

RESETTLEMENT ACTION PLAN (RAP)
FOR ANGLE TOWERS
of the
KABELI CORRIDOR 132 kV TRANSMISSION LINE
PROJECT
(KCTLP)

Submitted to:

Kabeli Corridor 132kV Transmission Line Project, Transmission Line / substation Construction
Department, Transmission and System Operation

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January, 2011

Executive Summary

The **Kabeli Corridor 132 kV Transmission Line Project (KCTLP)** is part of the Government of Nepal's **Kabeli Power Generation Project** under development by the **Nepal Electricity Authority (NEA)**. The project is funded through the **Nepal Power Development Project (NPDP)** under a loan from the **World Bank/IDA**.

The KCTLP is located in Nepal's Eastern Development Region within Mechi and Koshi Zones and passes through four districts: Terathum of Mechi Zone, and Panchthar, Ilam and Jhapa of Koshi Zone (**Figure 1**). The transmission line (TL) corridor is 83.74 km in length, crossing 25 VDCs in the four districts. They are (from north to south) one VDC in Terathum District (*Chattedhunga*), 10 VDCs of Pachthar District (*Amarpur, Shubhang, Bharapa, Phidim, Chokmagu, Siwa, Nawamidanda, Imbung, Pauwasartap and Chilingden*), 13 VDCs of Ilam District (*Phakphok, Chamaita, Ektappa, Mangalbare, Sangarumba, Siddhithumka, Soyak, Godak, Chisapani, Danabari, Mahamai, Bajho and Chulachuli*), and one VDC of Jhapa District (*Lakhanpur*). At Lakhanpur, near the city of Damak on the East-West Highway, the transmission lines will link into the national electricity supply grid.

Scope of Land Acquisition and Resettlement. Project design has carefully incorporated engineering solutions to minimize land acquisition and resettlement impacts. The Kabeli Corridor Transmission Line Project (KCTLP) will affect private lands both permanently and temporarily. The permanent land affects will be due to the permanent land acquisition for Power Sub-Station and Tower foundations. Private lands will be also affected permanently due to restriction on land use along the 18 m wide corridor of KCTLP right-of-way (ROW). Apart from this, temporary impacts will occur due to the camps and storage areas occupied during the construction phase.

The Kabeli Corridor 132 kV TL Project, Transmission Line/Substation Construction Department, Transmission and System Operation Unit of NEA coordinate and execute the land acquisition and resettlement process through the Chief District Officers of Terathum, Panchthar, Ilam and Jhapa Districts, respectively. Within the KCTLP/NEA, an officer will be designated as the In-Charge of the land acquisition and to oversee and manage social issues and social safeguards.

Policy Framework and Entitlements. Land acquisition for public purposes in Nepal is largely governed by the Land Acquisition Act 2034 (1997 AD), which sets out compensation standards and benefits such as compensation for lost assets at market value, and compensation for standing crops and trees. As per the regulatory provision, while acquiring land, the GoN forms a Compensation Fixation Committee (CFC) under the chairmanship of Chief District Officer (CDO) of the district. As a result, all Affected Persons (APs) will be provided compensation and assistances based on this updated RP. The project will follow LAA 1997 of GON and World Bank Involuntary Resettlement Policy (OP 4.12)

Information Dissemination, Consultation, Disclosure and Grievance Redress. Public consultation on the project has begun with the census survey of project affected families (PAFs) during which focus group discussions have served as a forum for participation and consultation. Several public consultations were held with Affected People (APs) and coordination meetings at were consulted during RAP preparation. The information meetings, FGDs and interactions were held in 10 VDCs of Pachthar district (*Amarpur, Shuvang, Bharapa, Phidim, Chokmagu, Siwa, Nawamidanda, Imbung, Pauwasartap & Chilingden*), 1 VDC of Terathum district (*Chattedhunga*), 13 VDCs of Ilam district (*Phakphok, Chamaita, Ektappa, Mangalbare, Sangarumba, Siddhithumka, Soyak, Godak, Chisapani, Danabari, Mahamai, Bajho & Chulachuli*) and 1 VDC of Jhapa district (*Lakhanpur*).

Income Restoration Strategy. APs shall be given priority for employment as laborers/supervisors based on their skill and capability. In addition, income restoration strategies provide capacity building, enterprise training, and facilitating economic activities to landowners as well as training for self employment to agricultural laborers.

Institutional Framework. The Kabeli Corridor 132 kV TL Project, Transmission Line/Substation Construction Department, Transmission and System Operation Unit of NEA will be the responsible institution for RAP implementation with an input from external support and assisted by the compensation fixation committee.

Resettlement Budget and Financing. The budget will be made available through the Kabeli Corridor 132 kV TL Project, Transmission Line/Substation Construction Department, Transmission and System Operation Unit of NEA .

Implementation Schedule. Detailed schedule of tasks of implementation of RAP is presented in this report. Since land acquisitions and rehabilitations are the major task to undertake, monitoring during the project implementation shall be carried out in a routine manner.

Monitoring and Evaluation. The resettlement process will be monitored both internally and externally. Internal and external monitoring will utilize quantitative monitoring, and qualitative monitoring using a variety of tool and methods such key informant interviews, focus group discussions, community public meetings and case studies. The Kabeli Corridor 132 kV TL Project, Transmission Line/Substation Construction Department, Transmission and System Operation Unit of NEA will be responsible for internal monitoring. An external monitoring agency will be engaged by NEA who will carry out independent biannual review of resettlement implementation as well as post project evaluation throughout the project cycle.

ABBREVIATIONS

AH	Affected Household
AP	Affected Person
AT	Angle Tower
CCV	Community Consensus Valuation
CDO	Chief District Officer
CFC	Compensation Fixation Committee
CPR	Common Property Resource
DDC	District Development committee
EA	Executing Agency
FGD	Focus Group Discussion
GON	Government of Nepal
GRC	Grievance Redress Committee
Hhs	Households
IA	Implementing Agency
IR	Involuntary Resettlement
KCTLP	Kabeli Corridor 132 kV Transmission Line Project
LAA	Land Acquisition Act (1977)
LACFC	Land Acquisition and Compensation Fixation Committee
NEA	Nepal Electricity Authority
NGO	Non-Governmental Organization
NRs	Nepalese Rupees
PAF	Project Affected Family
PS/S	Power Sub-Station
RAP	Resettlement Action Plan
ROW	Right-of-Way
RP	Resettlement Plan
SIA	Social Impact Assessment
TL	Transmission Line
TOR	Terms of Reference
VDC	Village Development Committee
WB	World Bank

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1. SCOPE OF LAND ACQUISITION AND RESETTLEMENT ON KCTL PROJECT

1.1 Background

Development of power projects is always correlated with the power evacuation network available in the proposed power development area. As NEA is the solely responsible utility for expansion and reinforcement of networks of Integrated Nepal Power System (INPS), NEA had conducted several evacuation studies considering the candidate hydroelectric projects.

At present, INPS had 132 kV transmission network from Anarmani in the east to Mahendranagar on the far-west region running through the Terai Physiographic Zone of the country. As most of the hydroelectric projects are located in the northern hilly region, the limiting factor for the hydropower development is pointed out to be the lack of north south extending high voltage transmission lines in the existing INPS. In the context of the ever increasing electricity demand and annually spiraling load shedding, there is a need of the development of critically important north south high voltage transmission line to facilitate the development of candidate hydropower projects vis a vis meet the energy demand and abolish ongoing load shedding.

As of the date there are 17 hydropower projects in Ilam district (67MW), 4 projects in Panchthar (32MW), and 14 projects in Taplejung (312MW), all of which have been licensed for development. Note that an additional 33 hydropower projects of above 950 MW have applied for survey license to DoED for hydropower development in the same region. These projects are delayed due to a lack in the area of adequate capacity high voltage transmission lines to evacuate the power from the area to the consumption centers. For this reason, a feasibility study was conducted in 2003 recognizing the need for development of the proposed Kabeli Corridor as a priority high voltage transmission line project in the Eastern Development Region to provide transmission line facility to the licensed hydropower projects to be developed in the immediate future.

The 132 kV KCTLP is located in the Eastern Development Region of Nepal. The project lies within Mechi and Koshi Zone and passes through 4 districts -- Jhapa, Ilam and Panchthar of Mechi Zone and Terhathum of Koshi Zone. The KCTLP alignment pass across 10 VDCs of Panchthar District (*Amarpur, Shubhang, Bharapa, Phidim, Chokmagu, Siwa, Nawamidanda, Imbung, Pauwasartap land Chilingden*), 1 VDC of Terhatum (*Chattedhunga*), 13 VDCs of Ilam (*Phakphok, Chamaita, Ektappa, Mangalbare, Sangarumba, Siddhithumka, Soyak, Godak, Chisapani, Danabari, Mahamai, Bajho and Chulachuli*), and 1 VDC of Jhapa (*Lakhanpur*).

The proposed KCTLP starts from 132/33 kV sub-station at Sabitra Chowk of Lakhanpur VDC in the Terai and extend north east through Chaju Khola at the foot hills of Chure and across Chure mountains into the valley of Mai Khola in the Mahabharat and Midlands. From Soyak, it bifurcates into two branches. The one extending north east is a short 6 km long arm terminating at Godak 132/33 kV substation (Setuwabesi, Godak VDC-3). The longer arm proceeds north-north-west from Soyak up to Amarpur 132/33 kV substation (Pinasi ghat, Amarpur VDC-9) in the northern part of midland zone.

1.2 Approaches and Rational for Resettlement Planning

For KCTLP, three key social safeguard documents namely Social Impact Assessment, Social Management Framework and Resettlement Action Plan for Angle Towers and policy framework for the remaining were prepared. This report has included the included the RAP for angle towers and policy framework for the rest followed by detailed planning during the implementation phase

2. SOCIO ECONOMIC PROFILE OF PROJECT AREAS

2.1 Overview of the Project VDCs

2.1.1 Physical Characteristics

Twenty five VDCs in four districts are directly impacted by the KCTL Project. Three districts are in the hills (*Pahad*): Terathum, Panchthar and Ilam; and one is in the lowland *Terai*: Jhapa. Of the 51 power line angle towers (AT) sited along the TL corridor, 47 are located in the three hill districts -- Terathum: 1, Panchthar: 17 and Ilam: 28 and four in the terai district (Jhapa). There are also three power substation (PS/S) sites, two in the hills at Phidim VDC (Panchthar District) and Godak VDC (Ilam District), and one in the terai at Lakhanpur VDC (Jhapa District).

The transmission lines cross land that is generally rural, agricultural and relatively well populated, including cultivated (private) land, community forest land, government forest land, and barren land (and a few villages). For AT site numbers and location by VDC, ward and settlement, see **Table 4.1**.

Table 2.1: Angle Towers (AT) and Power Substations (PS/S) in Project Affected VDCs

	VDC	Ward	Nearest Settlement	Infrastructure		Land Type	Remarks
				AT	PS/S		
TERHATHUM DISTRICT (1 AT)							
1.	Chhatedhunga	7	Bokre	AP-1		Private land, cultivated	
PANCHTHAR DISTRICT (19 AT, 1 PS/S)							
2.	Amarpur	8	Pinaseghat	AP-0		Private land, cultivated	
3.	Subhang	2	Chulidanda, Siruwani	AP-2		Government land, barren	
4.	Subhang	2	Dabaltar	AP-3		Government land, barren	
5.	<i>Bharapa</i>			--		<i>(transmission lines pass over VDC, but no angle tower)</i>	
6.	Phidim	4	Dangalgaun		✓	Government land, barren land	Numbered AP-4
7.	Phidim	4	Gadgidanda	AP-5		Private land, cultivated	
8.	Chokmagu	1	Dangalgaun	AP-6		Government land, barren	
9.	Chokmagu	8	Jorkulo	AP-7		Private land, cultivated	
10.	Chokmagu	6	Gauthali	AP-8		Private land, cultivated	
11.	Chokmagu	7	Maidane	AP-9		Private land, cultivated	
12.	Siwa	5	Maluwa	AP-11		Private land, cultivated	
13.	Siwa	4	Siwa	AP-12		Private land, cultivated	
14.	Siwa	4	Magar	AP-13		Private land, cultivated	
15.	Siwa	4	Srimantar	AP-14		Private land, cultivated	
16.	Siwa	4	Khamladin	AP-15		Private land, cultivated	
17.	Nawamidanda	4	Pataleghanjyang	AP-16		Private land, cultivated	
18.	Imbung	8	Hongue	AP-17		Private land, cultivated	
19.	Imbung	1	Panitankyadanda, Sisuwa	AP-18		Private land, cultivated	
20.	Pauwasartap	2	Sartap	AP-19		Private land, cultivated	
21.	Chilinden	2	Lukuwa	AP-20		Private land, cultivated	
22.	Chilinden	3	Kamerudanda, Deurali	AP-21		Government land, barren	
ILAM DISTRICT (26 AT, 1 PS/S)							
23.	<i>Phakphok</i>			--		<i>(transmission lines pass over VDC, but no angle tower)</i>	
24.	Chamaita	9	Simsara	AP-22		Private land, cultivated	
25.	Ektappa			--		<i>(transmission lines pass over VDC, but no angle tower)</i>	
26.	Mangalbare	5	Sabjung	AP-23		Private land, cultivated	
27.	Mangalbare	2	Dandagaun	AP-24		Private land, cultivated	

28.	Mangalbare	4	Surkedanda, Panitar	AP-25		Government land, other	National Tea Development Board
29.	Siddhithumka	?	Buddhachowk, Kalsing	AP-26		Private land, cultivated	
30.	Siddhithumpka	4	Khandrung, Panchami	AP-27		Private land, cultivated	
31.	Siddhithumpka	3	Chuligaun	AP-28		Government forest	
32.	<i>Sangarumba</i>			--		<i>(transmission lines pass over VDC, but no angle tower)</i>	
33.	Soyak	7	Nawamidanda	AP-29		Private land, cultivated	
34.	Soyak	7	Dhode	AP-30		Private land, cultivated	
35.	Soyak	9	Bikramdanda, Sirkot	AP-I 5		Private land, cultivated	
36.	Soyak	6	Tamakipa, Bahana	AP-I 6		Private land, cultivated	
37.	Chisapani	9	Lamudanda, Borung	AP-I 7		Private land, cultivated	
38.	Chisapani	9	Karkidanda	AP-I 8		Private land, barren	
39.	Danawari	9	Hangrayo, Bhalukhop	AP-I 9		Private land, cultivated	
40.	Danawari	9	Hatikharka	AP-I 10		Private land, barren	
41.	Mahamai	5	Tamakhe	AP-I 11		Private land, cultivated	
42.	Mahamai	5	Sanguri	AP-42		Private land, cultivated	
43.	Mahamai	5	Sanguri	AP-43		Community Forest	
44.	<i>Bajho</i>			--		<i>(transmission lines pass over VDC, but no angle tower)</i>	
45.	Chulachuli	5	Beteni	AP-44		Government land, barren	
46.	Chulachuli	5	Beteni	AP-45		Government forest	
47.	Chulachuli	5	Sarkitar	AP-46		Private land, cultivated	
48.	Chulachuli	4	Budhikhola	AP-D6		Private land, cultivated	
49.	Chulachuli	3	Barhagothe, Siran	AP-D5		Private land, cultivated	
50.	Soyak	1	Balase	AP-I 3		Private land, cultivated	
51.	Chisapani	4	Rangapani	AP-I 2		Government land, barren	
52.	Godak	3	Setuwabesi		✓	Government land, barren	PS/S has no AP number
53.	Godak	3	Danawaribesi, Bhandaribesi	AP-I 1		Private land, cultivated	
54.	JHAPA DISTRICT (5 AT, 1 PS/S)						
55.	Lakhanpur	3	Ratuwa Mai	AP-D4		Government land, barren	
56.	Lakhanpur	1	Rangkathko Tuppa	AP-D3		Government land, barren	
57.	Lakhanpur	1	Rangathko Tuppa	AP-D2		Government land, barren	
58.	Lakhanpur	1	Geuriva	AP-D1		Government land, barren	
59.	Lakhanpur	1	Pathibharachowk,	AP-D0		Government land, barren	
60.	Lakhanpur	1	Damak		✓	Government land, barren	PS/S has no AP number

All three Power Sub-Stations are located on government land (barren), but the Angle Towers are sited on a variety of land types (**Table above**) See **Table below** for the total number of Angle Towers by land type for each district.

Table 2.2: Number of Angle Towers by Land Type by District

Land Type	Terathum	Panchthar	Ilam	Jhapa	Totals
• Private land, cultivated	1	15	18	--	34
• Private land, barren	--	--	2	--	2
• Community forest	--	--	1	--	1
• Government forest	--	--	2	--	2
• Government land, barren	--	4	2	5	11
• Government land, other	--	--	1	--	1
Totals	1	19	26	5	51

2.1.2 Population

The Initial Environmental Examination (IEE), and SIA report is corroborated by the findings of this resettlement plan for angle tower, indicate that the 25 project VDCs through which the transmission lines pass have a total population of 168,747 (13% of the total population of the four districts), based on the 2001 census. The average household size is 5.34, with a male:female ratio of 1:1.02 (49.40% male to 50.60% female) (Ref. **Table**)

Table 2.3: Demographic Characteristics of the Project Districts

District	Jhapa	Ilam	Panchthar	Terhathum	Total of Project Districts
Total Population	688,109	282,806	202,056	113,111	1,286,082
Male Population	341,675	142,434	99,042	54,932	638,083
Female Population	346,434	140,372	103,014	58,179	647,999
Male : Female ratio	1.01	0.99	1.04	1.06	1.02
No. of Households	137,301	54,565	37,260	20,682	249,808
Average Household Size	5.01	5.18	5.42	5.47	5.15
Area in sq. Km.	1,606	1,703	1,241	679	4,550
Population Density Person/sq.km.	428	166	163	167	283

Source: CBS, 2001

About 40% of the population of the project-affected VDCs is below 14 years of age, 54% is between the ages of 14 and 60, and 6% is above 60 years of age (IEE §6.3.2.1: Population).

More than 70 caste and ethnic groups inhabit the project VDCs.¹ The *caste groups* (as distinct from ethnic groups/Indigenous Nationalities) residing in the project VDCs fall into two general categories: (a) Brahmin and Chhetri (the so-called 'advantaged', or 'upper' or 'higher' castes), and (b) Dalit (or artisan castes, the socio-economically 'disadvantaged' or 'vulnerable' groups, sometimes called 'lower' castes).

The Vulnerable Groups, as defined in GON and WB development policy, include both Dalit castes and Women (irrespective of caste or ethnicity). (See Terms and Definitions, above.) The Dalit castes found in the project area are, in order of magnitude, the Kami or Blacksmith caste (3.56%), Damai or Dholi, Tailor caste (1.69%), and Sarki or Leatherworker caste (0.47%). All other Dalits (mostly in the Terai district of Jhapa) account for less than 1% each.

At the district level, the Brahmin and Chhetri castes predominate numerically. When considered together the Brahmin/Chhetri castes total 39.51% of the population of the four districts, but at the level

1.

of the project-affected VDCs they only account for 26% of the population. By comparison, the major indigenous ethnic groups predominate numerically at the VDC level, with an overall 54% of the population.

There are ten *ethnic groups* resident in the four districts of the project. They are defined as Indigenous Nationalities (Adivasi/Janjati). (See Terms and Definitions, above.) Eight are hill ethnic groups, including Limbu, Rai, Tamang and Magar; and two are lowland (Terai) ethnic groups (Rajbansi, Santhal). The more populous ethnic groups are the Limbu, Rai, Tamang and Magar. The smaller groups include Gurung, Majhi, Sunwar, Tharu, and others.²

The Muslims resident in the project area account for only 0.02% of the population. They are found in three of the four project-affected districts: Jhapa (6.63% of the district population), Panchthar (0.57%) and Terathum (1.4%). Their percentage within the total population of the four project affected districts is 3.38%.

2.1.3 Community Groups Sample Surveys and Analysis

SIA of KCTLP has mentioned three specially targeted populations resident in the Project VDCs which are potentially affected by the KCTL Project: Indigenous Groups Vulnerable Groups: and Vulnerable Groups: Women

Each section concludes with an Analysis relevant to KCTL Project impact mitigation.

2.1.4 Indigenous Groups (Adivasi/Janjati) Findings

Indigenous Groups in Nepal are known by several interchangeable terms: as 'Indigenous Peoples', 'Indigenous Nationalities', 'Ethnic Groups', and/or as '*Adivasi/Janajati*'.

Taken together all ethnic groups represent slightly over half of the population of the four project districts.

SIA report revealed that Focus Group Discussions were held with representative groups of seven Indigenous Peoples/Ethnic Groups.

Table2.4: Ethnic Groups and Their Populations in the Four Project Districts

Ethnic Group	Total Population in Project VDCs	Ethnic Group	Total Population in Project VDCs
Limbu	42,925 (24%)	Gurung	1,647 (0.93%)
Rai	7,045 (3.99%)	Majhi	714 (0.40%)
Tamang	10,613 (6%)	Sunwar	1,416 (0.80%)
Magar	29,250 (16.61%)	<i>Source: Central Bureau of Statistics 2001, Nepal</i>	

Within the Project affected VDCs, considering all Ethnic Groups (Indigenous Peoples) a total of 1,428 households were recorded, with a total population of 9,092, of which 4,063 (44.5%) are male and 5,052 (55.5%) are female. The male to female ratio is 1: 1.24

2.1.5 Summary of Socio economic Findings of TL Corridor

In the following summary of findings, a number of significant points are made including factors relating to ethnic identity and cultural heritage and specific or unique identifying cultural markers, their place in the larger society, ethnic group livelihoods and lifestyle (e.g., traditional cultural attributes, and

2. For details, see IEE Table 6.3.20: Caste/Ethnic Groups in the Project VDCs. For comparative district-level data see Table 6.3.3: Ethnic Composition of the Project Districts. Note that the latter table includes some caste groups.

contemporary conditions including group health, education and employment), their relative level of achievement, and perceptions of the project and of issues or needs arising.

(1) Ethnic History, Origins and Identity

The project districts (Terathum, Panchthar, Ilam and Jhapa) are four among the districts of eastern Nepal. Traditionally, this region of east Nepal (*Arun purba*; lit. 'East of the Arun river') has been known as Limbuwan, literally 'Land of the Limbus' (from which the contemporary Limbuwan political movement takes its name). The Limbu and Rai Indigenous Peoples are often lumped together and called, collectively, the Kiranti ethnic people. (Sometimes Sunwar are included in the list of Kiranti people). The Kirant, or Kiranti, are the true indigenous peoples of eastern Nepal. Other ethnic groups such as Tamang, Magar, and Gurung have migrated into the eastern hills only in recent generations from ancestral homelands farther west in the hill districts of central and western Nepal.

The Limbus of the project VDCs have especially strong self-identity, which is maintained through several local ethnic and cultural groups. Other groups, like the Gurung of Ektappa VDC and the Sunwar of Mangabare VDC are in the process of reclaiming their traditional ethnic and cultural identity.

(2) Language and Oral Tradition

Only a few of the Indigenous Peoples of the project area speak indigenous local languages. Most have no unique language other than Nepali, the national language, which all speaks. The Kiranti ethnic groups (Limbu, Rai, Sunwar) each have their own language written in a unique Kiranti script (e.g., *Yakthumba* or *Kiranti* among the Limbu; *Wantawa* among the Rai; and *Sunwar* among the Sunwar). In addition, some Tamang and Magar speak their own language. In some locales there is a contemporary attempt to revitalize linguistic tradition by introducing it as a subject in school (e.g., Limbu and Rai).

(3) Folk Tales, Song and Dance

Each ethnic group has its own traditional folk tales, songs and dances; with accompanying instruments. Most also practice Pan-Nepali folk music traditions. Indigenous folk music is typically heard during festivals that are unique to each ethnic group, and it is at these times that unique ethnic forms of dress are worn.

(4) Festivals

While all celebrate the Pan-Nepali festivals of Dashain, Diwali (Tihar), Sankranti, and various seasonal or calendrical events, some have their own unique traditional celebrations. Sometimes ethnic names are given to national festivals (e.g., Limbu call Diwali as *Yumasam*). The most popular seasonal festivals are *Ubhauri*, a spring festival prior to the cultivation of the rice crop, and *Udhauri*, a fall harvest festival.

A main value of celebrating traditional festive events is to maintain cultural identity, mutual relationships and social order. In a few instances, locals are attempting to revive ancient and traditional festival events, including the wearing of ethnic costume and the recitation and singing of folk tales and songs (e.g., Gurung of Ektappa VDC, Sunwar of Mangalbare VDC).

(5) Religion, Ritual Observances and Sacred Sites

• Religion, ritual occasions and sacred sites

The ethnic groups practice Hinduism, Buddhism and/or forms of Animism or Shamanism -- sometimes combined in such ways that they are hard to separate. Tamang, and some Magar, for example, are Buddhist and observe the Buddhist New Year (*Lhosar*) and Buddha's Birthday (*Buddha Jayanti*). Limbus and Rais practice local Kiranti religions (*Manghim* or *Mangdhan* to

Limbus) which have a strong Nature worship orientation, recognizing sacred ground, stones, trees and water sites. Certain water sites (rivers, ponds) are especially sacred to one or another of the ethnic groups, including the Mai Khola (river) and others. All riversides and river waters are sacred to the Majhi, a fisherman group.

Some sacred sites are quite near the Angle Tower sites, but no AT is sited directly on recognized sacred ground.

- ***Funerary practice and burial sites***

Both cremation and burial are practiced, and for some groups there are designated burial grounds, usually in association with a sacred grove or forest. The Limbu, for example, have well known cemeteries where they erect elaborate monuments in memory of the dead. The Majhi, unique among the ethnic groups, bury their dead on the river bank. No Angle Tower is known to be sited on a burial or cremation ground.

(6) Life Crisis/Life Cycle Events

The main life crises events are birth (and accompanying naming ceremonies), marriage (arranged, or love marriage and, in some instances, marriage by an older custom of capture or kidnapping), and death rituals (followed by burial or cremation). The wedding events (*bibaha*) are quite similar to those observed across Nepal, with a wedding party (*janti*), gift giving, and the like, following a patrifocal system (where the bride lives in the groom's house, with his extended family).

(7) Other Aspects of Cultural Heritage

- ***Distinct style of dress***

Uniquely distinctive styles of dress, for men and for women, are common, although modern forms of dress have overtaken these traditions (especially among youth). Ethnic dress is typically seen during local cultural events and festival celebrations.

- ***Distinctive instruments, tools, ornaments and weaponry***

Most instruments, tools, and ornaments are Pan-Nepali, though in a few instances unique and usually ancient ethnic variations are seen.

(8) Socio-Cultural and Political Organizations

- ***Socio-cultural and political associations***

The larger and, therefore, socially more obvious ethnic groups (and settlements) tend to have established socio-cultural organizations for purposes of social cohesion and maintenance of ethnic traditions, and for promoting specific socio-cultural, political, judicial (dispute settlement), economic, sports and entertainment, education, welfare, environment, or development (especially health-associated) agendas (e.g., local youth groups or *Yuva Samuha*, mother's groups or *Aama Samuha*, and others).

The various community-based organizations (CBOs) are useful contact points during project implementation.

- ***Involvement in public decision making***

Most of the Janjati households (adult men and women) surveyed are actively involved in one or more organizations, and in community decision-making. Details are elaborated in SIA report of KCTL

(9) Land and Natural Resources

• Overview

Private land holdings are the norm. In the past, however, a system of communal tenure known as *Kipat*, was practiced especially among the Limbu of eastern Nepal. In 1947 AD, however, *Kipat* was abolished and *Kipat* landholdings were converted to private holdings.

As elsewhere in Nepal, some local lands are designated as *Guthi*, or religious trust lands. None are known to be associated with Angle Towers on the TL corridor.

Private forest lands are common among the ethnic groups, and are used for a variety of purposes: e.g., fuelwood and fodder collection, building materials, for collection of herbs and ayurvedic and medical plants and wild foods (nuts, berries, tubers, etc.), and for grazing livestock. And, in some communities, there are community forests (*Samudayik Ban*) with participatory Community Forest User Groups (CFUGs).

The vast majority of Angle Towers are sited on private, cultivated land, and secondly on barren government land. Several others are sited on government land and in government forests, and one on community forest land.

• Forest

In most settlements, most households have their own private forest, which makes it relatively easy to collect fuelwood, fodder and timber as and when needed. Those households without private forests can buy from those who do (trees: NRs 5,000 + the tractor to deliver it: NRs 5,000), or they have access to nearby community forest resources. Some forms of natural resource collection from the forests are done seasonally; mostly winter and spring months. Some villagers also use government forests (usually 30 to 60 minutes walk from the village) for the collection of fuelwood, although it is illegal.

• Animal grazing

Most settlements surveyed lack special lands for grazing, but depend heavily on nearby private and/or forest and community forest for this. In most cases they collect the needed fodder and grasses from the forests, and stall feed their livestock. Collection of fodder/grasses from government forest is common, though illegal.

• River

In most settlements located near rivers, the local people use the rivers for transportation, animal watering, washing utensils and clothes, fishing, and swimming. In some locals there is also extraction of sand and stone from the river, which is then sold or used for construction purposes. Some villagers also worship local rivers or streams (e.g., Phakphok khola, Mai khola, Taramai khola, Hongmai khola) and perform ritual activities there, such as bathing and cremation (on the river banks).

(10) Energy Sources

• Cooking

Fuelwood is the major source of energy for cooking, with kerosene and biogas as secondary fuel sources.

• Lighting

Almost 48% of the households surveyed use electricity for lighting, followed by kerosene (32.5%), solar (9%), battery light (almost 9.5%) or wick lamp (diyoo) (slightly over 1%) (percentages rounded). Several communities do not have rural electricity, and use solar or other sources for lighting.

(11) Modes of Livelihood

Agriculture and livestock rearing and foreign employment are the major sources of income for the ethnic group households. A few households are also involved in other occupations, including small business, services, daily wage labor, or fishing.

- **Food sufficiency**

Although agriculture is the main economic activity among the Indigenous Groups, food production is generally not sufficient for an entire year. Food sufficiency varies greatly among households; at one extreme 39% of the households have food enough only for three months, compared with 37% for six months, 15% for nine months and only 5% for 12 months. The latter depend almost exclusively on unskilled daily wage labor to provide enough food to their households for the entire year.

At the settlement level, out of 19 settlements surveyed six settlements were food sufficient for only 3 months of a year, five settlements for six months, and two for nine months. The situation is dire in some settlements; for example, in the village of Aapdanda, Chisapani VDC (Ilam District), 65% of the households depend on daily wage labor to support their families.

(12) Land Ownership

The average land ownership status of the Indigenous Ethnic Groups ranging from 7.42 to 33.16 ropani (1 hectare = 19.64 Ropani) in the VDCs surveyed. The Janajatis of Pauwasartap and Sangrumba of Panchthar District and Mangalbare of Ilam District have the highest land holdings, while those of Amarapur, Imbung and Bharapa (in Panchthar) and Sangrumba and Banjho (in Ilam) have the lowest average landholding status (among the VDCs surveyed). Some land holdings are less than two rupani per household.

(13) Literacy, Education and Skill Training

- **Literacy**

The educational status of Indigenous Groups is quite good. In all VDCs surveyed, the literacy rate is 69.41% (higher than the national average of 54.1%), with illiteracy at 30.64%.

- **Educational institutions and access to schools**

Most settlements surveyed had schools, but it was determined that the total number of schools is insufficient for the population. In those few settlements with no local schools, or without schools at all levels of education, the school children often have to walk long distances for their further education, ranging from a 30 minute walk up to six hours walk daily.

(14) Employment

Of the population surveyed, slightly over 2% are formally employed (besides household agriculture and livestock rearing), mostly in government services, or the Nepal Army, police, or as school teachers. Some also work in private offices, in the Indian Army, in NGOs and as health workers. The main reason for such a low incidence of off-farm employment is illiteracy and lack of special skill training.

- **Skill training**

Slightly over 3% of the Janajati population possess skills like sewing, midwifery, knitting, basket making, carpentering, animal raising, electricity, and sericulture. There is a significant lack of opportunity for skill training. The greatest amount of skill training recorded is in knitting and basket making (nanglo, doko). Training for these skills is provided by the Gharelu Sana Bikas Kendra (Ilam). Other trainings noted were in sericulture (provided by JICA and UNDP). Villagers who work in the tea gardens, are trained by the tea garden owners. Those who have participated in one form of training or another are using their skills to supplement their household incomes.

(15) Health and Sanitation

• Incidence of disease

Gastric ailments including diarrhea, along with back problems, Tuberculosis, cholera, skin allergies, uterine problems (in women), skin allergies, Typhoid, and respiratory diseases are some of the major ailments reported during the field survey. Most of these ailments are related to water or air pollution. Lack of education and awareness of personal hygiene, average to low quality of drinking water, and unhygienic cooking methods are the main causes.

• Drinking Water

Approximately 60% of the households surveyed have access to piped water; other sources include *kuwa* (spring) (c.19%), wells (slightly over 5%) *kholi* (stream water), or bamboo pipe (c.8%) (all percentages rounded). Piped water means that the village have access to a nearby water tap, or in some instances one tap for an entire community. In most settlements the main water source (*mul pani*) is open and unprotected. As a result, the quality of drinking water ranges from average to poor. During the dry season, many water sources go dry and villagers have to go far to fetch water. Some householders boil their water before drinking, though most drink it directly without treatment (leading to illnesses). Lack of awareness about safe drinking water is a serious problem in the villages.

• Sanitation

Slightly over 70% of the households surveyed have some kind of toilet, while the remainders (almost 30%) defecate in open areas or in the forest. Approximately 51% of households have temporary toilets (pit latrines), while only about 12% have permanent toilets. Thus, the sanitary condition of the settlements surveyed ranges from average to poor. Lack of awareness and financial considerations are the cause of poor sanitation conditions in the communities.

• Health institutions

Two of the communities surveyed have government sub-health posts, and two have full government health posts, both types usually within 15 to 20 minutes walk. From the remaining settlements without health facilities, the residents have to walk from 30 minutes up to six hours to reach help in case of illness or other health emergency. Some residents also use ayurvedic and/or private clinics. Because health posts and private clinics have only minimal facilities, for more serious problems village have to go to the nearest hospital, usually in the district headquarters town.

(16) Security and Social Services

Security and social services are generally lacking in most communities. Thus, when disputes arrive, villagers attempt to resolve them through consensus and/or with the assistance of local political leaders. In case of serious crimes, they must go to the closest security center, in a nearby settlement or to the district police office. In many communities, the Aama Samuha (the local Women's Association) help resolve disputes or otherwise assist the women in the population, and in the case of communal problems.

2.2 Socio economic Profile of APs in Angle Towers of KCTLP

2.2.1 Population/Households

The total population of surveyed 33 household is 203 with an average household size of 6.15 (Table 2.1). The households directly affected by the angle towers have household size greater than that of average of the project affected districts comprising average household size of 5.15.

Table 2.5 : Ethnic Distribution of the Households

Caste/Ethnicity	Male	Female	Total	Average HH Size
Limbu	35	31	66	6.00
Rai	28	19	47	6.71
Tamang	17	10	27	6.75
Brahmin Hill	16	13	29	9.67
Chhetri	3	5	8	4.00
Magar	10	7	17	4.25
Newar	2	2	4	4.00
Sunuwar	3	2	5	5.00
Grand Total	114	89	203	6.15

Eight different ethnic groups are directly affected by angle towers with Limbu holding the highest share (Table 2.6). Similarly, the households have beliefs on four different religions among which Hindu covering the highest share (45.5%) followed by Kirat (27.3%) (Table 2.7).

Table 2.6: Frequency of HHs Affected by Angle Tower according to Ethnicity

HH Caste	Frequency	Percent
Limbu	11	33.33
Rai	7	21.21
Tamang	4	12.12
Hill Brashman	3	9.09
Chhetri	2	6.06
Magar	4	12.12
Newar	1	3.03
Sunuwar	1	3.03
Total	33	100.00

Table2.7: Religion of the Households

HH Religion	Frequency	Percent
Hindu	15	45.50
Bouddha	8	24.20
Christian	1	3.00
Kirat	9	27.30
Total	33	100.00

2.2.2 Quality of Life Values

Education

The survey shows that the education background of the members of the affected households is far better than that of the project affected districts. Of the total, 203 members 194 are above six years of age. The survey shows 83.51% of the members are literate. But on the other hand just about 10% have their education above SLC (Table 2.8). The share of illiteracy in women (11.34%) is higher than that of male members (5.15%) (Annex: //III).

Table 2.8: Literacy Status of HHs according to Ethnicity

Caste/Ethnicity	Literacy Status								
	Illiterate	General	Primary	Lower Secondary	Secondary	SLC	Intermediate	Bachelor	Masters
Limbu	8	17	5	4	10	10	10	0	0
Rai	10	4	4	16	4	3	3	0	0
Tamang	4	3	3	4	7	3	2	0	0
Brahmin Hill	2	4	5	3	6	4	1	2	0
Chhetri	1	0	2	2	0	2	1	0	0
Magar	7	0	3	2	3	1	0	0	0
Newar	0	1	3	0	0	0	0	0	0
Sunuwar	0	2	0	1	1	0	1	0	0
Total	32	31	25	32	31	23	18	2	0
Total percent	16.49	15.98	12.89	16.49	15.98	11.86	9.28	1.03	0.00

Energy Use

The survey shows that 90.91% of the households use fuel wood and dung cake for the cooking purposes. Only, 6.06% of the total HHs affords LPG for cooking purpose (Table 2.9). Similarly, very few households (15.15%) have improved cook stoves. The status for lightening shows that more than 50% of the population is not connected to the electricity grid (Table 2.10).

Table 2.9: Household status of Energy Use for Cooking

Caste/Ethnic Groups	LPG		Fuelwood/ dungcake		Firewood and Biogas	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Limbu	1	9.09	9	81.82	1	9.09
Rai	0	0.00	7	100.00	0	0.00
Tamang	0	0.00	4	100.00	0	0.00
Brahmin Hill	1	33.33	2	66.67	0	0.00
Chhetri	0	0.00	2	100.00	0	0.00
Magar	0	0.00	4	100.00	0	0.00
Newar	0	0.00	1	100.00	0	0.00
Sunuwar	0	0.00	1	100.00	0	0.00
Grand Total	2	6.06	30	90.91	1	3.03

Table 2.10: Household status of Energy Use for Lightening

Caste/Ethnic Groups	Kerosene		Electricity		Solar		Others	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Limbu	5	45.45	4	36.36	1	9.09	1	9.09
Rai	2	28.57	1	14.29	2	28.57	2	28.57
Tamang	2	50.00	2	50.00	0	0.00	0	0.00
Brahmin Hill	1	33.33	2	66.67	0	0.00	0	0.00
Chhetri	0	0.00	2	100.00	0	0.00	0	0.00
Magar	0	0.00	4	100.00	0	0.00	0	0.00
Newar	0	0.00	0	0.00	1	100.00	0	0.00
Sunuwar	0	0.00	0	0.00	0	0.00	1	100.00
Grand Total	10	30.30	15	45.45	4	12.12	4	12.12

Sanitation

With regards to sanitation, only 54.55% of the households have facilities of toilet (Table: 2.11). Among, the HHs having toilet facilities only 38.8% have permanent toilets. The remaining have pit type toilet.

Table 2.11: Households Having Toilet Facility by Ethnicity

Caste/Ethnic Groups	Toilet Facility			
	Yes		No	
	Frequency	Percent	Frequency	Percent
Limbu	8	72.73	3	27.27
Rai	2	28.57	5	71.43
Tamang	1	25.00	3	75.00
Brahmin Hill	3	100.00	0	0.00
Chhetri	1	50.00	1	50.00
Magar	2	50.00	2	50.00
Newar	0	0.00	1	100.00
Sunuwar	1	100.00	0	0.00
Grand Total	18	54.55	15	45.45

Health

In the last one year period, nearly 57.58% of the household reported some member of their family falling sick (Table: 2.12). The households reported that, all of them visited health posts and hospitals for curing the illness. On the other hand, during the delivery cases 72.73% reported they visit health posts while 24.24% reported they take the help of Sudeni for the case (Table 2.13).

Table 2.12: Households Members Reporting Sickness

Caste/Ethnic Groups	Incidence of sickness			
	Yes		No	
	Frequency	Percent	Frequency	Percent
Limbu	4	36.36	7	63.64
Rai	3	42.86	4	57.14
Tamang	4	100.00	0	0.00
Brahmin Hill	3	100.00	0	0.00
Chhetri	1	50.00	1	50.00
Magar	4	100.00	0	0.00
Newar	0	0.00	1	100.00
Sunuwar	0	0.00	1	100.00
Grand Total	19	57.58	14	42.42

Table 2.13: Help taken by HHs during Delivery Case

Caste/Ethnic Groups	Help from whom during delivery case					
	Sudeni		Health Post		Not Answered	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Limbu	2	18.18	8	72.73	1	9.09
Rai	3	42.86	4	57.14	0	0.00
Tamang	2	50.00	2	50.00	0	0.00
Brahmin Hill	0	0.00	3	100.00	0	0.00
Chhetri	0	0.00	2	100.00	0	0.00
Magar	1	25.00	3	75.00	0	0.00
Newar	0	0.00	1	100.00	0	0.00
Sunuwar	0	0.00	1	100.00	0	0.00
Grand Total	8	24.24	24	72.73	1	3.03

2.2.3 Participation in Organizations

Among the households surveyed, only 27.27% reported that some of their family members have participated in organizations such as community forest, water users committees, co-operatives etc. A large portion of households (72.73%) have none of their family members participating in any organization (Table 2.14).

Table 2.14: Household Participation in Community Organizations

Caste/Ethnic Groups	Organizational Participation			
	Yes		No	
	Frequency	Percent	Frequency	Percent
Limbu	3	27.27	8	72.73
Rai	2	28.57	5	71.43
Tamang	2	50.00	2	50.00
Brahmin Hill	0	0.00	3	100.00
Chhetri	1	50.00	1	50.00
Magar	1	25.00	3	75.00
Newar	0	0.00	1	100.00
Sunuwar	0	0.00	1	100.00
Grand Total	9	27.27	24	72.73

2.2.4 Economic Concerns

Occupational Status

The survey shows that 90.91% of the households depend on agriculture for their subsistence being this as the primary occupation. Only 6.06% of the households reported business as their primary occupation (Table 2.15). On the other hand, 54.55% of the population depend on their primary profession for subsistence (Table 2.16).

Table 2.15: Primary Occupation of Households

Caste/Ethnic Groups	Agriculture and Livestock		Business		Others	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Limbu	10	90.91	0	0.00	1	9.09
Rai	6	85.71	1	14.29	0	0.00
Tamang	4	100.00	0	0.00	0	0.00
Brahmin Hill	3	100.00	0	0.00	0	0.00
Chhetri	1	50.00	1	50.00	0	0.00
Magar	4	100.00	0	0.00	0	0.00
Newar	1	100.00	0	0.00	0	0.00
Sunuwar	1	100.00	0	0.00	0	0.00
Grand Total	30	90.91	2	6.06	1	3.03

Table 2.16: Secondary Occupation of Households

Caste/Ethnic Groups	Secondary Profession			
	Yes		No	
	Frequency	Percent	Frequency	Percent
Limbu	7	63.64	4	36.36
Rai	3	42.86	4	57.14
Tamang	2	50.00	2	50.00
Brahmin Hill	1	33.33	2	66.67
Chhetri	0	0.00	2	100.00
Magar	1	25.00	3	75.00
Newar	1	100.00	0	0.00
Sunuwar	0	0.00	1	100.00
Grand Total	15	45.45	18	54.55

Land Holdings

All the surveyed households have land holdings though the land type may vary. The land holding in average is 8.40, 14.49, 2.27, 3.11, 0.06, 0.82 and 9.80 ropanies of khet, bari, Kharbari, forest, garden, tea garden and Cardamom garden respectively Table 2.17.

Table 2.17: Land Holdings of HHs according to Ethnicity

Caste/Ethnicity of the HH	Average land holdings in Ropani						
	Khet owned	Bari owned	Kharbari owned	Forest Owned	Garden owned	Tea Garden owned	Cardamom garden owned
Limbu	11.00	15.00	2.73	4.00	0.00	0.45	27.36
Rai	12.39	7.16	1.43	2.43	0.00	1.14	1.29
Tamang	1.63	16.75	3.00	2.50	0.00	2.50	0.50
Hill Brahman	13.33	31.67	7.00	5.00	0.67	1.33	3.33
Chhetri	4.00	5.50	1.00	7.50	0.00	0.00	0.00
Magar	3.75	6.25	0.00	0.38	0.00	0.00	0.38
Newar	0.00	5.00	0.00	0.00	0.00	0.00	0.00
Sunuwar	0.00	60.00	0.00	0.00	0.00	0.00	0.00
Total Average	8.40	14.49	2.27	3.11	0.06	0.82	9.80

Agriculture Production and Food Sufficiency

The surveyed households grow different types of crops which include vegetables, cereals, fruits etc. Though most of the household's primary occupation is agriculture, they do not have sufficient foods to feed them whole year. Among the 33 households surveyed 75.76% reported that they do not have sufficient food Table 2.18. Of the total households, 24.24% have food insufficiency for three months, 36.36% have food insufficiency for six months and 15.15% for nine months Table 2.19

Table 2.18: Food Sufficiency Status of HHs

Caste/Ethnic Groups	Food Sufficiency			
	Yes		No	
	Frequency	Percent	Frequency	Percent
Limbu	3	27.27	8	72.73
Rai	3	42.86	4	57.14
Tamang	0	0.00	4	100.00
Brahmin Hill	0	0.00	3	100.00
Chhetri	1	50.00	1	50.00
Magar	1	25.00	3	75.00
Newar	0	0.00	1	100.00
Sunuwar	0	0.00	1	100.00
Grand Total	8	24.24	25	75.76

Table 2.19: Food Insufficiency in Months

Caste/Ethnic Groups	Food Insufficiency in time							
	3 Months		6 Months		9 Months		Not Applicable	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Limbu	3	27.27	3	27.27	2	18.18	3	27.27
Rai	0	0.00	3	42.86	1	14.29	3	42.86
Tamang	2	50.00	2	50.00	0	0.00	0	0.00
Brahmin Hill	0	0.00	3	100.00	0	0.00	0	0.00
Chhetri	0	0.00	0	0.00	1	50.00	1	50.00
Magar	2	50.00	1	25.00	0	0.00	1	25.00
Newar	1	100.00	0	0.00	0	0.00	0	0.00
Sunuwar	0	0.00	0	0.00	1	100.00	0	0.00
Grand Total	8	24.24	12	36.36	5	15.15	8	24.24

2.2.5 People's Perception towards the Project

Most of the HHs surveyed (96.97%) showed positive perception to the project development (Table 2.20). One household of the total surveyed did not like the project implementation because he believed project may not give compensation. On the other hand 84.85% of the households have information about the project (Table 2.21). Similarly, 24.24% of the respondents said some of their family members were involved in the interactions of the project. Table 2.22

Table 2.20: People's Perception about the Project

Caste/Ethnic Groups	Perception toward Kabeli TL			
	OK		Not OK	
	Frequency	Percent	Frequency	Percent
Limbu	11	100	0	0
Rai	7	100	0	0
Tamang	4	100	0	0
Brahmin Hill	3	100	0	0
Chhetri	1	50	1	50
Magar	4	100	0	0
Newar	1	100	0	0
Sunuwar	1	100	0	0
Grand Total	32	96.97	1	3.03

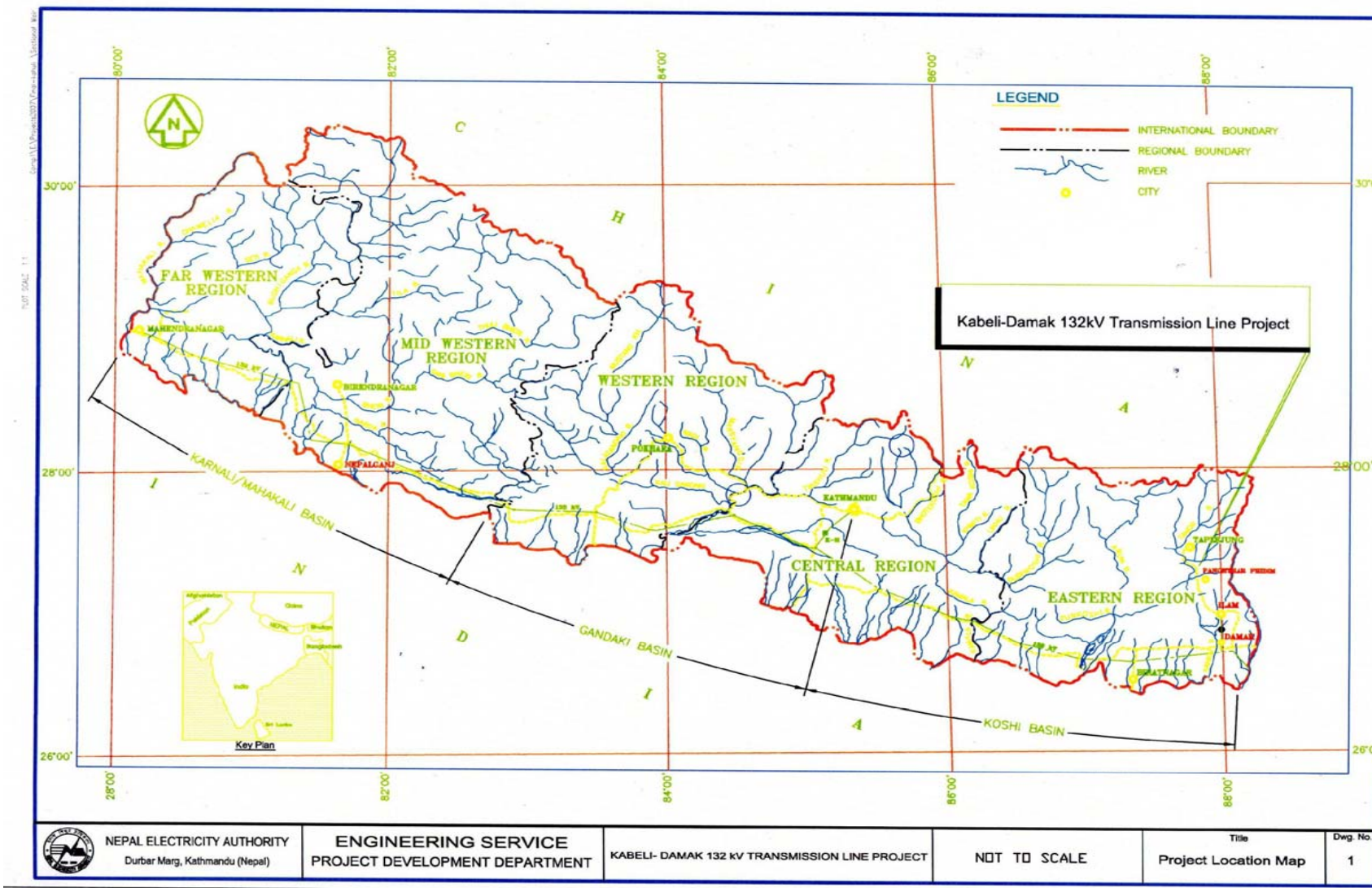
Table 2.21: Information on HHs Members according to Ethnicity

Caste/Ethnic Groups	Information on Kabeli Corridor Transmission Line			
	Yes		No	
	Frequency	Percent	Frequency	Percent
Limbu	9	81.82	2	18.18
Rai	7	100.00	0	0.00
Tamang	2	50.00	2	50.00
Brahmin Hill	2	66.67	1	33.33
Chhetri	2	100.00	0	0.00
Magar	4	100.00	0	0.00
Newar	1	100.00	0	0.00
Sunuwar	1	100.00	0	0.00
Grand Total	28	84.85	5	15.15

Table 2.22: Participation of HHs Members in Interaction

Caste/Ethnic Groups	Involvement in Interactions/discussion on Kabeli TL					
	Yes		No		Didn't Answer	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Limbu	4	36.36	7	63.64	0	0.00
Rai	1	14.29	6	85.71	0	0.00
Tamang	0	0.00	4	100.00	0	0.00
Brahmin Hill	1	33.33	1	33.33	1	33.33
Chhetri	0	0.00	2	100.00	0	0.00
Magar	1	25.00	3	75.00	0	0.00
Newar	1	100.00	0	0.00	0	0.00
Sunuwar	0	0.00	1	100.00	0	0.00
Grand Total	8	24.24	24	72.73	1	3.03

Figure 2.1: Project Location Map of KCTLP



3. RAP OF ANGLE TOWERS AND OVERALL FRAMEWORK FOR REMAINING (SUBSTATIONS, TL ROW)

3.1 Approaches and Methodologies

3.1.1 Communication and Consultation with Stakeholders

The project involves multiple stakeholders of different interests. Without a close consultation, cooperation and participation of these stakeholders the objectives of the RAP study could not be realized. Thus, a mechanism of maximization of consultation and cooperation of the stakeholders were followed during the entire period of study. Awareness building of the stakeholders and use of multiple participation approaches were key focus area for realizing wider participation of the stakeholders in all stages of the RAP study for KCTLP.

During the study period, the concerns and suggestions of stakeholders were collected, reviewed and incorporated in the RAP reports.

The project stakeholders were involved at three different stages. In the *initial stage*, primary focus of the plan was to introduce the project and its likely implication to the people at the local level and seek information and concerns of the people on the project and/or identify issues that are not well understood and need further investigation to understand their implications. The *second stage* of the Plan was to seek information on the baseline conditions of various resources at local level, their use, their importance, critical factors that govern the existing baseline etc. The *third stage* of the Plan was to seek information on the programs and measures and their adequacy to avoid, minimize, and compensate the adverse **social impacts** of the projects and maximize the **social benefits**. The findings from stakeholder discussions and interviews are presented succinctly in more detail in **Annex**.

Various tools, methods and means can be utilized to involve the people in the project decision making process particularly related to social aspects. **Public Notification, Distribution of Brochures, Rapid Rural Appraisal, Participatory Rural Appraisal, Informal Focus Group Discussions (FGD), Interviews with Key Informants, Census Social Survey of the Affected Populations**, etc., were applied depending upon local conditions. The FGD checklist for women, Adivasi/Janajati, Dalit is included in **Annex** of this report.

3.1.2 RAP Fieldwork

The study team members have interacted with the local government, organizations, institutions, NGOs, CBOs and the members of civil societies to actively take part in the SIA, RAP and SMF studies. During the course of study, the consulting team members have noted the views and ideas of the stakeholders and encourage them to provide further input for successful completion of the study and implementation of the project.

The SIA, RAP and SMF requirements mentioned in OP of World Bank and GoN requirements were taken as a reference during the entire study period. It is widely agreed that for the project to be feasible for implementation it should be technically feasible, financially viable and socio-economically and environmentally acceptable.

The study team of NESS has used "*already available information*" for the SIA study and analysis so as to minimize time for the study accomplishment. Primary information was sought only in cases where there were complete gaps.

For the RAP study, the contractor mobilized a multidisciplinary team of specialists, proceeding in five groups of two specialists each, to conduct the fieldwork along the KCTLP TL corridor across

the four project affected districts in eastern Nepal. Ultimately, the entire TL right-of-way, Angle Tower (AT) sites and Power Sub-Station (PS/S) sites were covered.

Each team first read all available reports and details of the project to become familiar with the project site. In the field, selected portions of relevant reports were carried for reference, along with maps with tower/corridor details. A detailed questionnaire was prepared to be administered to those householders whose land has been selected for angle tower or sub-station construction, And, focus group discussions (FGDs) were held with a sampling of Adivasi/Janajati, Dalit, and Women's groups from the VDCs affected by the KCTLP (**Annex**).

During the 10 days of fieldwork, the following specific tasks were accomplished:

1. Conducted a desk review of available information from previous surveys (IEE) and secondary data from the districts and VDCs concerned.
2. Reviewed GON and WB legal and policy frameworks, focusing on the key social, economic, cultural, ethnic and political characteristics of the project area, including socio-political, environmental, socio-economic, and employment and livelihood patterns of the local people.
3. Identified and interviewed landowners of the pre-selected AT and PS/S construction sites with a pre-designed questionnaire. Data were collected on their demographics, socio-cultural features, livelihood and employment patterns, use of natural resources, association or participation in formal and informal institutions, and their relationships/interactions with other ethnic groups. The affected sites include private land (where private landowners were interviewed), community forest (where community forest user group members were interviewed), and government land (government agencies were consulted at the DDC level).
4. Screened for the presence of Indigenous Peoples (Adivasi/Janajati) and Vulnerable Groups (Dalit, Women) residing under or within 250 meters of the proposed transmission line corridor, and focus group discussions (FGDs) were held with a representative sample of such groups. Altogether 53 FGDs were conducted (**Table**). These discussions were designed to determine ethnic identity markers such factors as (a) self-identification and recognition of the identity by others, (b) collective attachment to geographically distinct habitats or ancestral territories and associated natural resources, (c) presence of distinct customary cultural, economic, social or political institutions, and (d) indigenous languages. Data were collected on demographics, socio-cultural features, livelihood and employment patterns, use of natural resources, formal and informal institutions, and their relationships/interactions with other ethnic groups.
5. Note that all consultations, interviews and discussions (in both #3 & 4, above) focused on the impacts on people and communities of land acquisition for Angle Towers, impacts on local livelihood patterns due to TL construction, general resource use in the communities (including both common natural and cultural resources used), and the presence and significance of other religious, cultural and/or historical resources. For further discussion see **Annex 4**.
6. Other project-affected individuals, communities and groups, and other stakeholders were also identified and interviews/discussions were carried out, including with local government bodies/agencies (DDCs, VDCs, DFOs, CBOs/NGOs, ethnic and caste group associations, and forest user groups), to assess their views, concerns, expectations and advice regarding the project.

3.1.3 Inventory of APs Belonging to Angle Towers of KCTLP

During the field survey, the consultant used the tools like available maps, TL survey details, drawings, cadastral maps in identifying the APs of angle tower of KCTLP. With this information, the consultant identified the APs on the ground and their details were obtained through interviews. The inventory of such APs are highlighted below.

Table 3.1: Details of APs in KCTLP

VDC	Settlement	Angle Poles	Affected Person / Land Owner	Land Use				Remarks
				Cultivated Land	Barren Private land	Barren government land	Forest	
Chhatedhunga-7	Bokre	AP - 1	Dik Bdr. Majhi	Cultivated Land				The person rented in the land but doesnot cultivate now. He could not be contacted and the actual owner is not known.
				1				
Amarpur-8	Pinaseghat	AP - 0	River Bank	Cultivated Land				Local people say the land lies on river bank.
Subhang-2	Chuli danda,Siruwani	AP - 2	Government Land			Barren government land		Lies in government land
Subhang-2	Dabal taar	AP - 3	Government Land			Barren government land		Lies in government forest
Phidim-4	Ghehetar		Details on Substation					S/S
Phidim-4	Gadgi danda	AP - 5	Debaka Dhakal	Cultivated Land				HH Survey done
Chokmagu-1	Dangal gaun	AP - 6	Government Land			Barren government land		
Chokmagu-8	Jorkulo	AP - 7	Deu Kumar Tumbapo	Cultivated Land				HH Survey done
Chokmagu-6	Gauthali	AP - 8	Durgamaya Tumbapo	Cultivated Land				HH Survey done

Chokmagu-7	Maidane	AP - 9	Deb man Tumbapo	Cultivated Land				HH Survey done
Siwa-5	Maluwa	AP - 11	Kali Prasad Tumrok	Cultivated Land				HH Survey done
Siwa-4	Siwa	AP - 12	Bank of Siwa River	Cultivated Land				HH Survey done
Siwa-4	Magar	AP - 13	Abidal Tumrok	Cultivated Land				HH Survey done
Siwa4	Srimantar	AP - 14	Ram Kumar Rana Magar	Cultivated Land				HH Survey done
Siwa-4	Khamladin	AP - 15	Yam Bdr. Magar	Cultivated Land				HH Survey done
Nawami danda-4	Patale Bhajang	AP - 16	Kumar Bastola	Cultivated Land				HH Survey done
Imbung-8	Hongue	AP - 17	Birbal Tamang	Cultivated Land				HH Survey done
Imbung-1	Pani Tankya Danda, Sisuwa	AP - 18	Singha Prasad Newang	Cultivated Land				HH Survey done
Pauwa Sartap-2	Sartap	AP - 19	Subarna Chemjong	Cultivated Land				HH Survey done
Chilindin-2	Lukuwa	AP - 20	Buddhibal Chemjong	Cultivated Land				HH Survey done
Chilindin-3	Kameru danda, Deurali	AP - 21	Government Land			Barren, government land		
				15		4		
Chamaita-9	Simsara	AP - 22	Devi Bdr. Poudel	Cultivated Land				HH Survey done
Mangalbare-5	Sabjung	AP - 23	Dhan Prasad Rai	Cultivated Land				HH Survey done
Mangalbare-2	Danda gaun	AP - 24	Tulasha Acharya	Cultivated Land				HH Survey done
Mangalbare-4	Surke Danda, Panitar	AP - 25	Owned by National Tea Development Board				Owned by National Tea Development Board	
Siddi Thumka	Budhha Chowk, Kalsing	AP - 26	Jit Raj Tamang	Cultivated Land				HH Survey done
Siddi Thumka-4	Khandrung, Panchami	AP - 27	Dambar Bdr. Gole Tamang	Cultivated Land				HH Survey done

Siddi Thumka-3	Chuligaun	AP - 28	Government Land				Forest, government land	
Soyak-7	Nawami Danda	AP - 29	Lal Bdr. Magar	Cultivated Land				HH Survey done
Soyak-7	Dhode	AP - 30	Dukh Bdr. Magar	Cultivated Land				HH Survey done
Soyak-9	Bikram Danda, Sirkot	AP- I 5	Thagi Maya Rai	Cultivated Land				HH Survey done
Soyak-6	Tamakpa, Bahana	AP- I 6	Uday Yaktan	Cultivated Land				HH Survey done
Chisapani-9	Lamudanda, Borung	AP- I 7	Mohan Godake Rai	Cultivated Land				HH Survey done
Chisapani-9	Karki Danda	AP- I 8	Bhim Bdr. Sangpang		Barren private land			HH Survey done
Danawari-9	Hangrayo, Bhalukhop	AP- I 9	Santa Bdr. Mukhiya	Cultivated Land				HH Survey done
Danawari-9	Hatikharka	AP- I 10	Mohan Hadim Rai		Barren private land			HH Survey done
Mahamai-5	Tamakhe	AP- I 11	Tek Bdr. Kulung	Cultivated Land				HH Survey done
Mahamai-5	Sanguri	AP- 42	Man Kumar Yongyang	Cultivated Land				
Mahamai-5	Sanguri	AP- 43					Tamakhe community forest, government land	
Chulachuli-5	Beteni	AP- 44				Barren, government land		
Chulachuli-5	Beteni	AP- 45					Forest, government land	
Chulachuli-5	Sarkitar	AP- 46	Dip Bdr. Shrestha	Cultivated Land				HH Survey done
Chulachuli-4	Budhijhola	AP-D 6	Nar Bdr. Dewan	Cultivated Land				HH Survey done
Chulachuli-3	Barhagothe, Siran	AP-D 5	Bhim Bdr. Limbu	Cultivated Land				HH Survey done
Soyak - 1	Balase	AP - I 3	Bir Bdr. Tamang	Cultivated				HH Survey done

				Land				
Chisapani-4	Rangapani	AP - I 2				Barren, government land		
Godak-3	Danawaribesi, Bhandaribesi	AP - I 1	Som Bdr. Kunwar	Cultivated Land				HH Survey done
Godak-3, Setuwa besi								S/S
				18	2	2	4	
Lakhanpur-3	Ratuwa mai	AP-D 4				Barren, government land		
Lakhanpur-1	Rangkath ko Tupppa	AP-D 3				Barren, government land		
Lakhanpur-1	Rangkath ko Tupppa	AP-D 2				Barren, government land		
Lakhanpur-1	Holiko Paini, Gauriya	AP-D 1				Barren, government land		
Lakhanpur-1	Pathibhara chowk, Geuriya	AP-D 0				Barren, government land		
Damak								S/S
						5		

	Terhathum	Panchthar	Illam	Jhapa	Total
Cultivated Land	1	15	18	0	34
Barren Private Land			2	0	2
Barren Government Land		4	2	5	11
Forest , Government Land			4		4
Total AP	1	19	26	5	51
Substation		1 (Phidim)	1 (Godak)	1 (Damak)	
Grand Total (AP)			51		
Sub Station (S/S)			3		

Phidim	Hewa Khola	Phidim Hub	Tanka Shrestha					HH Survey done
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			Tej Kumar kuruwan					HH Survey done
Godak	Godak	Ilam Hub	Alok Tea Farm (Basu Dev Koirala)					HH Survey Not Done
Lakhanpur	Lakhanpur	Jhapa Hub	Birendra Kumar Subba					HH Survey done
			Bhoj Kumari Budathoki					HH Survey done
			Rohit Budathoki					HH Survey done

3.2 Project Impacts

The angle tower RAP impact details are the result of inventory survey and the rest are estimates, to be confirmed and updated through detailed inventory survey during implementation, following the framework. The details provided here are for RAP following by detailed planning during the implementation

The KCTLP will affect private land both permanently and temporarily. Permanent affects will be due to the permanent land acquisition for PS/S and tower foundation, and due to restrictions on land use along the 18 m wide KCTLP ROW corridor. Temporary affects will be associated with camps and storage areas occupied during construction. Table 3.2 presents the area of private land affected.

Table 3.2: Table Private Land Affected by KCTLP

Locations	Permanent (ha)	Temporary (ha)
Substations	4.324	
Tower Foundations	2.821	
ROW	89.27	
Camps and Storage	0	6.98
Total	96.415	6.98

Source: IEE Field Survey, NESS, 2010 Note: The private land areas include both cultivated land and private forests.

The land acquisition and restriction on land use will impart direct impacts to the landowners of the private land. The envisaged impacts are on the socioeconomic status of the affected population/households as landholding is considered to be a matter of social status in the rural areas of Nepal. The land area occupied permanently for substation and tower foundation will be lost forever. Of the total 51 angle towers, only 34 numbers of angle towers need to acquire private land. Hence the details of 34 APs are included in this report. The remaining angle towers falls in to barren private land, barren government land, forest and government land.

The main objective of the impact analysis is to develop the profiles of APs and communities affected by the project along with identification of the nature and types of losses to prepare inventory of the affected assets. Assets to be lost include: (i) agricultural land, (ii) residences, (iii) commercial structure, (iv) private assets, and (v) others .

3.2.1 Agricultural Land

A total of 2.821 ha of agricultural land will be acquired. A socio-economic survey of all the households was carried out. Cash compensation will be paid based on the prevailing market rate to 2.821 ha of agricultural land. This aspect is included in the cost estimation chapter of this report.

3.2.2 Residential Structures

No residential structures are affected during the construction of ATs in the given alignment.

3.2.3 Commercial Structures

No commercial structures are affected during the construction of ATs.

Note: Since there is no losses of 10% more of "productive asset" additional compensation package to APs is not required for angle towers. So, the proposed cash compensation is considered sufficient for rehab purpose.

3.2.4. Environmental Impacts

The likely environmental impacts due to the construction and operation of angle towers are elaborated along with their suggested mitigation measures

Table 3.3: Environmental Impacts and Mitigation Measures

Environmental Impacts	Mitigation Measure
A. Construction Phase	
Direct/Indirect Soil Erosion and Land Instability Impact	The cleared areas of the Terai, and gentler slopes of the Mahabharat and Midlands will be managed by NTFP plantation with consideration of soil erosion and land stability impacts
	The spoil generated in the tower foundation will be properly managed. Sidecasting of the spoil on the side slopes will be controlled.
	The tower foundation sites will be protected by the application of bio-engineering measures.
	Tower foundations sites will be further re-examined from the stability point of view and sites which are stable will only be used for tower foundations by adjusting the span between the towers.
	Excavations along tower foundations will be minimized to the required depth only without altering the ground drainage conditions.
	As far as possible, existing trails will be used for transportation of materials to ROW and Tower foundation sites. In case new trail need opening will utilize the most stable part of the terrain to avoid erosion, gully formation and landslides.
Direct/Indirect Impact on Land Use	The agricultural land use will be allowed for agricultural purpose except for the clearance of built structures and tall trees
Direct/Indirect Impacts on Noise Levels	Except in the sub-station, heavy machinery will not be used for construction
	Noise producing construction activities at the tower foundation and substation will be carried out in the day time zone only
	Anthropogenic noises at the camp sites will be minimised through special instruction to the workforce
Direct/Indirect Impact on Land Use	The spoil generated in the tower foundation will be properly managed. Sidecasting of the spoil on the side slopes will be controlled
	Headward progressing gullies in the Siwaliks, Mahabharat and Midlands close to the tower foundation sites will be controlled by application of bio-engineering
	The tower foundation sites will be protected by the application of bio-engineering measures
Direct/Indirect Impacts of Solid and Liquid Waste Disposal	The construction solid waste will be collected in safe area and will be disposed safely in consultation with the engineers
	Spent oils, mobils, and other chemicals generated will be safely collected in drums and disposed as per the advice of the engineers
	The toilets in the camps and active construction sites will be

Environmental Impacts	Mitigation Measure
	constructed as per the requirement of the construction workforce. Haphazard defecation will be prohibited
	Other liquid and solid waste of the camp sites will be collected in safe sites and disposed as to the instruction of the engineers
Indirect Impact on Air Quality	Fugitive dust emissions in the tower foundation construction sites will be minimised through regular sprinkling of water
	Fuel wood at the camp sites will be replaced by the subsidised kerosine or LPG
Direct/Indirect Impact on Water Quality	Haphazard disposal of the solid and liquid wastes will be controlled
	Toilets with sanitary earth pits will be provisioned in the camps and active construction sites
	Final disposal of the spoil and solid or liquid waste will be carried out in areas away from the water path ways and water bodies
	All the spent oils, mobiles and chemicals and the containers will be collected and managed as per the instruction of the engineers.

3.3 Attitudes and Perceptions towards the KCTL Project

In addition to the discussion below, the summary data directly above (§4.3.4) from the women surveyed, are especially insightful vis-à-vis attitudes and local perceptions towards the Project.

3.3.1 General Perceptions and Expectations

Both the Kabeli hydroelectric and transmission line projects generally enjoy positive perceptions among the residents of the project affected VDCs, based on the focus group discussions held in the settlements. It is seen to have significant benefits forthcoming, both locally and nationally.

During almost every FGD, village participants/discussants listed benefits that they expect to accrue from the project(s), including most prominently the following.

- local rural electrification where it does not already exist, and enhancements to the system where it does;
- local employment on the project;
- skill enhancement training (for employment and livelihood improvement);
- introduction and training in enhanced/modern agriculture and livestock rearing practices (including hybrid seeds, and animal health improvement);
- rehabilitation and improved maintenance of rural roads;
- improved health facilities (esp. safe drinking water, and sanitation);
- enhanced educational awareness, facilities and opportunities; and
- enhanced conditions for indigenous, women's and other vulnerable groups development.

3.3.2 Modes of implementation of social development program

From most discussions it is clear that the local people wish to see the involvement of CBOs, NGOs and national experts in the implementation of the benefits listed above. Community participation in decision-making, implementation, monitoring and evaluation are considered most valuable.

3.3.3 Mitigation measures and modes of rehabilitation or restoration

In cases where compensation is due, the locals wish to see it in the following forms:

- Cash compensation;
- Provision of land to project affected families (PAFs); and/or

4. RESETTLEMENT OBJECTIVES AND POLICY FRAMEWORK

This section discusses the key national and KCTLTP specific resettlement policies and legal issues involved in land acquisition and compensation. It describes the principles and approach to be followed in minimizing and mitigating negative social and economic impacts of the KCTLTP. The RP has been prepared based on the general findings of the census/social survey, field visits, and meetings with various sub-project affected persons in the KCTLTP corridor. The principles adopted establish eligibility and provisions for all types of losses.

4.1 Review of National Policy

4.1.1 Government of Nepal's Land Acquisition Act (1997)

Land Acquisition Act, 2034 (1977) is the core legal document to guide tasks related to land acquisition and resettlement activities in Nepal. There is provision in Clause 3 of the Act to acquire land for any public purpose, subject to the award of compensation. Besides, any institutions seeking land acquisition may also request GON to acquire the land under the regularity provisions subject to be compensated by such institutions' resources. As per the prevailing government rules, the compensation to be provided for land acquisition should generally be in cash as per current market value. However, there is also a provision under Clause 14 of the Land Acquisition Act 2034 (1977) to compensate land for land provided government land is available in the area. As per the regulatory provision, while acquiring land, GON forms a Compensation Fixation Committee (CFC) under the chairmanship of Chief District Officer (CDO) of the district. The other members to be included in the committee comprise of - Chief of Land Revenue, an Officer assigned by CDO, representative from District Development Committee (DDC)³, Concerned Project Director. While determining the compensation, the Committee has to consider relevant acts and periodic guidelines of the Government in compliance with World Bank policy and guidelines.

The Act also envisages the possibility of two separate rates of compensation, distinguishing between families who lose all their land and those who lose only some part of their landholdings. In determining the compensation, the Committee must consider the loss incurred by persons due to acquisition of land, shifting of residence or place of business to another place. If the land has to be acquired for institutions other than the VDCs and institutions fully owned by the government, the Committee has to consider the following while fixing the compensation amount:

- Price of land prevailing at the time of notification of land acquisition;
- Price of standing crops and structures, and
- Damage incurred by being compelled to shift the APs residence or place of business in consequence of the acquisition of land.

In other words, CFC under the Act is formed for actual verification of land to be acquired, reviewing and fixing compensation rate, identification of proper owner(s), distribution of compensation, providing necessary administrative support addressing associated issues. However, formally the implementation process of CFC begins once GON grants formal approval for the land acquisition. After the approval, from government side, the Officer concerned of Executing Agency (EA) is entrusted with the task to initiate the process through public notification. The public notification also includes the activities of disseminating details of the land area, structure affected in municipality/VDC coming under the Project.

3 District level development unit to be chaired by district level elected leaders.

4.1.2 Current Resettlement Practice in Nepal

As specified in the LA Act Clause 13, a four-member committee headed by CDO of the concerned district is constituted for fixing up the compensation for lost assets. The fixing of compensation is through Community Consensus Valuation (CCV). During the implementation process of the RP, after the submission of the report to the Chief District Officer (CDO) with the details of specific location for the land and other assets to be acquired by the concerned Officer-in-Charge of the Project, the acquisition process is undertaken. The other members include Project Chief or his/her representative, and a representative from the DDC. In this process, the Committee issues circulars or undertakes extensive consultation with representatives of the project affected population, political party's local representatives and relevant district level chiefs of line agencies to finalize and fix the rate of compensation. This integrated approach is in line with the World Bank policy guidelines. After finalization of the agreements, formal notification is placed in public places, local and national newspapers identifying the amount of land, owner and ownership related matters of the affected assets. The compensation amount will be paid to the AP before the commencement of construction work.

4.2 Review of World Bank Resettlement Policy

4.2.1 Involuntary Resettlement (OP 4.12)

This policy is the principal social safeguard policies of the World Bank applying for resettlement. The key objectives of the policy on involuntary resettlements includes to (i) avoid or minimize involuntary resettlement and related disruption where feasible; (ii) explore all viable alternatives for project design; (iii) provide transparent compensation procedures for the involuntary acquisition of land; (iv) assist the affected and displaced persons in their efforts to improve their standards of living, income earning capacity, and production level, or at least in restoring them, implemented through a resettlement action plan; (v) encourage community participation in planning and implementing resettlement; (vi) provide assistance to affected people regardless of the legality of land tenure. The policy covers not only physical relocation but any loss of land or other assets resulting in relocation or loss of shelter; loss of assets or access to assets ; loss of income source or means of livelihood whether or not the affected people must move to another location. When the policy is triggered, a Resettlement Action Plan must be prepared. An abbreviated plan may be prepared when less than 200 people are affected by the project. In situations, where all the precise impacts cannot be assessed during project preparation, provision is made for preparing a Resettlement policy framework (RDF). The RAP/RDF must ensure that all the Banks policy provisions detailed in OP 4.12 are addressed particularly the payment of compensation for affected assets at their replacement cost.

More specific and relevant to the SRN Program, the following provisions are given in this policy:

- The implementation of resettlement activities is linked to the implementation of the investment component to ensure that displacement does not occur before necessary measures for resettlement are in place. The measures (i.e the RP) include provision of compensation and of other assistance required for relocation, prior to displacement, and preparation and provision of resettlement sites with adequate facilities, where required. Land and assets acquisition should take place only after compensation has been paid and, where applicable, resettlement sites and moving allowances have been provided to the DPs. The measures are implemented in accordance with the plan of action as part of the project.
- Preference should be given to organize land-based resettlement program for the DPs whose livelihoods are land-based. In such case, the land should have combination of higher comparative advantage or at least equivalent to the land taken. If the land is not the preferred options of the DPs, or equivalent land could not be available, non-land-based options built around opportunities.

- For employment/livelihood should be provided in addition to cash compensation for land and other assets lost. Cash compensation to the DPs should be sufficient to replace the lost land and other assets at full replacement cost in local markets.
- DPs and their communities, and any host communities receiving them, are provided timely and relevant information, consulted on resettlement options, and offered opportunities to participate in planning, implementing, and monitoring resettlement. Appropriate and accessible grievance mechanisms should be established for these groups.
- Infrastructure and public services are provided as necessary to improve, restore or maintain accessibility and levels of service for the DPs and host communities. Alternative or similar resources are provided to compensate for the loss of access to community resources.
- DPs who have formal legal rights to land and those who don't have at the time of census survey but have a claim to such land or assets or become recognized through a process identified in the resettlement plan are provided compensation and other assistance for the land they lose. In the case of DPs who have no recognizable legal right or claim to the land they are occupying are provided resettlement assistance in lieu of compensation for the land they occupy, and other assistance as necessary, if they occupy the project area prior to a cut off date. Any encroachers settling after the cut-off date are not entitled to compensation or other form of resettlement assistance.
- Both the GON legal frameworks and World Bank guidelines related to resettlement aim at achieving the following overall goals:
 - Involuntary resettlement shall be avoided to the extent possible or minimized where feasible, exploring all viable alternative project designs.
 - Where displacement is unavoidable, people losing assets, livelihood or other resources shall be assisted in improving or at a minimum regaining their former status of living at no cost to themselves.

World Bank policy states for provision of assistance to affected people regardless of the legality of land tenure, which is not included in Land Acquisition Act of Nepal, if such situation arises in the project it has to be brought to the attention of Compensation Fixation Committee (CFC) of the district for necessary action.

4.3 Resettlement Principles to be followed at KCTLP

The resettlement principles adopted in this Kabeli TL project will provide compensation and resettlement assistance to all affected persons to improve or at least restore their livelihoods

The core resettlement principles for this sub-project are:

- (i) acquisition of land will be minimized and will avoid the resettlement of people, as much as possible;
- (ii) local stakeholders will be systematically informed and properly consulted to identify the possible alternative subproject engineering and operational solutions to avoid or minimize the adverse impacts of land acquisition; and disclosure to the public regarding the preparation of RPs, eligibility of APs, compensation, entitlements and special assistance measures to vulnerable groups will be undertaken;
- (iii) all affected persons (APs) will be properly identified and recorded in a census instrument in which cut-off date for their eligibility is the last day of the survey in the sub-project area, and will be notified in advance when land for the sub-project will be acquired; lack of formal legal rights to the assets lost will not prevent APs from receiving compensation, entitlement and rehabilitation measures;

- (iv) where resettlement cannot be avoided, relocation site(s) whether permanent or temporary, free from environmental risks and with access to drinking water and sanitation, social services and all other services accessible in the previous location, will be provided prior to relocation, in consultation with APs and their hosts;
- (v) relocated APs will be provided with assistance to maintain, or improve their pre-sub-project living standards, income earning capacity and production levels;
- (vi) special assistance measures will be incorporated in resettlement implementation process to protect the socially and economically vulnerable groups that will be affected;
- (vii) effective mechanism for arbitration of complaints and grievances will be provided during resettlement implementation;
- (viii) institutional arrangements and human resources will be in place for consultation, liaison, land acquisition, resettlement and monitoring to ensure the effective resettlement implementation prior to commencement of the sub-project; and
- (ix) payment of compensation prior to displacement must be provided, and other resettlement assistance initiated prior to award of civil works contract.

5. BASIS OF LAND ACQUISITION FOR KCTLP

The Land Acquisition Act, 2034 (1977) is the basis for land acquisition by the Government in Nepal, including the provision for the Compensation Determination Committees and the process of appeal available to the land owner. The LAA specifies the following process for land acquisition.

Table 5.1: Process for Land Acquisition as per Land Acquisition Act (2034)

	Steps outlined in the LAA	Status
1	Sectoral agency decides to execute a development project at a certain location	NEA based on feasibility studies has finalized the designs, including the layout for proposed TL project
2	Sectoral agency requests the Government to acquire land specifying objectives and committing payments of compensation and other expenses	NEA will submit the request to the Ministry seeking approval for acquiring land. Provision for land acquisition and compensation made within NEA budget.
3	GoN approves and orders the initiation process	To be approved once the commitment for funding for the project is obtained.
4	Public notification is made at public places in the project area, VDC offices and to the affected households	List of plots to be impacted made public at the CDO office, apart from VDC Offices. Public hearing held with the affected households and communities.
5	Necessary preliminary survey including boundary demarcation, agricultural production valuation and social census of affected families takes place	Inventory survey completed during SIA.
6	Land revenue officer report on the area and location of land to be acquired including likely compensation and amount of loss	To be carried out once the approval from the government to initiate the process of land acquisition is obtained.
7	The local officer (CDO) issues notices including purpose of acquisition and detail of land to be acquired in daily National Newspaper.	
8	Land transactions are banned within the notified area	
9	Owner can file complaints within 7 days through the local officer	
10	Resolution of grievance within 15 days of complaint	
11	Acquisition of land and payment of compensation	The KCTLP will disburse the compensation amount to the affected district administration office (DAO). The money will be deposited in DAO account. The APs can claim their compensation with legal entitle documents any time.
12	Compensation Payment Disbursement and cut off date for compensation entitlement	

5.1 Responsibilities for Land Acquisition and Resettlement

The Kabeli Corridor 132 kV TL Project, Transmission Line/Substation Construction Department, Transmission and System Operation Unit of NEA will be coordinating and executing the land acquisition and resettlement process through the Chief District Officer, of Terhathum, Panchthar and Ilam districts. Within the unit, an officer designated as the in-charge of the land acquisition and resettlement operations, will oversee and manage social issues and social safeguards. The NEA will work in close coordination with the respective line agencies of the government and Project NGOs on the day-to-day activities of the resettlement plan implementation. The Project manager of KCTLP, would be responsible for coordinating with the Chief District Officer (CDO), of above districts with regard to the implementation of the RP provisions.

5.2 Cost Estimates for Land Acquisition and Compensation of Angle Towers of KCTLP

The cost estimates are based on the prevailing district rates of 2010.

Table 5.2: Average Land Prices in the Project VDCs

District	VDC	Bari	Khet	Kharbari
		Rs/Ropani	Rs/Ropani	Rs/Ropani
Terathum	Chhatedhunga	12500	22500	8500
	<i>District Average</i>	<i>12500</i>	<i>22500</i>	<i>8500</i>
Panchthar	Amarpur	40000	60000	NA
	Subhan	25000	50000	10000
	Bharapa	10000	20000	5000
	Phidim	50000	100000	30000
	Chokmagu	35000	50000	22500
	Siwa	27500	45000	17500
	Imbun	30000	40000	20000
	Nawamidada	60000	100000	10000
	Pauwasartap	40000	55000	20000
	Chilindin	25000	70000	10000
	<i>District Average</i>	<i>34250</i>	<i>59000</i>	<i>16111</i>
Ilam	Phakphok	27500	50000	17500
	Chamaita	50000	60000	25000
	Ekatappa	20000	30000	20000
	Mangalbare	5000	65000	20000
	Sangrumba	50000	70000	30000
	Siddhithumka	30000	50000	15000
	Soyak	35000	50000	25000
	Godak	60000	90000	40000
	Chisapani	40000	65000	25000
	Danabari	10000	15000	5000
	Mahamai	15000	30000	10000
	Bajho	8000	15000	5000
	Chulachuli	20000	65000	10000
	<i>District Average</i>	<i>28500</i>	<i>50385</i>	<i>19038</i>
Jhapa	Lakhanpur	460000	460000	NA

Source: Field Survey, 2010

Table 5.3: Land Prices for Sub-Station Sites

Locations	Permanent (ha)	Rate (NRs)	Rate (NRs)
Substations	4.324	Already acquired	Already acquired
Tower Foundations	(2.821 ha = 56 ropani)	175000.00/ <i>ropani</i> (The latest data available for land acquired by NEA for Phidim area was Rs. 150000/ <i>ropani</i> , and Ilam district was Rs. 200000.00). Average taken for estimating the cost as Rs. 125000/ <i>ropani</i> .	7000000.00

The total cost required for acquiring the angle tower foundations of private land owners, as per prevailing market rate of 2010 is equal to Rs. 7,000,000.00.

6. ENTITLEMENT MATRIX FOR RESETTLEMENT ACTIVITIES OF KCTLP

The entitlements are derived from the Land Acquisition Act, 2034 (1977) and World Bank Policy on Involuntary Resettlement Policy (OP 4.12)). The principles adopted established eligibility and provisions for all types of losses (land, structures, business / employment, and work day wages). All affected persons will be compensated at full replacement costs. Cut-off date for titleholders will be the date of notification under the land acquisition act.

The compensation and assistance have been designed to cover compensation for lost assets and restore or enhance the livelihoods of all categories of affected people. Table below (Entitlement Matrix) provides further details regarding application of the principles, definition of entitled persons, entitlements and indicates results of actions. As revealed in Clause 9 Sub clause 3, the duration of compensation days will be determined by Land Acquisition and Compensation Fixation Committee (LACFC). Furthermore, Clause 37 of the Act illustrates that the Committee may extend the period of additional three months, if compensation are not collected by those affected. After termination of extended three months period the amount will be deposited to the Government account. Any grievances and objections will be referred to the Grievances Redress Committee (GRC). A detailed description of each compensation measure is provided below

Table 6.1: Entitlement Matrix

S. N.	Type of Loss	Application	Entitled Person⁴	Compensation Policy	Implementation Issues	Responsible Agency
1a	Loss of land	Homestead land, agricultural land, or vacant plot	Owner(s) with legal title	<ul style="list-style-type: none"> • Land-for-land arrangements of equal productive capacity satisfactory to AP if available or • cash compensation equivalent to replacement cost • Provision of stamp duty, land registration fee, capital gains tax, and value added tax incurred for replacement land • Option to be compensated if remaining land is no longer viable • Provision of access to equivalent common property resources previously accessed 	<ul style="list-style-type: none"> • If land-for-land is offered, title will be to both husband and wife. • Vulnerable households to be identified during detailed measurement surveys conducted as part of the RP 	<ul style="list-style-type: none"> • Verification of APs by NEA • Government to provide replacement land • Replacement cost at Community Consensus Valuation by Committee headed by CDO • EA to provide budget and release cash compensation payments
1b	Loss of land	Agricultural land	Sharecropper(s)	<ul style="list-style-type: none"> • At least 60 days' formal advance notice to harvest standing seasonal crops, if harvest is not possible, compensation for share of crops (item 4) Assistance if required in new sharing arrangement with the land owners 	<ul style="list-style-type: none"> • Work schedule to allow harvesting prior to acquisition and avoid harvest season • Vulnerable households to be identified prior detail surveys conducted as part of the RP 	<ul style="list-style-type: none"> • Verification of APs by NEA
2	Loss of structure	Residential/ commercial structure and other assets (e.g. fences, gates, posts) structure	Owner(s) with legal title	<ul style="list-style-type: none"> • Cash compensation equivalent to replacement cost of structure (or part of structure) • Option to be compensated for entire structure if remaining structure is no longer viable • Rights to salvage materials from structure • Transfer and subsistence allowance of up to 3 months 	<ul style="list-style-type: none"> • Vulnerable households to be identified during detailed measurement surveys conducted as part of the RP 	<ul style="list-style-type: none"> • Verification of APs by NEA • Replacement cost at Community Consensus Valuation by Committee headed by CDO • NEA to determine viability of remaining structure • NEA to review allowances and verify all charges
3	Loss of livelihood	Livelihood/ source of income	Business owner (s), tenant (s),	<ul style="list-style-type: none"> • Assistance for lost income based on three months lost income or minimum 	<ul style="list-style-type: none"> • Vulnerable households to be identified during 	<ul style="list-style-type: none"> • Verification of APs by NEA

			leaseholder(s), employee(s), agricultural worker(s), hawker(s)/ vendors(s)	wage rates.	detailed measurement surveys conducted as part of the RP	
4	Loss of crops and trees	Standing crops and trees	Owner(s) with legal title, tenant(s), leaseholder(s), sharecropper (s), encroacher(s), squatter(s)	<ul style="list-style-type: none"> • 60 days' advance notice to harvest standing seasonal crops, if harvest is not possible, cash compensation for crops (or share of crops) equivalent to prevailing market price • Cash compensation for perennial crops and fruit bearing trees based on annual net product market value multiplied by remaining productive years • Cash compensation equivalent to prevailing market price of timber for non-fruit trees 	<ul style="list-style-type: none"> • Work schedule to allow harvesting prior to acquisition and avoid harvest season • Market value to be determined 	<ul style="list-style-type: none"> • Verification of APs by NEA • Replacement cost at Community Consensus Valuation by Committee headed by CDO with assistance from agriculture/horticulture expert
5	Temporary loss of land	Land temporarily acquired for the Project	Owner(s) with legal title, tenant(s), leaseholder(s), sharecropper (s), encroacher(s), squatter(s)	<ul style="list-style-type: none"> • 60 days' advance notice • Provision of land rental value during the duration of temporary acquisition • Restoration of affected land 		<ul style="list-style-type: none"> • Verification of APs by NEA • NEA determine rental values in consultation with APs • Restoration as part of contractors contract
6	Temporary loss of access	Temporary loss of access to land, structure, utilities, common property resource	Owner(s) with legal title, tenants, leaseholders, sharecroppers, encroachers, squatters	<ul style="list-style-type: none"> • 60 days' advance notice • Provision of temporary access (e.g. planks across pipe trench) where possible • Restoration/enhancement of affected land, structure, utilities, common property resource 		<ul style="list-style-type: none"> • Verification of APs by NEA • NEA to ensure restoration as part of contractors contract
7	Temporary loss of livelihood	Temporary loss of livelihood/source of income	Business owner (s), tenant (s), leaseholder(s), employee(s), agricultural worker(s),	<ul style="list-style-type: none"> • 60 days' advance notice • Provision of temporary access (e.g. planks across pipe trench) where possible • Provision of alternative sites for continued economic activity 		<ul style="list-style-type: none"> • Verification of APs by NEA • NEA to ensure restoration as part of contractors contract

			hawker(s)/ vendors(s)	<ul style="list-style-type: none"> • Where provision of alternative sites is not feasible, compensation of lost income • Compensation for agricultural losses • Restoration of affected land, structure, utilities, common property resource 		
8	Any other loss not identified			Unanticipated involuntary impacts shall be documented and mitigated based on the, principles provided in World Bank Policy		

7. CONSULTATION AND GRIEVANCE REDRESS MECHANISM

7.1 Introduction

This Resettlement Plan has been prepared in consultation with stakeholders identified at different levels including the local people and sub-project affected households represented by head of the households, family members, representatives of vulnerable group and other resource persons and consulted about RP and any others that are identified during the construction and implementation of project activity will be brought into the process in the future for the revised RP. Some of the basic objectives of such consultation include:

- Assessing informal socio-economic information required for the study
- Disseminating information to the people about the sub-project in terms of project activities and scope of work;
- Understanding the perceptions of the local communities;
- Generating ideas regarding the expected demand of the affected people;
- Assessing the local people's willingness to get involved in the Kabeli TL project; and
- Enumerating the measures to be taken during the implementation of the Kabeli TL project

7.2 Methods of Public Consultation

A series of public consultations was carried out in different places during preparation of RP of angle towers for Kabeli TL project. Project affected people and other stakeholders were informed about the land acquisition and compensation. Key informant interviews involving APs (including vulnerable APs), village heads, and government agency representatives have been carried out. In addition, public meetings with affected communities to discuss and plan work program and allow issues to be raised and addressed during implementation.

7.2.1 Summary of Consultations

The scope of consultation, especially with local people and Kabeli TL project affected population was focused to inform them about the nature of the sub-project and its activities. During the consultations, they were informed about the possibilities of acquisition of private land and other physical assets by the sub-project at replacement/compensation cost. Likewise, the people were also made aware about the possibilities of acquiring other community properties, cultural and religious structure etc. if necessary for the sub-project. Options of relocating, shifting, and loss of employment as per need and provision of livelihood support to the vulnerable groups were some of the major discussed during consultation. Further, Focus Group Discussions were conducted with affected communities of affected VDCs, Dalit communities, Women, Adivasi/Janajati, civil society, to obtain necessary information regarding land acquisition, compensation and other issues. Such consultation result in refinements while preparing this RP. The summary of consultations held by RAP team during the field survey is highlighted below.

Table 7.1: Detail of Interaction/Consultative Meetings Held during Preparation of SIA and RAP of KCTLTP

	Types of Consultation	Date	Address	No. of Participants
1	Interaction/Consultative meeting	7/13/2067	Tundikhel, Chhatedhunga-9, Tehrathum	9
2	Interaction/Consultative meeting	7/14/2067	Simkharka, Bharrapa-9, Panchthar	19
3	Interaction/Consultative meeting	7/15/2067	Maidani, Chowkmagu-5, Panchthar	21
4	Interaction/Consultative meeting	7/14/2067	Patle Bhanjyang, Nawamidanda-1, Panchthar	20
5	Interaction/Consultative meeting	7/13/2067	Simsara, Chamaita-9 Illam	11
6	Interaction/Consultative meeting	7/14/2067	Metalung, Ektappa-1, Illam	14
7	Interaction/Consultative meeting	7/15/2067	Pungphung, Mangalbare-8, Illam	5
8	Interaction/Consultative meeting	7/15/2067	Sabjung, Mangalbare-5, Illam	18
9	Interaction/Consultative meeting	7/16/2067	Dandagaun, Mangalbare-2 Illam	7
10	Interaction/Consultative meeting	7/17/2067	Bhandaribesi, Godak-3 Illam	11
11	Interaction/Consultative meeting	7/11/2067	Jhilke, Banjho-2, Illam	9
12	Consultative /Interaction meeting with Community forest user group (Mai Valley)	7/15/2067	Sirkot, Soyak-9, Ilam	8

Table 7.2: Detail of Consultation with Indigenous Peoples Held during Preparation of SIA and RAP of KCTLTP

	Types of Consultation	Caste/ Ethnicity	Date	Location	No. of Participants
1	Janajati/Adivasi	Majhi	7/12/2067	Pinase, Amarapur-9, Panchthar	9
2	Janajati/Adivasi	Limbu	7/14/2067	Chautara, Subhan-2, Panchthar	13
3	Janajati/Adivasi	Limbu	7/15/2067	Siwa ,Siwa-1, Panchthar	23
4	Janajati/Adivasi	Limbu	7/12/2067	Sisuba, Imbung-1, Panchthar	11
5	Janajati/Adivasi	Limbu	7/11/2067	Sartap, Pauwa Sartap-2 Panchthar	18
6	Janajati/Adivasi	Limbu	7/10/2067	Chaplung, Chilingden-2, Panchthar	20
7	Janajati/Adivasi	Rai	7/12/2067	Simkharka, Phakphok-5, Illam	10
8	Janajati/Adivasi	Rai	7/12/2067	Phalate Bazzar, Chaamaita-9 Illam	13
9	Janajati/Adivasi	Gurung	7/14/2067	Metalung, Ektappa-1, Illam	11
10	Janajati/Adivasi	Sunwar	7/15/2067	Sunuwargaun, Mangalbare-7	14
11	Adibash/Janajati	Tamang	7/12/2067	Talkharka, Snagrumba-9, Ilam	18
12	Adibhasi/Janajati	Limbu	7/13/2067	Gorkhegu, Sidhithumka-6, Ilam	12
13	Adibahsi/Janajati	Magar	7/16/2067	Bhandari Besi, Godak-3 Ilam	7
14	Janajati/Adivasi	Rai	7/10/2067	Sarkitaar, Chulachuli-5, Illam	10
15	Janajati/Adivasi	Magar	7/11/2067	Jhilke, Banjho-2, Illam	11
16	Janajati/Adivasi	Rai	7/15/2067	Karki Danda, Chisapani-9, Illam	11

Table 7.3: Detail of Consultation with Women Held during Preparation of SIA and RAP of KCTLTP

	Type of Consultation	Date	Location	No. of Participants
1	Women	7/13/2067	Tundikhel, Chhatedhunga-9, Tehrathum	10
2	Women	7/11/2067	Pinase, Amarapur-9, Panchthar	14
3	Women	7/13/2067	Ekcheppa, Subhan-2, Panchthar	10
4	Women	7/15/2067	Danda Gaun, Phidim-4, Panchthar	12
5	Women	7/16/2067	Maidane ,Chowkmagu-5, Panchthar	13
6	Women	7/15/2067	Siwa ,Siwa-1, Panchthar	10

7.2.2 Disclosure of RP

Disclosure of RP is expected to be helpful to the local people to be aware about the project and provisions of compensations and other assistance. A summary Resettlement Plan (RP) will be translated into Nepali and made accessible to affected people.

The Summary RP in Nepali language will be available at: (i) NEA, Kathmandu, (ii) CDO offices in three project affected districts. These copies are available free of cost to any person seeking information on the same. Hard copies of the RP will be available in the NEA. Prior awarding the contract, the KCTLP will disclose the RP to the related stakeholders.

Disclosure of RP will be made prior the land acquisition process of angle towers of KCTLP. Without complete resettlement, the construction process will not begin.

7.2.3 Plans for Further Consultation and Community Participation during Project Implementation

To ensure continued public participation, provisions to ensure regular and continued stakeholder participation, at all stages during the sub-project design and implementation is proposed. Such consultation should be carried out by the NEA. The grievances of the people regarding technical, social and environmental aspects should be well document and addressed. This participatory process shall ensure that all views of the people are adequately reviewed and suitably incorporated in the design and implementation process. Further, to ensure an effective disclosure of project proposals to the stakeholders and the communities in the vicinity of the TL angle towers and RoWs. An extensive project awareness campaigns shall be carried out.

Together with the local institutions, the NEA will conduct information dissemination sessions. Focus Group Discussions will be held with the vulnerable groups. The NEA will organize public meetings to inform the community about the payment. The participation of AP's will be further enhanced through their active involvement in the Grievance Redress Committee (GRC). In addition the NEA will maintain an ongoing interaction with AP's to identify problems and undertake appropriate remedial measures.

7.2.4 Grievance Redressal Mechanism

As enumerated above, the constitutional basis of GRC for RP activities is Land Acquisition Act of Nepal 2034 (1977). The Act assigns CDO as the sole responsibility to chair land acquisition activities and to address the grievances related to the RP implementation activities. In case of any grievances while implementing RP there are some legal provisions made in the LA Act 2034 (1977). Some of the major steps that are supposed to be taken for addressing the grievances are stipulated in the Act (Clause 11 sub-clause a,b,c). In keeping with the legal provision mentioned in the Act, the basic process of grievances redressal to be undertaken under the sub-project will be as follows:

- Decisions should be given within fifteen days after receiving the grievances.
- Further processing of the grievances or any decision should be taken only after consultation with the CDO and also the Project Officer, if deemed necessary;
- Ministry of Home Affairs can exercise legal authority as of District Court while investigating in the matter of such grievances;

The other members of the committee are VDC chairpersons, two representatives from APs (one man and one woman), local representatives, and representatives from NEA in the rank of Manager. The NEA TL manager will be the member-secretary of the committee and shall act as the Project's Grievance Officer.

Grievances of APs will first be brought to the attention of field level staff of the implementing staff of NEA. Grievances not redressed will be brought to the grievance redress committee (GRC). The GRC will meet every month (if grievances are brought to the Committee), determine the merit of each grievance, and resolve grievances within 15 days of receiving the complaint. Further complaints not addressed or satisfied, the complaint is made to the Home Ministry. If not satisfied, case may be filed in the court.

The various queries, complaints and problems that are likely to be generated among the APs and that might require mitigation, include the following:

- APs not enlisted;
- Losses not identified correctly;
- Compensation/assistance inadequate or not as per entitlement matrix;
- Dispute among ownership;
- Delay in disbursement of compensation/assistance;
- Improper distribution of compensation/ assistance in case of joint ownership; and
- Dispute among Owner and Tenant

8. INCOME RESTORATION STRATEGY OF KCTLP

8.1 Income Restoration Strategy

The income restoration strategy will be developed for two sets of APs namely: marginally affected and seriously affected. For the former, cash compensation at replacement cost is recommended. For the latter, some rehab assistance is planned under this RAP. Training, extension services and preference in construction jobs are among these assistance. This kind of R&R assistance has been in the RAP programs in other transmission line projects, such as Khimti, Likhu IV TL, Kaligandaki A TL projects.

If there are structural losses, either residential or business, the RAP should explain about their relocation options, decisions, arrangements and possible assistance etc. However no such losses are envisaged at this stage of preparing RAP for angle towers of KCTLP

The construction related impacts mentioned under the environmental impacts chapter above could be applicable to this context as well. It was spelled out in the project IEE that the construction related losses will be reduced or minimized during the construction and operation of KCTLP. However, if such losses were recorded, compensation of such losses will be made through CFC decision.

Income restoration strategies proposed include (i) capacity building, enterprise training, and facilitating economic activities to landowners; (ii) training for self employment to agricultural laborers.

For the agricultural landowners losing part of their land and the remaining land will be viable to continue cultivation, they will be guided by the NEA through district agriculture/horticulture office in improving agricultural/fruit production including use of modern techniques in cultivation, harvesting and storing.

The NEA will assess the capacity of the APs prior to offering them any training towards small-scale income generation programs. The assessment of the NGO and the interest of the AP will determine the training that the AP would undergo. Training for self-employment that would be given by the NEA recruited center/NGO for skill development will include and not be limited to (i) plumbing, (ii) electrical, (iii) electronic repair and service. Training will be imparted to any willing member of the household, but the project will provide necessary toolkit only to one member of the household. By providing the toolkit the project will enhance the ability of the trained AP to earn more as a skilled employee.

8.2 Employment Opportunity

One person in each shall be given priority for employment in project related construction works based on their capabilities or qualifications. Skills training shall be provided to the members and vulnerable groups prior to construction work to qualify them for the construction work employment.

The contract document for the sub-project shall include a provision for employment under the social requirements. Accordingly, the list of APs, especially vulnerable groups will be provided to the contractor, for consideration in the project.

9. INSTITUTIONAL FRAMEWORK

This chapter describes the implementation framework, and the organizations involved – their roles and responsibilities – in the implementation of the sub-project.

9.1 Organizations involved in RP implementation

Kabeli Corridor 132kV Transmission Line Project, Transmission Line / Substation Construction Department , Transmission and System Operation, Nepal Electricity Authority will be responsible for RP implementation.

KCTLTP is the Executing Agency (EA). KCTLTP will establish coordination with the district administration office, CFC and other line agencies in relation to land acquisition and compensation. The KCTLTP Project Coordinator will be responsible for coordinating with the Chief District Officers of KCTLTP affected districts with regard to formation and implementation of land acquisition and compensation fixation committee. In this regard environmental & social unit formed will assist the project management office.

10. RESETTLEMENT BUDGET AND FINANCING

This section provides detailed updated revised cost estimates for IR is in the RP, and is included in the overall project cost estimates. The budget includes i) detailed costs of land acquisition and resettlement assistance, ii) source of funding, iii) arrangements for approval, and the flow of funds and contingency arrangements. All land acquisition funds will be provided by the NEA (EA). All land acquisition and resettlement assistance will be considered as an integral component of project costs. The EA will earmark in advance in its annual plan, the provisional budget for the cost of land acquisition and resettlement. The resettlement cost in the RP includes a contingency of 10% of the total cost in order to adjust any deviation in the project implementation.

A preliminary cost for assets likely to be affected by the sub-project and cost for other financial assistance/support for APs including other associated costs has been estimated to implement this resettlement plan. The Government will bear all the costs of land acquisition.

10.1 Basis Taken for Estimating Land Cost

Loss of assets will be compensated at replacement cost. The compensation shall be fixed through Community Consensus Valuation (CCV). During the implementation of the RP, after the submission of the report to the Chief District Officer (CDO) with the details of specific location for the land and other assets to be acquired by the manager of KCTLP, the acquisition process will be undertaken. The valuation of affected assets will be based on the existing legal framework⁵ and guidelines. After finalization of the agreements, formal notification is placed in public places, local and national newspapers identifying the amount of land, owner and ownership related matters of the affected assets. The compensation amount will be paid to the AP before the commencement of construction work. Because prices set by the land revenue offices may be lower than the prevailing market price, the KCTLP will verify that the value arrived at is the replacement value through a survey of land transactions, survey of building materials and construction costs.

10.2 Cost Calculation

Based on the Land Acquisition Act of Nepal, fixation of compensation rate is the responsibility of Compensation Fixation Committee (CFC) to be formed under the Act. As per the prevailing practices, CFC to be formed by the CDO under the Land Acquisition Act of Nepal is responsible for determining the land cost. Towards the same, the Committee makes extensive consultation with representatives of the affected population, local representatives of political party, and relevant district level chiefs of line agencies to fix the compensation rate as per the prevailing market price. Representatives of the affected households, the local government representatives, the project personnel and other local level representatives of line agencies are brought together to fix the price of land, structures and other asset. The Method of Community Consensus Valuation (CCV) for fixing compensation has been applied in recent projects. Based on the same process, the NEA will assist the CFC in conducting market survey to evaluate local market rate of structures and land which will be helpful on reducing disparity in the valuation based on prevailing market rate. CFC will determine the value of loss property based on the findings of CCV.

To arrive at realistic cost estimates, the RP proposes the following process while estimating the cost of land, structure and other resettlement costs. The process adopted includes:

- Query on prevalent land price in the affected areas using recent land transaction over the last year to determine the local market price and compare with district official rate,
- Collection of minimum land revenue rate fixed by the Land Offices of respective districts for land transactions during census, and

- Collection of recent updated rate from the Department of Urban Development and Housing to determine compensation for structures.

10.3 Estimated Cost for Resettlement/Compensation and RAP Implementation

The cost estimates provided below for land acquisition payment for angle towers and for RAP implementation. Since these rates are obtained from the available references, it should be finalized later following the CFC and CCV processes.

Table 10.1: Estimated cost of Resettlement/Compensation and RAP Implementation

S.N.	Description	Unit	Quantity	Rate (NRs) / Unit	Amount (NRs)
1.	Land acquisition of Angle Towers	Ropani	56 ropani	175000.00	7000000.00
2.	Compensation Fixation Committee (Resettlement/Compensation Management)				
	5 person for 1 yr. (as and when required basis). (meeting allowance)	Person days	200	1500	300000
3.	Administration				
	Unit Chief	To be cover by NEA budget			
4.	Resettlement Officer-2 for ½ year	Mm	12	75000	900000
5.	Surveyor	Mm	3	35000	105000
6.	Supporting Staff				
	1 computer operator	Mm	6	25000	150000
7.	Other Support (30%)				
	Office supplies, equipment etc.	Lump sum			245500
8.	Transportation	LS			250000.00
9.	Capacity Building Program of KCTLTP and RAP staff	LS			600000.00
A. Sub Total					9550500.00
B. Contingency 5% of					477525.00
Total Cost					10028025.00

11. IMPLEMENTATION SCHEDULE OF RAP ON KABELI TL PROJECT

Table 11.1: RP Implementation Schedule

Activities	Months											
	1	2	3	4	5	6	7	8	9	TB D*	TB D*	TB D*
Establishment and allocation of Resettlement unit within NEA	▲											
Appointment/Assigning RO to look after RP	▲											
Consultation and Disclosure		▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Confirmation of government land to be used and transfer from other departments	▲	▲										
Issue notice to APs		▲										
-Compensation and resettlement assistance -Training to APs			▲	▲	▲	▲	▲	▲				
Takeover possession of acquired property							▲	▲				
Handover land to contractors									▲	▲		
Commencement of civil works										▲		
Monitoring			▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

AP: Affected People, CFC: Compensation Fixation Committee, ESU: Environment and Social Unit, RP: Resettlement Plan, RO: Resettlement Officer, TBD: To be decided

12. MONITORING AND EVALUATION

12.1 Need for Monitoring

Monitoring and evaluation is of critical importance to the management of resettlement operation. Monitoring provides periodic checks to ascertain whether resettlement activities are moving according to the plan. Generally, internal monitoring is conducted by NEA and independent consultants undertake the task of external monitoring. Evaluation, on the other hand, is an exercise usually undertaken towards the end of the project to assess whether the plan achieved its intended goals.

12.2 Internal Monitoring

The NEA will be responsible for internal monitoring. The Social/Resettlement Specialist of NEA will provide necessary technical assistance and monitor the RP implementation and will prepare monthly reports on the progress of RP implementation. Reporting is mandatory on a quarterly basis to the NEA Kabeli TL secretariat and the World Bank on the progress of resettlement activities.

The internal monitoring is centered on all affected families, as this will give the true picture of resettlement plan activities impact on them. Monitoring will ensure:

- Verification that there are no outstanding or unresolved land acquisition issues with respect to the project and that property valuation and economic rehabilitation has been carried out in accordance with the provisions of the plan;
- Information campaign and consultation has been carried out with APs;
- Status of land acquisition and payments on land compensation;
- Value of entitlement received is equal to that of original structure or land acquired;
- Effective utilization of entitlements received;
- Compensation for affected structures and other assets;
- Relocation of APs; if applicable
- Payments for loss of income;
- That all economic rehabilitation measures are implemented, as approved;
- Effective operation of both the Grievance Committees and sub-project level Committees; and
- Funds for implementing land acquisition and economic rehabilitation activities are available in a timely manner, are sufficient for the purposes, and are spent in accordance with the plan.

Baseline surveys and land acquisition data provide the necessary benchmark for field level monitoring. In addition, field level monitoring will be carried out through:

- Review of census information for all APs;
- Consultation and informal interviews with APs;
- In-depth case studies;
- Informal sample survey of APs;
- Key informant interviews; and
- Community public meetings.

A performance data sheet will be developed to monitor the project at the field level. Quarterly reports will be sent to the NEA for overall project level monitoring. NEA Social/Resettlement specialist will monitor the RP implementation and will report on a quarterly basis to NEA TL head office and the World Bank on the progress of all aspects of resettlement activities. Monitoring and evaluation reports documenting progress on resettlement implementation and the completion report will be

provided by the NEA to the World Bank for review. The monitoring reports will be submitted quarterly to World Bank.

12.3 External or Independent Monitoring

An external monitoring agency will be engaged by NEA who will carry out independent biannual review of resettlement implementation as well as post project evaluation throughout the project cycle. An external monitor will be assigned to carry out external monitoring and evaluation works. External evaluation can be done by a consulting agency, university department or development NGOs. The external monitoring will be focused on:

- Evaluating the social and economic impact of land acquisition and rehabilitation of APs;
- Verifying the objective of enhancement or at least restoration of income levels and standard of living of the APs has been met;
- Suggesting modifications in land acquisition and economic rehabilitation, where necessary, to achieve the principles and objectives as set before; and
- Making final ex-post evaluation to ensure all resettlement and Land acquisition activities have been completed; any problem issues identified are followed-up (including recommendation of mitigation measures for the budget).

More specifically the following activities will be required to be performed by the External Monitoring Agency:

- verify and review internal monitoring report – to ensure the appropriateness of activities being carried out by NEA and the field offices;
- Sample Baseline and Biannual Household Surveys – to monitor progress from a pre-resettlement benchmark;
- Evaluation of Delivery and Impacts of Entitlements – to determine if they are as per the approved Resettlement Plan;
- Evaluation of Consultation and Grievance Procedures – especially levels of public awareness of grievance procedures, access by AP's and households to information and rapid conflict resolution;
- Evaluation of actual operations of Grievance Committee – assisting APs as required and acting as observers;
- Declaration of successful implementation – summing up the outcome of activities on completion of all entitlements distribution and resettlement activities; and
- Recommend Follow-up Actions for the EA – relating to outstanding actions required to complete achievement of objectives of the RP and resettlement policies, additional mitigation measures for APs, if required, and timing and budget of these additional measures.
- To help in future resettlement policy formulation and planning.

Annexes

