800	28800
		Lekh Bd Thapa Magar	204	1	204	-	-	600	122400	122400
		Chandra Bd Pulami Thapa Magar	180	1	180	-	-	600	108000	108000
		Ganga Devi Magar	144	1	144	-	-	600	86400	86400
		Check Bd Simkhada	108	1	108	-	-	600	64800	64800
		Beg Bd Sapkota	252	1	252	250	63000	600	151200	214200
	Total (2)		936		936		63,000		561600	624600
3. Kitchen	Lapang	Toran Adhikari	126	1	126	-	-	900	113400	113400

Type of structure	Project component	Name of Owner	Plinth Area (sq. ft.)	No. of story	Total area (sq.ft.)	Cost for land occupied by structure based on plinth area		Construction Cost of Structure based on total area		Total Compensation Cost (NRs)
						Rate (NRs/sq.ft.)	Amount (NRs)	Rate (NRs./sq.ft.)	Amount (NRs)	
	Substation	Chandra Bd Pulami Thapa Magar	220	1	220	-	-	900	198000	198000
		Ganga Devi Magar	80	1	80	-	-	900	72000	72000
		Total (3)	426		426				383400	383400
4.Toilet	Lapang Substation	Toran Adhikari	48	1	48			800	38400	38400
		Lekh Bd Thapa Magar	40	1	40	-	-	800	32000	32000
		Chandra Bd Pulami Thapa Magar	42	1	42	-	-	800	33600	33600
		Ful Maya Adhikari	20	1	20	-	-	800	16000	16000
		Ganga Devi Magar	24	1	24	-	-	800	19200	19200
		Dhan Kumari Adhikari	70	1	70	-	-	800	56000	56000
		Check Bd Simkhada	84	1	84	-	-	800	67200	67200
		Total (3)	328		328	-	-		262,400	262,400
		Subtotal (1+2+3)	5220		6795		334,800		8,781,200	9,115,300

Type of structure	Project component	Name of Owner	Plinth Area (sq. ft.)	No. of story	Total area (sq.ft.)	Cost for land occupied by structure based on plinth area		Construction Cost of Structure based on total area		Total Compensation Cost (NRs)
						Rate (NRs/sq.ft.)	Amount (NRs)	Rate (NRs./sq.ft.)	Amount (NRs)	
2. Name of subproject: Dandakhet-Rahughat 132 kV transmission line										
House	AP4 -AP5	Lal Puri (Durrba)	444.02	2	888.02	1200	532,812	1500	1,332,030	1,332,030
	AP26A-27	Gyan Bahadur Thapa	225.96	1	225.96	1000	225,960	1200	271,152	271,152
		Bazra Sherpurza Magar	258.33	1	258.33	1000	258,330	1200	309,996	309,996
Cowshed		Bazra Sherpurza Magar	96	1	96	400	38,400	400	38,400	38,400
Sub-total of Dandakhet-Rahughat					928.3		1,017,102		1,951,578	1,951,578
Grand total of (1+2)					7,723.3		1,351,902		10,632,778	11,006878

(Note: construction cost for the structures is calculated on the basis of the consultation with public in different project affected areas.