

**NEPAL INDIA ELECTRICITY TRANSMISSION AND TRADE PROJECT**

**HETAUDA- DHALKEBAR- DUHABI 400 KV TRANSMISSION LINE**

**VULNERABLE COMMUNITY DEVELOPMENT PLAN**

# **FINAL REPORT**

*PREPARED BY:*

**ENVIRONMENT AND SOCIAL STUDIES DEPARTMENT**

**ENGINEERING SERVICES**

**NEPAL ELECTRICITY AUTHORITY**

**KHARIPATI, BHAKTAPUR**

**DECEMBER, 2016**

## EXECUTIVE SUMMARY

The Hetauda– Dhalkebar– Duhabi 400 kV Transmission Line of Nepal India Electricity Transmission and Trade Project (NIETTP) is one of the major transmission line (TL) project in Nepal. This project is being implemented by Nepal Electricity Authority (NEA) with the support of World Bank (WB). The main objective of this project is to address the current power crisis by importing power from India; transmit power within Nepal and export excess power to India in the future by establishing cross-border transmission capacity of about 1000 MW.

The TL starts from Hetauda Municipality Ward number 1 of Makwanpur district and terminates at new Duhabi substation located at Ward number 7 (Hanif Tole) of Bhokraha VDC of Sunsari district. It covers 30 Village Development Committees (VDCs) and 17 municipalities of 10 districts (Makwanpur, Bara, Rautahat, Sarlahi, Mahottari, Dhanusha, Siraha, Saptari, Udyapur, and Sunsari).

Total length of the TL alignment is 285.2 kilometers and right of way (ROW) is 23 meter from the center line. This project will construct altogether 793 towers consisting 295 angle towers and 498 suspension towers with average tower height of 45 meters.

This vulnerable community development plan (VCDP) is prepared by Environment and Social Studies Department (ESSD) of NEA. The report is prepared to fulfill the requirement of World Bank Social safeguard policy and Land Acquisition, Resettlement, and Rehabilitation Policy for Infrastructure Development Project of GON.

The methodology adapted to collect data for the VCDP includes but not limited to identification of stakeholders, literature review, participatory rapid appraisal (PRA), key informant interview (KII), informal meeting/consultations with district and local key stakeholders, affected households, and field observation. The study has adopted participatory approach during community consultation and information dissemination throughout the preparation of this VCDP for its effective planning and implementation. The household data collected by the ESSD has been used to study the impact on land and structure of the vulnerable households.

In total 146 PRAs including 93 PRAs with *Dalits* and 53 PRAs with indigenous people *Adibasi/Janjati* (at least three PRA in each VDC/municipality) were conducted. Altogether 3444 participants including 1989 *Dalits* and 1455 indigenous people (IP) had participated in the PRA including 57.6% female. In addition to the PRA, altogether 47 KIIs were conducted in the area including 1 KII in each VDC/municipality.

The study team also conducted informal discussions/meetings with key stakeholders i.e. local political leaders, businessmen, teachers, social workers, government officials, and representatives of NGOs/CBOs of the project districts during the field work.. The main purpose of the discussions/meetings was to solicit their views, concerns and issues regarding the TL as well as to inform them about the TL project. The stakeholders raised several issues related to land acquisition, compensation, local development and employment to local people. Their concerns and issues have been incorporated in relevant sections of this VCDP.

In the context of Nepal, vulnerable community means communities who are commonly landless and marginal farmers living below subsistence level. Moreover, these people have no or limited access to public resources and they rarely participate in national planning, policy, and no access in decision making process. Formal and informal studies conducted in Nepal reveal that most of indigenous

people *Adibasi/ Janjati*, and *Dalits* fall under the category of vulnerable person in Nepal. This has also reflected in the Government's plans and policies that recognize women, disabled, ethnic minorities and *Dalits* groups as the predominant poor and marginalized groups. Women in all social groups and regions are more disadvantaged than their male counterparts and even among women, widows, separated and women headed households are particularly disadvantaged. Female-headed households, households headed by physically disabled; and indigenous people were initially considered as potential vulnerable groups for this VCDP.

Almost all the local people of the project area showed positive attitude regarding construction of the project realizing the importance of transmission line for hydropower development in the country and regular supply of electricity to address prevailing energy crisis. Due to support of almost all the people of the project area the progress of TL construction work is encouraging. However, a few people expressed their dissatisfaction regarding alignment of the TL, devaluation of their prominent land and compensation of land during community consultation.

The implementation of the project (as per public notices of District Administration Offices of the area regarding land acquisition (until June 12, 2015), will affect 606 households due to land acquisition, out of which 169 were indigenous and dalit households. Out of the total affected households 22.44 % (136 nos) is from indigenous communities. Out of the total affected households 5.44 % (33nos) are from Dalit communities. Altogether 11 caste/ethnic group of Dalit communities will be affected from 6 project district of 10 affected districts in total. In addition 64 women headed households (out of 606) will also affected by the project due to land acquisition.

The survey revealed that a total of 26.17 ha land has been acquired from 606 households for the placement of tower pads and substations. Of the affected land owners, there are 6 schools, one medical college/hospital, one cement factory and 2 small temples. The amount of affected land is high in Sunsari (9.43 ha.) and Dhanuha (7.95 ha.) districts and low in Makawanpur district (0.39 ha).

Out of the total acquired land 4.85 ha is acquired from 136 households of indigenous/Janjati communities. This land is 3.12% of their total landholding and 18.55% of the total land acquired for the project. Out of the total acquired land 1.98 ha has been acquired from 33 households of Dalit communities. This land is 3.12% of their total landholding and 7.56% of the total land acquired for the project.

Due to the construction of the project, altogether 26 structures consisting 17 houses , 8 both houses and cowshed and one private owned religious structure(Mane) will be acquired for the project. Altogether 25 households of indigenous group will be affected due to acquisition of structure.

During the community consultation several issues and concerns were raised by local people of the project area. The major issues/concerns raised during consultation process by the indigenous people, vulnerable communities and key stakeholders have been broadly categorized as: i) compensation, ii) Livelihood, iii) alignment of transmission line, iv) community support and v) Project information and community participation.

The above issues and concerns of the people will be addressed through different mechanism and support system. Major areas of concerns of the vulnerable community and IPs pertain to compensation, supports for their livelihood, proper information, and communication, avoid and

minimize negative impacts and enhance participation of the local people at different stages of the project. In addition, the local people demanded several community support programs as a measure to improve their livelihood and socioeconomic environment.

Field visits and consultations reveal that the affected people are in need of diverse supports and assistances in order to improve their livelihoods through increased income, employment and community based infrastructures. Based on the felt needs of the people, different types of programs and activities are suggested for implementation in different locations of the project area with focus on settlements of IPs and *Dalits* close to the TL alignment in particular. The key activities included in the VCDP are, however, not limited to the followings.

- Development/Renovation of community based infrastructures viz drinking water, irrigation facilities/canals, ponds, river control, school support, health and sanitation support etc;
- Livelihood improvement and income generation programs viz agriculture and livestock support, fishery; horticulture etc;
- Vocational training in different trades / fields to the members of *Dalits* and selected *Janajati* households affected by the project including both males and females;
- Awareness raising programs through different IEC activities, in disseminating correct information about project's activities, its impacts on public health, local environment and safety measures;
- Regular consultations, and counseling to the vulnerable households/indigenous people regarding importance of the project, ongoing community support program and impact of the project;
- The project affected households and community will be made fully aware of their rights and the procedures.
- Grievance redress mechanism has to be established to allow project affected persons/households and community to appeal any disagreeable decisions, practices and activities arising from compensation for land and assets and other issues/concerns.
- The GRM includes four stages to allow the affected people to file their complaints at different tiers such as Communication Officer at the first stage, Project Manager/director in second stage, CDO in the third stage and finally the right to file the case at the court if none of the earlier stages failed to satisfy the complaints of the APs.

The NIETTP will ensure that funds are delivered on time to implement the activities specified in the VCDP. Implementation of the VCDP will be completed in twelve months from the date of its commencement. The implementation of activities under VDCP will be carried out by the ESSD through program coordinator office established for the project. The total budget for implementing the VCDP has been estimated at NRs.24.926 millions.

The VCDP implementation activities will be closely monitored by ESSD through its site based Unit Offices. The project will also monitor the progress made by the ESSD as per the schedule, technical proposal submitted by ESSD and make sure the designed programs/activities are implemented as per the VCDP document.

Progress of implemented programs/activities as per their nature, awareness level in local communities, livelihood improvement of *Dalits* and indigenous PAFs, improvement in their living standard through improvement in irrigation, water supply, training and other community support activities, school dropout rate of IP and *Dalit* children and health and sanitation condition in the target

settlements are some of the major parameters of progress monitoring. ESSD will be responsible for monitoring of VCDP implementation and reporting. Periodic monitoring reports will be prepared and distributed through Project Manager's Office to the concerned agencies. ESSD will also cover monitoring status of the VCDP implementation in its regular environment and social management report prepared by its Unit Offices on quarterly basis. A third party monitoring and evaluation of VCDP implementation will be conducted by separate monitoring team of ESSD not associated with the work of NIETTP or local consultant after completion of the VCDP implementation period.

## ABBREVIATIONS

CBO	Community Based Organization
CDO	Chief District Officer
CFUG	Community Forest User Group
DADO	District Agriculture Development Office
DDC	District Development Committee
DHO	District Health Office
DCS	Distribution and Consumer Services
EIA	Environmental Impact Assessment
EMF	Electromagnetic Fields
ESSD	Environment and Social Studies Department
GON	Government of Nepal
HDDTL	Hetauda – Dhalkebar – Duhabi 400 kV Transmission Line
HDD -ESMU	Hetauda – Dhalkebar – Duhabi Environment and Social Management Unit
HEP	Hydroelectric Project
HH	Household
IEE	Initial Environmental Examination
IEC	Information, Education and Communication
ILO	International Labor Origination
INPS	Integrated Nepal Power System
IP	Indigenous People
IPP	Independent Power Producers
KIIs	Key Informant Interviews
km	Kilometer
kV	Kilovolt
LCF	Local Consultative Forum
LDO	Local Development Officer
LARU	Land Acquisition and Rehabilitation Unit
MW	Megawatt
NEA	Nepal Electricity Authority
NRs.	Nepalese Rupees
NGO	Non-Governmental Organization
NIETTP	Nepal India Electricity Transmission and Trade Project
PAF	Project Affected Family
PAP	Project Affected Person
PRA	Participatory Rapid Appraisal
RAP	Resettlement Action Plan
ROW	Right of Way
SIA	Social Impact Assessment
TL	Transmission Line
VDC	Village Development Committee
VC	Vulnerable Community
VCDP	Vulnerable Community Development Plan
WB	World Bank

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>A-D</b>
<b>ABBREVIATIONS.....</b>	<b>E</b>
<b>TABLE OF CONTENTS .....</b>	<b>F</b>
<b>1. INTRODUCTION.....</b>	<b>1</b>
1.1 BACKGROUND .....	2
1.2 OBJECTIVES OF THE STUDY .....	3
1.3 SCOPE OF THE WORK.....	3
1.4 LAYOUT OF THE REPORT .....	4
<b>2. PROJECT DESCRIPTION .....</b>	<b>5</b>
2.1 PROJECT LOCATION.....	5
2.2 PROJECT AFFECTED VDCs AND MUNICIPALITIES .....	5
2.3 PROJECT AFFECTED POPULATION .....	6
2.4 TRANSMISSION LINE ROUTE.....	7
2.5 PROJECT FEATURES.....	7
<b>3. STUDY METHODOLOGY .....</b>	<b>100</b>
3.1 STUDY AREA DELINEATION .....	100
3.2 LITERATURE REVIEW .....	100
3.3 IDENTIFICATION OF STAKEHOLDERS FOR CONSULTATIONS.....	111
3.4 PREPARATION AND FINALIZATION OF STUDY TOOLS .....	111
3.5 SAMPLE DISTRIBUTION .....	111
3.6 TRAINING/ORIENTATION TO FIELD TEAM .....	122
3.7 FIELDWORK.....	122
3.8 KEY INFORMANT INTERVIEWS (KIIs).....	122
3.9 PARTICIPATORY RAPID APPRAISAL.....	133
3.10 MEETINGS/CONSULTATIONS .....	133
3.11 DATA ENCODING AND ANALYSIS .....	144
3.12 TEAM COMPOSITION.....	144
<b>4. REVIEW OF POLICIES, LAWS AND CONVENTIONS .....</b>	<b>15</b>
4.1 GENERAL.....	15
4.2 CONSTITUTION, PLAN POLICIES, ACTS, RULES AND GUIDELINES.....	15

4.2.1	Constitution, Plan and Policies .....	155
4.2.2	Acts .....	16
4.2.3	Rules/ Regulations .....	17
4.3	ILO CONVENTION ON INDIGENOUS AND TRIBAL PEOPLES, 1989 (No.169).....	18
4.4	THE WORLD BANK SAFEGUARD POLICIES .....	18
4.4.1	OP 4.12 - Involuntary Resettlement.....	19
4.4.2	OP 4.10 - Indigenous People.....	19
4.4.3	The World Bank Policy on Access to Information .....	20
<b>5.</b>	<b>COMMUNITY CONSULTATIONS AND PARTICIPATION .....</b>	<b>21</b>
5.1	PROCEDURE FOR CONSULTATION AND PARTICIPATION .....	21
5.1.1	Consultation with Indigenous People .....	21
5.1.2	Consultation with <i>Dalits</i> of the Project Area .....	22
5.1.3	Consultation with other Stakeholders of the Project Area .....	23
5.3	KEY ISSUES/CONCERNS RAISED DURING COMMUNITY CONSULTATIONS .....	24
5.4	CONTINUATION OF CONSULTATION PROCESS.....	255
<b>6.</b>	<b>SOCIOECONOMIC INFORMATION OF INDIGENOUS AND VULNERABLE COMMUNITY.....</b>	<b>26</b>
6.1	INDIGENOUS COMMUNITY IN THE CONTEXT OF NEPAL .....	26
6.2	INDIGENOUS COMMUNITY IN THE PROJECT DISTRICT/AREA .....	27
6.2.1	Socioeconomic Status of Indigenous People of the Project Area .....	29
6.3	<i>DALITS</i> IN THE CONTEXT OF NEPAL .....	30
6.4	<i>DALIT</i> COMMUNITY IN THE PROJECT DISTRICT/AREA.....	31
6.4.1	Socioeconomic Status of <i>Dalit</i> Community of the Project Area .....	33
<b>7.</b>	<b>IMPACTASSESSMENT.....</b>	<b>35</b>
7.1	GENERAL .....	50
7.1	POSITIVE IMPACTS .....	50
7.2	ADVERSE IMPACTS.....	51
<b>8.</b>	<b>MITIGATION AND ENHANCEMENT MEASURES .....</b>	<b>48</b>
8.1	MITIGATION MEASURES .....	48
8.2	ENHANCEMENT MEASURES .....	50

8.3	MITIGATION AND ENHANCEMENT MEASURES MATRIX .....	53
<b>9.</b>	<b>IMPLEMENTATION MECHANISM AND INSTITUTIONAL ARRANGEMENT .....</b>	<b>58</b>
9.1	INSTITUTIONAL ARRANGEMENT .....	58
9.2	IMPLEMENTATION SCHEDULE .....	59
9.3	GRIEVANCE REDRESS MECHANISM .....	60
<b>10.</b>	<b>MONITORING AND EVALUATION MECHANISM .....</b>	<b>63</b>
10.1	GENERAL .....	63
10.2	MONITORING .....	63
10.3	REPORTING .....	63
10.4	IMPACT EVALUATION .....	64
10.5	MONITORING AND EVALUATION MECHANISM .....	64
<b>11.</b>	<b>ESTIMATED BUDGET .....</b>	<b>67</b>
	<b>ANNEXES .....</b>	

## LIST OF TABLES

- Table 2.1: Number of Project Affected VDC and Municipalities in the Project Area
- Table 2.2: Distribution of Project Affected Population by Caste/Ethnicity and District
- Table 2.3: Salient Features of the Project
- Table 3.1: Sample Distribution
- Table 3.2: Distribution of Key Informant Interviews
- Table 5.1: Summary of Key Issues/Concerns Raised by the Indigenous People
- Table 5.2: Summary of Issue/Concerns Raised by the *Dalits*
- Table 5.3: Summary of Key Issues and Concerns of *Dalit*, IP and Other Stakeholders
- Table 6.1: Categorization of Indigenous *Adibasi/Janajati* Groups of Nepal
- Table 6.2: Population of Indigenous People in the Project Districts
- Table 6.3: Distribution of Project Affected Population of *Janjati* by Caste/Ethnicity and District
- Table 6.4: Classifications of *Dalits* by Origin in Nepal
- Table 6.5: Population of *Dalits* in the Project Districts
- Table 6.6: Distribution of Project Affected Population of Dalits by Caste/Ethnicity and District
- Table 7.1: Number of direct affected Janjati due to land acquisition by caste/ethnicity
- Table 7.2: Number of direct affected Dalit due to land acquisition by caste/ethnicity
- Table 7.3: Women Headed Households affected by the Project
- Table 7.4: Land Acquisition details including Dalit and Indigenous Households
- Table 7.5: Details of Land Acquisition from Indigenous/Janjati Households
- Table 7.6: Details of Land Acquisition from Dalit Households
- Table 7.7: Caste Wise Land Acquisition from Indigenous/Janjati Households
- Table 7.8: Caste Wise Land Acquisition from Dalit Households
- Table 7.9: Land Acquisition from Women headed Households
- Table 7.10: Acquisition of Structures
- Table 8.1: River Control Activities
- Table 8.2: Drinking Water Schemes
- Table 8.3: Details of Mitigation and Enhancement Measures
- Table 9.1: Implementation Schedule
- Table 10.1: Monitoring and Evaluation Parameters, Methods, Frequency and Responsibility
- Table 11.1: Estimated Budget for VCDP

## LIST OF ANNEXES

- Annex I: Sample Distribution of PRA and KIIs
- Annex II: Characteristics of KII Participants
- Annex III: Characteristics of the PRA Participants of Indigenous People and *Dalits*
- Annex IV: Summary of Issue/Concerns Raised Indigenous People
- Annex V: Summary of Issue/Concerns Raised by *Dalits*
- Annex VI: Details of *Dalit* Population Distribution of the Project Area
- Annex VII: Details of *Janajati* Population Distribution of the Project Area
- Annex VIII: Details of PRA Participants of *Dalits* People by Caste/Ethnicity
- Annex IX: Details of PRA Participants of *Janajati* by Caste/Ethnicity
- Annex X: PRA Meeting Locations shown in Topo Map
- Annex XI: Caste Wise Land Acquisition from Janjati Households
- Annex XII: Caste Wise Land Acquisition from Dalit Households
- Annex XIII: Land Acquisition from Womenheaded Households
- Annex XIV: Photographs

# 1. INTRODUCTION

At present Nepal faces power deficit, due to severe imbalance in demand and supply of electricity in the country. It has led to unexpected load shedding (even more than 12 hours) in Nepal since the last few years. This situation has resulted negative impact on production and service sectors and overall development of the nation.

Many independent power producers (IPP) are putting their efforts on developing hydroelectric projects to address power demand of Nepal as well as export excess power to India. At present in absence of 400 kV transmission line, power generated in one part of Nepal could not be transmitted to other parts as well as import power from India to address the present power crisis of Nepal is also difficult due to present 132 kV system to the Indian Border.

In this context the Government of Nepal (GON) requested World Bank (WB) to provide financial support to construct Hetauda– Dhalkebar– Duhabi 400 kV Transmission Line (HDDTL). As a result, the WB funded this transmission line under Nepal-India Electricity Transmission and Trade Project. The main objective of this project is to establish cross-border transmission capacity of about 1000 MW to facilitate electricity trade between India and Nepal, increase the supply of electricity in Nepal by the sustainable import of at least 150 MW of electricity and synchronized operation of the Nepal and Indian grids. Therefore, the HDDTL is a high priority 400 kV transmission line project in Nepal. The implementation of this project will help to address the current power crisis of Nepal by importing power from India, ease power transmission within Nepal as well as export excess power to India in the future. The total length of the HDDTL is 285.2 km that covers 10 districts (Central and Eastern Development Regions) of Nepal.

The project component includes transmission line RoW, tower pads, construction of 400,220,132 and 33 kV voltage level buses at Dhalkebar substation and 220 kV bus and transformers at new Hetauda substation. The project component also includes construction of 400/220/132 kV at Hanif tole of Bhokraha VDC.

This Vulnerable Community Development Plan has been prepared by Environment and Social Studies Department (ESSD) of NEA jointly with Forum for Research and Development (FORD) Pvt. Ltd (local consultant) to fulfill the requirements set forth in social safeguard policy of the WB. Social Impact Assessment Report and Resettlement Action Plan of the Hetauda – Dhalkebar – Duhabi 400 kV Transmission Line were prepared in 2010 as an integral part of project document. However, VCDP for the TL was not prepared at that time. Realizing its need to fulfill requirements of the social safeguard policy of WB the task of VCDP preparation was assigned by NIETTP to ESSD in 2015. The VCDP covers entire project components consisting 30 VDCs and 17 Municipalities of 10 districts i.e. Makwanpur, Bara, Rautahat, Sarlahi, Mahottari, Dhanusha, Siraha, Saptari, Udaypur, and Sunsari (one hill and 9 Terai districts).

In the context of Nepal, vulnerable community means the communities who are mostly landless and marginal farmers living below subsistence level. Furthermore, these people have no or limited access to public resources and they almost never participate in national planning, policy, and no or nominal access in decision making process or in development initiatives.

Formal and informal studies conducted in Nepal reveal that most of indigenous people (IPs) *Adibasi/Janjati, Dalit* and people from geographically remote areas fall under the category of vulnerable

groups. The Government's plans and policies also recognize women, disabled, ethnic minorities and *Dalits* groups as the predominant poor and marginalized groups.

As per the Land Acquisition, Resettlement, and Rehabilitation Policy for Infrastructure Development Project -2015, *Janajati/Adivasi, Dalits*, landless, women, especially women-headed households, poverty groups and senior citizens are entitled to special benefit and assistance packages in addition to compensation and resettlement.

Construction of the transmission line will directly and indirectly affect the IPs and vulnerable groups/communities and their resources of the project area. The VCDP will focus on the IPs and vulnerable groups/communities that will be affected directly or indirectly due to construction of the transmission line.

This VCDP has been prepared based on the findings of PRAs with indigenous and vulnerable communities, key informant interviews (KIIs) with key stakeholders, consultation meeting with local stakeholders, field work conducted in April-May, 2015 and in July 2015, review of relevant literatures and best practices.

This VCDP is prepared based on the principles that the directly affected indigenous people and vulnerable groups of the project area will be compensated through cash compensation and other enhancement measures as provisioned in the SIA and RAP of the project, and enhancement measures are required particularly for the indirectly affected indigenous people, vulnerable groups and their community as a whole to uplift their socioeconomic status as a benefit of the project implementation in their areas.

The VCDP will be an integral part of the project documents.

## **1.1 Background**

Nepal is a South Asian landlocked country, bordered by the People's Republic of China in the North and by the Republic of India in South, East and West. It has a geographical area of 147,181 sq. km and population of about 26.4 million with growth rate of 1.35% (Population and Housing Census, 2011 Census). Nepal has enormous potentiality of hydropower development due its geophysical setting and perennial source of water resource. Despite having a large hydro potentiality, half of the population is still deprived of electricity use and the other half is facing long hours load shedding. At present Nepal faces power deficit, due to severe imbalance in demand and supply of electricity in the country. The annual peak electricity demand is increasing with an average of 10% annually. It has led to unprecedented load shedding since the last 5-6 years, and this situation is expected to continue in the coming years also. It has resulted negative impact on overall development of the nation and inconveniences to the consumers.

The annual peak power demand of the Integrated Nepal Power System (INPS) was 1,291.8 MW in 2014-15 having deficit of 585 MW. The contribution of NEA's own hydropower projects was 357.68 MW, IPPs provided 124.71 MW and 224.41 MW of electricity was imported from India and the remaining demand of 585 MW of electricity was managed by 12 hours of load shedding in the country (Annual Progress Reports, NEA, 2014, 2015).

The Government of Nepal has given high priority in hydropower development through policy reform by implementing Hydropower Development Policy, 2001. This policy has opened door for private

investment in the hydropower sector. Due to the policy reform and other legal arrangements private sector investors attracted for hydropower development in Nepal.

Transmission is another important component of hydropower development. The upcoming projects require TL for power evacuation and connection with INPS. However, Nepal is far behind in development of TL networks. In absence of required TL network there is problem of power evacuation generated by different power plants in different parts of the country. Similarly, due to low capacity of existing TLs it is difficult to import required energy from India to manage power crisis. Further, due to long transmission route the system loss is high. Past experience shows that construction of TL is a big challenge in Nepal due to obstruction of local community, political instability, financial constraints, inadequate policies, legal provisions, and other reasons.

## **1.2 Objectives of the Study**

The main objective of the study was to assess adverse social impacts of the project on indigenous people (IP) and vulnerable communities (VC) of the project area, inform them about the project, ongoing construction activities and solicit their issues/concerns, and prepare a VCDP addressing their issues/concerns and adverse social impacts of the TL project based on the national policies, guideline/strategies, World Bank social safeguard policy and best practices:

The specific objectives were to:

- ensure the participation of members of affected IP and VC in the entire process of planning, design, implementation and monitoring of VCDP through free, prior and informed consultations
- conduct meaningful consultations with the IP and VC and other stakeholders focusing on identification and analysis of the impacts on IP and VC of the project areas and inform about the project activities,
- identify organizational and institutional requirement for the implementation of VCDP activities including grievance handling,
- ensure that IP and VC benefits from the proposed project are augmented and potential adverse impacts on IP and VC resulting from the implementation of the project are avoided, minimized and or mitigated,
- assist the IP and vulnerable families in the planned development of their communities as an enhancement measures,
- develop appropriate training, community based programs and other income generation activities in accordance to their own defined needs and priorities based on general agreement and available resources, and
- Provide cost estimation for implementation of VCDP for smooth construction of the project.

## **1.3 Scope of the Work**

The scope of work of the assignment was to conduct field observation, analyze information collected through consultations and prepare a vulnerable community development plan (VCDP) based on Social Safeguard Policy of World Bank, national policies/strategies and best practices. The scope of the services of the assignment includes but not limited to:

- Collect and review all relevant data and reports prepared for the project including IEE, SIA and RAP for the TL project, and other relevant VCDP prepared for high voltage transmission line projects and development projects,

- Develop guidelines, checklists and other required tools for consultation to collect socioeconomic baseline data and issues/concerns of the vulnerable groups, indigenous people and *Dalits* of the project affected area.
- Provide training to field study team regarding study tools, identification and sampling of vulnerable groups/IP for consultation, data collection and preparation of field reports of the consultations,
- Process and analyze field data, and identify likely socio-economic impacts of the TL project on vulnerable households/groups and IP community including their land/property, community resources/facilities, traditional and customary rights, culture and livelihood in the project area,
- Provide expert guidance to conduct meaningful public consultation with the local communities, target groups and other stakeholders through free, prior and informed consultationsto design significant mitigation measures at community level based on their desire/need,
- Attend stakeholder consultation meeting in selected locations to assess the field environment and support the field team for quality data collection.
- Prepare a VCDP covering adequate socioeconomic status of the vulnerable groups, impact of the project on the groups, plan, and strategies for community participation, issues regarding implementation, institutional arrangement for VCDP implementation, monitoring, and evaluation of VCDP implementation, and its estimated cost.

#### **1.4 Layout of the Report**

This VCDP report contains 11 chapters. Chapter 1 includes introduction, chapter 2 contains project description, chapter 3 outlines the study methodology, chapter 4 highlights information on relevant policy, legal framework, guidelines and conventions, chapter 5 describes about community consultation and participation, chapter 6 details socioeconomic information of indigenous people and vulnerable communities, chapter 7 describes about impacts, chapter 8 details of mitigation and enhancement measures, chapter 9 explains implementation mechanism and institutional arrangement, chapter 10 provides information on monitoring and evaluation mechanism, and finally chapter 11 details on estimated budget for the VCDP implementation.

## 2. PROJECT DESCRIPTION

### 2.1 Project Location

The Hetauda – Dhalkebar – Duhabi 400 kV Transmission Line of Nepal India Electricity Transmission and Trade Project is a high priority project of NEA to address the current power crisis by importing power from India; transmit power within Nepal and export excess power to India in the future. The project is located in Central and Eastern Development Region of Nepal Physiographically the project is located in Siwaliks and Terai Region of Nepal.

The Hetauda–Dhalkebar–Duhabi 400 kV transmission line crosses 30 VDCs and 17 Municipalities of 10 districts i.e. Makwanpur, Bara, Rautahat, Sarlahi, Mahottari, Dhanusha, Siraha, Saptari, Udaypur, and Sunsari (one hill and 9 Terai districts). During the IEE and SIA (2010/11) there were altogether 77 VDCs and two municipalities. However, due to recent changes made by the government, the number of VDCs has been significantly decreased from 77 to 30 whereas the number municipalities increased from 2 to 17 (Fig. 1)

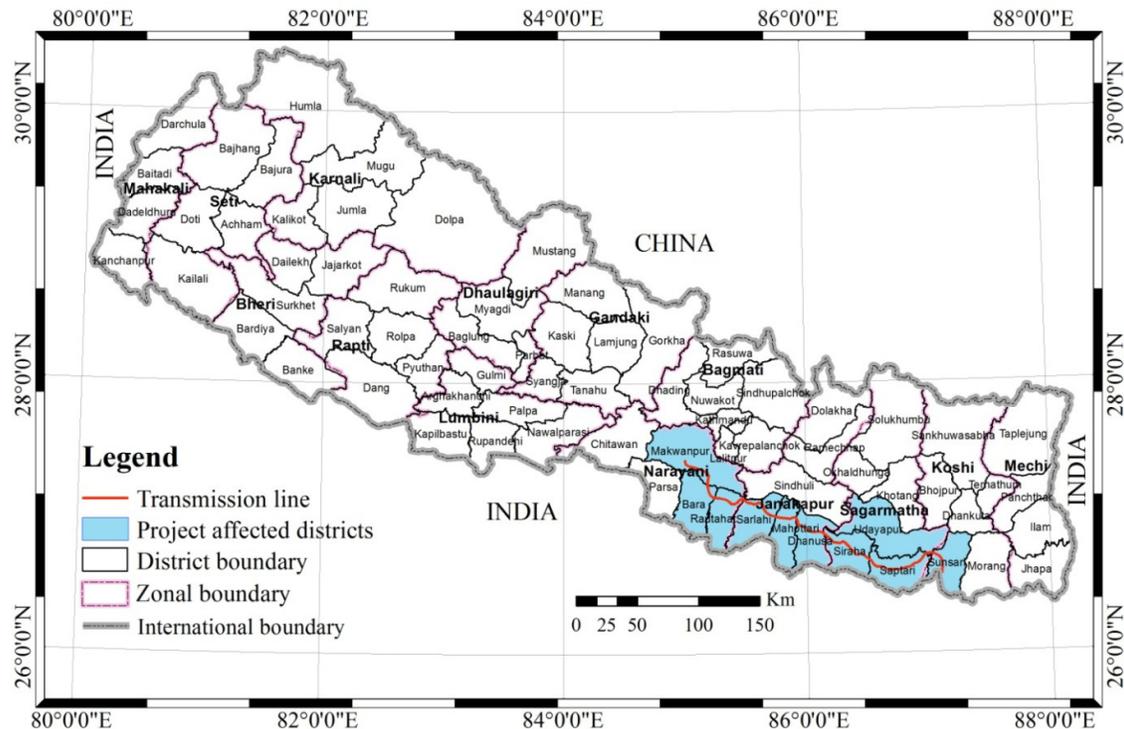


Fig. 1: Location of Hetauda–Dhalkebar – Duhabi 400 kV Transmission Line

### 2.2 Project Affected VDCs and Municipalities

There are 30 VDCs and 17 municipalities that are directly affected by the HDDTL within a span of 285.2 km starting from Hetauda (Makwanpur) to Bhokraha of Sunsari district (Table 2.1).

**Table 2.1: Number of Project Affected VDC and Municipalities in the Project Area**

District	Municipality	VDC	Both
Makwanpur	1	2	3
Bara	1	-	1
Rautahat	1	2	3
Sarlahi	2	4	6
Mahottari	1	1	2
Dhanusha	4	1	5
Siraha	3	4	7
Udaypur	-	1	1
Saptari	3	12	15
Sunsari	1	3	4
<b>Total</b>	<b>17</b>	<b>30</b>	<b>47</b>

Source: Field Survey 2015

### 2.3 Project Affected Population

The total population of project affected districts is 6304624 and the total population of the project affected VDCs/municipalities is 826772, which is 13.1% of the total district population (CBS, 2011). Further of the total district population, the share of *Dalit* and *Janjati* population of the project area is 5.9% (370782 people) including 3.8% of *Janjati* and 2.1% of *Dalit* population.

However, regarding the total population of the project area, the total population of *Janjati* and *Dalit* is dominant in the project area. Of total population (826772) of the project area, the total population of *Janjati* and *Dalits* is 44.9% including 29.2% of *Janjati* and 15.7% of *Dalit* population (Table 2.2).

**Table 2.2: Distribution of Project Affected Population by Caste/Ethnicity and District**

District	Caste/Ethnicity								Total District Population
	Brahmin	Chhetri	Janajati	Dalit	Yadav	Muslim	Others	Total	
Makwanpur	2031	2091	33316	1893	14	0	1621	40966	420477
Bara	5062	3732	8000	1219	0	200	1401	19614	687708
Rautahat	6138	3895	21172	6689	456	3260	5620	47230	686722
Sarlahi	18984	19598	37243	7018	1446	5557	17301	107147	769729
Mahottari	2814	3218	7985	3433	624	348	2881	21303	627580
Dhanusha	5157	5723	29888	21380	16046	9356	63143	150693	754777
Siraha	3696	4975	18104	36456	17493	8128	79224	168076	637328
Saptari	4567	6774	51454	37648	11479	12358	49188	173468	639284
Udaypur	1466	2662	4633	887	29	20	454	10151	317532
Sunsari	8200	10205	29357	13007	1893	7976	17486	88124	763487
<b>Total</b>	<b>58115</b>	<b>62873</b>	<b>241152</b>	<b>129630</b>	<b>49480</b>	<b>47203</b>	<b>238319</b>	<b>826772</b>	<b>6304624</b>
<b>Percentage</b>	<b>7.0</b>	<b>7.6</b>	<b>29.2</b>	<b>15.7</b>	<b>6.0</b>	<b>5.7</b>	<b>28.8</b>	<b>100</b>	<b>-</b>

Source: Population and Housing Census, 2011, CBS

Regarding population diversity of *Janjati*, there are 16 different caste/ethnic groups of *Janjati* in the project area. This includes 11 groups of hill origin and 5 groups Terai origin. Similarly, there are more than 13 different caste/ethnic groups of *Dalit* in the project area including 4 caste/ethnic groups of hill

origin and 9 caste/ethnic groups of Terai origin (details of the *Janjati* and *Dalit* caste/ethnic groups has been explained in Chapter 6 below).

## 2.4 Transmission Line Route

The proposed 400 kV Hetuda–Dhalkebar–Duhabi Transmission Line is 285.2 km in length and aligned parallel to existing 132 kV line to the extent possible. The TL starts from Hetauda Municipality Ward no 1 of Makwanpur district and terminates at the new Duhabi substation located at Ward no 7 (Bhokraha Tole/ Hanif tole) of Bhokraha VDC in Sunsari district.

The initial 18.6 km stretch of Hetuda–Dhalkebar–Duhabi Transmission Line passes through hill section (Hetauda–Harnamadi). The immediate next 23.4 km section passes through hill to Terai (Harnamadi–Nijgadh) and the remaining 243.2 km (Nijgadh–Dhalkebar–New Duhabi) passes through flat plain of Terai. There are total of 794 tower pads out of which 485 are located on private land and 309 are located on forest land.

The route of the right-of-way of this stretch is dominated by flat cultivated plains. The land use of the alignment consists mainly of cultivated fields and forest, rivers, sand beaches and barren land. Much of the land within the Right-of-way is currently used for agriculture with sparse settlements.

## 2.5 Project Features

Altogether 793 towers will be constructed of them 295 are angle towers and 498 are suspension towers. The proposed transmission line will be double circuit comprising of duplex overhead conductor. Each line circuit will have three phases, each phase comprising two separate aluminum conductor steel reinforced (ACSR).

The vertical double circuit configuration tower will have an average height of 45 m and the standard tower base dimensions will be 15 m x 15 m from centre to centre of each tower leg foundation/ footing. Steel tower leg and body extensions will be utilized to reduce foundation excavation on slopes and provide greater tower foundation structural security. The design span between tower structures is approx 400 m.

Each line circuit will have three phases, each phase comprising two separate aluminum conductor steel reinforced (ACSR). The vertical double circuit configuration tower will have an average height of 45 m and the standard tower base dimensions will be 15 m X 15 m from center to center of each tower leg foundation/ footing. The right of way (RoW) of the transmission line is 23 meters on each side from the centerline of the overhead transmission line as per the Electricity Regulation, 1993 (Table 2.3).

**Table 2.3: Salient Features of the Project**

Features	Description
<b>General features</b>	
<b>Project</b>	Nepal India Electricity Transmission and Trade Project, Hetauda – Dhalkebar – Duhabi 400 kV Transmission Line
<b>Zones</b>	Narayani, Janakpur, Sagarmatha and Koshi
<b>Districts</b>	10 districts ( 6 from Central Development Region 4 from Eastern Development Region)
<b>Zones</b>	Districts   VDCs/Municipalities

<i>Narayani</i>	Makwanpur	Hetauda municipality, and Shreepur Chhatiwan and Dhiyal VDCs
”	Bara	Nijgadh municipality
”	Rautahat	Chandrapur municipality, and Kanakpur, and Rangapur VDCs
<i>Janakpur</i>	Sarlahi	Hariwon and Lalbandi municipalities, and Raniganj, Kalinjor, Dhungrekholra and Karmaiya VDCs
”	Mahottari	Bardibas municipality and Khayarmara VDC
”	Dhanusha	Chhireswornath, Dhanushadham, Ganeshman Charnath and Mithila municipalities, and Puspapur VDC
<i>Sagarmatha</i>	Siraha	Lahan, Mirchaiya, Golbazar municipalities, and Dhangadi, Karjanha, Badahramal and Ayodhyanagar VDCs
”	Saptari	Shambhunath, Saptakoshi, and Kanchanpur municipalities, and Pansera, Paraswani, Madhupatti, Sitapur, Kusaha, Daulatpur, Jandaul, Kalyanpur, Bakdhuwa, Rayapur, Tehrauta and Khojpur VDCs
”	Udayapur	Tapeswari VDC.
<i>Koshi</i>	Sunsari	Ramdhuni Bhasi municipality, and Mahendranagar, Bhokraha and Dumraha VDCs
Initial point	New Hetauda Substation, Makwanpur Municipality 2, Makwanpur 2.	
Terminal point	1. New Duhabi Substation, Bhokraha VDC, Sunsari district	
Number of major road crossing	3	
Number of major river crossings	4	
Number of 33 kV line crossings	1	
Number of 66 kV line crossings	1	
Number of 132 kV line crossings	1	
<b>Design features</b>		
Line length	285.2 km	
Total number of towers	793	
Number of angle points/tower	295	
Number of suspension towers	498	
Average span between towers	400 m	
Right-of-way	46 m (23 m on either side of centerline)	
Voltage level	400 kV	
Land area requirement for each tower	15m x 15m area is assumed for all tower foundations	
Current at normal operating condition and maximum value	Maximum current carrying capacity of Moose conductor is 890A	
Voltage at normal operating condition and maximum value	400 kV	

Conductor configuration	Vertical
Standard tower height	45 m
Circuit	Double
Foundation area	15 m x 15 m
Insulator	Porcelain or glass type
Foundation type	Concrete pier and pad type
Tower type	Steel lattice structure
Conductor	Aluminum Conductor Steel Reinforced 525 mm <sup>2</sup> “Moose”
Earth wire	Optical Fiber Ground Wire (OFGW) and EHS Steel wire
<b>Clearances</b>	
Highways	9.5 m
Normal ground for pedestrians only	8.6
Power lines	6.5 m for 11 & 33 kV and 6.1 for 66 & 132 kV
Telecommunication lines	36m
Roads and streets	9.5m
Residential areas	9.2m
Water surface at maximum flood	7.5 m
To metal clad or roofed sheds or structures upon which a man may stand	6m
Vertical clearance for forest	7.5m
Horizontal clearance for forest and settlement	46m
<b>Substation</b>	
New Substation	400/220/132 kV at Hanif Tole of Bhokraha VDC
Upgrading	Construction of 400,220,132 and 33 kV voltage level buses at Dhalkebar Substation and 220 kV bus and establishment of transformers at new Hetauda Substation.
<b>Total Cost and Funding</b>	
Total Cost	USD 144 million for both transmission line and substation
Funding	GON / World Bank

The Contractor for Electro-mechanical, Hydro-mechanical and 400 kV Transmission Line is Joint Venture of Angelique International Limited, India and LTB Leitungsbau GmbH, Germany J/V (AIL-LTB Joint Venture).

Power Grid Corporation of India (PGCIL), India is the consultant while Jade Consult Pvt. Ltd, Kathmandu, Nepal is the associate consultant for Hetauda– Dhalkebar– Duhabi (HDD) 400 KV Transmission Line.

### 3. STUDY METHODOLOGY

The methodology to collect data for the VCDP preparation has included but not limited to literature review, key informant interviews (KIIs), participatory rapid appraisal (PRA), focus group discussions (FGDs), consultation with the directly projectaffected households, field observation and informal discussion/meeting with district and local level government officials. A detailed work plan was prepared for performing the assignment. The VCDP has been prepared in line with ESMF prepared for the project.

The study team has adopted a participatory approach with maximum involvement of IP, *Dalits*, women, minor ethnic groups and otherrelevant stakeholders at the local and district levels to generate necessary information for the VCDP. The study team has also consultedwith the officials of district level government offices relevant to study, VDC level key stakeholders and other stakeholders of the area while conducting the fieldwork. The consultant and expert worked in close coordination with the field team to facilitate the consultation process and data collection. This has helped to assure data quality, understand the real ground situation by the experts. The following methodology was applied to collect required data for the VCDP:

Socioeconomic data was collected from field with the IP, *Dalits* and other vulnerable communities for the VCDP. Required data such as demography, education, health, access to services, access to natural resources, culture/religion, participation in social activities, self identification, income, expenditure, migration, agriculture, employment, marketing livelihood, issues/concerns of the target communities, impact of the transmission line, expectation from the authorities of the TL etc. was collected from the field using different social research techniques and tools (i.e.FGD, PRA KII etc.).

#### 3.1 Study Area Delineation

Based on the review of maps, IEE, SIA and RAP documents of the of Hetauda–Dhalkebar–Duhabi 400 kV TL and field assessment, the study area is defined as the area for the construction of the 400 kV transmission line alignment as well as the area that will be impacted due to the construction and operation of the TL for the VCDP preparation. The study area includes 10 districts, 17 municipalities and 30 VDCs of Eastern and Central Development Regions. The study area has been delineated based on the transmission route alignment passing through the VDCs and Municipalities.

#### 3.2 Literature Review

Relevant literature including IEE, SIA and RAP of HDD 400 kV TL, publication of Central Bureau of Statistics, profile of District Development Committees (DDCs), VCDP and other relevant documents/reports related to transmission line projects were collected and reviewed extensively to collect required data/information for the VCDP. The following publications were reviewed extensively to prepare the VCDP:

- IEE, SIA and RAP documents of the Hetauda–Dhalkebar–Duhabi 400 kV TL, 2011.
- Population of Nepal, Population Census 2001, Central Bureau of Statistics, National Planning Commission, Government of Nepal, 2002.
- National Population and Housing Census 2011, Volume - I, II and 6 (National Report and VDC/Municipality Reports), Central Bureau of Statistics, National Planning Commission, Government of Nepal, 2012 and 2014.

- Nepal Living Standard Survey 2010/2011, Statistical Report, Volume - I, Central Bureau of Statistics, National Planning Commission, Government of Nepal, 2011.
- District profiles of the concerned District Development Committees.
- Village Development Committee Profiles of the concerned VDCs.
- Review of constitution, national plans, policies, acts and rules and conventions related to vulnerable communities, social impacts, land acquisition, compensation, resettlement and other relevant documents.
- Review of World Bank SocialSafeguard Policies.

### **3.3 Identification of Stakeholders for Consultations**

The identified key stakeholders of the TL are affected families (PAFs), affected indigenous people *Adibasi/Janjati*, vulnerable groups (*Dalits*, women, minor ethnic groups, disable etc.), representatives of local government bodies/line agencies, nongovernment organizations (NGOs), community based organizations (CBOs), community forestry user groups (CFUGs), women led organization, teachers, and political party leaders of the project area.

These stakeholders were identified by the study team with the help of site based Environment and Social Management Unit Offices of ESSD, local leaders, representatives of district and level government offices, representatives of local government bodies (VDC/municipality), NGOs, CBOs, teachers, and other key informants of the area.

The identified stakeholders were consulted through free, prior and informed consultationsto solicit their views, concerns regarding the construction of TL and their expectations from the project as well as informed regarding activities of the TL. These stakeholders are the directly or indirectly affected by the TL, and have important roles to influence the TL construction. Altogether 47 KIIs (5 with female) and 146 PRAs were conducted in the project area. The location of PRA meetings conducted throughout the transmission line alignment is shown in Annex VIII and IX. Of the 146 PRAs, 93 PRAs were conducted with *Dalits* and 53 PRAs were conducted with IPs in which 3444 participants had participated including 57.8% female. These identified stakeholders are fairly representingthe affected *Dalit* and *Janjati*population of the project area.

### **3.4 Preparation and Finalization of Study Tools**

After discussion with the field staff of Unit Offices of ESSD and review of relevant documents, study tools such as PRA guidelines, checklist for KIIs were prepared to collect required information/data from the field for the VCDP. A three days extensive training/orientation session to field researchers was conducted and the study tools were further refined as per input of the participants.

### **3.5 Sample Distribution**

The VCDP preparation study has covered all the TL affected VDCs (30) and municipalities (17) of the 10 project affected districts. Of the146 PRAs, 93 PRAswith *Dalits* and 53 PRAs with indigenous peoplewere conducted. This included at least threePRAs in each VDC/municipality with the indigenous peopleand *Dalits*based on their existence. Similarly, altogether 47 KIIs were conducted in the area including one KII from each affected VDC/municipality. The KIIs were conducted with the key stakeholders of the area representinglocal government bodies (VDC/municipality), NGOs/CBOs, user groups, teachers, social workers and activists working for the IP and *Dalits*at local level(Table 3.1 and Annex I).

**Table 3.1: Sample Distribution**

District	PRA						No of KIIs
	No. of PRA	Dalit		No. of PRA	Indigenous People		
		No of Participants			No of Participants		
		Male	Female		Male	Female	
Makwanpur	5	54	58	4	47	51	3
Bara	2	24	14	1	24	8	1
Rautahat	5	27	38	4	122	104	3
Sarlahi	12	105	168	6	81	188	5
Mahottari	4	54	67	2	56	54	2
Dhanusha	10	95	176	5	61	76	5
Siraha	14	98	254	7	60	85	7
Saptari	30	231	362	19	173	174	16
Sunsari	9	67	76	4	47	24	4
Udaypur	2	11	10	1	16	4	1
<b>Total</b>	<b>93</b>	<b>766</b>	<b>1223</b>	<b>53</b>	<b>687</b>	<b>768</b>	<b>47</b>

Source: Field Survey 2015

### 3.6 Training/Orientation to Field Team

A three days extensive training/orientation was organized at ESSD premises in Kharipati for the field team. The training/orientation had focused on indigenous and vulnerable groups of the area, sampling technique, rapport building, tools, and technique of public consultation and preparation of field reports of the consultation. It has helped to provide practical knowledge and skills to the trainees regarding identification of IP and vulnerable groups, rapport building, consultation process, qualitative data collection techniques. The training/orientation was jointly conducted by the consultant and ESSD professionals. This has helped to enhance knowledge and skills of the ESSD field team regarding qualitative research, public consultation and conduct similar studies in the future for ESSD.

### 3.7 Fieldwork

Fieldwork of the VCDP preparation was started after one week of the completion of training. Due to large coverage the study area the field work was divided into two sections. Each section was led by professionals of ESSD and supported by 3 field based staff of Unit offices. Local assistants were hired to provide required support to the field team for the field work. The field work was conducted in close coordination with the Consultation Expert and Sr. Socio-economist hired from local consulting firm.

A tentative field schedule and reporting formats for preparing field reports of PRA and KIIs was prepared. It has helped for timely completion of the field work, maintain uniformity in the field reports, and ease the data analysis process. The collected data was properly checked in the field before leaving the site and any missing or inconsistent information was collected or corrected before leaving the site.

### 3.8 Key Informant Interviews (KIIs)

Key Informant Interviews (KIIs) was conducted with 47 purposively selected key informants of the area including one key informant from each affected VDC/municipality to assess their views,

concerns, and expectation from the TL and collect relevant information of the IP and vulnerable groups. The number of KII was highest (16) in Saptari. Of the key informants 53.2% were job holders, 25.5% were involved in social work, 12.8% were engaged in agriculture, and 8.5% were teachers (Table 3.2 and Annex II).

**Table 3.2: Distribution of Key Informant Interviews**

District	No. of KII
Makwanpur	3
Bara	1
Rautahat	3
Sarlahi	5
Mahottari	2
Dhanusha	5
Siraha	7
Saptari	16
Sunsari	4
Udaypur	1
<b>TOTAL:</b>	<b>47</b>

Source: Field Survey 2015

The key informants included representatives of vulnerable communities, teachers, representative/employees of local government bodies/line agencies, NGOs, CBOs and activists working for the target groups, representatives of CFUGs, women organization, political party leaders and other intellectual of the study area. The KIIs was conducted using an indepth interview guideline.

### 3.9 Participatory Rapid Appraisal

In total 146 Participatory Rapid Appraisals (PRAs) were conducted in the area. Of the total PRAs, 63.7% (93) were conducted with *Dalit* and 36.3% (53) were conducted with indigenous people. Three PRAs were conducted in each VDC/municipality affected by the TL to collect basic socioeconomic data, views, concerns and expectation of the target groups from the area (Table 4). The participants were also informed regarding the VCDP, the TL and its construction activities during the PRA. A total of 3444 participants had participated in the PRA including 57.8% (1989) *Dalit* and 42.2% (1455) indigenous people.

Of the total participants, 42.2% were male and 57.8% were female. Further among the PRA participants of *Dalit*, 38.5% were male and 61.5% were female and among the PRA participants of indigenous people, 42.7% were male and 52.8% were female (Annex III).

### 3.10 Meetings/Consultations

Informal meetings/consultations were conducted with the district level relevant government officials (CDO, LDO, VDC Secretary, head of municipality), NGOs, CBOs, CFUGs, and representatives of vulnerable communities/IP of the study area to collect required information regarding the IP/vulnerable groups of the area, their concerns/expectation and inform them about the TL activities. The purpose of the meeting was to solicit their views regarding the preferred VCDP measures, feasibility of such measures to improve livelihoods of the target groups, coordination for sharing available resources, and provide them opportunities to participate in VDCP preparation process.

### 3.11 Data Encoding and Analysis

The field teams were responsible to make sure that all the required information collected properly and consistently. Any missing or inconsistent information was collected or corrected in the field before leaving the site. After completion of the field work the collected data was encoded and analyzed using appropriate computer programs.

### 3.12 Team Composition

The study was conducted using in-house professionals of ESSD and experts from local consulting firms. Local assistants were hired from *Dalit* and indigenous communities to provide required support to the field team during the field work. The following professionals were involved in preparation of the VCDP.

1.	Mr. Bharat Mani Sharma	Team Leader, Local Consultant/FORD
2.	Mr. Kedar Nath Bhatta	Sr. Socio-economist, Local Consultant/FORD
3.	Mr. Chola Kant Sharma	Consultation Expert, Local Consultant/FORD
4.	Mr. Kiran Pantheei	Database Expert, Local Consultant/FORD
5.	Mr. Pankaj K. Pokheral	Sociologist, Local Consultant/FORD
6.	Mr. Raju Gyawali,	Program Coordinator /Environmentalists, ESSD, NEA
7.	Mr. Krishna Pd. Joshi	Field Team Leader/Sociologist/Statistician, ESSD, NEA
8.	Mr. Bijaya Mishra	ESMU Chief/Environmentalists/, ESSD, NEA
9.	Mr. Prasanna Aryal	Field Team Member/Environmentalists, ESSD, NEA
10.	Mr. Ram Raj Chaudhary	Field Team Member/Sociologist, ESSD, NEA
11.	Mr. Dinesh Sharma	Field Team Member/Sociologist, ESSD, NEA
12.	Mr. Kashi Chaudhary	Field Team Member/Environmentalists, ESSD, NEA
13.	Mr. Janak Bahadur Shai	Field Team Member/Sociologist, ESSD, NEA

## **4. REVIEW OF POLICIES, LAWS AND CONVENTIONS**

### **4.1 General**

This chapter focuses on brief description of the policy, legal and administrative framework within which the project has been implemented. The proponent will fulfill the legal requirement of Government of Nepal as well as The World Bank (WB) Social Safeguard Policies and will be responsible for fulfilling provisions of all relevant acts while implementing the project.

Some of these national and international policies, acts, rules and conventions relevant to the proposed project regarding VCDP are described below. The proponent will obey and follow if any other legal provisions besides those already mentioned in this chapter are attracted due to various activities that will be undertaken as part of the project. This VCDP report is prepared following World Bank Operational Policies since national laws does not specifically required VCDP. The activities mentioned in VCDP will be implemented by ESSD of NEA.

### **4.2 Constitution, Plan Policies, Acts, Rules and Guidelines**

#### **4.2.1 Constitution, Plan and Policies**

##### **4.2.1.1 Constitution of Nepal, (2072 BS), 2015**

Article 18 explains about right to equity. The article 18 (3) stated that discrimination shall not be on the grounds origin, religion, race, caste, ethnicity, gender, sex, economic status, language, region, ideological conviction or any of these. Provided that nothing shall be deemed to prevent the making special provision by law for the protection, empowerment, or advancement of women, *Dalit*, indigenous people *Aadibashi Janjati, Madeshi, Tharu, Muslim*, suppressed group, ethnic minority, marginalized group, farmer, labor, youth, children, elder citizen, gender minority, disable, pregnant, helpless, remote area or poor *Khas Arya*. Article 18 (4) mentioned that there shall be no discrimination with regard to remuneration for same kind of work and social security on the basis of gender. Article 25 (2) mentioned that that the state shall acquire legal private property only for public interest, and Article 25 (3) mentioned that compensation shall be provided for such acquired property on the basis of compensation as prescribed by law.

Article 30 (1) mentioned that every citizen has the right to live in a clean and healthy environment. Under state policy, Article 51 (5) mentioned that by increasing awareness of general public regarding environmental cleanness, minimizing the risk of industrial and physical development on environment conservation, promotion and sustainable use of forest, wildlife, birds, flora and biodiversity. Article 51 (6) explains about applying appropriate minimization or mitigation measures for negative impact on nature, environment or biodiversity.

##### **4.2.1.2 Thirteenth Three Year Plan (2070/71–2072/73 BS), 2013**

The government has recently endorsed the Thirteenth Three Year Plan (2070/71–2072/73). This plan will cover the period of 2013/14 2015/2016. Its long-term vision is to promote Nepal from its current status of a least developed country to a developing country by 2022. Its aim is to reduce human and

economic poverty, bring change in the living standard of citizen by promoting green economy focusing on poverty reduction and reducing the percentage of population living below the poverty line from 23.8% to 18.0% during the plan period. The plan also aims to achieve 6.0% of annual economic growth rate. The priority areas of the plan are hydropower, energy, agriculture, basic education, health, drinking water, good governance, tourism, and environment. The GON will increase the participation and contribution of private sector, public sector, and cooperatives for the promotion and development of the priority areas during the plan period.

#### **4.2.1.3 Hydropower Development Policy (2058 BS), 2001**

The Hydropower Development Policy 2001 AD emphasizes the need of implementation of mitigation measures in project affected area. The policy states that Resettlement and Rehabilitation works shall be conducted as per approved criteria of the GON. The policy clearly states that hydropower development shall be emphasized with due consideration of environmental conservation and as an alternate of bio and thermal energy. Section 6.3 deals with the provision for investment in generation, transmission and distribution whereas section 6.1.2.3 (a) deals with different kind of license required at different level of project development. The article 6.3 and 6.1.2.3 (a) are relevant for project planning and investigation including EIA.

#### **4.2.1.4 Land Acquisition, Resettlement, and Rehabilitation Policy for Infrastructure Development Project, (2072 BS) 2015**

Realizing the need of a land acquisition, resettlement, and rehabilitation policy for Infrastructure Development Project for smooth project implementation, the GON has recently endorsed “Land Acquisition, Resettlement, and Rehabilitation Policy for Infrastructure Development Project, 2015. This policy has provided clear guidelines to screen, assess, and plan land acquisition and resettlement aspects in development projects. The policy has the following major guiding principles:

Involuntary resettlement should be avoided where feasible or minimized, exploring all available alternative project design. Where it is not possible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources.

Appropriate and adequate compensation for the loss of assets or income is a fundamental right of affected person;

Physically displaced people must be relocated with facilities such as school, health post, drinking water, security etc.;

Vulnerable groups such as *Janajati/Adivasi*, *Dalits*, landless, women, especially women-headed households, poverty groups and senior citizens are entitled to special benefit and assistance packages in addition to compensation and resettlement;

Affected persons should be assisted to restore at least their pre-project income and livelihood sources. The absence of legal title to land should not be a bar for compensation, resettlement and rehabilitation assistance.

### **4.2.2 Acts**

#### **4.2.2.1 Land Acquisition Act(2034 BS), 1977**

It is the main legislation to guide the land acquisition process in the country. Government can acquire land at any place in any quantity by giving the compensation pursuant to the act for the land required

for any public purpose or for the operation of any development project initiated by government institution (sections 3 and 4).

The compensation paid under this act will be given in cash. To decide about the amount of compensation the act has made provision for the constitution of Compensation Determination Committee (CDC). This act is silent about the payment of compensation at market rate, which pose difficulty for the payment of compensation at present value.

#### **4.2.2.2 Labor Act, (2049 BS), 1992**

This act has been enforced by GON in May 15, 1992. This act classified people below 15 years as child and minor *Nabalik* for the age group of above 14 years and below 18 years. The act has also made provision of labor court and Department of Labor. The act clearly mentioned that appointment letter should be issued for all the employees, which include their working hours, working time, wages, and other benefits. The act allows for the time bond contract for the manpower required for development work. The act specifies that working hours for the *Nabalik* and women must be within the period of 6 AM to 6 PM that clearly restrict to deploy women in night works. The act also stated that equal opportunity shall be given to women as man. Similarly, working period of other employees must not exceed 8 hours a day and 48 hours in a week. If some people work beyond that period overtime allowances must be paid which is 150 % of the normal per hour wages and such overtime must not exceed 4 hours in each day. According to this act wages rate of the employees shall not be less than rate fixed by the GON.

#### **4.2.2.3 Land Reform Act (2021 BS), 1964**

The Land Reform Act, 1964 is considered as a revolutionary step towards changing the existing system of land tenure by establishing rights of tenants and providing ownership rights to actual tenant. To date the act has been amended five times. Chapter 3, section 7 and sub-section 1 sets ceiling on land ownership according to geographical zones. Chapter 25, section 7 and sub-section 1 of this act deals with tenancy rights.

#### **4.2.2.4 Right to Information Act (2064 BS), 2007**

Right to Information Act, 2007 and Right to Information Rules, 2009 are the legal provisions to protect the right of the citizen. It states that citizens should be well-informed for any public matters that could make adverse impact on the interest of the nation and citizen. The government has formed an Independent National Information Commission for the protection, promotion, and practice of right to information in Nepal.

As key stakeholders in development, the citizens have the right to know and to be involved in information exchange and decision-making that affects their lives, resources, and properties from the initial stage of a development project.

### **4.2.3 Rules/ Regulations**

#### **4.2.3.1 Electricity Regulations (2050 BS), 1992**

Section *Chha* of Article 12 and section *Chha* of Article 13 of Electricity Regulation 1992 are important from environmental and social viewpoint. It has clearly mentioned that proponent should analyze the effect on landowners due to construction and operation of the project and details of people

to be evacuated and necessary plan for their rehabilitation should be developed. This regulation has also made provision for the formation of Compensation Determination Committee (CDC) for compensation of the land required for the project.

### **4.3 ILO Convention on Indigenous and Tribal Peoples, 1989 (No.169)**

Nepal ratified ILO Convention No. 169 on September 14, 2007. In 2007 the UN Declaration on the Rights of Indigenous Peoples was adopted by the General Assembly. The declaration reaffirms the importance of the principles and approaches provided for under Convention No. 169 and its adoption therefore provide a fresh impetus for promoting the ratification and implementation of Convention No. 169. ILO Convention No.169 highlights the need to recognize indigenous and tribal people's specific knowledge, skills, and technologies as the basis for their traditional economies and self-determined development process. Article -1 of the convention provide definition of the tribal and indigenous people. Article -6 deals the consultation of the peoples concerned through appropriate procedure and in particular through their representative institutions, whenever consideration is being given to legislative or administrative measures which may affect them directly.

In Article 15, the rights of the peoples concerned to the natural resources pertaining to their lands shall be specifically safeguarded. These rights include the right of these people to participate in the use, management, and conservation of these resources. The use of the term lands includes the concept of territories, which covers the total environment of the areas that the peoples concerned occupy or otherwise use. The peoples concerned wherever possible shall participate in the benefits of such activities and shall receive fair compensation for any damages that they may sustain as a result of such activities. Article 16 (2) clearly mention that where the relocation of these peoples is considered necessary as an exceptional measures such relocation shall take place only with their free and inform consent. Where their consent cannot be obtained, such relocation shall take place only following appropriate procedures established by national laws and regulations, including public inquiries where appropriate, which provide the opportunity for effective representation of the peoples concerned. Article 16 (3) mention that whenever possible these peoples shall have the right to return their traditional land as soon as the grounds for relocation cease to exist. Article 16(5) elaborated the persons thus relocated shall be fully compensated for any resulting loss or injury.

### **4.4 The World Bank Safeguard Policies**

The World Bank has ten safeguard policies mainly environmental assessment, natural habitats, forest, pest management, safety of dams, involuntary resettlement, indigenous people, cultural property, projects involving international waters, projects in disputed area etc. The objectives of Safeguard policies are to integrate environmental and social issues in to decision making, to support Participatory approaches and transparency, to effective implementation of project for achieve sustainable development etc.

The objective of these policies is to prevent and mitigate undue harm to people and their environment in the development process. These policies provide guidelines for bank and borrower staffs in the identification, preparation, and implementation of programs and projects. Safeguard policies have often provided a platform for the participation of stakeholders in project design, and have been an important instrument for building ownership among local people.

#### **4.4.1 OP 4.12 - Involuntary Resettlement**

Involuntary resettlement may cause severe long-term hardship, impoverishment, and environmental damage unless appropriate measures are carefully planned and carried out. The basic principle of Involuntary Resettlement Policy are; avoid, minimize and mitigate involuntary resettlement impacts, payment of compensation before taking possession of the property, compensation at replacement cost and carry out consultation from beginning to end of the project. For these reasons, the overall objectives of the Bank's policy on involuntary resettlement are as follows:

Involuntary resettlement should be avoided where feasible, or minimized, exploring all viable alternative project designs.

Where it is not feasible to avoid involuntary resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits.

Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs.

Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

To address the impacts covered of this policy, the borrower must prepare a resettlement plan or a resettlement policy framework. The framework shall include consultation process, alternative project designs, compensation at full replacement cost for losses of asset, assistance (such as moving allowances) during relocation, residential housing, or housing sites, or, as required, agricultural sites, offered support after displacement for a transition period to restore their livelihood and standards of living and provide with development assistance such as land preparation, credit facilities, training, or job opportunities in addition to compensation measures.

Operational Policy 4.10 ensures that indigenous population benefits from development projects and those projects' potentially adverse effects are avoided or mitigated.

#### **4.4.2 OP 4.10 - Indigenous People**

The World Bank defines indigenous people, as the people, who have their self-identification, collective attachment to ancestral lands, customary culture, economic, social, political institution and indigenous language. The World Bank recognizes that the identities and cultures of indigenous peoples are inextricably linked to the lands on which they live and the natural resources on which they depend. These distinct circumstances expose indigenous people to different types of risks and levels of impacts from development projects, including loss of identity, culture, and customary livelihoods, as well as exposure to disease.

As social groups with identities that are often distinct from dominant groups in their national societies, indigenous peoples are frequently among the most marginalized and vulnerable segments of the population. As a result, their economic, social, and legal status often limits their capacity to defend their interests in and rights to lands, territories, and other productive resources, and/or restricts their ability to participate in and benefit from development. At the same time, The World Bank recognizes that indigenous people play a vital role in planning and implementation of development projects and their continued consultation, participation and cooperation are of profound significance in all projects.

OP4.10 requires several measures that should be applied in the context of preparing VCDP viz free, prior and informed consultation leading to broad community support, participation of IPs, information disclosure, customary rights of IPs to their lands and resources, cultural and spiritual values etc.

#### **4.4.3 The World Bank Policy on Access to Information**

As per Bank's disclosure policy, the safeguard documents, especially the VCDP will be disclosed for access to the public at various levels and sites. At the central level, the soft copy of the document would be posted in the website of NEA, the Executing Agency of the Project. In parallel, this would be disclosed in the Info-shop of the World Bank. Disclosure of the summarized translated Nepali version of the document would also be made at the local level (affected VDCs/municipalities) in compliance with the World Bank Disclosure Policy. The hard copies would be made public in different places such as Project Site Offices, ESMU Offices, VDCs, municipalities DDCsandDAOs.

## 5. COMMUNITY CONSULTATIONS AND PARTICIPATION

Community participation, consultation, and information dissemination from the beginning is crucial to reduce misunderstandings and successful implementation of a project or program. When the public is well informed and motivated, project/program implementation could be trouble-free. Therefore, the project has given more emphasis to community consultation and information dissemination throughout the preparation of this VCDP for its effective planning and implementation.

### 5.1 Procedure for Consultation and Participation

PRA with indigenous and vulnerable groups was used as the main tool of community consultation and information dissemination for preparation of the VCDP. Similarly, key informant interviews, and informal meeting/consultation with the key stakeholders of the project area were also conducted as other tools of community consultation. Information about the PRA and other means of stakeholder consultation (key informant survey and informal meetings) was done 3 days prior to meeting date and venue and time was finalized in consultation with local people. All stakeholder consultation meetings conducted during the preparation of VCDP was free, prior and informed.

During the consultations, the participants were requested to express their views, concerns/issues regarding the project as well as they were informed regarding the importance of the project and its activities. Information such as project purpose, project type, impact area, likely impacts, and potential opportunities due to project implementation were provided to the people during the consultation. Checklists and guidelines were used to facilitate the PRA and KII.

Altogether 146 PRAs including 63.7% (93) with *Dalits* and 36.3% (53) with indigenous people (at least 3 PRAs in each VDC/municipality) were conducted. Altogether 3444 participants including 57.8% female and 42.2% male representing *Dalits* and indigenous people had participated in the PRAs. The average number of participants was 24 person each group in the PRA (Annex III). Participants of the PRA were purposively selected with the help of local leaders, social workers, teachers, and local assistants based on their existence in the project area and proximity to the TL alignment. The participants were pre-informed regarding the PRA, location of gathering, time, and venue and were requested to participate actively in the PRA.

#### 5.1.1 Consultation with Indigenous People

Altogether 53 PRAs were conducted for consultation with the indigenous people in all the project affected VDCs and Municipalities. A total of 1455 participants (42.7% male and 57.3% female) participated in the PRA. The various hill and Terai origin caste/ethnic such as Tharu (30.0%), Tamang (21.9%), Magar (17.9%), Majhi (13.0%), Danuwar (5.9%), Bhujel/Gharti (3.0%), Rai (2.9%), Newar (1.9%) etc. had actively participated in the consultation through PRA process. As per Population and Housing Census 2011, the total population of major caste/ethnic groups of *Janjati* of the project area such as Tamang is 34.2%, Tharu is 29.4% and Magar is 12.1%. Therefore, the sample has fairly represented these groups in the consultation process. However, some of the Terai origin caste/ethnic groups of the area had not included in the process as they are living far from the TL alignment. Name lists of the PRA participants along with their attendancesheets were also prepared during the PRA. Of the participants, 68.8% were literate and 31.2% were illiterate. Their educational level varied from barely literate (28.7%) to bachelor and above (2.5%).

Subsistence farming was the dominant occupation (63.9%) of the participants. The other main occupations of the participants were salaried job, business, and wage employment. Further of the participants, 10.8% werestudents (AnnexIII). Summary of key concerns/issues raised by the indigenous people is presented in Table 5.1 below and its details in AnnexIV.

**Table 5.1: Summary of Key Issues/Concerns Raised by the Indigenous People**

<b>Key Areas of Concerns</b>	<b>Summary of Issues/Concerns of Indigenous People</b>
<b>Compensation</b>	Appropriate compensation for land and private property Crops loss due to TL construction Special package to HH near TL Plantation for loss of tree from CF Compensation of land under RoW Land use restriction under RoW
<b>Livelihood</b>	Employment to indigenous people during construction period Agriculture training (vegetable, cash crops, mushroom farming, fishery, goat raising etc.) Driving/heavy equipment operation/ vehicle/bike repairing training Provide skill development /IG training (forest/agriculture based, and vocational training: wiring, driving, plumbing, carpentry and masonry, micro enterprises, etc.)
<b>Alignment of Transmission Line</b>	Avoid agricultural/private land Shift alignment to minimize tree loss of forest Timely completion of TL Temple under RoW Houses of vulnerable group near TL Risk of electricity/health hazards Likely impacts on wildlife habitat Minimize loss of community forest trees during construction
<b>Community Support</b>	Support for education/ educational materials, library, adult literacy, health and drinking water Support for small infrastructure development (drinking water: new schemes, source improvement/renovation, school building, toilet in school, irrigation, rural road etc.) Incentive for toilet construction Support for awarenessraising program (health and sanitation, education, domestic violence, social harmony etc.)
<b>Project information and Community Participation</b>	Provide proper information regarding the project Involve local people in the project activities Inform local people about adverse impact/risk of 400 kV TL to human and livestock and safety measures

### 5.1.2 Consultation with *Dalits* of the Project Area

Altogether 93 PRAs were conducted for consultation with *Dalits* in all the project affected VDCs and municipalities. A total of 1989 participants including 38.5% male and 61.5% female participated in the PRA. Different hill and Terai origin *Dalits* of the area i.e. Mushar (38.5%), Kami (29.9%), Chamar/Ram (11.3%), Paswan (8.5%), Damai (6.2%), Khetwe (3.4%), etc. had actively participated in the consultation. As per Population and Housing Census 2011, the total population of major caste/ethnic groups of *Dalit* of the project area such as Mushar is 28.2%, Chamar/Ram is 20.4% Kami is 13.4% and Paswan is 10.1%. Therefore, the sample has fairly represented these groups in the consultation process. However, some of the Terai origin caste/ethnic groups of *Dalit* of the area had not included in the process as they are living far from the TL alignment.

List of the PRA participants along with their signup sheets was also prepared during the PRA. Of the participants, 50.1% were literate and 49.9% were illiterate. The educational level of the PRA participants varied from literate (26.8%) to bachelor and above (1.3%). Subsistence farming was the dominant occupation (58.2%) of the participants. The other main occupation of the participants was wage employment (23.9%). Similarly, 7.2% were students (Annex III). Summary of concerns/issues raised in the PRA by the IP is presented in Table 5.2 below and its details in Annex V.

**Table 5.2: Summary of Issue/Concerns Raised by the Dalits**

<b>Key Areas of Concerns</b>	<b>Details of Issues/Concerns of Dalits</b>
<b>Compensation</b>	Appropriate compensation for land and private property Crops loss due to TL Construction Special package to HH near TL Plantation for loss of tree from CF Compensation of land under RoW Land use restriction under RoW
<b>Livelihood</b>	Employment to Dalits during the construction period Mushroom farming training Heavy equipment operation training Provide income generating/skill development training (forest/agriculture related and vocational training: repair and maintenance of electrical/mechanical equipments, plumbing, carpentry and masonry, driving, computer related, sewing/weaving, micro enterprises, wiring, etc.)
<b>Alignment of Transmission Line</b>	Avoid agricultural/private land Minimize tree loss in forests by shifting alignment Timely completion of TL Temple under RoW Affect community forest Houses of vulnerable group near TL Risk of health hazards Impacts on wildlife habitat
<b>Community Support</b>	Support for education/ educational materials, library, adult literacy, health and drinking water Support for small infrastructure development (like drinking water, source improvement, school buildings, toilet in school, irrigation, rural road etc.) Support in toilet construction Support for awareness program for health and sanitation, domestic violence and social harmony
<b>Project Information and Community Participation</b>	Provide proper information regarding the project, involve local people during implementation of the project activities Information to local people about adverse impact/risk of 400 kV TL to human and livestock and safety measures

### 5.1.3 Consultation with other Stakeholders of the Project Area

Some informal meetings were also conducted with the government line agencies, political party leaders, businessmen, teachers, social workers, government officials, and representatives of NGOs/CBOs and local leaders of the project area to solicit their views, issues and concerns during the course of field work.

The experts of the study team also visited local community, construction activities of the TL and interacted with key stakeholders and local people of the area. The concerns/issues of the stakeholders have been incorporated in relevant section of the VCDP.

## 5.2 Key Issues/Concerns Raised During Community Consultations

Almost all the local people of the project area have positive attitude regarding quick construction of the project realizing the need of transmission line for hydropower development in the country, regular supply of electricity to address more than 12 hours of load shedding. Due to the support of almost all the local people the construction work of the project in most of the project VDCs /municipalities is in rapid progress.

During the community consultation several issues and concerns were raised by the people. The key issues and concerns raised by the local people are related to compensation, employment, implementation of mitigation and enhancement measures and community participation in the project activities. The major issues/concerns raised during consultation process by the IP, VC and local stakeholders have been broadly categorized as: 1) compensation, 2) livelihood, 3) alignment of transmission line, 4) community support and 5) project information and community participation. The key issues/concern raised by the local people during community consultations is summarized in Table 5.3 below.

**Table 5.3: Summary of Key Issues and Concerns of Dalit, IP and Other Stakeholders**

<b>Key Areas of Concerns</b>	<b>Details of Issues/Concerns of Dalit, Indigenous People and Other Stakeholders of the Project Area</b>
<b>Compensation</b>	Appropriate compensation for land and private property of <i>Janjati/Dalit</i> Crops loss due to TL Construction Special package to HH near TL Plantation for loss of tree from CF Compensation of land under RoW Land use restriction under RoW
<b>Livelihood</b>	Employment to <i>Janjati/Dalit</i> people during the construction period Heavy equipment operation training Provide income generating/skill development training (forest/agriculture related and vocational training: repair and maintenance of electrical/mechanical equipments, plumbing, carpentry and masonry, driving, computer related, sewing/weaving, micro enterprises, wiring etc.)
<b>Alignment of Transmission Line</b>	Avoid agricultural/private land Minimize tree loss of forest by shifting alignment Timely completion of TL Temple under RoW Affect community forest Houses of vulnerable group near TL Risk of health hazards Likely impacts on wildlife habitat
<b>Community Support</b>	Support for education/ educational materials, library, adult literacy, health and drinking water Support for small infrastructure development (like drinking water, source improvement, school building, toilet in school, irrigation, rural road etc.) Support in toilet construction Support for awareness program for health and sanitation, domestic violence and social harmony
<b>Project Information and</b>	Provide proper information regarding the project, involve local people during implementation of the project activities

<b>Community Participation</b>	Information to local people about negative impact/risk of 400 kV TL to human and livestock and safety measures
--------------------------------	--

The study team team replied the queries of the stakeholder raised in different meetings conducted with different group. The issues of adequate compensation for the acquired land, compensation for RoW land, land use restriction, crop loss and compensatory plantation has been assured showing the provision made in IEE and SIA document prepared for the project. Likewise the livelihoods issues have been addressed by incorporating additional training in VCDP report besides provisions made in IEE and SIA. In response to alignment of transmission line and its impact on forest, temple, health and agriculture land the route selection process was informed to the participants and it was assured the best possible route was selected considering the minimum impacts on above mentioned aspects. Adequate mitigation measures have been proposed to minimize the impact on health, temple and agriculture land in the safeguard documents prepared for the project. Likewise compensatory plantation has been designed to plant 2 samplings of trees for the loss of one tree and its management for 5 years. The community support program is designed as per the request of stakeholder during formal and informal meetings. Among the requested program technically viable community based program is selected considering at least one activity in each VDC. The local people are assured that information about the project activities will be given through project site offices, ESMU office, project brochure, FM Radio and formal and informal consultation by the environmental and social staff working at site. An attempt has been made to address major areas of concerns of the vulnerable community and IP in this VCDP. However, the issue of compensation has not been addressed in this VCDP since it has been included in RAP, IEE and SIA documents prepared for the project.

### **5.3 Continuation of Consultation Process**

The above issues/concerns of the people will be addressed through different mechanism and support system by the proponent. Major areas of concerns of the vulnerable community and IP pertain to compensation, supports for their livelihood, proper information, and communication, avoid and minimize negative impacts and enhance participation of the local people at different stages of the project. In addition, the public have demanded several community support programs as measures to improve their livelihood and socioeconomic environment. Continued consultations and proper information dissemination to the public, seem to be the most strategic approach for the project to resolve the issues and smooth implementation of the project activities.

### **5.4 Disclosure of the Report**

The VCDP report will be disclosed at World Bank Infoshop and NEA web site. The VCDP report will be kept disclosed at Central and local level. In central level it will be available for public review at NEA central office, Environment and Social Studies Department Office and Project office at Kharipati Bhaktapur. The VCDP report will be kept at District Development Committee Office of project districts, Project site offices and Environment and Social Management Unit Offices (ESMU). The report will be translated in Nepali and translated version will be distributed to project VDCs.

## 6. SOCIOECONOMIC INFORMATION OF INDIGENOUS AND VULNERABLE COMMUNITY

### 6.1 Indigenous Community in the Context of Nepal

Nepal is inhabited by more than 103 different caste/ethnic groups with multi culture, language and religion. Of them 59 caste/ethnic groups are recognized as groups of indigenous peoples *Adibasi/Janjati*, with distinct cultures, languages and belief systems by the government in 2002.

The *Adibasi/Janjati* groups are scattered across mountain, hill and Terai regions of the country. Their total population enumerated 37.21% in the Population Census, 2001 in Nepal. Concentration of indigenous group is high in rural areas of Nepal. *Raute* and *Kusunda* are the nomadic type of people and classified as highly endangered. They are mainly concentrated in remote rural areas and subsistence farming is their main source of livelihood. Most of the indigenous people are deprived of their social, economic, cultural, and political rights despite of several policy and legal measures by the government for inclusion in the main stream of development. Therefore, inclusion in the main stream of development is the common voice and main issue of the people. After the Peoples Movement II *Jan Andolan II* (2062/63) and restoration of democracy these people are organized for their common issue through different organizations. Nepal Federation of Nationalities (NEFEN) is the umbrella organization of the indigenous people voicing for political, economic, social and cultural rights of the indigenous people in Nepal in the context of state transformation.

NEFEN categories the indigenous groups into 5 broad categories based on their population other socio-economic variables such as literacy, housing, land holdings, occupation, language and area of residence at present as 1) Endangered Group (10); 2) Highly Marginalized Group (12); 3) Marginalized Group (20); 4) Disadvantaged Group (15) and 5) Advanced Group 2 (Table 6.1).

**Table 6.1: Categorization of Indigenous *Adibasi/Janajati* Groups of Nepal**

Category	Ethnic Groups
Endangered Groups	Bankariya, Kusunda, Kushbadia, Raute, Surel, Hayu, Raji, Kisan, Lepcha, Meche (10 groups)
Highly Marginalized Groups	Santhal, Jhangad, Chepang, Thami, Majhi, Bote, Dhanuk (Rajbansi), Lhomi (Singsawa), Thudamba, Siyar (Chumba), Baramu, Danuwar (12 groups)
Marginalized Groups	Sunuwar, Tharu, Tamang, Bhujel, Kumal, Rajbansi (Koch), Gangai, Dhimal, Bhote, Darai, Tajpuria, Pahari, Dhokpya (Topkegola), Dolpo, Free, Magal, Larke (Nupriba), Lhopa, Dura, Walung (20 groups)
Disadvantaged Groups	Jirel, Tangbe (Tangbetani), Hyolmo, Limbu, Yakkha, Rai, Chhantyal, Magar, Chhairrotan, Tingaunle Thakali, Bahragaunle, Byansi, Gurung, Marphali Thakali, Sherpa (15 groups)
Advanced Groups	Newar, Thakali (2 groups)

## 6.2 Indigenous Community in the Project District/Area

Different indigenous *Adibasi/Janjati* groups of mountain, hill and Terai origin were enumerated in the project district in the Population and Housing Census, 2011. As per the census, there are more than 20 different *Adibasi/Janjati* groups such as Tamang, Tharu, Magar, Kumhar/Kumal, Majhi/Malaha, Newar Limbu, Gharti/Bhujel, Chepang, Bantar, Dhanuk, Santal/Satar, Bhote, Urau, Sherpa, Danuwar, Rai etc. in the project district. As per the Population and Housing Census 2011, the total population of indigenous people is 17.2% in the project districts with high (62.0%) concentration in Makwanpur and low (3.9%) in Dhanusha (Table 6.2).

**Table 6.2: Population of Indigenous People in the Project Districts**

District	Population of <i>Adivashi/Janajati</i> in the District		Total District Population
	Number	% of District Population	
Makwanpur	260889	62.0	420477
Bara	151766	22.1	687708
Rautahat	58158	8.5	686722
Sarlahi	102340	13.3	769729
Mahottari	50744	8.1	627580
Dhanusha	29558	3.9	754777
Siraha	40489	6.4	637328
Udaypur	154413	48.6	317532
Saptari	85142	13.3	639284
Sunsari	151121	19.8	763487
<b>Total</b>	<b>1084620</b>	<b>17.2</b>	<b>6304624</b>

Source: Population and Housing Census, 2011, CBS

The project area is diverse in terms of caste/ethnicity. There are 16 different caste/ethnic groups of *Janjati* including 11 of hill and 5 of Terai origins. The hill origin caste/ethnic groups are Tamang (34.2%), Magar (12.1%), Newar (6.2%), Rai (3.4%), Gharti/Bhujel (1.8%), Gurung (0.5%), Limbu (0.5%), Kumal (0.3%), Sherpa (0.1%), and Chepang (0.1%). Of the hill origin groups, Tamang Gharti/Bhujel and Kumal are defined as marginalized groups, Chepang is defined as highly marginalized group, Magar, Gurung, Sherpa Limbu and Rai are defined as disadvantaged groups and Newar is defined as advanced group by NEFEN. As the Chepangs are living in hills of Makawanpur far from the TL alignment therefore they are not directly affected by the TL project. There are no endangered indigenous groups in the project area.

Some of these hill origin indigenous groups have migrated in the area after eradication of Malaria in Terai (after 1950), whereas most after construction of the East–West Highway due to accessibility, cheap agriculture land and hardships in the hills in search of quality of life.

The Terai origin caste/ethnic groups are Tharu (29.4%), Dhanuk (4.7%), Danuwar (3.7%), Majhi (2.7%), and Jhangad (0.3%). Among the Terai origin groups, Tharu is defined as marginalized, and Dhanuk, Danuwar, Majhi and Jhangad are defined as highly marginalized groups. Tamang is the dominant ethnic group of hill origin in the project area and particularly in Makwanpur (the only hill district of the project area) whereas Tharu is the dominant ethnic group of Terai origin in the project area (Table 6.3).

**Table 6.3: Distribution of Project Affected Population of Janjati by Caste/Ethnicity and District**

Caste/Ethnicity	District										Total	%
	Bara	Dhanusha	Mahottari	Makwanpur	Rautahat	Saptari	Sarlahi	Siraha	Sunsari	Udaypur		
Tamang (M)	3309	11015	4085	28669	7983	1022	20716	3806	1176	588	82369	34.2
Tharu (M)	141	160	56	0	8460	36097	505	3966	18837	2677	70899	29.4
Magar (DA)	1056	10198	1690	1069	1888	1907	7137	2431	1575	150	29101	12.1
Newar (Adv)	1102	3285	1378	413	723	1040	3199	1465	1984	275	14864	6.2
Dhanuk (HM)	0	1356	109	0	270	5765	488	3408	0	0	11396	4.7
Danuwar (HM)	1504	766	20	461	0	3171	1367	1571	47	15	8922	3.7
Rai (DA)	166	716	81	844	662	1294	549	743	2470	763	8288	3.4
Majhi (HM)	567	495	39	1321	610	777	917	14	1650	30	6420	2.7
Gharti/Bhujel (M)	25	997	514	95	157	181	1699	132	377	80	4257	1.8
Gurung (DA)	85	33	13	205	276	106	189	69	118	0	1094	0.5
Limbu (DA)	29	0	0	0	13	67	0	30	989	42	1170	0.5
Jhangad (HM)	0	630	0	0	0	0	0	0	0	0	630	0.3
Kumal (M)	0	69	0	0	53	27	36	469	0	13	667	0.3
Bhote (M)	16	168	0	0	0	0	441	0	0	0	625	0.3
Sherpa (DA)	0	0	0	0	77	0	0	0	134	0	211	0.1
Chepang (HM)	0	0	0	239	0	0	0	0	0	0	239	0.1
<b>Total Population of IPs</b>	<b>8000</b>	<b>29888</b>	<b>7985</b>	<b>33316</b>	<b>21172</b>	<b>51454</b>	<b>37243</b>	<b>18104</b>	<b>29357</b>	<b>4633</b>	<b>241152</b>	<b>100</b>
<b>Total Proj. Affected Pop.</b>	<b>19614</b>	<b>150693</b>	<b>21303</b>	<b>40966</b>	<b>47230</b>	<b>173468</b>	<b>107147</b>	<b>168076</b>	<b>88124</b>	<b>10151</b>	<b>826772</b>	<b>-</b>

Source: Population and Housing Census, 2011, CBS, Note: Census population of project affected VDCs/Municipalities is only included.

Note: M= Marginalized, HM= Highly Marginalized, DA= Disadvantaged, Adv=Advanced

Based on field observation, most of the indigenous households of the project area are scattered expect the Tharu HHs. The indigenous people of the project area are inhabited in the Northern VDCs of the project area due to accessibility of forest resources.

Poor and marginal households of hill and Terai origin caste/ethnic groups inhabit in almost all the settlements located within 500 m of the transmission line. Tharu and Tamang are the dominant indigenous caste/ethnic groups in most of the settlements located within 500 m of Hetauda–Dhalkebar–Duhabi stretch of the transmission line.

Though some of the indigenous groups of the project area have their own language, culture, values, and norms, they have mixed together with other caste/ethnic groups and have also follow cultural values and norms of other caste/ethnic groups of the area. Nepali and Maithali languages are the common languages of most of the ethnic groups of the area. However, most Tharu, some Tamang and a few households of the other indigenous groups of the area also speak their own languages in the family.

Almost all the indigenous people of the project area are mixed together with other caste/ethnic groups of the area. They share common language, they have similarity in dress, follow culture and festivals of other caste/ethnic groups and other also follow their culture/festivals, share common resources and facilities and have social harmony. In this way, the indigenous people of the project area are not much distinct with other caste/ethnic groups of the area regarding social and economic aspects. Inter-caste marriage is also practiced between the indigenous and other caste/ethnic groups. However, after restoration of democracy, the indigenous groups of the project area are more united and aware regarding their cultural identity.

Therefore, the indigenous people of the area are not much different with other caste ethnic groups regarding socio-economic activities of the area and due to the linear nature of the project, it has no particular adverse impact on the indigenous people of the project area.

### 6.2.1 Socioeconomic Status of Indigenous People of the Project Area

Based on the KIIs and PRA findings, the socioeconomic statuses of the indigenous people of the project area have been summarized below.

<b>Education</b>	<b>Statistics and Issues</b>
Lowest Literacy Rate %	40
Highest Literacy Rate %	90
Average Literacy Rate %	67
Major Problems of Primary and Lower Secondary Schools	Poverty and lack of awareness, DW and Toilets, located in far distance, poor infrastructures of schools
Major Problems of Secondary and Higher Secondary Schools	No library in the schools, poor quality of education, unavailability of trained teachers
Reason for Lower Rate of Enrollment of Children of <i>Adibasil/Janjati</i>	Poverty and lack of awareness

<b>Health</b>	<b>Statistics and Issues</b>
Common Diseases	Diarrhea, Jaundice, Typhoid, Pneumonia, Malaria
Treatment Practices	Government health service centers (HPs) and private clinics
Perception on Quality of Government HSC	Poor quality of services
Major Problems of Government HSC	No adequate medicine, unavailability of Medical persons, in-accessible to all settlements, high treatment cost in private clinics, no facility for the treatment of major diseases.

<b>Drinking Water and Sanitation</b>	<b>Statistics and Issues</b>
Piped Water Coverage	38 % HHs
Tube Well	53% HHs
Spout, River and Natural Springs	9 % HHs
Sufficiency of Piped Water	No
Average Insufficient Months	3 months
Issues:	Regular test of DW for contamination, support for the supply of potable drinking water
% of IPs HHs having Toilet	61 %
Issues:	No space for the construction of toilet and poverty (no cash)
Practices of Solid Waste Disposal	Dump/burrying in Bari/Khet for compost and some burn
Practices of Liquid Waste Disposal	Drain in Bari/Khet

<b>Livelihood</b>	<b>Statistics and Issues</b>
Economic Activities	Agriculture, wage, animal husbandry, foreign employment
Dependency	Agriculture (70%), wage labor (15%), foreign employment (12%), others (3%)
% of IP HHs able to Produce Enough Food	18 % HHs
% of IP Landless HHs	19 % HHs
Off-farm Activities:	
Agriculture Based	Vegetable farming, livestock raising and fishery

Forest Based	Herbs collection
Others	Tailoring and weaving, knitting, <i>Agarbatti</i> , candle and soap production

<b>Migration</b>	<b>Statistics and Issues</b>
% of Migrant HHs	11 % HHs
% of IP Migrant HHs	8 % HHs
Reason for Migration	unemployment and poverty
Popular Destination	Dubai, Qatar, Malaysia, UAE
Issues:	Employment opportunity at local level
Positive Impacts of Remittance	Improved livelihood and better access to education and health services to family
Negative Impacts of Remittance	Lack of youth in the community, inflation, social disputes

<b>Gender and Social Inclusion</b>	<b>Statistics and Issues</b>
Economic Activities of Women	Wage labor, agriculture and animal husbandry
Potential Agriculture Activities for Women	Animal husbandry and vegetable farming
Potential Off-Farm Activities for Women	Tailoring, knitting/waving, micro enterprises
Relationship of IP with Other Community	Good in mostly places

<b>Issues/Opinion</b>	<b>Statistics and Issues</b>
Social Issues:	Should not disturb social harmony
Economic Issues:	Provision of employment opportunity to IP, IG activities, technical and vocational training (driving, plumbing, house wiring etc.)
Expectation:	Employment, support in irrigation, drinking water, education and skill training
Possible Impacts:	Electric and health hazards, loss of trees of community forest, cremation site under RoW,
Ways for Successful Implementation:	Prior consultation with IP community to implement project activities, IP focused programs implementation, including IP in all the project activities.

### **6.3 Dalits in the Context of Nepal**

*Dalits* are most marginalized groups and stand at the bottom of most of socio-economic development indicators and still facing caste based discrimination. They own no or nominal land compared to other groups, exhibit the lowest household income that result low consumption cause poor health and low productivity.

This group is in the category of the most vulnerable groups, scattered all over the country with concentration of some groups in some districts of hill and Terai. The socioeconomic status of *Dalits* in Nepal is very low and they are deprived of their social, economic, political and other rights.

Discrimination based on caste, sex and color is strictly prohibited through different legal and policy reform. Despite the legal protection, the caste based discrimination is still prevalent and it is high in the Terai area compared to hill. The National Civil Code of Nepal “Muluki Ain”, 1963 was a landmark attempt for reform in the system.

The caste-based discrimination is a part of the caste system of the Indian subcontinent originated time-immemorial. The National Code of Nepal, implemented in 1854 had classified all the Nepalese people into four caste hierarchy (Barna) based on their occupational: 1. Brahmin "Sacred thread wearing", 2. Chhetri "ruling class", 3. *Baisa* "touchable low castes", and 4. *Chudra (Dalit)* "Untouchables" and 36 castes. One of the main reasons of such discrimination is poverty, illiteracy, lack of awareness, access to resources and social and economic exclusion.

The discrimination is also exists among the different *Dalits* based on their occupation structure.

There are 22 identified *Dalits* scattered all over the country identified by the National Dalit Commission that includes five of the Hill origin *Dalits* and seventeen Terai origin (Table 6.4).

**Table 6.4: Classifications of *Dalits* by Origin in Nepal**

Classification	Caste/Ethnic Groups
Hill <i>Dalits</i>	1. Gandarva/Gaine, 2. Pariyar/ Damai, 3. Badi, 4. Kami, (BK) 5. Sarki
Terai <i>Dalits</i>	1. Khatik, 2. Khatbe, 3. Chamar, 4. Chidimar, 4. Dom, 5. Tatma, 6. Dusadh (Paswan), 7. Dhobi, 8. Pattharkatta, 9. Pasi (Paswan), 10. Bantar, 11. Musahar, 12. Mehtar /Halkhor, 13. Sarvanga /Sarbariya, 14. Kaluwar, 15. Kori, 16. Kakahiya

*Dalits* are the groups, who prepare agriculture tools, carve statue of God/Goddess, stitch cloths, prepare shoe, dispose dead animal, clean human extract and perform many more unavoidable jobs, are the most vulnerable groups due to suppressed socially and economically by the so called high caste/ethnic groups.

Social inclusion, access to economic opportunities, gainful employment is required for mainstreaming *Dalits* and uplifts their socioeconomic status.

#### **6.4 *Dalit* Community in the Project District/Area**

*Dalits* are the most vulnerable groups scattered all in all the VDCs and municipalities of the project districts. The socioeconomic status of *Dalits* in the project districts is not much different, as in other parts of Nepal. Rather, it is worse regarding some of the Terai origin groups such as Mushar, Dom, Chamar, Pattharkatta etc. in the districts.

Though caste based discrimination still do exist in the country, it is relatively high in Siraha, Saptari and Dhanusha districts compared to the other project districts. There are ample examples of community disputes highlighted frequently in national media regarding refusal for dead livestock consumption/disposal (Chamar), touching water sources using by so called high caste/ethnic groups, physical and mental torture, blaming witch and treating nonhuman behavior, restriction for entrance in temple and many more forms of discrimination.

The Terai origin *Dalits* of the project districts are Mushar, Chamar, Dom, Tatma, Dusadh (Paswan), Dhobi, Pattharkatta (nomadic), Pasi (Paswan), Bantar, Mehtar/Halkhor, Sarbariya, Kori etc. Similarly, the hill origin groups are Kami, Damai and Sarki. As *Dalits* are occupational caste group, their caste division is based on their occupation.

As per the Population and Housing Census 2011, the total population of *Dalits* 16.5% in the project districts with high (26.0%) concentration in Siraha and low (3.4%) in Makwanpur (Table 6.5).

**Table 6.5: Population of *Dalits* in the Project Districts**

District	Population of <i>Dalits</i> in the District		Total District Population
	Number	% of District Population	
Makwanpur	14319	3.4	420477
Bara	74664	10.9	687708
Rautahat	73758	10.7	686722
Sarlahi	159828	20.8	769729
Mahottari	106986	17.0	627580
Dhanusha	148317	19.7	754777
Siraha	165737	26.0	637328
Udaypur	44453	14.0	317532
Saptari	133472	20.9	639284
Sunsari	119461	15.6	763487
<b>Total</b>	<b>1040995</b>	<b>16.5</b>	<b>6304624</b>

Source: Population and Housing Census, 2011, CBS

There are more than 13 different caste/ethnic groups of *Dalit* in the project area including 4 caste/ethnic groups of hill and 9 caste/ethnic groups of Terai origins. Mushar (28.2%) is the dominant caste/ethnic group in the Terai followed by Chamar/Ram (20.4%) and among the hill origin caste/ethnic groups Kami (13.4%) is the dominant group. There is no clear classification of *Dalits* as defined for IPs by NEFEN. However, among the *Dalits*, Mushar is regarded as most vulnerable *Dalit* group in Terai. Almost all Mushar families are landless and live on others land or marginal public land and work as wage labors for subsistence. Similarly, Badi (0.2%) is considered as most vulnerable group among the hills *Dalits* (Table 6.6).

**Table 6.6: Distribution of Project Affected Population of *Dalits* by Caste/Ethnicity and District**

Caste/Ethnicity	District											Total	%
	Bara	Dhanusha	Mahottari	Makwanpur	Rautahat	Saptari	Sarlahi	Siraha	Sunsari	Udaypur			
Musahar	0	3957	52	0	1475	14051	122	9385	7397	70	36509	28.2	
Chamar/Ram	17	6069	1119	0	1024	5329	612	10995	1274	0	26439	20.4	
Kami	467	3810	864	1505	1454	2660	2710	1847	1714	395	17426	13.4	
Pasawan	36	1225	0	0	202	4376	522	6614	33	23	13031	10.1	
Khatwe	0	1016	0	0	0	5683	62	1347	1109	0	9217	7.1	
Kalwar	156	0	277	40	1787	3092	1094	1184	41	0	7671	5.9	
Tatma/Tatwa	17	2509	0	0	101	969	65	2306	0	0	5967	4.6	
Damai	278	681	514	195	341	563	833	763	852	141	5161	4.0	
Sarki	44	1281	503	37	90	175	410	328	427	243	3538	2.7	
Dhobi	0	614	53	0	169	271	173	1338	20	0	2638	2.0	
Dom	0	173	23	0	0	394	304	349	48	15	1306	1.0	
Badi	0	45	0	0	0	32	29	0	92	0	198	0.2	
Dalit Others	204	0	28	116	46	53	82	0	0	0	529	0.4	
<b>Total Pop.</b>	<b>1219</b>	<b>21380</b>	<b>3433</b>	<b>1893</b>	<b>6689</b>	<b>37648</b>	<b>7018</b>	<b>36456</b>	<b>13007</b>	<b>887</b>	<b>129630</b>	100	
<b>Total Project Affected Pop.</b>	<b>19614</b>	<b>150693</b>	<b>21303</b>	<b>40966</b>	<b>47230</b>	<b>173468</b>	<b>107147</b>	<b>168076</b>	<b>88124</b>	<b>10151</b>	<b>826772</b>	-	

Source: Population and Housing Census, 2011, CBS, Note: Census population of project affected VDCs/Municipalities is only included.

It is observed that the area where there is rampant poverty, illiteracy and in remoteness, rural areas, the caste based discrimination is high compared to other parts. It is high in rural area compared to urban area. Therefore, different social and economic interventions are required for mainstreaming and social inclusion of the *Dalits* in the project area.

#### 6.4.1 Socioeconomic Status of *Dalit* Community of the Project Area

Based on the KII and PRA findings, the socioeconomic statuses of the *Dalit* communities of the project have been summarized below.

Education	Statistics and Issues
Lowest Literacy Rate %	5
Highest Literacy Rate %	85
Average Literacy Rate %	40
Major Problems of Primary and Lower Secondary Schools	Drinking water and toilets, located in far distance, infrastructures of schools,
Major Problems of Secondary and Higher Secondary Schools	No library in the schools, quality of education is poor, unavailability of teachers,
Reason for Lower Rate of Enrollment of <i>Dalit</i> Children	Poverty and lack of awareness

Health	Statistics and Issues
Common Diseases	Diarrhea, cold and fever, typhoid, pneumonia, malaria
Treatment Practices	Health service centers (HPs)
Perception on Quality of Government HSC	Average
Major Problems of Government HSC	No adequate medicine, unavailability of medical persons, not accessible to all settlements, high treatment cost in private clinics, no facility for treatment of major diseases.

Drinking Water/Sanitation	Statistics and Issues
Piped Water Coverage	15 % HHs
Tube Well	55% HHs
Well	17% HHs
Spout, River and Natural Springs	13% HHs
Sufficiency of Piped Water	No
Average Insufficient Months	4 months
Issues:	Regular test of DW for contamination, need support for the supply of safe drinking water
% <i>Dalit</i> HHs having Toilet	37 %
Issues:	No space for the construction of toilet, due to poverty, <i>Dalit</i> HHs could not construct toilet.
Practices of Solid Waste Disposal	Dump into Bari/Khet. Some <i>Dalit</i> households burn
Practices of Liquid Waste Disposal	Drainin Bari/Khet

Livelihood	Statistics and Issues
Economic Activities	Wage labor, agriculture, animal husbandry, foreign employment
Dependency	Wage labor (55%), agriculture (30%), foreign employment (10%), others (5%)
% of <i>Dalit</i> HHs able to Produce Enough Food	10 % HHs
% of <i>Dalit</i> Landless HHs	45 % HHs

Off-farm Activities:	
Agriculture Based	Vegetable farming and livestock raising
Forest Based	Herbs collection
Others	Tailoring and knitting/weaving, production of Bamboo products

Migration	Statistics and Issues
% of Migrant HHs	13 % HHs
% of Dali Migrant HHs	7 % HHs
Reason for Migration	Unemployment and poverty
Popular Destination	India, Qatar, Malaysia, UAE, Kathmandu
Issues:	Employment opportunity at local level
Positive Impacts of Remittance	Improved livelihood and better access to education and health services for family
Negative Impacts of Remittance	Inflation, social disputes

Gender and Social Inclusion	Statistics and Issues
Economic Activities of Women	Wage labor, agriculture and animal husbandry
Potential agriculture activities for women	Animal husbandry and vegetable farming
Potential off-farm activities for Women	Tailoring, knitting, weaving, micro enterprises
Relationship of <i>Dalit</i> with other community	Good in most places. There is still discrimination in some places during fetching drinking water from public water sources and in temples.

Issues/Opinion	Statistics and Issues
Social Issues:	Should not disturb social harmony
Economic Issues:	Provision of employment opportunity to <i>Dalit</i> Community. Income generation activities, technical/vocation training (driving, house wiring etc.).
Expectation:	Employment, support in irrigation, drinking water, education and skill development training
Possible Impacts:	Electric health hazards, loss of trees from community forest
Ways for Successful Implementation:	<i>Dalit</i> focused programs should be introduced. Include <i>Dalit</i> in all the project activities.

## 7. IMPACT ASSESSMENT

### 7.1 General

This section of the report describes the details of affected assets of vulnerable households due to implementation of the Nepal India Electricity Transmission and Trade Project, Hetauda- Dhalkebar-Duhabi 400 kV Transmission Line. The major affected assets include loss of private property such as land, houses, cowsheds and private owned religious structure by vulnerable households.

These losses will occur due to construction of towers located in the private land and acquisition of the structures falling in RoW. This chapter discusses the likely impacts of the project on vulnerable households during construction and operation phases.

### 7.2 Positive Impacts

The positive impacts identified due to implementation of the project such as local employment, increase in local skill & economic opportunity and rural electrification are also applicable to vulnerable households.

### 7.3 Adverse Impacts

The adverse impacts identified during construction and operation phases of the project are given below.

#### 7.3.1 Acquisition of land

The implementation of the project (as per public notices of District Administration Offices of the area regarding land acquisition (until June 12, 2015), will affect 606 households due to land acquisition, out of which 169 were indigenous and dalit households. Out of the total affected households 22.44 % (136 nos) is from indigenous communities. Altogether 7 caste/ethnic group of indigenous communities will be affected from 6 project district out of total 10 affected districts (Table 7.1). Among the affected ethnic group Tharu (60.29%) is the highly affected group followed by Tamang (18.38%) and Newar (8.82%). The number of directly affected *Janjati* is high (84) in Saptari and low (2) in Makwanpur district.

**Table 7.1: Number of Direct Affected Janjati due to Land Acquisition by Caste/Ethnicity**

S.No	Caste/Ethnicity	Project Districts						Total	%
		Makawanpur	Sarlahi	Dhanusha	Siraha	Saptari	Sunsari		
1	Tharu	0	0	0	6	76	0	82	60.29
2	Tamang	6	2	10	6	0	1	25	18.38
3	Magar	0	0	1	6	2	1	10	7.35
4	Newar	0	3	1	3	5	0	12	8.82
5	Rai	0	0	0	1	1	1	3	2.21
6	Majhi	1	0	0	0	0	1	2	1.47
7	Limbu	0	0	0	0	0	2	2	1.47
	<b>Total</b>	<b>7</b>	<b>5</b>	<b>12</b>	<b>22</b>	<b>84</b>	<b>6</b>	<b>136</b>	<b>100.00</b>

Source: Field Survey 2015

Out of the total affected households 5.44 % (33nos) are from Dalit communities. Altogether 11 caste/ethnic group of Dalit communities will be affected from 6 project district of 10 affected districts in total (Table 7.2). Among the affected ethnic group Mandal (26.47%) is the highly affected group followed by Biswakarma (18.18%), Mochi (15.15%), Das(15.15%), and Kami (15.15%).The number of directly affected *Dalit* is high (11) in Saptari followed by (9) Sunsari districts and others.

**Table 7.2: Number of Direct Affected Dalit due to Land Acquisition by Caste/Ethnicity**

S.No	Caste/Ethnicity	Project Districts						Total	%
		Makawanpur	Sarlahi	Dhanusha	Siraha	Saptari	Sunsari		
1	Kami	0	0	1	0	0	1	2	6.06
2	Mandal	0	0	2	1	1	5	9	27.27
3	Chamar	0	0	0	0	1	0	1	3.03
4	Sarki					1		1	3.03
5	Musahar						1	1	3.03
6	BK	1	1	1	1	1	1	6	18.18
7	Ram					1		1	3.03
8	Mochi	0	0	2	1	2	0	5	15.15
9	Das				2	3	0	5	15.15
10	Khatwe						1	1	3.03
11	Dhobi					1		1	3.03
	<b>Total</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>5</b>	<b>11</b>	<b>9</b>	<b>33</b>	<b>100.00</b>

Source: Field Survey 2015

In addition 64 women headed households (out of 606) will also affected by the project due to land acquisition. It includes 62.50% from Siraha district, 26.56% from Saptari district, 7.81% from Sunsari and 3.13% from Sarlahi district.

**Table 7.3: Women Headed Households Affected by Land Acquisition**

SN	District, VDCs/Municipalities	Ward Number	Name of Affected HHs
<b>Sunsari</b>			
1	Bokhara	7	Pramila Devi Mahaato
2	Bokhara	7	Sita Devi Yadhav
3	Mahendranagar	8	Lila maya Basnet
4	Bokhara	8	Gita Devi Mahato
5	Dumra	9	Jaleswari devi shah
<b>Saptari</b>			
6	Daulatpur	2	Rampari Devi Thakur
7	Pansera	6	Bhuti Devi Shah
8	Varuwakhal	4	Gaga devi katuwal
9	Khojpur	8	Samjhana Jha
10	Theliya	1	Uhadevi Rajput ni
11	Khosarparwa	2	Parmeshworai devi shah

12	Vangaha	6	Durgi Devi Shah
13	Khosarparwa	3	Pashupati Devi shah
14	Madhupatty	6	Durga Devi yadhav
15	Pansera	7	Mariya Khatun
16	Pansera	7	Rehna Khatun
17	Rupnagar	3	Rahim Khatun
18	Vangaha	7	Lalita Devi Shah
19	Theliya	1	Karodevi Shah
20	Pansera	6	Nathari Devi Haluwai
21	Khojpur	8	Chndeswori Pandit
22	Rupnagar	4	Sairul vivi
<b>Siraha</b>			
23	Golbazar Municipality	4	Rekha Devi Yadav
24	Golbazar Municipality	10	Sumitra devi Yadav
25	Mirchiya	9	Niratini Yadabni
26	Dhangadimai	8	Dhaneshwori devi Yadav
27	Lavtoli	4	Sukmaya Kamini
28	Badharmal	4	Rita kr. Rawat (BC)
29	Mirchiya	6	Ram pari Devi
30	Karjana	8	Sadulan Khatun
31	lovetoli	3	Indu Shahi
32	Badarmahal	9	Yosodha Pokheral
33	Bastipur		Usha Kumari shah
34	Bastipur	5	Sajan Kumari Yadhav
35	Nainpur	1	Urmila Yadhav
36	Karjana	7	Bechani Devi Mahato
37	Badarmahal		Bishnu Maya Thapa
38	Karjana		Jasodha devi Mahato
39	Fulbariya	7	Jiwachi devi Tharuni
40	Karjana	4	Babita devi Mahato
<b>Dhanusa</b>			
41	Mithila	9	Bhakta Devi Giri
42	Ganeshman Charnath Municipality	5	Sushila Devi Pangiyar
43	Ganeshman Charnath Municipality	1	Bachani Devi Yadav
44	Ganeshman Charnath Municipality	7	Malati Devi Sah Sudi
45	Mithila	4	Dulari devi Sah
46	Mithila	4	Phul kr. Mahato
47	Dhanuadham	9	Gauri devi Losya
48	Dhanuadham	9	Ambika devi KC
49	Dhanuadham	9	Manju Adhakari
50	Mithila	4	Janaki Kumari Baniya
51	Mithila	4	Kishori Shah
52	Mithila	4	Ganga Devi

53	Mithila	4	Shiwani Devi Kathwania
54	Mithila	3	Indradevi Yadhav
55	Hariharpur	8	Dlari devi Koirai
56	Pushwalpur	3	Laganwati devi
57	Pushwalpur	7	Sahabir Kami
58	Ganeshman Charnath Municipality	2	puja lama
59	Ganeshman Charnath Municipality	5	Niramal devi Karki
60	Ganeshman Charnath Municipality	5	Urmila devi yadhav
61	Mithila	5	Tilotama Raut
62	Dhanuadham	9	Sauraa Khatun
<b>Sarlahi</b>			
63	Hariwon Municipality	9	Bishnu Maya Mainali
64	Hariwon Municipality	9	Lilamaya Khadka

Source: Field Survey 2015

To assess the amount of land impacted in each district, a survey of affected land owners was conducted in July, 2016 by the field team of ESSD, NEA. The survey revealed that a total of 26.17 ha land has been acquired from 606 households for the placement of tower pads and substations. Of the affected land owners, there are 6 schools, one medical college/hospital, one cement factory and 2 small temples. The amount of affected land is high in Sunsari (9.43 ha) and Dhanu (7.95 ha.) districts and low in Makawanpur district (0.39 ha). The amount of land loss is high in Sunsari and Dhanusha districts due to land acquisition for sub-station construction.

**Table 7.4 Land Acquisition details including Indigenous and Dalit Households**

District	Caste/Ethnicity				Total Affected Land (ha)	Remarks
	Indigenous People	Dalits	Others	Total Affected Owners		
Makawanpur	7	1	33	41	0.39	Public notice published in Gorkhapatra on 2071-11-6 (February 18, 2015). Names of 6 owners unidentified.
Sarlahi	5	1	45	51	0.8	Public notice published in Gorkhapatra on 2071-12-12 (March 15, 2015). One parcel of land owned by Shree Pra, Bi, Atrali.
Dhanusha	12	6	55	73	7.95	Public notices published in Gorkhapatra on 2070-10-13 (January 27, 2014), 2071-1-23 (May 6, 2014), 2071-5-4 (August 20, 2014), 2072-2-27 (June 10, 2015). Two parcels of land owned by school (Shree Ni. Ma.Bi), Bhiman

Siraha	84	5	88	177	4.25	Public notices published in Gorkhapatra on 2070-11-29 (March 13, 2014), 2071-1-16 (April 29, 2014), 2071-5-5 (August 21, 2014), 2071-12-12 (March 25, 2015 and 2072-2-29 (June 12, 2015). Three parcels owned by Sayura Cement Pvt. Ltd, Karjana, one parcel owned by Sanjiwani Medical Collage and Hospital, Bastipur, one parcel of irrigation canal, Badaharamal, one parsal of Shree Thakurjee Temple, Badaharamal, one parcel owned by Shree Jansewa High School, Karjana and one parcel owned by Public Middle School of Lalpur.
Saptari	22	11	211	244	3.2	Public notices published in Gorkhapatra on 2071-6-5 (September 21, 2014), 2071-7-5 (October 22, 2014), 2071-8-8 (November 24, 2014) and 2071-12-16 (March 30, 2015). One parcel owned by Shree Manilal Janata High School, Kushaha, Madhupatti and one parcel owned by Ramjanaki Temple. Theliya Primary School.
Sunsari	6	9	2	17	9.43	Public notice published in Gorkhapatra on 2071-9-7 (December 22, 2014).
Rauthat	0	0	2	2	0.04	
Mahottari	0	0	1	1	0.11	
Total	136	33	437	606	26.17	
Percent	22.44	5.45	72.11	100	-	

Source: Public notices published by District Administration Offices in Gorkhapatra for land acquisition 2014/2015

Out of the total acquired land 4.85 ha is acquired from 136 households of indigenous/Janjati communities. This land is 3.12% of their total landholding and 18.55% of the total land acquired for the project. Saptari is highly affected district in terms of area acquired and number of indigenous households affected (Table 7.5). The details of land acquired from the indigenous/Janjati household and their land holding is given in Annex-XI.

**Table 7.5: Details of Land Acession from Indigenous/ Janjati HHs**

SN	VDC/Mun.	Ward	Name	Total Land owned (Kattha)	Affected Land (Kattha)	% loss
<b>Sunsari District</b>						
1	Singiya	2	Lok Bdr Majhi	2	0.5	25
2	Mahendranagar	3	Sukha Dhoj Limbu	8	1	12.5
3	Mahendranagar	3	Tika Bahadur Tamang	14	1	7.14
4	Mahendranagar	3	Rupa limbu	20	1.2	6
5	Mahendranagar	8	Bir Bahadur Rai	30	1.7	5.67
6	Mahendranagar	3	Muna Thapa Magar	20	1	5
	<b>Sub total (Kattha)</b>			<b>94</b>	<b>6.4</b>	<b>10.22</b>
<b>Saptari District</b>						
1	Vakduwa	7	Sita Maya Rai	5	0.675	13.5
2	VaruwaKhal	9	Sona Kumari Chaudhary	11	1.4	12.73

3	Khojpur	8	Bilat Chaudhary	15	1.7	11.33
4	Goganpur	9	Digambar Bdr shrestha	17	1.875	11.03
5	khojpur	6	Enral Chaudhary	18	1.85	10.28
6	Pansera	6	Raj Kumari Devi Chaudhary	10	1	10
7	VaruwaKhal	9	Kastu Chaudhary	10	0.95	9.5
8	Vakduwa	9	Ganesh Kr Magar	8	0.65	8.13
9	Pansera	7	Andu Chaudhary	13	0.95	7.31
10	Kusaha	2	Chauthanai Wati Chaudhary	13	0.925	7.12
11	Kalyanpur	1	Lilawati Devi Chaudhary	16	1.05	6.56
12	Khoksarparwa	7	Sita devi chaudhary	12	0.7	5.83
13	Pansera	5	Panchu Chaudhary	20	1.15	5.75
14	Madhupatty	5	Dukhani devi Chaudhary	10	0.5	5
15	Vangaha	8	Bishow Nath Chaudhary	20	0.95	4.75
16	Vangaha	7	Sanjana Chaudhary	20	0.95	4.75
17	kalyanpur	3	Birbal chaudhary	40	1.85	4.63
18	Kusaha	2	Hari Kr Chaudhary	20	0.9	4.5
19	Vakduwa	9	Bhuuti Devi Tharuni	20	0.9	4.5
20	Kusaha	2	Pampa Devi Tharuhni	15	0.6	4
21	Varuwakhal	5	Urmila Kumari Chaudhary	20	0.8	4
22	VaruwaKhal	1	Rm Kumar Chaudhary	25	0.95	3.8
23	Madhupatty	5	Ganaur Chaudhary	12	0.45	3.75
24	Goganpur	9	Purna Maya Shrestha	17	0.625	3.68
25	Madhupatty	4	Urmila KumariChaudhary	30	0.95	3.17
26	Kushaha	8	Sukarlal Chaudhary	30	0.95	3.17
27	Khosarparwa	3	Harihar Chaudhary	30	0.95	3.17
28	Kusaha	1	Kari Chuadhry	15	0.45	3
29	Mohanpur	5	Janaki Devi Chaudhary	10	0.3	3
30	Jandol	9	Bhatu Chaudhary	20	0.575	2.88
31	Jandol	9	Gundev Chaudhary	30	0.825	2.75
32	Madhupatty	8	Anand Narayan Chaudhary	20	0.5	2.5
33	Pansera	6	Jholai Chaudhary	20	0.5	2.5
34	Vangaha	4	Ram Lagan Chaudhary	20	0.5	2.5
35	Khosarparwa	3	Anil Kumar chaudhary	15	0.375	2.5
36	Theliya	5	Bir Bahadur Rana Magar	10	0.25	2.5
37	Parasbani	3	Dev raj Chaudhary	40	0.95	2.38
38	Vakduwa	7	Dropati Chaudhary	30	0.7	2.33
39	Vangaha	5	Tej Narayan Xchaudhary	20	0.425	2.125
40	Kusaha	2	Volahi Chaudhary	18	0.375	2.08

41	Khosarparwa	7	Chandan Chaudhary	30	0.6	2
42	Parasbani	5	Mahani devi Tharuni	30	0.6	2
43	Sitapur	3	Jhallu Chaudahary	50	1	2
44	VaruwaKhal	2	Dharma lal Chaudhary	50	0.95	1.9
45	Sitapur	3	Tek Narayan Chaudhary	50	0.95	1.9
46	Sitapur	1	Resham Lal Chaudhary	50	0.95	1.9
47	Theliya	1	Kannan Chaudhary	40	0.75	1.88
48	Mohanpur	5	Lilam Devi Chaudhary	40	0.7125	1.78
49	Sitapur	1	Aasa Chaudhary	60	0.95	1.58
50	Parasbani	5	Yogenra Pr Chaudhary	40	0.575	1.44
51	Vakduwa	9	Jay kumari Chaudhary	60	0.775	1.29
52	Goganpur	9	Harka narayan Shrestha	17	0.2	1.18
53	Dharmpur	8	Parasu Ram Chaudhary	50	0.575	1.15
54	Madhupatty	7	Ramnarayan Chaudhary	40	0.45	1.13
55	Sitapur	3	Laxmi NarayanTharu	40	0.4	1
56	Daulatpur	2	Prithivi Lal Lekhi	20	0.175	0.88
57	Rupnagar	2	Man kishan Shrestha	20	0.175	0.88
58	Jandol	9	Mahesh Chaudhary	70	0.6	0.86
59	Madhupatty	6	Adhi lal Chaudhary	30	0.25	0.83
60	Vakduwa	9	Dewananda Lekhi	30	0.25	0.83
61	Vangaha	4	Ram Charitra Chaudhary	20	0.15	0.75
62	Vangaha	4	Dev raj Chaudhary	40	0.3	0.75
63	Vangaha	7	Deveshwor Chaudhary	140	0.95	0.68
64	Kusaha	2	Vikhan Chaudahry	20	0.125	0.63
65	Jandol	9	Durga Naha Chaudhary	20	0.125	0.63
66	Sitapur	3	Mahbir prasad Chaudhary	160	0.95	0.59
67	Goganpur	9	Man Kumar Shrestha	10	0.05625	0.56
68	Jandol	8	Keshar Prasad Chaudhary	20	0.1	0.5
69	Jandol	9	Parsuram Chaudhary	5	0.025	0.5
70	Theliya	5	Ramnanda Chaudhary	50	0.225	0.45
71	Khoksarparwa	7	Aasawati Chaudhary	40	0.175	0.44
72	Khoksarparwa	7	Amarkant chaudhary	40	0.125	0.31
73	Kusaha	1	Nathari Devi Chaudhary	70	0.2	0.29
74	Vakdwa	7	Shyam dev chaudhary	18	0.05	0.28
75	Sitapur	1	Mallu Chaudahry	36	0.1	0.28
76	Daulatpur	9	Chandra kala Tharuni	70	0.175	0.25
77	Jandol	9	Magan Chaudhary	40	0.1	0.25
78	VaruwaKhal	3	Balum Tharu	60	0.15	0.25
79	Sitapur	8	Pratham Lal Chaudhary	40	0.1	0.25

80	Daulatpur	7	ChandraKant Chaudahary	80	0.175	0.22
81	Vakduwa	9	Man Bhura Chaudhary	30	0.05	0.17
82	Pansera	6	Pratp Chanda Chaudahry	40	0.05	0.13
83	Jandol	8	Dulari Devi Chaudhary	25	0.025	0.1
84	VaruwaKhal	4	Sarswoti Kumari Chaudhary	80	0.025	0.03
	<b>Sub total (Kattha)</b>			<b>2716</b>	<b>50.32</b>	<b>2.94</b>
<b>Siraha District</b>						
1	Badharamal	5	Jugal Pr Rai	80	1.05	1.31
2	Golbazar Municipality	3	Ratna Kumar Pulami	120	0.08	0.06
3	Dhanghadimai	10	Lok bd. Mashrangi Magar	19	0.01	0.07
4	Dhanghadimai	10	Balbahadur Mashrangi Magar	26	0.46	1.78
5	Dhanghadimai	10	Manbahadur Mashrangi Magar	19	0.51	2.7
6	Karjhana	2	Muglal Shrestha	30	0.6	2
7	Karjhana	2	kalu Shrestha	15	0.45	3
8	Golbazar Municipality	2	Birlal Tamang	20	0.05	0.25
9	Golbazar Municipality	2	Gyan Kumar Tamang	30	0.58	1.92
10	Golbazar Municipality	3	Kariman Pulami	240	1.05	0.44
11	Golbazar Municipality	10	Bal BD. Magar	10	1.05	10.5
12	Golbazar Municipality	10	Dorje Jimma	40	6	15
13	Golbazar Municipality	10	Butimaya Tamang	100	1.05	1.05
14	Golbazar Municipality	10	Fulmati Tamang	13	0.3	2.31
15	Dhangadimai Municipality	9	Gore Yonjan Tamang	30	1.05	3.5
16	Padariya	1	Bilat Chaudhary	24	1.08	4.48
17	Padariya	5	Chedi lal Chaudhary	30	1.05	3.5
18	Bastipur	5	Kashilal Chaudhary	50	0.83	1.65
19	Padariya	1	Dev Narayan Chaudhary	80	0.98	1.22
20	Padariya	2	Nanuwati Chaudhary	7	0.08	1.07
21	Bastipur	5	Ramu Chaudhary	60	0.53	0.88
22	Mirchiya	2	Harinarayan Shrestha	33	12.8	38.79
	<b>Sub total (Kattha)</b>			<b>1076</b>	<b>31.61</b>	<b>4.43</b>
<b>Dhanusha District</b>						

1	Ganeshman Charnath Municipality	6	Purna BD. Thapamagar	12	4.4	36.67
2	Mithila	4	Julphe Dumjan	18	11.4	63.33
3	Mithila	4	Ojirnam Yonjan	10.5	0.6	5.71
4	Dhanuadham	7	Prithivi Bdr Tamang	1.5	0.59	39.17
5	Dhanuadham	9	Check Pani Moktan	11.5	0.95	8.26
6	Mithila	7	Janakai Maya Tamang	4	0.64	15.94
7	Mithila	4	Sukmaya Tamang	20	9	45
8	Mithila	4	Chandra Bdr Moktan	20	6	30
9	Mithila	4	Nema maya Tamang	11.5	3.8	33.04
10	Ganeshman Charnath Municipality	5	Dhana Maya Shrestha	57	1.11	1.95
11	Dhanushadham	9	Bishnu Bd. Tamang Domjan	30	0.7	2.33
12	Dhanushadham Municipality	9	Bishnu Bd. Tamang Domjan	30	0.7	2.33
	<b>Sub total(Kattha)</b>			<b>226</b>	<b>39.89</b>	<b>23.65</b>
<b>Sarlahi District</b>						
1	Karmaiya	6	Januka Devi Shrestha	20	1.7	8.5
2	Karmaiya	2	Isha Maskey	86	1.7	1.98
3	Dhungrekhola	1	Tulamaya Susling	1.5	0.49	32.5
4	Hariwon Municipality	1	Laxm devi Shrestha	30	0.95	3.17
5	Hariwon	8	Sangram Singh Waiba	50	0.95	1.9
	<b>Sub total(Kattha)</b>			<b>187.5</b>	<b>5.79</b>	<b>9.61</b>
<b>Makwanpur District</b>						
1	Chhatiwan	8	Singh Bd. Thing	36	1.5	4.17
2	Chhatiwan	8	Santa Lal Thing	46	1.75	3.8
3	Chhatiwan	9	Motilal Sigar	85	1.95	2.29
4	Chhatiwan	8	Jyoti Bal	3	0.5	16.67
5	Chhatiwan	8	Sukumaya Thokar	29	1	3.45
6	Chhatiwan	8	Aaiman Dong	45	1	2.22
7	Chhatiwan	9	Mangal Bd. Majhi	45	1.5	3.33
	<b>Sub total(Kattha)</b>			<b>289</b>	<b>9.2</b>	<b>5.13</b>
	Total in Kattha			4588.5	143.21	
	Total in ha			155.55	4.85	3.12

Source: Field Survey 2015

Out of the total acquired land 1.98 ha has been acquired from 33 households of Dalit communities. This land is 3.12% of their total landholding and 7.56% of the total land acquired for the project. Out of the total land acquired for the project Sunsari is highly affected district in terms of area acquired followed by Siraha and Saptari districts. The details of land acquired from the Dalit household and their land holding is given in Annex-XII.

**Table 7.6 Details of Land Acedquisition from Dalit HHs**

SN	VDC/Mun.	Ward	Name	Total Land owned (Kattha)	Affected Land (Kattha)	% loss
<b>Sunsari District</b>						
1	Bokhara	7	Jogindar Mushar	8	4	50
2	Bokhara	7	Ram Prasad Mandal	20	9	45
3	Bokhara	7	Sambhu mandal	30	6	20
4	Bokhara	7	uma Devi Mandal	20	3.2	16
5	Bokhara	7	Laxmi Mandal	64	7	10.94
6	Bokhara	7	Sanjeev Mandal	80	5.4	6.75
7	Dumra	9	Parmila Khatwe	9	0.3	3.33
8	Singiya	9	Man Kumari Bk	20	0.6	3
9	Singiya	8	Bir Bdr kami	40	0.33	0.81
	<b>Sub total</b>			<b>291</b>	<b>35.83</b>	<b>12.31</b>
<b>Saptari District</b>						
1	Vakduwa	7	Nar Bdr B.K	3	1.25	41.67
2	Theliya	1	Maja devi Ram	5	0.975	19.5
3	Madhupatty	7	Ram devi mochi	6	1	16.67
4	Madhupatty	7	Lukhiwati Chamar	8	0.675	8.44
5	Sitapur	3	Sita Devi Das	10	0.5	5
6	kalyanpur	1	Suklal Mandal	20	0.95	4.75
7	Khojpur	8	Jago Devi Mochi	20	0.85	4.25
8	Vakduwa	7	Kaji Bdr Sarki	2	0.08	3.91
9	Vangaha	5	Neb Kumar Das	11	0.03	0.23
10	Daulatpur	2	Khusi lal Das	18	0.43	2.36
11	Dharpur	8	Rajdhobi	40	0.6	1.5
	<b>Sub total</b>			<b>143</b>	<b>7.33</b>	<b>5.12</b>
<b>Siraha District</b>						
1	Badharmaal	5	Jaylal Das	13	1	7.69
2	Badharmal	5	Dinesh Das	10	0.05	0.5
3	Badharmal	7	Murari Bishwokarma	20	8	40
4	Golbazar Municipality	2	Shyam Suner Mandal	23	0.93	4.02
5	Bastipur	5	Jhumra mochi	19	0.48	2.5
	<b>Sub total</b>			<b>85</b>	<b>10.45</b>	<b>12.29</b>
<b>Dhanusa District</b>						
1	Ganeshman Charnath Municipality	1	Ram Dulari Mandal	18	0.6	3.33
2	Mithila	7	LilaMaya B.K	2	0.14	7.03
3	Mithila	3	Harilal Mochi	17	1	5.88
4	Mithila	3	Ram Lal Mochi	8	1	12.5

5	Mithila	4	Hari Prasad Mandal	10	0.15	1.5
6	Pushwalpur	7	Luk Bahadur Kami	13	0.13	0.96
	<b>Sub total</b>			<b>68</b>	<b>3.02</b>	<b>4.43</b>
<b>Sarlahi District</b>						
1	Hariwon Municipality	9	Subash Bika	14	0.64	4.55
	<b>Sub total</b>			<b>14</b>	<b>0.64</b>	<b>4.55</b>
<b>Makwanpur District</b>						
1	Chhatiwan	8	Buddhi Bd. B.K.	10	1	10
	<b>Sub total</b>			<b>10</b>	<b>1</b>	<b>10</b>
	<b>Total in Kattha</b>			<b>611</b>	<b>58.26</b>	<b>9.53</b>
	<b>Total in ha</b>			<b>20.71</b>	<b>1.98</b>	<b>9.56</b>

Source: Field Survey 2015

Of the total affected (136nos) indigenous caste/ethnicity Tamang (1.81 ha) is highly agected caste in terms of area of land acquired followed by Tharu (1.71 ha) and Newar (0.75 ha).

**Table 7.7: Caste/ethnicity Wise Land Acequisition from Indiginous HHs**

SN	Caste/Ethnicity	No. of HHs	Total Land owned (ha)	Affected Land (ha)	% loss
1	Chaudhary/Tharu	82	97.06	1.71	1.76
2	Majhi	2	1.59	0.07	4.26
3	Limbu	2	0.95	0.07	7.86
4	Rai	3	3.9	0.12	2.98
5	Tamang	25	23.71	1.81	7.65
6	Magar	10	16.41	0.32	1.96
7	Newar	12	11.93	0.75	6.32
	<b>Total</b>	<b>136</b>	<b>155.55</b>	<b>4.85</b>	<b>3.12</b>

Source: Field Survey 2015

Of the total affected (33nos) Dalit caste/ethnicity Mandal (1.14ha) is highly agected caste in terms of area of land acquired and number of households affected followed by Biswakarma (0.41ha) and Chamar (0.20ha).

**Table 7.8: Caste/ethnicity Wise Land Acequisition from Dalit HHs**

SN	Caste/Ethnicity	No. of HHs	Total Land owned (ha)	Affected Land (ha)	% loss
1	Mandal	10	9.97	1.14	11.4
2	Das	5	2.10	0.07	0.81
3	Biswakarma	8	4.14	0.41	9.9
4	Chamar	7	2.81	0.20	7.2
5	Others (Musahar, Sarki, Dhobi)	3	1.7	0.16	9.36
	<b>Total</b>	<b>33</b>	<b>20.72</b>	<b>1.98</b>	<b>9.56</b>

Source: Field Survey 2015

The project has also acquired 2.63 ha land from 64 women headed households. The number of affected women headed household is high in Siraha district in terms of (64%) number and area. The area of Sunsari is also high due to acquisition of land in substation area. The details of land acquired from the women headed household and their land holding is given in Annex-XIII.

**Table 7.9: Land Acquired from Womenheaded Households**

SN	Distrcits	No. of HHs	Total Land owned (ha)	Affected Land (ha)	% loss
1	Sunsari	5	8.88	1.92	21.58
2	Saptari	17	15.36	0.28	1.82
3	Siraha	40	70.22	2.63	3.74
4	Sarlahi	2	0.98	0.06	5.65
	<b>Total</b>	<b>64</b>	<b>95.44</b>	<b>4.89</b>	<b>5.12</b>

Source: Field Survey 2015

### 7.3.2 Acquisition of House and Other Structures

Due to the construction of the project, altogether 26 structures consisting 17 houses, 8 both houses and cowshed and one private owned religious structure (Mane) will be acquired for the project. Altogether 25 households of indigenous group will be affected due to acquisition of structure.

**Table 7.10: Acquisition of Structures**

Caste/Ethnicity	No. of Affected HH	Structure Type				
		House	Cowshed	Both	Other (Mane)	Total
Tamang	10	6	0	4	1	11
Shrestha	3	0	0	3	0	3
Majhi	1	0	0	1	0	1
Pahari	9	9	0		0	9
Bhujel	2	2	0			2
<b>Total</b>	<b>25</b>	<b>17</b>	<b>0</b>	<b>8</b>	<b>1</b>	<b>26</b>

Source: Field Survey 2015

The affected structures are mostly made up of wood and tyal wood and corrugated sheet and concrete structures.

### **7.3.4 Loss of Agricultural Production and Associated Income**

The project will acquire a total of 26.17 ha of cultivated land permanently for the placement of tower pads and substations from vulnerable households. Of the affected land 80% is cultivated. The average production of paddy, wheat and oilseed in project area is 3.62 MT, 2.58 MT and 0.91 MT respectively. Due to the land acquisition there will be loss of 75.79 MT paddy, 32.41MT wheat, 4.06 MT pulses, 5.23 MT maize and 3.81 MT oilseeds considering two crops in a year.

### **7.3.5 Livelihood**

Agriculture, wage/labor employment and remittance are the major income sources of the project affected vulnerable households. Most of the vulnerable households are poor and marginalized farmers. The acquisition of cultivated land, residential house and associated structures by the project will have direct impact on their livelihood. There will be annual loss of 121.30 MT food grains annually due to acquisition of land. The previous study conducted for the project shows that 62.96 % of the surveyed households have food deficit since their production is not able to meet the year round food requirement of their family. The acquisition of land will add further pressure on the majority of the PAFs household already facing food deficit problem.

## **8. MITIGATION AND ENHANCEMENT MEASURES**

### **8.1 Mitigation Measures**

The details of the mitigation measures for all identified social impacts are presented in IEE, SIA and RAP documents prepared for the project. The VCDP report covers some additional measures at household level and mostly community based enhancement programs.

#### **8.1.1 Compensation for the Land**

The private land acquired by the project being compensated as per the rate fixed by the Compensation Fixation Committee. The committee has been formed under the chairmanship of Chief District Officer of the concerned district and includes chairman of affected VDCs, representative of affected people, representative of Land Revenue Office and Project.

Land has been acquired according to Land Acquisition Act 2034. Considering the limitations of the Land Acquisition Act, 2034 (1977) recommendation of the IEAA, SIA and RAP document has been considered while determining the rates.

In addition to compensation additional mitigation programs were proposed based on the percentage of the land loss and loss of agriculture income. In IEE, SIA and RAP documents prepared for the project. Some of the major activities are mentioned below.

- Cash compensation at replacement cost is proposed for the household's losing less than 10% of their total cost.
- HHs losing 10-50% of their total land will receive compensation equivalent to the total loss of agriculture income from the acquired land for livelihood restoration for one year in addition to compensation of land. Besides this one family member of each household will be provided livestock/agriculture training and assistance based on their interest. This will include distribution of hybrid seed, small agriculture tools and livestock (goat/pig, poultry). Further one family member of each household will be provided technical training in the areas of driving, plumbing, house wiring as per their interest. Beside this due priority will be given to the concerned household for employment during construction.
- HHs losing above 50% of their total land will receive compensation equivalent to the total loss of agriculture income from the acquired land for livelihood restoration for one year in addition to compensation of land. In addition repair and maintenance of mechanical and electrical equipment and advance house wiring training/motor rewinding training will be given to one member of each household's falls under this category. Employment shall be provided one member of each affected household during the construction phase.

#### **8.1.2 Compensation for Acquisition of Structures**

The project proponent will provide compensation at replacement cost for the structures acquired by the project. This will include compensation for land occupied by the structure and cost of the structure

and other accessories (hand pump, well). Owners will have the right to use salvage materials from the affected buildings. The value of salvaged materials will not be deducted from the compensation amount.

A house rent allowances for 6 months will be paid to the concerned household at the rate of Rs. 2500/months assuming that a new house will be constructed within that period. Besides this a one time dislocation allowance Rs. 15000 and Rs. 10000 transportation allowance per household will be provided for transportation of goods and materials. These households shall also be eligible to receive compensation and other benefits as per the criteria of land and agriculture income loss.

### **8.1.3 Compensation for Loss of Standing Crop**

Construction work has been schedules and will be conducted further to avoid cropping season. People of the concerned land will be informed in advance so that these disturbances can be minimized. Compensation will be provided immediately for loss of crop by measuring the actual disturbances .

### **8.1.4 Livelihood Restoration Program**

The livelihood restoration program will include compensatory plantation to the nearby area to expand the forest cover as well as income of the concern community forest. Income generating species will be selected for plantation to increase income level of the forest users group. To restore the loss of agriculture income training program for agriculture extension, vegetable farming and livestock support will be conducted. In addition different type of skill development training will be provided to the concerned households to restore their income from other sources. Due priority will be given in project employment which will also enrich their economic status.

In addition to above mentioned activities given in IEE, SIA and RAP document the following additional livelihood improvement and income generation activities are proposed for the vulnerable households based on the household survey, and consultation meetings conducted along the alignment.

#### ***Agriculture and livestock support***

There is high potentiality in the area of agriculture and livestock sectors for increasing income of the IP, *Dalits* and other vulnerable groups. The project will support modern Agricultural Farming/Livestock Farming Training to 160 *Dalits* and *Janajatis*. This will be provided to the affected households and households having potential areas of agriculture and livestock development. The following areas will be covered in training Seasonal/off-seasonal vegetable, and cash crops production

- Soil test, organic farming
- Fodder/grass production
- Goat, piggery,
- Fishery
- Horticulture

After completion of training, necessary assistance for agricultural tools and seeds will be provided to concerned people.

#### ***Fishery Support***

The project will provide support for fishery at Bishrampur of Mithila, Dhanusha and other place as required.

#### ***Horticulture Development***

The project will provide support for distribution of fruit saplings and NTFPs to poor *Dalits* and *Janajatis households*. The training on NTFPs and Horticulture development shall also be provided to

poor *Dalits* and *Janajatis*. The budget required for the training will be covered under budget allocated in IEE report.

### ***Skill training***

Skill training for the PAFs losing more than 50% of their total land is proposed for 89 identified households including households losing structures in IEE and RAP conducted for the project. This number was proposed based on the households affected by angle towers and available details for structures falls in RoW. The present data shows that this number is not sufficient and affected households requiring training are more. Hence considering the request of *Dalit* and *Janajati* community skill training program for *Dalit/Janajati* PAFs is proposed in VCDP. The project will provide skill training to interested and qualified one selected family member of *Dalit*HHs as well as Women-headed and marginalized selected *Janajati* households who has lost their land/structure and/or income due to the project. Priority shall be given to the female candidate for the mentioned trainings. The suggested areas of the skill training are:

- Electrical wiring
- Repair and maintenance of mechanical/electrical/electronic equipments
- Plumbing/welding
- Mobile/TV/Radio Repair
- Driving
- Computer Hardware Technician
- Sewing/Knitting/weaving

## **8.2 Enhancement Measures**

The enhancement measures proposed in VCDPreport are based on assumptions that the directly affected people will be compensated as per the provisions of IEE, SIA and RAP of the project, and enhancement measures are required only for the indirectly affected vulnerable groups (IPs, Dalit and women headed households) for their socioeconomic upliftment as additional measures. In addition to enhancement measures mentioned below the vulnerable people will also get benefit for the enhancement programs mentioned in IEE and SIA documents prepared for the project.

As a prime responsibility, the proponent will implement proposed enhancement measures at household as well at community level to minimize the impacts of the TL project on the vulnerable groups. Following enhancement measures are proposed to support the vulnerable groups of the project area improving their quality of life. As the area is large, peoples expectation are high and resource constraints to fulfill their all demands/need, priority has been given to support the most vulnerable groups/community living close to TL of the area while designing the enhancement measures. Due priority has also given to cover the entire stretch while designing the enhancement activities.

### **8.2.1 Awareness Raising Program**

As most people of the project area are poor and illiterate, misinformation regarding the high voltage line and its adverse impact on human and animal due to its electromagnetic fields, risk of electrical hazards is one of the key concerns of the target people of the area. Similarly because of illiteracy and lack of information and communication, most of the vulnerable groups of the area are unaware of available public services/ facilities provided by the government agencies (health, education, agriculture etc.) that could help to improve their quality of life. Similarly, in absence of proper information and communication regarding the importance of TL for development, due to vested interest of some better-off people of the area (in terms of compensation, employment, contract,

political say, and shifting alignment) has also created negative attitude among the common public regarding the project. Therefore, it is an utmost important issue to address on time to create positive environment for quick project complementation on the one hand as well as on the other to support the vulnerable and ingenious community to improve their quality of life through different information, education, and communication interventions.

Therefore, mass awareness raising programs regarding the importance of TL project, beneficial impacts of the project to the people and nation, project's impacts on health and precautionary measures, importance of formal and non formal education, available public services/opportunities to the targeted vulnerable people/area (health, education, agriculture, drinking water and sanitation etc.) through different IEC activities is essential. Thus, ten number of awareness raising programs, each of oneday, will be organized under VCDP at *Dalit* and *Janajati* settlements located nearby the transmission line. If this number is not sufficient, further programs will be organized from the budget of environmental management cost. Total of 500 *Dalit* and *Janajati* individuals are expected to be benefitted by the program.

## 8.2.2 Community Infrastructure Support

As other parts of Nepal, there is lack of community infrastructures like, drinking water, school, and health facilities. Shortage of drinking water is one of the major problems particularly in the northern parts of the area. Similarly, poor physical facilities and infrastructure of educational institutions, lack of irrigation facility, poor status of rural access road, electrification etc. are the other problems of the area and access to these facilities are far particularly in the IP and *Dalit* communities. Therefore following enhancement measures are proposed to uplift their socioeconomic status.

### 8.2.2.1 River Control

Local people reported river cutting problems in some areas that has created risk in their settlements and loss of fertile land of the marginal farmers and anticipated support for it. To minimize the risk of dalit and other settlements support for embankment of river at Chisapani Khahare at Nijgadh-4, Baghdev; Galphadiya, Tapeshwori area of Udaypur District; Sunsari Khola of Sunsari District and other places nearby dalit /janajati settlements are proposed. The detail of the river control program is as follows:

**Table 8.1: River Control Activities**

S.N.	Project Location	Beneficiary Households	Advantage of the program
1	Chisapani Khahare of Bagdev at Nijgadh Municipality, Bara District	15 HHs of Magar ( <i>Janajati</i> ) and 30 HHs of Biswakarma ( <i>Dalits</i> )	Protection of <i>Dalit</i> and <i>Janajati</i> settlement from river cutting. Control landslide of Chure foothills. Assist to conserve rivulets of manmade pond which irrigates agricultural land nearby and provides drinking water for wild animals.
2	Galphadiya of Tapeshwori VDC, Udayapur District,	200 HHs of Tamang ( <i>Janajatis</i> ), and other communities	The potential of flooding at the village because of clearance of bamboos along the rivulets and TL RoW will be controlled. Controls submergence of crops/soil erosion.
3	Sunsari Khola at Bokhara VDC of Sunsari District.	50 HHs of Musahar and Urau community ( <i>Dalits</i> )	Controls river cutting

Source: Field Survey 2015

Besides above mentioned locations, the river control programs may also be implemented at other locations, nearer to the *Dalit* and *Janajati* settlements, depending upon the necessity of the program and availability of budget. The programs will either be implemented through beneficiary (user) groups or through a contract.

### 8.2.2.2 Drinking water

Drinking water is another major concerns of dalit and indigenous community of the project area, Support for installation of hand pumps at Musahari tole of Bhagbatpur, Mirchaiya-8, Siraha; Dumraha Musahari Tole of Sunsari; Golbazar-10, Siraha and other places (up to 30 in numbers) are proposed to address the problem. The detail of the support is as follows:

**Table 8.2: Drinking water Schemes**

S.N.	Project Location	Beneficiary Households	Advantage of the program
1	Musari Tole of Bhagbatpur, Mirchaiya, Siraha	15 HHs of <i>Dalits</i> (Sada), and other 50 HHs of <i>Janajatis</i> residing nearby.	Solve the current problem of drinking water.
2	Musari Tole of Dumraha, Sunsari	85 HHs of <i>Dalits</i> (Sada).	Solve the current problem of drinking water.
3	Mushari tole of Golbazar, Siraha	32 HHs of <i>Dalits</i> (Sada).	Solve the current problem of drinking water.

Source: Field Survey 2015

Besides above mentioned locations, the drinking water support program may also be launched at other *Dalit* and *Janajati* settlements, depending upon the necessity of the program and availability of budget.

### 8.2.2.3 Irrigation Schemes

The IP and *Dalits* of the area have small holding and could not grow enough food for subsistence. Lack of irrigation facility is one of the major constraints to increase their agriculture production and crop diversification (cash crops, vegetable farming). Support for small scale irrigation schemes, improvement of existing irrigation systems, renovation, improvement of ponds and distribution of water pump are proposed at Chiyabari of Ayodhyanagar located at Siraha district and other *Dalit* and *Janajati* settlements in order to increase the agriculture production and crop diversification.

### 8.2.2.4 Health and Sanitation

Health and sanitation facilities are very poor in *Dalit* settlements. Most of the households lack toilet facilities and open defecation in field and road side is a common practice. The project will support for toilet construction at Maisthan of Mahottari; Chhaghariya Maharatole of Dhanusha; Jiyatole of Mirchaiya, Siraha; and other relevant places of *Dalit/Janajati* settlements (up to 50 toilets) to improve the health and sanitation situation of the area.

### 8.2.2.5 Education

The existing infrastructure in local schools is not adequate and requires support. People of the area are expecting support for public schools located in/near the IP and *Dalits* settlements to strengthen their

physical facilities i.e. building (school/library), drinking water, toilet and renovation works. These supports will be provided through community support program mentioned in IEE and SIA report prepared for the project hence separate budget is not proposed for these activities. The school dropout of Dalit household is very high in project area. Use of child labor, lack of awareness and low economic status are the possible reason of such drop out. To increase the enrollment of dalit households education material/dress support and other supports to poor *Dalit* students studying at public schools (for up to 10 schools) is proposed. The type support provided to a particular school and *Dalit* students studying will be determined based on need assessment which will be carried out in detail during program implementation. The beneficiary school shall also be selected based on the number of *Dalit* students studying and their economic status, availability of infrastructures and others in due consultation with the school management and concerned stakeholders. Poor *Dalits* students will be the main beneficiary group under this support program.

In addition awareness raising regarding education to children, health and personal hygiene of children will also be conducted in major *Dalit* settlements nearer to the transmission line alignment.

#### **8.2.2.6 Protection of Religious Sites**

Local people at some *Dalit* and *Janajati* communities demanded for the protection of religious sites, temples that are located under RoW of the TL alignment or nearby the project area. The temples or other religious sites affected by the project structures will be relocated in nearby areas in consultation with the local communities. The support will be provided for relocation of temples/religious sites located at Bote Tole of Karmaiya (Sarlahi), Dhalkebar of Dhanusha, and others. Similarly other small scale assistance will also be provided for the protection/management of religious/cultural sites located at Daulatpur of Saptari and other key areas. Consultation has been carried out with some of the stakeholders regarding the relocation such sites. The budget from the allocated environmental management cost will be used for this purpose.

#### **8.2.2.7 Plantation**

Local people reported that during construction of the TL, trees from their community forests were cleared at few localities and in process of clearance to other areas. Due to the clearance of forest the income of their community is reduced. The communities also requested for NTFP plantation in cleared areas. The study team informed that project will implement such activities as per approved report and norms of Ministry of Forest and Soil Conservation. Due emphasis will be given to mobilize the *Dalit* communities and plantation work will be prioritized in the areas occupied by *Dalit* community.

#### **8.2.2.8 Rural Electrification**

Some of the settlements of poor people nearby project area still not connected with electricity and expected support for poles and rural electrification. The rural electrification work will be supported through the allocated environment management cost of the project.

### **8.3 Mitigation and Enhancement Measures Matrix**

The mitigation and enhancement measures mentioned below are the additional mitigation and enhancement program proposed focusing the vulnerable communities. These communities will also benifitted from the enhancement measures mentioned in IEE and SIA document prepared for the

project. In order to avoid duplication the impact mitigation measures matrix is not prepared since household level and community level impacts will be managed as per approved SIA, IEE and RAP documents prepared for the project.

**Table 8.3: Details of Mitigation and Enhancement Measures**

Enhancement Measures						
Component 1: Awareness Program						
	Plans/ Activities	Locations	Beneficiary Number/ Caste/Ethnicities	Mechanism (Instruments/ Tools)	Time (When)	Agencies to be Consulted
1.Information Communication and Dissemination	i) Printing and distribution of Project related IEC materials	Major settlement of <i>Dalit</i> and Indigenous people including PAFs and other communities	All people including <i>Dalit</i> and Indigenous group and PAFs	Leaflets/Brochures	2016- 2017	Local NGOs working for <i>Dalit</i> and Indigenous Communities
	ii) Mass campaigning about Project's impacts on public health/diseases and safety measures, importance of education and environmental sanitation	Major settlement of <i>Dalit</i> and Indigenous people including PAFs and other communities	All people including <i>Dalit</i> and Indigenous group and PAFs	Delivery of lectures, reading materials, slides etc	2016- 2017	Local NGOs working for <i>Dalit</i> and Indigenous Communities
Component -2: Community Infrastructure Support						
1.River Embankment works	Construction of spurs/ dams to check river floods to settlements.	Simaltar area of Hetauda Sub-metropolitan City; Chisapani Khahare at Nijgadh-4, Baghdev; Galphadiya, Tapesh wori area of Udaypur District; Sunsari Khola of Sunsari District and other places nearby <i>Dalit /Janajati</i> settlements.	Many households of affected VDCs of <i>Dalit</i> and Indigenous communities live near the river banks	Technical assessment and construction of dams/ spurs	2016- 2017	District Disaster Prevention Office, DDC, VDC
2.Drinking water	Support for Installation of hand pumps	Musahari Tole of Bhagbatpur, Mirchaiya-8,	About 10-15 settlements of <i>Dalit</i> will be	Installation of hand pumps	2016- 2017	VDCs and local NGOs working for <i>Dalit</i> Communities

		Sarlahi; Dumraha Musahari Tole of Sunsari; Golbazar-10, Siraha and other places	benefitted			
3. Irrigation	Construction of new small scale irrigation scheme maintenance/ renovation of ponds and distribution of electric water pumps.	Irrigation support for Nijgadh – 4, Bagdev, Bara; Maintenance of Pond at Chiyabari, Ayodhyanagar, Siraha and other places as identified.	People of Dalit and Indigenous Communities along with others	Construction/renovation of irrigation schemes and distribution of electrical pumps.	2016- 2017	District Irrigation Office, User Groups, VDCs
4. Health and sanitation	Support for toilet construction in poor <i>Dalit</i> and <i>Janjati</i> settlements	Maisthan of Mahottari; Chhaghariya Maharatole of Dhanusha; Jiyatole of Mirchaiya, Siraha; and other relevant places of <i>Dalit/Janajati</i> settlements	50 HHs of <i>Dalit</i> and indigenous community will be benefitted	Assistance for construction of toilet at household level	2016-2017	VDCs
5. Education	- Infrastructure support to local school  -Education material/dress support	Assistance for library to Jandol, Mithila NP, Shreepuer Chatiwan, and construction of toilet, drinking water etc for Karma Pr. Bi, ward 8. (Urau community),  Poor <i>Dalit</i> students studying at public schools	Local government school close to alignment  The program will cover poor <i>Dalit</i> students of 10 government schools up to level 10.	Assistance from community support program  Assistance for dress and education materials	2016-2017	Local government school
6. <i>Religious sites</i>	Relocation of temples falls in RoW and substation	Construction of new temple in consultation with local communities	Local people along with <i>Dalit</i> and Indigenous community will	Construction of new temple	2016-2017	VDCs

		Small assistance to some temple of <i>Dalit</i> and <i>Janjati</i> communities	be benefitted <i>Dalit</i> and <i>Janjati</i> community will be benefitted	Renovation works		
7. Plantation	Plantation in the public land occupied by dalit community	Plantation in public land of <i>Dalit</i> community through compensatory plantation	<i>Dalit</i> community will be benefitted by availability of fodder and fuel wood and NTFP	Implementation of plantation and NTFP work through compensatory plantation.	2016-2017	District Forest Office, CFUGs and local communities.
8. Rural electrification	Rural electrification in nearby communities including dalit settlements	Provide wire, pole and or complete electrification work	Local community including <i>Dalit</i> and indigenous people	Assistance for pole, wire and complete electrification	2016-2017	Distribution and Consumer Service Directorate, NEA
<b>Mitigation Measures</b>						
<b>Component 3: Livelihood Improvement and Income Generation</b>						
1. Agriculture including cash crop production/diversification, and organic farming and Livestock	Seasonal and offseason vegetable farming including cash crop production (mushroom, turmeric, fruits etc), Modern agricultural farming practices and livestock training	169 <i>Dalit</i> and <i>Janjati</i> households	<i>Dalit</i> and <i>Janjati</i> households of the area	Assessment of potential products and supply of inputs/extension services and technologies, and livestock training including assistance	2016- 2017	District Agriculture Development Office
2. Fishery	Support for fish culture including training and assistance	Bishrampur of Mithila, Dhanusha and other place of <i>Dalit/Janajati</i> settlement.	<i>Dalit</i> households	Training and assistance for fish farming including distribution of fish fry, pellets and nets	2016- 2017	District Agriculture Development Office
3. Horticulture	Distribution of fruit sampling and technical assistance for plantation	10 <i>Dalit</i> and <i>Janjati</i> settlements	<i>Dalit</i> and <i>Janjati</i> households	Technical assistance for plantation and distribution of saplings of fruit plants	2016- 2017	District Agriculture Development Office
4. Vocational education and Skill Training	Electrical wiring, repair and maintenance of mechanical and electrical equipment, Plumbing/ Welding, Driving,	<i>Dalit</i> and <i>Janjati</i> PAFs from the project area	Affected HHs of <i>Dalit</i> and <i>Janjati</i> communities.	Need Assessment of the potential trainees; and conduct 390 hours training through institution affiliated	2016- 2017	CTEVT affiliated institutions found in project area

	Mobile/TV/Radio repair, Computer hardware technician, Sewing/knitting/weaving training to 120 PAFs of Dalit and selected <i>Janjati</i> communities.			with CTEVT		
--	--	--	--	------------	--	--

## 9. IMPLEMENTATION MECHANISM AND INSTITUTIONAL ARRANGEMENT

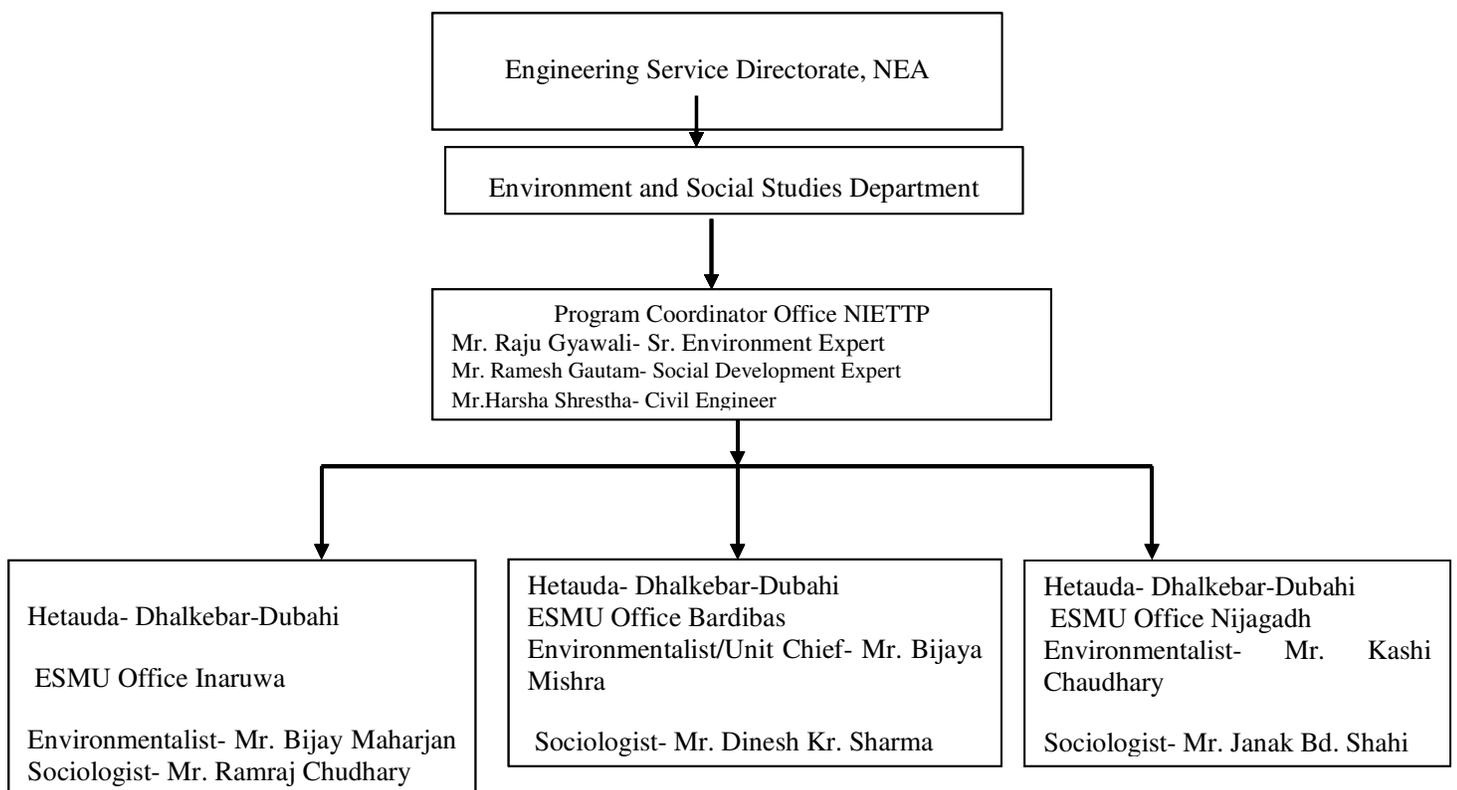
### 9.1 Institutional Arrangement

The overall responsibility of implementing this VCDP lies with Nepal India Electricity Transmission and Trade Project (NIETTP). The Environment and Social Studies Department (ESSD) of NEA which is mandated for environment and social studies and management of the project under taken by NEA will be responsible institution for the implementation of VCDP on behalf of the project. The department is currently involved in environment and social management of the Hetauda- Dhalkebar-Duhabi 400 kV line through its three unit offices. ESSD mobilized 3 full time sociologists and 3 environmental experts headed by Sr. environmental expert for the environmental and social management of the project. The ESMU offices are located at Nijagadh, Bardibas and Inaruwa covering the entire stretch of the transmission line. In addition Sr Socio-economists were mobilized from the department as required for specific task.

The department has created program coordinator office for the implementation of social and environmental program mentioned in SIA and IEE documents prepared for the project. The program coordinator office is headed by sr. Environmental expert and it consists one social development expert and one civil engineer. Same team will be mobilized for the VCDP implementation. The required support staff will be hired from the proposed implementation budget.

The department has prepared standing list of the local consulting firms, non governmental organizations and training institutions affiliated with CTEVT for skill training. The VCDP will be implemented by the existing organization system established for the environmental and social management of the project. The program will not be implemented by any other government organization. However necessary coordination and expert services if required will be taken from concerned district through program coordinator office. The department will seek services of local NGOs, training institutions and contractors as required.

#### Organization Chart for VCDP Implementation



ESSD will work in close coordination with the Project Director/Manager and section chief of the three section offices of the project, district level concerned offices. Specialized institutions/experts will be used for implementation of different tasks mentioned in VCDP.

The awareness raising program will be implemented by mobilizing local NGOs working in area of communication and information disclosure. Community infrastructure support program will be implemented by ESSD through users committee formed at local level or by mobilizing local contractor. The committee shall be registered at District Administration Office or concerned authorities and cost required for the implementation of program will be provided to the committee at periodic interval based on the progress made in the work. The community consultation, engineering design work and cost estimate will be done by ESSD. Plantation work will be done as a part of compensatory forestation program. The fishery and horticulture program will be implemented by ESSD in technical assistance of district level government offices and or local consultant. Training institution affiliated with CTEVT will be mobilized for implementation of skill development program.

## 9.2 Implementation Schedule

The Project will ensure that funds are delivered on time to implement the activities specified in the VCDP. Implementation of the VCDP will be completed in 12 months from the date of its implementation. The implementation schedule is as follows:

**Table 9.1: Implementation Schedule of VCDP activities**

S.No.	Activities	Quarterly Schedule					Implementation Responsibility
		(2016-2017)					
		12	1	2	3	4	
	Signing of MOU between project and ESSD						
1	Information Communication and Dissemination						ESSD
2	Implementation of community infrastructure support work						
a	Field investigation, cost estimate and design works						ESSD
b	Implementation of community infrastructure support work through users group or local contractor						ESMU

3	Plantation work in public land provided by dalit and indigenous communities including investigation of site, species to be planted and management plan						ESMU
4	Rural electrification						DCS/NIETTP
5	Livelihood and income generation						ESMU
a	Agriculture and livestock support including identification of the training needs, selection of local NGOs/resource person and implementation						ESMU
b	Fishery support						ESMU
c	Horticulture development						
6	Skill training including identification of the HHs for different training, selection of consulting firm and implementation of the training						ESSD
7	Monitoring and evaluation						ESMU
8	Reporting						ESMU

### 9.3 Grievance Redress Mechanism

At Project level, an effective grievance redress mechanism will be established to allow project affected persons (PAPs) to file or appeal any disagreeable decisions, practices and activities with which they are not satisfied. As part of the grievance redress mechanism (GRM), the PAPs will be made fully aware of their rights and the procedures to follow and also file their grievances in writing accordingly. The mechanism will also provide information to PAPs regarding how the complaints are filed, recorded and actions are taken to resolve the issues. ESSD is implementing 20 social awareness programs in project area focusing major settlements close to transmission line alignment. During social awareness the PAFs and communities will be informed regarding the grievances mechanism in the project with level details. The information can also be disclosed through posters and FM radio which is also included in ESSD budget under awareness program. The land Acquisition and Grievances Handling Officer will be accountable to ensure all complaints going to different forums get resolved. The ESMU office of the ESSD will be responsible for coordination, support to project for resolving the grievances, monitoring of the status of grievances received and periodic reporting to the ministry, NEA management and World Bank.

The PAPs will have unhindered access to the grievance redress officials to forward and file complains without being intimidated or being deterred by excessive bureaucratic hurdles. Furthermore, APs will

be exempted from all administrative fees incurred, pursuant to the grievance redressed procedures except for cases filed in court. Proposed mechanism for grievance resolution has four stages as given below in the Box - 1.

### **Box-1: Stages of Grievance Redress Mechanism**

**Stage 1: Land Acquisition and Grievances Handling Officer**

All PAPs along with concerned local people can complain on any aspects of VCDP implementation to the Land Acquisition and Grievances Handling Officer based in the field. The officer will review the grievance, visit the site if necessary to assess the issues and arrange meeting with the APs and other people in the community to settle the disputes informally or formally. Such meeting or consultation with the involvement of officer and village level leaders will be helpful to come up with a proper solution. It will be the responsibility of the concerned officer to resolve the issue within 15 days from the date of the complaint received. The Land Acquisition and Grievances Handling Officer will be assisted by the staff of the project and ESMU unit offices.

**Stage 2: Project Director /Manager**

If no understanding or amicable solution is reached or no response made from the Communication Officer as mentioned in Stage 1, the APs can appeal to the Project Director/Manager with his complaint. The PMO verify the issues and hold a joint meeting with the representative of the complaining community/individual, Project field staff, Environment and Social Management Unit (ESMU) Chief and other concerned members of the community to resolve the issue. The Project Manager, after hearing all the grievances and visiting the sites if necessary, will settle the grievance within 15 days after registering the complaint to him. The PMO may consult senior management of NEA and Legal Department if required. If the issue is settled the process ends.

**Stage 3: Local Consultative Forum**

Local consultative Forum (LCF) will be established in all three section of the transmission line covering the representative of the local bodies, intellectuals and Project Affected Families. The former VDC chairman, VDC secretary, representative of the PAFs, community leaders and principle of school are the potential people for the committee member. The office space for the LCF members, transportation facility as required and allowances during the field visit and meeting will be provided by the project under its regular management budget. The meeting of LCF will be scheduled by PMO office as required.

If the issues are not solved to the satisfaction, the concern will be forwarded to LCF from PMO. The LCF will visit the site, verify the issues and call meeting to solve the problem. The LCF will try for the amicable settlement of the issue and if not the committee will submit written report along with issues and proposed solution to PMO. The LCF will provide their report along with the possible solutions to PMO within 15 days from the issue received in the LCF. The PMO will take needful action within 7 days to solve the issues in due consultation/approval of NEA management/Board.

**Stage 4: CDO and Line Ministeries**

If the complaints or grievances of PAPs/communities are not resolved at the stages mentioned above, the APs will directly approach to the Chief District Officer (CDO) regarding the land acquisition and compensation and resettlement issues, who is also the Chairperson of the CDC. While lodging the complaints, the APs must produce adequate documents / proofs to support his/her grievances. The CDO or his staff will take the decisions within 15 days of registering the appeal and resolve the issues. If the issue (land acquisition and compensation and resettlement) is not resolved to the satisfaction of the complaining community/individual the issue will be elevated to the Ministry of Home Affairs. For other environmental and social issues if not resolved at the stage 1-3 the community/individual can complain to Ministry of Energy. The concerned ministries will address the issue within 15 days of complain lodged in their offices.

**Stage 5: District Court**

*If the APs/community are not satisfied with the decision of CDO/ministry or in absence of any response of its representatives within 15 days of the complaints filed, the APs, as his/her last resort, may appeal about the complaints and file the case to the court with the required evidences and documents as asked by the court. The court will be the final authority to take decision on the grievances within 35 days from the date of grievance filed to him.*

## 10. MONITORING AND EVALUATION MECHANISM

### 10.1 General

One of the main objectives of the project is to improve living standard of the affected community or at least restore their livelihood to pre-project level by implementing appropriate mitigation measures. Effective monitoring and evaluation systems will be introduced to ensure for proper monitoring of the VCDP implementation. The department will also monitor the grievances put forth by the PAPs regarding implementation of the activities stipulated in this VCDP including livelihood restoration measures on time and report to the project and WB on quarterly basis. The project will also supervise and monitor the activities of ESSD including implementation status and grievances, if any, regarding the program implementation.

### 10.2 Monitoring

Monitoring of the implementation of various activities as prescribed in the VCDP will be carried out to ensure that their goals are met. The VCDP implementation activities will be closely monitored by ESSD through its site based ESMU offices. The project will also monitor the progress made by the ESSD as per the schedule, technical proposal submitted by the department and make sure the programs are implemented as per the VCDP document. The monitoring involves: (i) administrative monitoring to ensure that implementation is on schedule and problems are dealt with on a timely basis; (ii) socio-economic monitoring during and after VCDP implementation by utilizing baseline information generated while updating this VCDP; (iii) overall monitoring to assess AP status; and (iv) preparation of progress reports to be submitted to project reporting actual achievements against the targets fixed and reasons for shortfalls, if any.

Participatory approach will be adopted for monitoring of the VCDP implementation. A performance data sheet will be developed to monitor the VCDP activities at the field level. Field level monitoring will be carried out through:

- Opinion survey of the IP, *Dalit* and indigenous project affected HHs
- Consultation with IP, *Dalit* and other vulnerable groups including users group
- Key informants interview (KII) with (local leaders, government officials, NGOs/CBOs)
- Participatory Rapid Appraisal (PRA)
- Focus Group Discussion (FGD)

Progress of implemented activities as per their nature, awareness level in local communities, livelihood improvement of *Dalit* and indigenous PAFs, improvement in living standard through improvement in irrigation, water supply and embankment protection works and school dropout of *Dalit* children and condition of health and sanitation in *Dalit* settlements are the major parameters of monitoring.

### 10.3 Reporting

ESSD will be responsible for VCDP Monitoring Report preparation which will be distributed through Project Managers Office to the concerned agencies. ESSD will cover the monitoring status of the VCDP implementation in regular environment and social monitoring report prepared by unit office on

quarterly basis. However a completion report will be prepared and submitted to project after completion of the work.

## 10.4 Impact Evaluation

After completion of the VCDP implementation (12 months) an evaluation study will be conducted. The evaluation study will focus on the following aspects:

- Evaluation of VCDP implementation focusing on stipulated activities.
- Evaluation of VCDP activities by summing up the outcomes of activities as per the VCDP.
- Socioeconomic survey to measure changes in living standard of the affected households/persons compared to pre-project situation.

ESSD will mobilize an independent team not associated with activities of Hetauda- Dhalkebar - Duhabi 400 kV line for impact evaluation after completion of the VCDP implementation. The team will be headed by Sr Sociologist along with economist, civil engineers and community liaison officer. The project may also mobilize local NGOs/consulting firm for independent monitoring and evaluation with detail analysis of the achievement made by the implementation of VCDP, problem faced during the implementation of program and new issues if any.

## 10.5 Monitoring and Evaluation Mechanism

The Environment and social management unit will monitor the activities of the implementation of VCDP on regular basis through three unit offices. The progress monitoring of VCDP implementation will be done quarterly along with the regular environmental and social monitoring report of the project. Monitoring and evaluation will be based on output; outcome and impact indicators. The details of monitoring and evaluation parameters are given in Table10.1.

**Table 10.1: Monitoring and Evaluation Parameters, Methods, Frequency and Responsibility**

Levels	Indicators	Methods	Frequency	Responsibility
<b>Activity/Output Level</b>	Awareness raising programs as per VCDP implemented	Review of progress report/field verification/meeting	Quarterly	Program Coordinator ESSD
	Community infrastructure support programs as per VCDP implemented	Review of progress report/field verification/meeting	Quarterly	Program Coordinator ESSD
	Livelihood improvement and income generation programs as per VCDP implemented	Review of progress report/field verification/meeting	Quarterly	Program Coordinator ESSD
<b>Outcome Level</b>	No. of HHs benefited from awareness program activities	Review of progress report/ meeting	Quarterly	ESMU offices

	Livelihood improvement activities implemented and people/HHs benefited	Review of progress report/field verification/ meeting	Quarterly	ESMU offices
	Nos. and types of community infrastructures constructed and operated	Review of progress report/field verification	Quarterly	ESMU offices
	Meeting /consultation held at different levels ( no. of meetings, no. of complains filled, handled and resolved	Review of progress report/field verification/ meeting	Quarterly	Project/ESMU site offices/ LCF
	Income generation/restoration measures taken and changes in HH income	Review of progress report/field verification/Meeting/ HH survey	Half yearly/ annually	ESMU offices
	Reduction in school dropout of <i>Dalit</i> students in government school where support is given	Review of school records of the previous years	Quarterly	ESMU offices
<b>C. Impact Level</b>	Improved livelihoods of the targeted group through self-employment (income, consumption, poverty reduction, education, health, HH assets etc.)	Review of progress report by disaggregated gender data /field verification/meeting and /HH survey	After completion of the VCDP implementation	ESSD/Independent consultant
	Improvement in existing condition of infrastructures and services provided by them	Review of progress report	After completion of the VCDP implementation	ESSD/Independent consultant
	Improvement in health and sanitation situation	Review of progress report, cross checking of data of nearest health post	After completion of the VCDP implementation	ESSD/Independent consultant
	Improvement in school dropout	Review of progress report, cross checking of data of school	After completion of the VCDP implementation	ESSD/Independent consultant
	Rural electrification in <i>Dalit</i> settlements	Review of progress report, cross checking of data of school	After completion of the work	ESSD/Independent consultant
	Social wellbeing(self-	Review of progress	After	ESSD/Independent

	satisfaction, security issues and problems)	report by disaggregated gender data /field verification/meeting and HH survey	completion of the VCDP implementation	consultant
--	---	---	---------------------------------------	------------

## 11. ESTIMATED BUDGET

The estimated cost for implementation of this VCDP is NRs24.926million. The detail breakdown of cost estimation is presented below. The program cost will be funded by Nepal-India Electricity Transmission and Trade Project.

**Table 11.1 Estimated Budget for VCDP**

S.N.	Plans, Programs & Activities	Number	Amount in NRs.	
			Unit Rate	Total amount
<b>A.</b>	<b>Awareness Raising Program to Dalit and Janajati settlements</b>	10 number	<b>50000</b>	<b>500000</b>
	<b>Sub - total: A</b>			<b>500000</b>
<b>B</b>	<b>Community Infrastructure Support Program</b>			
<i>1</i>	<i>River Embankment works</i>			
	Support for embankment of river at Chisapani Khahare at Nijgadh-4, Baghdev; Galphadiya, Tapeshwori area of Udaypur District; Sunsari Khola of Sunsari District and other places nearby Dalit/Janajati settlements.	LS		30,00,000
<i>2</i>	<i>Drinking water</i>			
	Support for Installation of hand pumps at Musahari tole of Bhagbatpur, Mirchaiya-8, Sarlahi; Dumraha Musahari Tole of Sunsari; Golbazar-10, Siraha and other places (up to 30 in numbers).	Up to 30 hand pumps		15,00,000
<i>3</i>	<i>Irrigation</i>			
	Support for maintenance of Pond at Chiyabari of Ayodhyanager, Siraha	LS		15,00,000
	Support for small scale irrigation schemes, improvement of existing irrigation systems, renovation, improvement of ponds and distribution of water pump at various locations of Dalit/Janajati settlements located near to the TL alignment.			
<i>4</i>	<i>Health and Sanitation</i>			
	Support for toilet making at Maisthan of Mahottari; Chhaghariya Maharatole of Dhanusha; Jiyatole of Mirchaiya, Siraha; and other relevant places of Dalit/Janajati settlements (up to 50 toilets)	50 toilets	80,000	40,00,000
<i>5</i>	<i>Education</i>			
	Education material/dress and other educational supports to poor Dalit students studying at public schools (for up to 10 schools).	10 schools		8,00,000
	<b>Sub-total: B</b>			<b>10800000</b>
<b>C</b>	<b>Livelihood Improvement and Income Generation (including training)</b>			
<i>1</i>	<i>Agriculture and Livestock Support</i>			
	Modern Agricultural Farming/Livestock Farming Training to 125 Dalits and Janajatis (including assistance for agricultural tools and seeds). – 5 in numbers	5 number of trainings	3,00,000	15,00,000
<i>2</i>	<i>Fishery</i>	2 number		7,00,000

	Support for fishery at Bishrampur of Mithila, Dhanusha and other place (2 places of <i>Dalit/Janajati</i> settlement)			
<b>3</b>	<b><i>Horticulture Development</i></b>			
	Distribution of fruit saplings and NTFPs to poor <i>Dalits</i> and <i>Janajatis</i> (up to 10 settlements). Short term training on NTFPs and Horticulture development (If required)	10 settlements	2,00,000	20,00,000
	<b>Sub-total: C</b>			<b>42,00,000</b>
<b>D</b>	<b>Vocational Skill Training to project affected <i>Dalits</i>, Women-headed and marginalized selected <i>Janajati</i> households.</b>			
1	Electrical wiring	20 participants	55000	11,00,000
2	Repair and maintenance of mechanical/ electrical equipment	10 participants	55000	5,50,000
3	Plumbing/welding	10 participants	55000	5,50,000
4	Mobile/TV/radio repair	10 participants	55000	5,50,000
5	Driving	40 participants	45000	18,00,000
6	Computer Hardware Technician	10 participants	55000	5,50,000
7	Sewing, knitting/weaving	20 participants	55000	11,00,000
	<b>Sub-total: D</b>	<b>120 Participants</b>		<b>62,00,000</b>
<b>E</b>	<b>Third party Monitoring and Evaluation</b>	<b>LS</b>		<b>3,00,000</b>
	<b>Total ( A to E)</b>			<b>2,20,00,000</b>
	Miscellaneous /contingency/others	3.00%		6,60,000
	<b>Total Program Cost</b>			<b>2,26,60,000</b>
	Implementation/Monitoring Cost (10% of the Program Cost)	10% of the program cost		<b>22,66,000</b>
	<b>Grand Total</b>			<b>2,49,26,000</b>

## ANNEXES

**Annex I: Sample Distribution of PRA and KIIs**

S.No.	District	VDC/Municipality	KIIS	PRA	
				Indigenous People	<i>Dalits</i>
1	Bara	Nijgadh NP	1	1	2
2	Dhanusha	Mithila NP	1	1	2
3		Chhirreswornath NP	1	1	2
4		Pusbalpur	1	1	2
5		Dhanushadham NP	1	1	2
6		GaneshmanCharnath NP	1	1	2
7	Mahottari	Bardibas NP	1	1	2
8		Khayarmara	1	1	2
9	Makwanpur	Hetauda NP	1	1	2
10		ShreepurChhatiwan	1	1	2
11		Dhiyal	1	2	1
12	Rautahat	Kanakpur	1	2	1
13		Chandrapur NP	1	1	2
14		Rangapur	1	1	2
15	Sarlahi	Dhungekhola	1	1	2
16		Karmaiya	1	1	2
17		Hariwon NP	1	1	2
18		Lalbandi NP	1	1	2
19		Raniganj	1	1	2
20		Kalinjor	1	1	2
21	Siraha	Lahan NP	1	1	2
22		Dhangadi	1	1	2
23		Mirchaiya NP	1	1	2
24		Golbazar NP	1	1	2
25		Karjanha	1	1	2
26		Badaramal	1	1	2
27		Ayodhyanagar	1	1	2
28	Saptari	Shambhunath NP	1	1	4
29		Pansera	1	1	2
30		Saptakoshi NP	1	1	2
31		Kanchanrup NP	1	1	2
32		Paraswani	1	2	1
33		Madhupatti	1	1	2
34		Sitapur	1	4	1
35		Kusaha	1	1	2
36		Daulatpur	1	1	2
37		Jandaul	1	1	2
38		Kalyanpur	1	1	2
39		Bakdhuwa	1	1	2
40		Rayapur	1	1	3
41		Tehruta	1	1	2
42		Khojpur	1	1	2
43	Sunsari	Mahendranagar	1	1	2
44		Bhokraha	1	1	2
45		RamduniBhasi NP	1	1	2
46		Dumraha	1	1	2
47	Udaypur	Tapeshwori	1	1	2
<b>Total</b>			<b>47</b>	<b>53</b>	<b>93</b>

## Annex II: Characteristics of KII Participants

S. N.	District	VDC/Municipality	Name Respondent	Age	Sex	Education	Occupation
1	Bara	Nijgadh	Sudarshan Lamichhane	52	M	Bachelor	Agriculture
2	Dhanusha	Puspapur	Keshab Pd. Kafle	48	M		Service
3		Dhaushadham NP	Prem Lama	52	M	SLC	Social Worker
4		Ganeshman Charnath NP	IndraBdr. Ale	41	M	Bachelor	Service
5		Mithila NP	Yuvaraj Sharma	33	M	HS	Service
6		Chhreshwornath NP	Shrawan K. Mahato	24	M	SLC	Social Worker
7		Mahottari	Bardibas	Rajan Pd.Dhungana	44	M	SLC
8	Khayamara		Laxmi Pd. Chaulagai	72	M	Literate	Social Worker
9	Makwanpur	Churiyamai	Chamfu Singh Waiba	77	M	L Sec	Social Worker
10		Shreepur Chhatiwan	Rajkumar Waiba	31	M	Bachelor	Teaching
11	Rautahat	Dhiyal	Dudh Bdr. Moktan	22	M	Secondary	Agriculture
12		Chandranigahpur	Ramji Timilsina	52	M	SLC	Agriculture
13		Rangapur	Jagat N. Chaudhari	49	M	SLC	Service
14	Saptari	Kanakpur	Jaya P. Chaudhari	36	M	Bachelor	Service
15		Daulatpur	Ram N. Chaudhari	56	M		Agriculture
16		Tehrouta	Bijaya Kumar Bhagat	36	M	HS	Agriculture
17		Rayapur	Ram Avatar Yadav	37	M	SLC	Service
18		Prasbani	Sunita Chaudhari	33	F	Bachelor	Social Mobilizer
19		Jandaul	Babita K. Chaudhari	29	F	Bachelor	Social Mobilizer
20		Sitapur	Gopal Mandal	30	M		Service
21		Pansera	Mahendra K. Singh	40	M		Social Mobilizer
22		Kushaha	Bachchu Pasawan	45	M		Social Worker
23		Madhumahi	Purna Raj Baral	36	M		Service
24		Shambhunath NP	Dev Narayan Shah		M		Service
25		Khojpur	Bhola Prasad Shah	58	M		Service
26		Kalyanpur	Lila Chaudhari	36	F	Bachelor	Social Mobilizer
27		Bakdhuwa	Roshan K.Mandal	45	M	Master	Social Worker
28	Kanchanpur NP	Bhagwat Mahato	56	M	SLC	Service	
29	Saptakoshi NP	Nita Chaudhari	32	F		Social Mobilizer	
30	Karmaiya	Ashish Bote	26	M	Bachelor	Social Mobilizer	
31	Sarlahi	Lalbandi NP	Indra Bhakta Tamang	51	M	Literate	Social Worker
32		Raniganj	Krishna Bdr. Karki	61	M	Literate	Social Worker
33		Kalinjor	Talak Bdr. Pulami	44	M	Secondary	Business
34		Hariwon NP	Khem Bdr. Bhandari	42	M	Literate	Social Worker
35		Dhungrekhola	BhaktaBdr. Thapa	60	M	SLC	Social Worker
36	Siraha	Lahan NP	Bhanu Raj Sharma	35	M		Service
37		Dhangadi	Ashesh Kumar Lamsal	45	M		Service
38		Ayodhyanagar	Ramdayal Sahani	43	M		Social Worker
39		Golbazar NP	Raj Kumar Rai	56	M	Bachelor	Teaching
40		Mirchaiya NP	Pradip Kumar Thakur	30	M	Bachelor	Service
41		Karajnaha	Pramod Kunwar	25	M	HS	Service
42	Sunsari	Badaharamal	Jagjwan Das	31	M		Social Mobilizer
43		Bhokraha	Parameshwor Mehata	36	M	Bachelor	Teaching
44		Ramdhuni Bhasi NP	Ranjita Chaudhari	30	F	HS	Social Mobilizer
45		Dumra	Migali Lal Chaudhari	40	M	HS	Teaching
46	Udaypur	Mahendranagar	Ranjit Lal	45	M	SLC	Agriculture
47		Tapeshwori	Anil Chamling	43	M	Bachelor	Service

Source: Field Survey, 2015

### Annex III: Characteristics of the PRA Participants of Indigenous People and Dalits

**Table 1: Total Number of PRAs Participants of Indigenous People**

District	No. of PRA	Male Participants	Female Participants	Total
Makwanpur	4	47	51	98
Bara	1	24	8	32
Rautahat	4	122	104	226
Sarlahi	6	81	188	269
Mahottari	2	56	54	110
Dhanusha	5	61	76	137
Siraha	7	60	85	145
Udaypur	1	16	4	20
Saptari	19	173	174	347
Sunsari	4	47	24	71
<b>Total</b>	<b>53</b>	<b>687</b>	<b>768</b>	<b>1455</b>
<b>Percent</b>	<b>-</b>	<b>47.2</b>	<b>52.8</b>	<b>100</b>

Source: Field Survey, 2015

**Table 2: Total Number of PRA Participants of Indigenous People by Caste/Ethnicity**

Caste/Ethnicity	Number	Percent
Tharu	436	30.0
Tamang	319	21.9
Magar	261	17.9
Majhi	189	13.0
Danuwar	86	5.9
Gharti/Bhujel	43	3.0
Rai	42	2.9
Newar	28	1.9
Bhote	23	1.6
Other	28	1.9
<b>*Total Participants</b>	<b>1455</b>	<b>100.0</b>
<b>Total IP Population of the Project Area</b>	<b>241152</b>	<b>-</b>

Source: Field Survey, 2015

Note: \* Percent of Total IP Population of the Project Area = 0.6 %

**Table 3: Distribution of PRA Participants of Indigenous People by Broad Age Group**

District	Up to 14 Years	14 to 59 Years	Above 59 Years	Total
Makwanpur	2	89	7	98
Bara	1	24	7	32
Rautahat	5	206	15	226
Sarlahi	6	244	19	269
Mahottari	4	96	10	110
Dhanusha	2	117	18	137
Siraha	2	127	16	145
Udaypur	0	16	4	20
Saptari	5	304	38	347
Sunsari	0	57	14	71
<b>Total</b>	<b>27</b>	<b>1280</b>	<b>148</b>	<b>1455</b>
<b>Percent</b>	<b>1.8</b>	<b>88.0</b>	<b>10.2</b>	<b>100</b>

Source: Field Survey, 2015

**Table 4: Distribution of PRA Participants of Indigenous People by Educational Status**

District	Illiterate	Literate	Primary	Lower Secondary	Secondary & SLC	10+2	Bachelor & Above	Total
Makwanpur	28	47	4	7	7	5	0	98
Bara	2	14	2	2	9	3	0	32
Rautahat	90	65	6	10	23	24	8	226
Sarlahi	74	80	23	24	46	22	0	269
Mahottari	27	41	3	9	20	5	5	110
Dhanusha	42	58	3	15	15	4	0	137
Siraha	19	43	5	14	41	18	5	145
Udaypur	5	2	5	2	4	2	0	20
Saptari	113	57	20	23	79	37	18	347
Sunsari	39	11	10	2	5	4	0	71
<b>Total</b>	<b>439</b>	<b>418</b>	<b>81</b>	<b>108</b>	<b>249</b>	<b>124</b>	<b>36</b>	<b>1455</b>
<b>Percent</b>	<b>30.2</b>	<b>28.7</b>	<b>5.6</b>	<b>7.4</b>	<b>17.1</b>	<b>8.5</b>	<b>2.5</b>	<b>100</b>

Source: Field Survey, 2015

**Table 5: Distribution of PRA Participants of Indigenous People by Main Occupation**

District	Agriculture	Teaching	Service	Business	Daily Wage	HH Work	Student	Total
Makwanpur	75			2	3	4	14	98
Bara	25			0	4	1	2	32
Rautahat	155	3	4	1	37	9	17	226
Sarlahi	166		12	6	43	8	34	269
Mahottari	65	2		1	17	5	20	110
Dhanusha	78	2	3	2	35	5	12	137
Siraha	85	1	2	2	30	7	18	145
Udaypur	16	2		1	1	0	0	20
Saptari	228	13	15	8	40	8	35	347
Sunsari	36		6	5	15	4	5	71
<b>Total</b>	<b>929</b>	<b>23</b>	<b>42</b>	<b>28</b>	<b>225</b>	<b>51</b>	<b>157</b>	<b>1455</b>
<b>Percent</b>	<b>63.9</b>	<b>1.6</b>	<b>2.9</b>	<b>1.9</b>	<b>15.5</b>	<b>3.5</b>	<b>10.8</b>	

Source: Field Survey, 2015

**Table 6: Distribution of PRA Participants of Dalits**

District	No. of PRA	Male	Female	Total
Makwanpur	5	54	58	112
Bara	2	24	14	38
Rautahat	5	27	38	65
Sarlahi	12	105	168	273
Mahottari	4	54	67	121
Dhanusha	10	95	176	271
Siraha	14	98	254	352
Udaypur	2	11	10	21
Saptari	30	231	362	593
Sunsari	9	67	76	143
<b>Total</b>	<b>93</b>	<b>766</b>	<b>1223</b>	<b>1989</b>
<b>Percent</b>	<b>-</b>	<b>38.5</b>	<b>61.5</b>	<b>100</b>

Source: Field Survey, 2015

**Table 7: Total Number of PRA Participants of Dalits by Caste/Ethnicity**

Caste/Ethnicity	Number	Percent
Musahar	766	38.5
Kami	595	29.9
Chamar/Ram	224	11.3
Pasawan	169	8.5
Damai	123	6.2
Khatwe	68	3.4
Sarki	11	0.6
Dalit Others	33	1.7
<b>*Total Participants</b>	<b>1989</b>	<b>100</b>
<b>Total Dalit Population of the Project Area</b>	<b>129630</b>	<b>-</b>

Source: Field Survey, 2015. Note: \*Percent of Total Dalit Population of the Project Area = 1.5

**Table 8: No. of PRA Participants of Dalits by Broad Age Group**

District	Up to 14 Years	14 to 59 Years	Above 59 Years	Total
Makwanpur	2	99	11	112
Bara	-	37	1	38
Rautahat	1	56	8	65
Sarlahi	8	244	21	273
Mahottari	3	101	17	121
Dhanusha	5	235	31	271
Siraha	4	319	29	352
Udaypur	-	19	2	21
Saptari	7	522	64	593
Sunsari	-	125	18	143
<b>Total</b>	<b>30</b>	<b>1757</b>	<b>202</b>	<b>1989</b>
<b>Percent</b>	<b>1.5</b>	<b>88.3</b>	<b>10.2</b>	<b>100</b>

Source: Field Survey, 2015

**Table 9: No. of PRA Participants of Dalits by Educational Status**

District	Illiterate	Literate	Primary	L. Secondary	Secondary & SLC	10+2	Bachelor & Above	Total
Makwanpur	31	61	-	2	13	1	4	112
Bara	12	24	-	0	2	-	-	38
Rautahat	33	12	1	7	7	3	2	65
Sarlahi	76	99	13	19	43	16	7	273
Mahottari	50	44	5	10	10	2	-	121
Dhanusha	137	86	9	15	21	-	3	271
Siraha	187	96	26	19	15	6	3	352
Udaypur	7	3	5	2	3	-	1	21
Saptari	360	100	32	37	51	8	5	593
Sunsari	99	8	14	11	5	6	-	143
<b>Total</b>	<b>992</b>	<b>533</b>	<b>105</b>	<b>122</b>	<b>170</b>	<b>42</b>	<b>25</b>	<b>1989</b>
<b>Percent</b>	<b>49.9</b>	<b>26.8</b>	<b>5.3</b>	<b>6.1</b>	<b>8.5</b>	<b>2.1</b>	<b>1.3</b>	<b>100</b>

Source: Field Survey, 2015

**Table 10: No. of PRA Participants of Dalits by Main Occupation**

District	Agriculture	Teaching	Service	Business	Daily Wage	HH Work	Student	Total
Makwanpur	92	1	2	5	2	3	7	112
Bara	22			2	7	7	0	38
Rautahat	35		3	2	15	3	7	65
Sarlahi	128	3	4	7	59	34	38	273
Mahottari	62			1	30	17	11	121
Dhanusha	134	1	2	2	57	53	22	271
Siraha	206		1	1	107	24	13	352
Udaypur	17	1		2	0	0	1	21
Saptari	390	3	6	4	144	10	36	593
Sunsari	71		3	5	55	1	8	143
<b>Total</b>	<b>1157</b>	<b>9</b>	<b>21</b>	<b>31</b>	<b>476</b>	<b>152</b>	<b>143</b>	<b>1989</b>
<b>Percent</b>	<b>58.2</b>	<b>0.5</b>	<b>1.1</b>	<b>1.6</b>	<b>23.9</b>	<b>7.6</b>	<b>7.2</b>	<b>100</b>

Source: Field Survey, 2015

### Annex IV: Summary of Issue/Concerns Raised Indigenous People

S. No.	District	VDC/ Municipality	Village	Date	Participants			Key Issues/Community Need Assessment	
					T	M	F		
1	Bara	Nijgadh NP	YojanaTole	2072/1/12	32	24	8	<ul style="list-style-type: none"> <li>• Cremation site under TL</li> <li>• Shift alignment</li> </ul>	
2		Mithila NP	Bishrampur	2072/1/22	23	15	8	<ul style="list-style-type: none"> <li>• Skill training and employment</li> </ul>	
3		Chhirreswornath NP	MagarTole	2072/1/28	28	15	13	<ul style="list-style-type: none"> <li>• Loss of Crops due to TL construction</li> <li>• Special package for houses nearby TL</li> </ul>	
4		Pusbalpur	ChaukiTole	2072/1/08	21	8	13	<ul style="list-style-type: none"> <li>• Weaving, and tailoring training to women</li> <li>• Training in candle and <i>Agarbatti</i> making</li> </ul>	
5		Dhanusha	Dhanushadham NP	Murgiya	2072/1/09	31	6	25	<ul style="list-style-type: none"> <li>• Provide driving, plumbing, motorcycle repair, electrician, TV/mobile repairing, cooking/waiter, tailoring, weaving training</li> <li>• Support in school building construction, drinking water and irrigation</li> <li>• Support in NTFP plantation</li> </ul>
6		GaneshmanCharnath NP	DandaTole	2072/1/28	34	17	17	<ul style="list-style-type: none"> <li>• Provide driving, plumbing, motorcycle repair, electrician, TV/mobile repairing, cook/waiter, tailoring, weaving training</li> <li>• Support in drinking water and irrigation</li> <li>• Support in animal husbandry (pig/goat)</li> </ul>	
7	Mahottari	Khayarmara	16 No. Tole	2072/1/23	55	39	16	<ul style="list-style-type: none"> <li>• Indigenous people focused programs</li> <li>• Support in supply of safe drinking water</li> </ul>	
8		Bardibas NP	GairiTole	2072/1/24	55	17	38	<ul style="list-style-type: none"> <li>• Employment and skill training to indigenous people</li> <li>• Support in irrigation</li> </ul>	
9	Makwanpur	Hetauda NP	Bhorle	2072/2/23	19	8	11	<ul style="list-style-type: none"> <li>• Support in supply of safe drinking water</li> <li>• Mushroom farming training</li> </ul>	
10		Shreepur Chhatiwan	Andheri	2072/2/22	24	15	9	<ul style="list-style-type: none"> <li>• Loss of school building</li> <li>• Shift alignment</li> </ul>	
11		Dhiyal	Kaileni	2072/2/22	33	16	17	<ul style="list-style-type: none"> <li>• Support in road construction</li> </ul>	
12		Dhiyal	SaraswotiTole	2072/2/14	22	8	14	<ul style="list-style-type: none"> <li>• Effect on community forest</li> <li>• Shift alignment</li> <li>• Settlement is nearby TL</li> </ul>	
13	Rautahat	Kanakpur	Simara	2072/1/11	27	22	5	<ul style="list-style-type: none"> <li>• Support in toilet construction</li> </ul>	
14		Kanakpur	Simara	2072/1/11	24	21	3	<ul style="list-style-type: none"> <li>• Support in education</li> <li>• Need house wiring and plumbing training</li> </ul>	
15		Chandrapur NP		2072/1/10	22	11	11	<ul style="list-style-type: none"> <li>• Loss of tree from community forest</li> <li>• Poultry and livestock training</li> </ul>	
16		Rangapur	Harinagar	2072/1/11	153	68	85	<ul style="list-style-type: none"> <li>• House wiring and skill training</li> </ul>	
17	Saptari	Shambhunath NP	Bhangaha	2072/2/17	17	9	8	<ul style="list-style-type: none"> <li>• Support in irrigation</li> <li>• Heavy equipment operation training</li> </ul>	
18		Saptakoshi NP	Malet	2072/1/12	26	18	8	<ul style="list-style-type: none"> <li>• Loss of tree from community forest</li> <li>• Plantation</li> <li>• Minimize loss of forest by shifting alignment</li> </ul>	
19		Kanchanrup NP	Bakchhya	2072/1/13	18	5	13	<ul style="list-style-type: none"> <li>• Vocational training</li> <li>• Micro enterprises training</li> </ul>	
20		Paraswani	NayaTole	2072/1/15	20	9	11	<ul style="list-style-type: none"> <li>• Employment to local people</li> <li>• House wiring training</li> </ul>	
21		Madhupatti	Birnagar	2072/1/18	22	11	11	<ul style="list-style-type: none"> <li>• Support in irrigation</li> <li>• Skill training</li> <li>• Support in supply of safe drinking water</li> </ul>	
22		Sitapur	Raghnathpur	2072/1/16	15	13	2	<ul style="list-style-type: none"> <li>• Skill training</li> </ul>	
23		Sitapur	Bhurki	2072/1/16	9	5	4	<ul style="list-style-type: none"> <li>• Skill training</li> </ul>	
24		Kusaha	Banigama	2072/1/18	20	2	18	<ul style="list-style-type: none"> <li>• Provide skill training (driving, computer, mobile repairing, beauty parlor, automobile training, tailoring/weaving)</li> <li>• Support in drinking water</li> <li>• Support in animal husbandry (pig/goat) and vegetable farming</li> </ul>	
25		Pansera	Amaha	2072/1/18	6	1	5	<ul style="list-style-type: none"> <li>• Provide mobile repairing, automobile repairing, plumbing and tailoring training</li> </ul>	

							<ul style="list-style-type: none"> <li>Support in pond construction and fishery</li> <li>Support in animal husbandry (cow/goat) and vegetable farming</li> </ul>
26	Daulatpur	BhusiMaholiya	2072/1/19	8	6	2	<ul style="list-style-type: none"> <li>Income generating activities</li> <li>Skill training</li> </ul>
27	Sitapur	School Tole	2072/1/15	18	5	13	<ul style="list-style-type: none"> <li>Timely completion of the TL</li> <li>Support in irrigation</li> </ul>
28	Sitapur	Raghunathpur	2072/1/15	20	10	10	<ul style="list-style-type: none"> <li>Provide electrician, driving, computer repairing, mason/carpenter, and tailoring training</li> <li>Support in pond maintenance</li> <li>Support in animal husbandry (goat) and vegetable farming</li> </ul>
29	Jandaul	Dhodidaha	2072/1/15	14	14	-	<ul style="list-style-type: none"> <li>Employment to local people</li> </ul>
30	Kalyanpur	Majo	2072/1/17	20	9	11	<ul style="list-style-type: none"> <li>Support in supply of safe drinking water</li> </ul>
31	Bakdhuwa	Basantapur	2072/1/14	23	7	16	<ul style="list-style-type: none"> <li>Provide technical training (house wiring, motorbike repair, TV/mobile repair)</li> <li>Provide IG training (mushroom farming, shop/Dhup making)</li> </ul>
32	Rayapur	RupaniTole	2072/1/16	24	7	17	<ul style="list-style-type: none"> <li>Support in supply of safe drinking water</li> </ul>
33	Tehrauta	Jagmohan	2072/1/16	29	15	14	<ul style="list-style-type: none"> <li>Provide electrician, driving, mobile/computer repairing, mason/carpenter, and tailoring training</li> <li>Support in irrigation and forest conservation</li> <li>Support in animal husbandry (goat/cow) and vegetable farming</li> </ul>
34	Paraswani	Habeli	2072/1/15	17	9	8	<ul style="list-style-type: none"> <li>Provide house wiring, furniture making and IG training (handicrafts, shop and Papad/Bhujiya)</li> <li>Support in irrigation and forest conservation</li> <li>Support in animal husbandry (goat/cow) and vegetable farming</li> </ul>
35	Khojpur	Meghbani	2072/1/17	21	18	3	<ul style="list-style-type: none"> <li>Provide house wiring, plumbing and electrician and tailoring trainings</li> <li>Support in animal husbandry (goat) and vegetable farming</li> </ul>
36	Dhungrekholra	Dagajor	2072/2/19	16	6	10	<ul style="list-style-type: none"> <li>No pre-consultation with local people</li> <li>Skill development, mechanical and electrical training</li> </ul>
37	Karmaiya	BoteTole	2072/2/19	23	5	18	<ul style="list-style-type: none"> <li>Temple under RoW of TL</li> <li>Shift alignment</li> <li>Houses of vulnerable group nearby TL</li> </ul>
38	Hariwon NP	DunuwariTole	2072/2/18	105	6	99	<ul style="list-style-type: none"> <li>Loss of tree from community forest</li> <li>Economic support</li> <li>Houses are nearby TL</li> </ul>
39	Lalbandi NP	Jiyajor	2072/2/04	22	20	2	<ul style="list-style-type: none"> <li>Health hazards</li> <li>Need vocational training</li> <li>Loss of cultivated land</li> </ul>
40	Raniganj	BireTole	2072/2/03	51	16	35	<ul style="list-style-type: none"> <li>Loss of tree from community forest</li> <li>Health hazards</li> <li>Possible impacts on wildlife habitat</li> </ul>
41	Kalinjor	NayaTole	2072/2/02	52	28	24	<ul style="list-style-type: none"> <li>Prior consultation with nearby households</li> <li>Compensation of land under RoW</li> </ul>
42	Lahan NP	Padariya	2072/1/22	17	9	8	<ul style="list-style-type: none"> <li>Provide technical training (vehicle/motorbike repair)</li> <li>Support in animal husbandry (goat), poultry and vegetable farming and micro enterprises)</li> <li>Support in irrigation</li> </ul>
43	Dhangadi	Musaharniya	2072/1/22	17	12	5	<ul style="list-style-type: none"> <li>Support in irrigation</li> </ul>
44	Mirchaiya NP	MagarTole	2072/2/19	15	11	4	<ul style="list-style-type: none"> <li>Prior consultation with nearby households</li> <li>Compensation of land under RoW</li> </ul>
45	Golbazar NP	TitariyaTole	2072/2/19	19	11	8	<ul style="list-style-type: none"> <li>Prior consultation with nearby households</li> <li>Compensation of land under RoW</li> </ul>
46	Karjanha	RaiTole	2072/2/18	21	3	18	<ul style="list-style-type: none"> <li>Support in education</li> <li>Employment to local people</li> <li>Mechanical and electrical training</li> </ul>

47		Badaramal	Lama Tole	2072/2/18	26	5	21	<ul style="list-style-type: none"> <li>• Loss of standing crops</li> <li>• Support for income generating activities</li> </ul>
48		Ayodhyanagar	Chiyabari	2072/2/20	30	9	21	<ul style="list-style-type: none"> <li>• Loss of standing crops</li> <li>• Support for income generating activities</li> <li>• Houses of indigenous people nearby TL</li> </ul>
49	Sunsari	Mahendranagar	Kalapani	2072/1/09	13	8	5	<ul style="list-style-type: none"> <li>• Environment hazards</li> <li>• Impacts to nearby households of TL</li> <li>• Loss of cultivated land</li> <li>• Land use restriction under RoW</li> </ul>
50		Bhokraha	BhittaTole	2072/1/10	34	27	7	<ul style="list-style-type: none"> <li>• Public awareness</li> <li>• Compensation of land</li> </ul>
51		Ramdhuni Bhasi NP	Ramdhuni	2072/1/09	13	8	5	<ul style="list-style-type: none"> <li>• Loss of land and crops</li> <li>• Support in school</li> <li>• Land use restriction under RoW</li> </ul>
52		Dumraha	MusaharTole	2072/1/10	11	4	7	<ul style="list-style-type: none"> <li>• Provide technical training (wiring, motorbike repair, knitting/weaving)</li> <li>• Support in vegetable farming</li> <li>• Provide IG training (bamboo, shop/<i>Dhupand Papad</i>making)</li> </ul>
53	Udayapur	Tapeshwori	Balchhi	2072/1/11	20	16	4	<ul style="list-style-type: none"> <li>• Provide technical training (house wiring, motorbike repair, knitting/weaving)</li> <li>• Support in agriculture</li> <li>• Provide IG training (handicraft, wood carving and bamboo work)</li> </ul>

Source: Field Survey, 2015

### Annex V: Summary of Issue/Concerns Raised by Dalits

S. No.	District	VDC/ Municipality	Village	Date	Participants			Key Issues/Community Need Assessment
					T	M	F	
1	Bara	Nijgadh NP	Purano Tole	2072/1/12	15	7	8	<ul style="list-style-type: none"> <li>• Provide <i>Dalit</i> focused program</li> <li>• Need skill training</li> </ul>
2		Nijgadh NP	Namuna Basti	2072/1/18	23	17	6	<ul style="list-style-type: none"> <li>• Driving and plumbing training</li> </ul>
3	Dhanusha	Chhireswornath NP	Magar Tole	2072/1/30	34	13	21	<ul style="list-style-type: none"> <li>• Support in irrigation</li> <li>• Training package for women</li> <li>• Provide <i>Dalit</i> focused program</li> </ul>
4		Chhireswornath NP	Maraghar	2072/1/30	67	14	53	<ul style="list-style-type: none"> <li>• Technical and mechanical training</li> <li>• Income generating activities for women</li> <li>• Support for construction of water tank</li> </ul>
5		Dhanushadham NP	Dharapani	2072/1/09	23	16	7	<ul style="list-style-type: none"> <li>• Support in irrigation</li> <li>• Technical and mechanical training</li> <li>• Support for toilet construction</li> </ul>
6		Dhanushadham NP	Bawan Tole	2072/1/26	24	10	14	<ul style="list-style-type: none"> <li>• Support for education</li> <li>• Possible health hazards due to TL</li> <li>• Support in animal husbandry</li> </ul>
7		Ganeshman Charnath NP	Tadiya	2072/1/27	9	2	7	<ul style="list-style-type: none"> <li>• Support in education</li> <li>• Support in animal husbandry</li> </ul>
8		GaneshmanCharnath NP	Chhagariya Tole	2072/1/26	37	16	21	<ul style="list-style-type: none"> <li>• Financial support for toilet construction</li> <li>• Support in irrigation</li> <li>• Provide <i>Dalit</i> focused program</li> </ul>
9		Mithila NP	Sundarbasti	2072/1/22	19	6	13	<ul style="list-style-type: none"> <li>• Loss of tree from community forest</li> <li>• Loss of under construction temple</li> </ul>
10		Mithila NP	Kemalipur	2072/1/22	21	4	17	<ul style="list-style-type: none"> <li>• Support in supply of safe drinking water</li> </ul>
11		Pusbalpur	Uddhami Tole	2072/1/08	20	11	9	<ul style="list-style-type: none"> <li>• Provide <i>Dalit</i> focused programs</li> </ul>
12		Pusbalpur	Musahariya Tole	2072/1/08	15	4	11	<ul style="list-style-type: none"> <li>• Support in animal husbandry</li> <li>• Technical training</li> </ul>
13		Mahottari	Bardibas NP	Gauridanda	2072/1/23	22	7	15
14	Bardibas NP		Maisthan Tole	2072/1/24	45	20	25	<ul style="list-style-type: none"> <li>• Provision of employment to <i>Dalits</i></li> <li>• Support in animal husbandry and poultry</li> </ul>
15	Khayarmara		Musari Tole	2072/1/25	28	14	14	<ul style="list-style-type: none"> <li>• Possible health hazards due to TL</li> <li>• Loss of agriculture land</li> <li>• Skill training to women</li> <li>• Provide <i>Dalit</i> focused program</li> </ul>
16	Khayarmara		BiswokarmaChowk	2072/1/23	26	13	13	<ul style="list-style-type: none"> <li>• Skill training to youth and women</li> <li>• Market management of local products</li> <li>• Support in education</li> </ul>
17	Makwanpur	Dhiyal	Batase Bhamara	2072/2/22	16	12	4	<ul style="list-style-type: none"> <li>• Employment to <i>Dalits</i> in the project</li> <li>• Support in irrigation</li> <li>• Tailoring and weaving training to women</li> </ul>
18		Hetauda NP	Thulo Gangate	2072/1/20	25	2	23	<ul style="list-style-type: none"> <li>• Support in irrigation</li> <li>• Skill training</li> </ul>
19		Hetauda NP	Badkule	2072/1/20	30	17	13	<ul style="list-style-type: none"> <li>• Provide employment to <i>Dalits</i> in the project</li> <li>• Support in irrigation</li> </ul>
20		ShreepurChhatiwan	Karmachuli	2072/2/23	20	9	11	<ul style="list-style-type: none"> <li>• Shift the alignment</li> </ul>
21		Shreepur Chhatiwan	Juneli Basti	2072/2/22	21	14	7	<ul style="list-style-type: none"> <li>• Compensation of land under RoW</li> <li>• Computer and library support for school</li> </ul>
22	Rautahat	Chandrapur NP	Ban Tole	2072/1/10	17	9	8	<ul style="list-style-type: none"> <li>• Support in NTFP products training</li> <li>• Training to women</li> <li>• Provide <i>Dalit</i> focused program</li> </ul>
23		Chandrapur NP	Danda Tole	2072/1/10	15	7	8	<ul style="list-style-type: none"> <li>• Income generating activities</li> <li>• Support in animal husbandry</li> </ul>
24		Kanakpur	Simri	2072/1/11	10	3	7	<ul style="list-style-type: none"> <li>• Support in supply of safe drinking water</li> </ul>
25		Rangapur	Harinagar	2072/1/11	8	2	6	<ul style="list-style-type: none"> <li>• Provision of employment to <i>Dalits</i></li> </ul>
26		Rangapur	Rangapur	2072/1/11	15	4	11	<ul style="list-style-type: none"> <li>• Support in education and school</li> </ul>

27	Saptari	Bagakhal		2072/1/25	13	6	7	<ul style="list-style-type: none"> <li>• Support for drinking water and irrigation</li> <li>• Skill training</li> </ul>
28		Bakdhuwa	Mohanpur	2072/1/14	22	7	15	<ul style="list-style-type: none"> <li>• Provide technical training (driving, plumbing, house wiring, TV/mobile repair, waiter/cook, and computer)</li> <li>• Provide livestock raising and fodder production training</li> <li>• Provide IG training (candle/Dhup making and tailoring)</li> </ul>
29		Bakdhuwa	Mahuli	2072/1/15	23	13	10	<ul style="list-style-type: none"> <li>• Provide technical training (motorbike/vehicle repairing, driving and computer)</li> <li>• Provide livestock raising and vegetable production training</li> <li>• Provide IG training (shop/dhup making, wood carving and tailoring)</li> </ul>
30		Daulatpur	Laxmipur	2072/1/19	22	4	18	<ul style="list-style-type: none"> <li>• Support in irrigation</li> <li>• Technical training</li> </ul>
31		Daulatpur	Laxmipur	2072/1/19	14	4	10	<ul style="list-style-type: none"> <li>• Support for temple construction</li> <li>• Support in supply of safe drinking water</li> </ul>
32		Jandaul	Jandaul	2072/1/14	15	3	12	<ul style="list-style-type: none"> <li>• Financial support in public toilet construction</li> <li>• Library support in school</li> </ul>
33		Jandaul	Jandaul	2072/1/15	6	3	3	<ul style="list-style-type: none"> <li>• Support in vegetable farming</li> <li>• Support in micro enterprises (Dhup, candle and soap production)</li> </ul>
34		Kalyanpur	Musaharniya	2072/1/17	13	2	11	<ul style="list-style-type: none"> <li>• Support for micro enterprises (Dhup, candle and soap making)</li> </ul>
35		Kalyanpur	Bishunpur	2072/1/17	20	7	13	<ul style="list-style-type: none"> <li>• Provide technical training (motorbike/vehicle repairing, driving, heavy equipment operation, mason and carpenter)</li> <li>• Provide livestock raising and vegetable production training</li> <li>• Provide IG training (shop/Dhup, Bhujiya/Papad and noodle making, wood carving and tailoring)</li> </ul>
36		Kanchanrup NP	Ghoghanpur	2072/1/13	26	8	18	<ul style="list-style-type: none"> <li>• Mechanical and driving training</li> </ul>
37		Kanchanrup NP	Dharampur	2072/1/13	8	5	3	<ul style="list-style-type: none"> <li>• Support for micro enterprises (Agarbatti, candle and soap production)</li> </ul>
38		Khojpur	Kharchuiya	2072/1/18	12	4	8	<ul style="list-style-type: none"> <li>• Support in irrigation and education</li> <li>• Provide employment to Dalits in the project</li> </ul>
39		Khojpur	Meghbani	2072/1/17	15	7	8	<ul style="list-style-type: none"> <li>• Income generating activities</li> </ul>
40		Kusaha	Kusaha	2072/1/18	14	9	5	<ul style="list-style-type: none"> <li>• Support in animal husbandry and poultry</li> <li>• Support in drinking water supply</li> </ul>
41		Kusaha	Banigama	2072/1/18	9		9	<ul style="list-style-type: none"> <li>• Support for micro enterprises (Agarbatti, candle and soap production)</li> </ul>
42		Madhupatti	Kadmaha	2072/1/23	38	24	14	<ul style="list-style-type: none"> <li>• Skill training to women</li> <li>• Impact on Tharu temple</li> </ul>
43		Madhupatti	Kanakpur	2072/1/16	31	11	20	<ul style="list-style-type: none"> <li>• Provision of employment to Dalits</li> </ul>
44		Pansera	Amaha	2072/1/18	25	6	19	<ul style="list-style-type: none"> <li>• Provide goat raising training</li> <li>• Provide IG training (shop/Dhup, candle, perfume making, wood carving and tailoring)</li> <li>• Support in pond construction and fishery</li> </ul>
45	Pansera	Karmaniya	2072/1/18	17	5	12	<ul style="list-style-type: none"> <li>• Provide plumbing and tailoring training</li> </ul>	
46	Paraswoni	Baterai	2072/1/15	29	5	24	<ul style="list-style-type: none"> <li>• Provide technical training (computer hardware, software)</li> <li>• Provide buffalo/goat raising training</li> <li>• Provide IG training (shop/Dhup, candle, perfume making, weaving, Mudha making)</li> </ul>	

47	Sarlahi	Rayapur	Ram Tole	2072/1/16	16	16		<ul style="list-style-type: none"> <li>• Support in school</li> <li>• Driving and automobile training</li> </ul>	
48		Rayapur	Ram Tole	2072/1/17	6	3	3	<ul style="list-style-type: none"> <li>• Provision of employment to <i>Dalits</i></li> <li>• Tailoring and weaving training to women</li> </ul>	
49		Rayapur	Khare Tole	2072/1/22	15	12	3		
50		Saptakoshi NP	Gangajali	2072/1/12	37	9	28	<ul style="list-style-type: none"> <li>• Support in animal husbandry and vegetable farming</li> </ul>	
51		Saptakoshi NP	Shiddhipur	2072/1/12	19	7	12	<ul style="list-style-type: none"> <li>• Provision of employment to <i>Dalits</i></li> <li>• Income generating activities</li> </ul>	
52		Shambhunath NP	Bhagwatpur	2072/1/17	17	11	6	<ul style="list-style-type: none"> <li>• Prior consultation with local people</li> <li>• Support in irrigation</li> <li>• Support for toilet construction</li> </ul>	
53		Shambhunath NP	Kanakpatti	2072/1/25	24	3	21	<ul style="list-style-type: none"> <li>• Support in education and school construction</li> <li>• Compensation for loss of crops</li> </ul>	
54		Shambhunath NP	Kanakpatti	2072/1/26	15	7	8	<ul style="list-style-type: none"> <li>• Support for micro enterprises (<i>Agarbatti</i>, candle and soap productions)</li> </ul>	
55		Sitapur	Musahar Tole	2072/1/15	25	7	18	<ul style="list-style-type: none"> <li>• Skill training</li> <li>• Loan support</li> </ul>	
56		Tehrauta	Milanchowk	2072/1/16	17	13	4	<ul style="list-style-type: none"> <li>• Support for road construction</li> </ul>	
57		Tehrauta	Jagmohanpur	2072/1/15	30	10	20	<ul style="list-style-type: none"> <li>• Support in animal husbandry and vegetable farming</li> </ul>	
58		Siraha	Dhungrekhola	Chauriya Tole	2072/2/19	12	3	9	<ul style="list-style-type: none"> <li>• Support for construction of river control</li> <li>• Provision of employment to <i>Dalits</i></li> </ul>
59			Dhungrekhola	Naya Basti	2072/2/19	25	10	15	<ul style="list-style-type: none"> <li>• Skill training</li> <li>• Income generating activities</li> </ul>
60			Hariwon NP	Kegwani	2072/2/18	18	11	7	<ul style="list-style-type: none"> <li>• Support in bridge construction</li> <li>• Support in supply of safe drinking water</li> </ul>
61			Hariwon NP	Khore Gaun	2072/2/20	14	3	11	<ul style="list-style-type: none"> <li>• Provision of employment to <i>Dalits</i></li> <li>• Provide vocational training</li> </ul>
62			Kalinjor	ThuloTole	2072/2/02	26	12	14	<ul style="list-style-type: none"> <li>• Support in supply of safe drinking water</li> <li>• Support in electrification</li> </ul>
63			Kalinjor	Sukepur	2072/2/02	25	4	21	<ul style="list-style-type: none"> <li>• Support in animal husbandry and vegetable farming</li> <li>• Provide vocational training</li> </ul>
64	Karmaiya		Purano Chauki	2072/2/20	20	5	15	<ul style="list-style-type: none"> <li>• Provide vocational training</li> <li>• Support in drinking water supply</li> </ul>	
65	Karmaiya		Naya Basti	2072/2/20	19	10	9	<ul style="list-style-type: none"> <li>• Support for river control</li> </ul>	
66	Lalbandi NP		Jiyajor	2072/2/04	29	15	14	<ul style="list-style-type: none"> <li>• Possible impacts due to TL</li> <li>• Provision of employment to <i>Dalits</i></li> </ul>	
67	Lalbandi NP		Chheda	2072/2/04	32	12	20	<ul style="list-style-type: none"> <li>• Possible impacts due to TL</li> <li>• Provision of employment to <i>Dalits</i></li> </ul>	
68	Raniganj		Danda Tole	2072/2/03	34	9	25	<ul style="list-style-type: none"> <li>• Loss of tree from community forest</li> <li>• Skill training</li> </ul>	
69	Raniganj		Bire Tole	2072/2/04	19	11	8	<ul style="list-style-type: none"> <li>• Loss of tree from community forest</li> <li>• Skill training</li> <li>• Support in animal husbandry and vegetable farming</li> </ul>	
70	Siraha	Ayodhyanagar	Paswan Tole	2072/2/20	21	7	14	<ul style="list-style-type: none"> <li>• Support in irrigation</li> <li>• Employment to <i>Dalits</i></li> </ul>	
71		Ayodhyanagar	Kasaha	2072/2/20	7	2	5	<ul style="list-style-type: none"> <li>• Support in irrigation</li> <li>• Support in animal husbandry and vegetable farming</li> </ul>	
72		Badaramal	Baltiya	2072/2/18	17	5	12	<ul style="list-style-type: none"> <li>• Possible health hazards due to TL</li> <li>• Employment to <i>Dalits</i></li> </ul>	
73		Badaramal	Mulkiya	2072/2/18	39	13	26	<ul style="list-style-type: none"> <li>• House wiring and driving training</li> <li>• Tailoring and weaving training to women</li> <li>• Income generating activities</li> </ul>	
74		Dhangadi	Sonapur	2072/1/22	28	7	21	<ul style="list-style-type: none"> <li>• Support in irrigation</li> <li>• Support in supply of safe drinking water</li> </ul>	
75		Dhangadi	Chamar Tole	2072/1/22	22		22	<ul style="list-style-type: none"> <li>• Employment to <i>Dalits</i></li> <li>• Support in education</li> </ul>	
76		Golbazar NP	Titariya	2072/2/19	23	11	12	<ul style="list-style-type: none"> <li>• Support in road construction</li> </ul>	

							<ul style="list-style-type: none"> <li>• Market management of local products</li> </ul>	
77		Golbazar NP	Dhobiyajhar	2072/2/19	28	11	17	<ul style="list-style-type: none"> <li>• Fish farming support</li> <li>• Financial support for toilet construction</li> </ul>
78		Karjanha	Dimari Tole	2072/2/18	16	7	9	<ul style="list-style-type: none"> <li>• Employment to Dalits</li> <li>• Proper compensation for loss of land</li> </ul>
79		Karjanha	Shiva Chowk	2072/2/18	24	4	20	<ul style="list-style-type: none"> <li>• Support in irrigation</li> <li>• Compensation for loss of land</li> </ul>
80		Lahan NP	Bastipur	2072/1/22	20	3	17	<ul style="list-style-type: none"> <li>• Support in irrigation</li> <li>• Support for vegetable farming</li> </ul>
81		Lahan NP	Gudigaun	2072/1/22	22	14	8	<ul style="list-style-type: none"> <li>• Support in drinking water, education and toilet construction</li> </ul>
82		Mirchaiya NP	Jiba Tole	2072/2/19	50	3	47	<ul style="list-style-type: none"> <li>• Skill training to women</li> <li>• Employment to Dalits</li> <li>• People participation during TL construction</li> </ul>
83		Mirchaiya NP	Bhagwatpur	2072/2/19	35	11	24	<ul style="list-style-type: none"> <li>• Mechanical and technical training to youth</li> <li>• Support for construction of toilets</li> </ul>
84		Bhokraha	Mahindra Tole	2072/1/09	20	11	9	<ul style="list-style-type: none"> <li>• Support for drainage construction</li> <li>• Provide house wiring and automobile training</li> </ul>
85		Bhokraha	BhittaTole	2072/1/10	29	27	2	<ul style="list-style-type: none"> <li>• Health and safety hazards</li> <li>• Support in animal husbandry and vegetable farming</li> <li>• Support for micro enterprises</li> </ul>
86		Dumraha	Musahar Tole	2072/1/10	18	4	14	<ul style="list-style-type: none"> <li>• Support for tube-well installation</li> <li>• Tailoring and weaving training to women</li> </ul>
87		Dumraha	Bhir Tole	2072/1/10	10	5	5	<ul style="list-style-type: none"> <li>• Tailoring and weaving training to women</li> <li>• Electrification</li> </ul>
88		Mahendranagar	Bishnuchowk	2072/1/09	11	5	6	<ul style="list-style-type: none"> <li>• Support for library establishment in schools</li> <li>• Health and safety hazards</li> </ul>
89		Mahendranagar	Kalapani	2072/1/09	24	2	22	<ul style="list-style-type: none"> <li>• Employment to Dalits</li> <li>• Support in animal husbandry and vegetable farming</li> </ul>
90		RamdhaniBhasi NP	Ikagahi	2072/1/09	15	7	8	<ul style="list-style-type: none"> <li>• Provide technical training (driving, mobile repairing)</li> <li>• Provide goat raising and vegetable farming training</li> <li>• Provide tailoring training</li> </ul>
91		RamdhaniBhasi NP	Lalpur	2072/1/06	16	6	10	<ul style="list-style-type: none"> <li>• Provide technical training (computer operation, driving, motorbike repair, mobile repairing)</li> <li>• Provide pig/poultry and vegetable farming training</li> <li>• Provide IG training (shop/Mudha making, tailoring)</li> </ul>
92	Sunsari	Tapeshwori	Shantinagar	2072/1/11	13	6	7	<ul style="list-style-type: none"> <li>• Electrification</li> <li>• Skill training</li> </ul>
93	Udaypur	Tapeshwori	Chandrapur	2072/1/11	10	6	4	<ul style="list-style-type: none"> <li>• Employment to Dalits</li> <li>• Skill training</li> </ul>

Source: Field Survey, 2015

**Annex VI: Details of Dalit Population Distribution of the Project Area**

S_No.	District	VDC/Municipality	Total_Pop	Dalit	Kami	Damai	Sarki	Chamar /Ram	Musahar	Pasawan	Kalwar	Tatma /Tatwa	Khatwe	Dhobi	Sada	Dom	Badi	Dalit Others
1	Bara	Nijgadh NP	19614	1219	467	278	44	17		36	156	17						204
<b>Total</b>			<b>19614</b>	<b>1219</b>	<b>467</b>	<b>278</b>	<b>44</b>	<b>17</b>	<b>0</b>	<b>36</b>	<b>156</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>204</b>
2	Dhanusha	Puspapur	2594	479	246	12	91		130									
3	Dhanusha	Dhaushadham NP	45009	7395	1404	105	687	1656	2175	147		543	126	456		51	45	
4	Dhanusha	GaneshmanCharnathNP	34770	5784	658	222	270	1632	618	394		1540	200	30	98	122		
5	Dhanusha	Mithila NP	31575	1761	521	306	80	510	147				177	20				
6	Dhanusha	Chhireshwornath NP	36745	5961	981	36	153	2271	789	684		426	513	108				
<b>Total:</b>			<b>150693</b>	<b>21380</b>	<b>3810</b>	<b>681</b>	<b>1281</b>	<b>6069</b>	<b>3859</b>	<b>1225</b>	<b>0</b>	<b>2509</b>	<b>1016</b>	<b>614</b>	<b>98</b>	<b>173</b>	<b>45</b>	<b>0</b>
7	Mahottari	Bardibas	12584	2399	407	444	77	1108	21		238			53		23		28
8	Mahottari	Khayarmara	8719	1034	457	70	426	11	31		39							
<b>Total:</b>			<b>21303</b>	<b>3433</b>	<b>864</b>	<b>514</b>	<b>503</b>	<b>1119</b>	<b>52</b>	<b>0</b>	<b>277</b>	<b>0</b>	<b>0</b>	<b>53</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>28</b>
9	Makwanpur	Churiyamai	14274	624	515	72	37											
10	Makwanpur	ShreepurChhatiwan	20747	1196	917	123					40							116
11	Makwanpur	Dhiyal	5945	73	73													
<b>Total</b>			<b>40966</b>	<b>1893</b>	<b>1505</b>	<b>195</b>	<b>37</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>116</b>
12	Rautahat	Chandranigahpur	26163	3958	1186	330	76	426	128	68	1556	54		134				
13	Rautahat	Rangapur	11044	1371	199	11		215	767		98			35				46
14	Rautahat	Kakanpur	10023	1360	69		14	383	580	134	133	47						
<b>Total</b>			<b>47230</b>	<b>6689</b>	<b>1454</b>	<b>341</b>	<b>90</b>	<b>1024</b>	<b>1475</b>	<b>202</b>	<b>1787</b>	<b>101</b>	<b>0</b>	<b>169</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>46</b>
15	Saptari	Daulatpur	4775	1708	59			313	792	154		153	223			14		
16	Saptari	Tehruta	5230	1799	108			116	542	12	103		219		699			
17	Saptari	Rayapur	10214	2946	57			451	601	272	272		1260			16		17
18	Saptari	Prasbani	6212	1964				201	929			30	44	25	718	17		
19	Saptari	Jandaul	4360	626	70			98	144					28	268	18		
20	Saptari	Sitapur	4122	1052	48	19		260	319				381		25			
21	Saptari	Pansera	4892	1703	50			557	376	138	116	399			48	19		
22	Saptari	Kushaha	6695	1757	25			669	18	835	197	13						
23	Saptari	Madhupatti	4786	1336	152			342	565	91	186							
24	Saptari	Shambhunath NP	30207	5340	120	87		567	1962		1236		564		747	57		
25	Saptari	Khojpur	5063	2221	31			198		134	654		896		289			19
26	Saptari	Kalyanpur	8724	1864	157			360	167	170	294		696			20		
27	Saptari	Bakdhuwa	8365	1803	197	153	95	136	935			79	170			21		17
28	Saptari	Kanchanpur NP	48691	7315	1060			625	875	2570		295	710	150	850	180		
29	Saptari	Saptakoshi NP	21132	4214	526	304	80	436	1578		34		520	68	604	32	32	
<b>Total</b>			<b>173468</b>	<b>37648</b>	<b>2660</b>	<b>563</b>	<b>175</b>	<b>5329</b>	<b>9803</b>	<b>4376</b>	<b>3092</b>	<b>969</b>	<b>5683</b>	<b>271</b>	<b>4248</b>	<b>394</b>	<b>32</b>	<b>53</b>
30	Sarlahi	Karmaiya	9114	1110	753	83	28	33	28	38	110		16			21		
31	Sarlahi	Lalbandi NP	30786	788				183			339			54		212		
32	Sarlahi	Raniganj	5576	427	348	57	22											
33	Sarlahi	Kalinjor	5388	642	259	134	220											29
34	Sarlahi	Hariwon NP	42783	3110	1027	383	102	326	94	421	481	65	21	119		71		

35	Sarlahi	Dhungrekholo	13500	941	323	176	38	70		63	164		25						82
<b>Total</b>			<b>107147</b>	<b>7018</b>	<b>2710</b>	<b>833</b>	<b>410</b>	<b>612</b>	<b>122</b>	<b>522</b>	<b>1094</b>	<b>65</b>	<b>62</b>	<b>173</b>	<b>0</b>	<b>304</b>	<b>29</b>	<b>82</b>	
36	Siraha	Lahan NP	33653	6628	411	278	158	987	1618	1834	403	555	237	109		38			
37	Siraha	Dhangadi	11262	2747	119	164		883	780	90	84	143	331	115		38			
38	Siraha	Ayodhyanagar	4433	339				124		138				47		30			
39	Siraha	Golbazar NP	47763	10086	641	95	157	4309	2492	751	308	428	779	31		95			
40	Siraha	Mirchaiya NP	47016	10059	241			3964	2273	2082	314			1036	37	112			
41	Siraha	Karajna	7467	2146	42			290	353	1379	19	27				36			
42	Siraha	Badaharamal	16482	4451	393	226	13	438	1832	340	56	1153							
<b>Total</b>			<b>168076</b>	<b>36456</b>	<b>1847</b>	<b>763</b>	<b>328</b>	<b>10995</b>	<b>9348</b>	<b>6614</b>	<b>1184</b>	<b>2306</b>	<b>1347</b>	<b>1338</b>	<b>37</b>	<b>349</b>	<b>0</b>	<b>0</b>	
43	Sunsari	Bhokraha	19415	5190		45		261	4177		28			666		13			
44	Sunsari	RamduniBhasi NP	28550	3262	865	271	93	505	1438				90						
45	Sunsari	Dumra	16528	2213	70	100	31	196	1525		13		208		22	48			
46	Sunsari	Mahendranagar	23631	2342	779	436	303	312	257	33			145	20	13	44			
		<b>Total:</b>	<b>88124</b>	<b>13007</b>	<b>1714</b>	<b>852</b>	<b>427</b>	<b>1274</b>	<b>7397</b>	<b>33</b>	<b>41</b>	<b>0</b>	<b>1109</b>	<b>20</b>	<b>0</b>	<b>48</b>	<b>92</b>	<b>0</b>	<b>0</b>
47	Udaypur	Tapeshwori	10151	887	395	141	243		70	23					15				
<b>Total</b>			<b>10151</b>	<b>887</b>	<b>395</b>	<b>141</b>	<b>243</b>	<b>0</b>	<b>70</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Grand Total</b>			<b>826772</b>	<b>129630</b>	<b>17426</b>	<b>5161</b>	<b>3538</b>	<b>26439</b>	<b>32126</b>	<b>13031</b>	<b>7671</b>	<b>5967</b>	<b>9217</b>	<b>2638</b>	<b>4383</b>	<b>1306</b>	<b>198</b>	<b>529</b>	

Source: Population and Housing Census, 2011

#### Annex VII: Details of Janajati Population Distribution of the Project Area

S. No.	District	VDC/Municipality	Toal_Pop	Janajati	Bhote	Chepang	Danuwar	Dhanuk	Gharti/Bhujel	Gurung	Jhanga d	Kumal	Limbu	Magar	Majhi	Newar	Rai	Sherpa	Tamang	Tharu
1	Bara	Nijgadh NP	19614	8000	16		1504		25	85			29	1056	567	1102	166		3309	141
<b>Total</b>			<b>19614</b>	<b>8000</b>	<b>16</b>		<b>1504</b>		<b>25</b>	<b>85</b>			<b>29</b>	<b>1056</b>	<b>567</b>	<b>1102</b>	<b>166</b>		<b>3309</b>	<b>141</b>
2	Dhanusha	Puspapur	2594	1012										461					551	
3	Dhanusha	Dhaushadham NP	45009	8152				472	218		630			2788		294	224		3420	106
4	Dhanusha	GaneshmanCharnathNP	34770	6806	168		634	394	254					3392		542	248		1120	54
5	Dhanusha	Mithila NP	31575	10372				253	468	33				2240	495	2365	88		4430	
6	Dhanusha	Chhireswornath NP	36745	3546			132	237	57			69		1317		84	156		1494	
		<b>Total</b>	<b>150693</b>	<b>29888</b>	<b>168</b>	<b>0</b>	<b>766</b>	<b>1356</b>	<b>997</b>	<b>33</b>	<b>630</b>	<b>69</b>	<b>0</b>	<b>10198</b>	<b>495</b>	<b>3285</b>	<b>716</b>	<b>0</b>	<b>11015</b>	<b>160</b>
7	Mahottari	Bardibas	12584	3102			20	60	394	13				1303	39	499	81		637	56
8	Mahottari	Khayarmara	8719	4883				49	120					387		879			3448	
<b>Total</b>			<b>21303</b>	<b>7985</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>109</b>	<b>514</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1690</b>	<b>39</b>	<b>1378</b>	<b>81</b>	<b>0</b>	<b>4085</b>	<b>56</b>
9	Makwanpur	Hetauda NP	14274	12075		239	13		44	83				601		268	21		10806	
10	Makwanpur	ShreepurChhatiwan	20747	16007			448		51	122				370	1321	145	823		12727	
11	Makwanpur	Dhiyal	5945	5234										98					5136	
<b>Total</b>			<b>40966</b>	<b>33316</b>	<b>0</b>	<b>239</b>	<b>461</b>	<b>0</b>	<b>95</b>	<b>205</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1069</b>	<b>1321</b>	<b>413</b>	<b>844</b>	<b>0</b>	<b>28669</b>	<b>0</b>
12	Rautahat	Chandranigahpur	26163	10108				21	67	229		53	13	1211		507	502		5696	1809
13	Rautahat	Rangapur	11044	7598					90	32				472	149	160	160		2177	4358
14	Rautahat	Kakanpur	10023	3466				249		15				205	461	56		77	110	2293
<b>Total</b>			<b>47230</b>	<b>21172</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>270</b>	<b>157</b>	<b>276</b>	<b>0</b>	<b>53</b>	<b>13</b>	<b>1888</b>	<b>610</b>	<b>723</b>	<b>662</b>	<b>77</b>	<b>7983</b>	<b>8460</b>
15	Saptari	Daulatpur	4775	1652			200	66	24					50		27	40		38	1207

16	Saptari	Tehrauta	5230	2219									276	25	29	131			1636	
17	Saptari	Rayapur	10214	888									15		16			25	716	
18	Saptari	Prasbani	6212	1602															771	
19	Saptari	Jandaul	4360	2833			341									35			2457	
20	Saptari	Sitapur	4122	2307							11						83	116	2097	
21	Saptari	Pansera	4892	1645															1537	
22	Saptari	Kushaha	6695	2466								19				11			2340	
23	Saptari	Madhupatti	4786	2357			14	151					15			50			2127	
24	Saptari	Shambhunath NP	30207	12916			2616	756								116			9428	
25	Saptari	Khojpur	5063	1274				40											1234	
26	Saptari	Kalyanpur	8724	2935				36				12	37	17	212	90		136	2395	
27	Saptari	Bakdhuwa	8365	2236				164	75			16				96		60	1636	
28	Saptari	Kanchanpur NP	48691	6540				3225					975	735				385	1220	
29	Saptari	Saptakoshi NP	21132	7584				54	82	106			36	350		544	854	262	5296	
<b>Total</b>			<b>173468</b>	<b>51454</b>	<b>0</b>	<b>0</b>	<b>3171</b>	<b>5765</b>	<b>181</b>	<b>106</b>	<b>0</b>	<b>27</b>	<b>67</b>	<b>1907</b>	<b>777</b>	<b>1040</b>	<b>1294</b>	<b>0</b>	<b>1022</b>	<b>36097</b>
30	Sarlahi	Karmaiya	9114	4101	415			45	102	45				492	493	452	67		1979	11
31	Sarlahi	Lalbandi NP	30786	9399	26		30	56	380					2319	57				6231	300
32	Sarlahi	Raniganj	5576	1751			44	12	143			36		236		245			882	153
33	Sarlahi	Kalinjor	5388	2601				109	123					586		35			1748	
34	Sarlahi	Hariwon NP	42783	11734			1293	154	682	119				2230	337	2258	414		4206	41
35	Sarlahi	Dhungre Khola	13500	7657				112	269	25				1274	30	209	68		5670	
<b>Total</b>			<b>107147</b>	<b>37243</b>	<b>441</b>	<b>0</b>	<b>1367</b>	<b>488</b>	<b>1699</b>	<b>189</b>	<b>0</b>	<b>36</b>	<b>0</b>	<b>7137</b>	<b>917</b>	<b>3199</b>	<b>549</b>	<b>0</b>	<b>20716</b>	<b>505</b>
36	Siraha	Lahan NP	33653	5565			118	1307	77	14			30	145	14	234	95		69	3462
37	Siraha	Dhangadi	11262	2435			208	34						830		306	95		825	137
38	Siraha	Ayodhyanagar	4433	398								183				11			204	
39	Siraha	Golbazar NP	47763	4468			622	112	39					1053		319	227		1839	257
40	Siraha	Mirchaiya NP	47016	3225			487	1695						403		375	64		120	81
41	Siraha	Karajnaha	7467	394			136	152									106			
42	Siraha	Badaharamal	16482	1619				108	16	55		286				220	156		749	29
<b>Total</b>			<b>168076</b>	<b>18104</b>	<b>0</b>	<b>0</b>	<b>1571</b>	<b>3408</b>	<b>132</b>	<b>69</b>	<b>0</b>	<b>469</b>	<b>30</b>	<b>2431</b>	<b>14</b>	<b>1465</b>	<b>743</b>	<b>0</b>	<b>3806</b>	<b>3966</b>
43	Sunsari	Bhokraha	19415	205				13					29	69	13	58		23		
44	Sunsari	RamdhuniBhasi NP	28550	15973				83					46	353	835	783	459	50	373	12991
45	Sunsari	Dumraha	16528	5449			34	77					44	73		64	105		38	5014
46	Sunsari	Mahendranagar	23631	7730			13	204	118				870	1080	802	1079	1906	61	765	832
<b>Total</b>			<b>88124</b>	<b>29357</b>			<b>47</b>	<b>377</b>	<b>118</b>				<b>989</b>	<b>1575</b>	<b>1650</b>	<b>1984</b>	<b>2470</b>	<b>134</b>	<b>1176</b>	<b>18837</b>
47	Udaypur	Tapeshwori	10151	4633			15	80				13	42	150	30	275	763		588	2677
<b>Total</b>			<b>10151</b>	<b>4633</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>42</b>	<b>150</b>	<b>30</b>	<b>275</b>	<b>763</b>	<b>0</b>	<b>588</b>	<b>2677</b>
<b>Grand Total</b>			<b>826772</b>	<b>241152</b>	<b>625</b>	<b>239</b>	<b>8922</b>	<b>11396</b>	<b>4257</b>	<b>1094</b>	<b>630</b>	<b>667</b>	<b>1170</b>	<b>29101</b>	<b>6420</b>	<b>14864</b>	<b>8288</b>	<b>211</b>	<b>82369</b>	<b>70899</b>

Source: Population and Housing Census, 2011

**Annex VIII: Details of PRA Participants of Dalits People by Caste/Ethnicity**

S. No.	District	VDC	Dalit	Kami	Damai	Sarki	Chamar/Ram	Musahar	Pasawan	Khatwe	Others
1	Bara	Nijgadh NP	38	24	12						2
2	Dhanusha	Puspapur	35	18	2			15			
3	Dhanusha	Dhaushadham NP	47	47							
4	Dhanusha	Ganeshman Charnath NP	46	10				36			
5	Dhanusha	Mithila NP	39	19	9		11				
6	Dhanusha	Chhireswornath NP	104	36			2	66			
7	Mahottari	Bardibas	67	37	19						11
8	Mahottari	Khayarmara	54	48	2	4					
9	Makwanpur	Hetauda NP	64	42	11						11
10	Makwanpur	Shreepur Chhatiwan	32	28	2						2
11	Makwanpur	Dhiyal	16	16							
12	Rautahat	Chandranigahpur	47	17	9		14				7
13	Rautahat	Rangapur	8	8							
14	Rautahat	Kakanpur	10	10							
15	Saptari	Daulatpur	36				3	33			
16	Saptari	Tehrauta	47	4				39	4		
17	Saptari	Rayapur	49				32		2	15	
18	Saptari	Parsawani	29					29			
19	Saptari	Jandaul	27					27			
20	Saptari	Sitapur	52	12			15	25			
21	Saptari	Pansera	17					17			
22	Saptari	Kusaha	23				5		18		
23	Saptari	Madhupatti	49	1				40	8		
24	Saptari	Shambhunath NP	62				18	44			
25	Saptari	Khojpur	27						15	12	
26	Saptari	Kalyanpur	32	3			8	17	4		
27	Saptari	Bakdhuwa	43	15	8		5	15			
28	Saptari	Kanchanpur NP	41				25	16			
29	Saptari	Saptakoshi NP	59	1				58			
30	Sarlahi	Karmaiya	39	24	9				6		
31	Sarlahi	Lalbandi NP	62		3		59				
32	Sarlahi	Raniganj	53	49	4						
33	Sarlahi	Kalinjor	51	43	4	4					
34	Sarlahi	Hariwon NP	31	31							
35	Sarlahi	Dhungrekhol	37	16	19	2					
36	Siraha	Lahan NP	31					19	12		
37	Siraha	Dhangadi	48				16			32	
38	Siraha	Ayodhyanager	31				5		26		
39	Siraha	Golbazar NP	51					51			
40	Siraha	Mirchaiya NP	85					35	50		
41	Siraha	Karajaha	50					26	24		

42	Siraha	Badaharamal	56		4			52				
43	Sunsari	Bhokraha	49				6	43				
44	Sunsari	Ramduni Bhasi NP	31	11				20				
45	Sunsari	Dumraha	28					19		9		
46	Sunsari	Mahendranagar	35	7	4			24				
47	Udaypur	Tapeshwori	21	18	2	1						
<b>Total</b>			<b>1989</b>	<b>595</b>	<b>123</b>	<b>11</b>	<b>224</b>	<b>766</b>	<b>169</b>	<b>68</b>	<b>33</b>	

Source: Field Survey, 2015

#### Annex IX: Details of PRA Participants of Janjati by Caste/Ethnicity

S_No	District	VDC	Janajati	Bhote	Danuwar	Gharti/Bhujel	Magar	Majhi	Newar	Rai	Tamang	Tharu	Others
1	Bara	Nijgadh NP	32				20	6	2		2	1	1
2	Dhanusha	Puspalpur	19				13				5	1	
3	Dhanusha	Dhaushadham NP	31								31		
4	Dhanusha	Ganeshman Charnath NP	34			1	33						
5	Dhanusha	Mithila NP	25			11	13			1			
6	Dhanusha	Chhireswornath NP	28				28						
7	Mahottari	Bardibas	55			6	32		8		9		
8	Mahottari	Khayarmara	55						12		43		
9	Makwanpur	Hetauda NP	19			17					2		
10	Makwanpur	ShreepurChhatiwani	24					20	2		2		
11	Makwanpur	Dhiyal	55						1		49		5
12	Rautahat	Chandranigahpur	27				16				11		
13	Rautahat	Rangapur	153					93				60	
14	Rautahat	Kakanpur	46					19				21	6
15	Saptari	Daulatpur	19				2					17	
16	Saptari	Tehrauta	19									19	
17	Saptari	Rayapur	24									24	
18	Saptari	Prasbani	37									37	
19	Saptari	Jandaul	14									14	
20	Saptari	Sitapur	40							2	5	29	4
21	Saptari	Pansera	21									19	2
22	Saptari	Kushaha	20									20	
23	Saptari	Madhupatti	22									22	
24	Saptari	Shambhunath NP	28									28	
25	Saptari	Khojpur	20							1		19	
26	Saptari	Kalyanpur	16						2	3	8		3
27	Saptari	Bakdhuwa	23					19		4			
28	Saptari	Kanchanpur NP	18									18	

29	Saptari	Saptakoshi NP	26									26	
30	Sarlahi	Karmaiya	23	23									
31	Sarlahi	Lalbandi NP	22					21	1				
32	Sarlahi	Raniganj	51				13				33		5
33	Sarlahi	Kalinjor	52				22				30		
34	Sarlahi	Hariwon NP	107		86		4			1	10	6	
35	Sarlahi	Dhungrekholā	14								14		
36	Siraha	Lahan NP	16									16	
37	Siraha	Dhangadi	16				8				6		2
38	Siraha	Ayodhyanagar	30								30		
39	Siraha	Golbazar NP	20				20						
40	Siraha	Mirchैया NP	16				16						
41	Siraha	Karajnaha	21							21			
42	Siraha	Badaharamal	26								26		
43	Sunsari	Bhokraha	32			8	19	5					
44	Sunsari	RamdhuniBhasi NP	12					6			1	5	
45	Sunsari	Dumraha	14									14	
46	Sunsari	Mahendranagar	13				2			9	2		
47	Udayapur	Tapeshwori	20									20	
<b>Total</b>			<b>1455</b>	<b>23</b>	<b>86</b>	<b>43</b>	<b>261</b>	<b>189</b>	<b>28</b>	<b>42</b>	<b>319</b>	<b>436</b>	<b>28</b>

Source: Field Survey, 2015

**Annex- XI**

**Caste Wise Land Aquisition from Janjati HHs**

SN	Cast/Ethnicity	Ward	Name	Total Land owned (Kattha)	Affected Land (Kattha)	% loss
	<b>Chaudhary/Tharu</b>					
1	VaruwaKhal	9	Sona Kumari Chaudhary	11.00	1.4	12.73
2	Khojpur	8	Bilat Chaudhary	15.00	1.7	11.33
3	khojpur	6	Enral Chaudhary	18.00	1.85	10.28
4	Pansera	6	Raj Kumari Devi Chaudhary	10.00	1	10.00
5	VaruwaKhal	9	Kastu Chaudhary	10.00	0.95	9.50
6	Pansera	7	Andu Chaudhary	13.00	0.95	7.31
7	Kusaha	2	Chauthanai Wati Chaudhary	13.00	0.925	7.12
8	Kalyanpur	1	Lilawati Devi Chaudhary	16.00	1.05	6.56
9	Khoksarparwa	7	Sita devi chaudhary	12.00	0.7	5.83
10	Pansera	5	Panchu Chaudhary	20.00	1.15	5.75
11	Madhupatty	5	Dukhani devi Chaudhary	10.00	0.5	5.00
12	Vangaha	8	Bishow Nath Chaudhary	20.00	0.95	4.75
13	Vangaha	7	Sanjana Chaudhary	20.00	0.95	4.75
14	kalyanpur	3	Birbal chaudhary	40.00	1.85	4.63
15	Kusaha	2	Hari Kr Chaudhary	20.00	0.9	4.50
16	Vakduwa	9	Bhuuti Devi Tharuni	20.00	0.9	4.50
17	Kusaha	2	Pampa Devi Tharuhni	15.00	0.6	4.00
18	Varuwakhal	5	Urmila Kumari Chaudhary	20.00	0.8	4.00
19	VaruwaKhal	1	Rm Kumar Chaudhary	25.00	0.95	3.80
20	Madhupatty	5	Ganaur Chaudhary	12.00	0.45	3.75
21	Madhupatty	4	Urmila KumariChaudhary	30.00	0.95	3.17
22	Kushaha	8	Sukarlal Chaudhary	30.00	0.95	3.17

23	Khosarparwa	3	Harihar Chaudhary	30.00	0.95	3.17
24	Kusaha	1	Kari Chuadhry	15.00	0.45	3.00
25	Mohanpur	5	Janaki Devi Chaudhary	10.00	0.3	3.00
26	Jandol	9	Bhatu Chaudhary	20.00	0.575	2.88
27	Jandol	9	Gundev Chaudhary	30.00	0.825	2.75
28	Madhupatty	8	Anand Narayan Chaudhary	20.00	0.5	2.50
29	Pansera	6	Jholai Chaudhary	20.00	0.5	2.50
30	Vangaha	4	Ram Lagan Chaudhary	20.00	0.5	2.50
31	Khosarparwa	3	Anil Kumar chaudhary	15.00	0.375	2.50
32	Parasbani	3	Dev raj Chaudhary	40.00	0.95	2.38
33	Vakduwa	7	Dropati Chaudhary	30.00	0.7	2.33
34	Vangaha	5	Tej Narayan chaudhary	20.00	0.425	2.125
35	Kusaha	2	Volahi Chaudhary	18.00	0.375	2.08
36	Khosarparwa	7	Chandan Chaudhary	30.00	0.6	2.00
37	Parasbani	5	Mahani devi Tharuni	30.00	0.6	2.00
38	Sitapur	3	Jhallu Chaudahary	50.00	1	2.00
39	VaruwaKhal	2	Dharma lal Chaudhary	50.00	0.95	1.90
40	Sitapur	3	Tek Narayan Chaudhary	50.00	0.95	1.90
41	Sitapur	1	Resham Lal Chaudhary	50.00	0.95	1.90
42	Theliya	1	Kannan Chaudhary	40.00	0.75	1.88
43	Mohanpur	5	Lilam Devi Chaudhary	40.00	0.7125	1.78
44	Sitapur	1	Aasa Chaudhary	60.00	0.95	1.58
45	Parasbani	5	Yogenra Pr Chaudhary	40.00	0.575	1.44
46	Vakduwa	9	Jay kumari Chaudhary	60.00	0.775	1.29
47	Dharmpur	8	Parasu Ram Chaudhary	50.00	0.575	1.15
48	Madhupatty	7	Ramnarayan Chaudhary	40.00	0.45	1.13
49	Sitapur	3	Laxmi NarayanTharu	40.00	0.4	1.00

50	Daulatpur	2	Prithivi Lal Lekhi	20.00	0.175	0.88
51	Jandol	9	Mahesh Chaudhary	70.00	0.6	0.86
52	Madhupatty	6	Adhi lal Chaudhary	30.00	0.25	0.83
53	Vakduwa	9	Dewananda Lekhi	30.00	0.25	0.83
54	Vangaha	4	Ram Charitra Chaudhary	20.00	0.15	0.75
55	Vangaha	4	Dev raj Chaudhary	40.00	0.3	0.75
56	Vangaha	7	Deveshwor Chaudhary	140.00	0.95	0.68
57	Kusaha	2	Vikhan Chaudhary	20.00	0.125	0.63
58	Jandol	9	Durga Naha Chaudhary	20.00	0.125	0.63
59	Sitapur	3	Mahbir prasad Chaudhary	160.00	0.95	0.59
60	Jandol	8	Keshar Prasad Chaudhary	20.00	0.1	0.5
61	Jandol	9	Parsuram Chaudhary	5.00	0.025	0.5
62	Theliya	5	Ramnanda Chaudhary	50.00	0.225	0.45
63	Khoksarparwa	7	Aasawati Chaudhary	40.00	0.175	0.44
64	Khoksarparwa	7	Amarkant chaudhary	40.00	0.125	0.31
65	Kusaha	1	Nathari Devi Chaudhary	70.00	0.2	0.29
66	Vakdwa	7	Shyam dev chaudhary	18.00	0.05	0.28
67	Sitapur	1	Mallu Chaudahry	36.00	0.1	0.28
68	Daulatpur	9	Chandra kala Tharuni	70.00	0.175	0.25
69	Jandol	9	Magan Chaudhary	40.00	0.1	0.25
70	VaruwaKhal	3	Balum Tharu	60.00	0.15	0.25
71	Sitapur	8	Pratham Lal Chaudhary	40.00	0.1	0.25
72	Daulatpur	7	ChandraKant Chaudahary	80.00	0.175	0.22
73	Vakduwa	9	Man Bhura Chaudhary	30.00	0.05	0.17
74	Pansera	6	Pratp Chanda Chaudahry	40.00	0.05	0.13
75	Jandol	8	Dulari Devi Chaudhary	25.00	0.025	0.10
76	VaruwaKhal	4	Sarswoti Kumari Chaudhary	80.00	0.025	0.03

77	Padariya	1	Bilat Chaudhary	24	1.08	4.48
78	Padariya	5	Chedi lal Chaudhary	30	1.05	3.50
79	Bastipur	5	Kashilal Chaudhary	50	0.83	1.65
80	Padariya	1	Dev Narayan Chaudhary	80	0.98	1.22
81	Padariya	2	Nanuwati Chaudhary	7	0.08	1.07
82	Bastipur	5	Ramu Chaudhary	60	0.53	0.88
	<i>Sub total (Kattha)</i>			<i>2863.00</i>	<i>50.34</i>	<i>1.76</i>
	<i>Sub total (ha)</i>			<b>97.06</b>	<b>1.71</b>	<b>1.76</b>
	<b>Majhi</b>					
1	Singiya	2	Lok Bdr Majhi	2	0.50	25.00
2	Chhatiwan	9	Mangal Bd. Majhi	45	1.50	3.33
	<i>Sub total (Kattha)</i>			<i>47</i>	<i>2.00</i>	<i>4.26</i>
	<i>Sub total (ha)</i>			<b>1.59</b>	<b>0.07</b>	<b>4.26</b>
	<b>Limbu</b>					
1	Mahendranagar	3	Sukha Dhoj Limbu	8	1.00	12.50
2	Mahendranagar	3	Rupa limbu	20	1.20	6.00
	<i>Sub total (Kattha)</i>			<i>28</i>	<i>2.20</i>	<i>7.86</i>
	<i>Sub total (ha)</i>			<b>0.95</b>	<b>0.07</b>	<b>7.86</b>
	<b>Rai</b>					
1	Badharamal	5	Jugal Pr Rai	80	1.05	1.31
2	Mahendranagar	8	Bir Bahadur Rai	30	1.70	5.67
3	Vakduwa	7	Sita Maya Rai	5.00	0.68	13.50
	<i>Sub total (Kattha)</i>			<i>115.00</i>	<i>3.43</i>	<i>2.98</i>
	<i>Sub total (ha)</i>			<b>3.90</b>	<b>0.12</b>	<b>2.98</b>
	<b>Tamang</b>					
1	Mahendranagar	3	Tika Bahadur Tamang	14	1.00	7.14
2	Chhatiwan	8	Singh Bd. Thing	36	1.50	4.17

3	Chhatiwan	8	Santa Lal Thing	46	1.75	3.80
4	Chhatiwan	9	Motilal Sigar	85	1.95	2.29
5	Chhatiwan	8	Jyoti Bal	3	0.50	16.67
6	Chhatiwan	8	Sukumaya Thokar	29	1.00	3.45
7	Chhatiwan	8	Aaiman Dong	45	1.00	2.22
8	Dhungrekhol	1	Tulamaya Susling	1.5	0.49	32.50
9	Hariwon	8	Sangram Singh Waiba	50	0.95	1.9
10	Dhanushadham	9	Bishnu Bd. Tamang Domjan	30.00	0.70	2.33
11	Dhanushadham Municipality	9	Bishnu Bd. Tamang Domjan	30.00	0.70	2.33
12	Mithila	4	Julphe Dumjan	18.00	11.40	63.33
13	Mithila	4	Ojirnam Yonjan	10.50	0.60	5.71
14	Dhanuadham	7	Prithivi Bdr Tamang	1.50	0.59	39.17
15	Dhanuadham	9	Check Pani Moktan	11.50	0.95	8.26
16	Mithila	7	Janakai Maya Tamang	4.00	0.64	15.94
17	Mithila	4	Sukmaya Tamang	20.00	9.00	45.00
18	Mithila	4	Chandra Bdr Moktan	20.00	6.00	30.00
19	Mithila	4	Nema maya Tamang	11.50	3.80	33.04
20	Golbazar Municipality	2	Birlal Tamang	20	0.05	0.25
21	Golbazar Municipality	2	Gyan Kumar Tamang	30	0.58	1.92
22	Golbazar Municipality	10	Dorje Jimma	40	6	15
23	Golbazar Municipality	10	Butimaya Tamang	100	1.05	1.05
24	Golbazar Municipality	10	Fulmati Tamang	13	0.30	2.31
25	Dhangadimai Municipality	9	Gore Yonjan Tamang	30	1.05	3.50
	<i>Sub total (Kattha)</i>			<i>699.5</i>	<i>53.54</i>	<i>7.65</i>
	<i>Sub total (ha)</i>			<b>23.71</b>	<b>1.81</b>	<b>7.65</b>

	<b>Magar</b>					
1	Golbazar Municipality	3	Ratna Kumar Pulami	120	0.08	0.06
2	Dhanghadimai	10	Lok bd. Mashrangi Magar	19	0.01	0.07
3	Dhanghadimai	10	Balbahadur Mashrangi Magar	26	0.46	1.78
4	Dhanghadimai	10	Manbahadur Mashrangi Magar	19	0.51	2.70
5	Mahendranagar	3	Muna Thapa Magar	20	1.00	5.00
6	Ganeshman Charnath Municipality	6	Purna BD. Thapamagar	12.00	4.40	36.67
7	Golbazar Municipality	3	Kariman Pulami	240	1.05	0.44
8	Golbazar Municipality	10	Bal BD. Magar	10	1.05	10.50
9	Vakduwa	9	Ganesh Kr Magar	8.00	0.65	8.13
10	Theliya	5	Bir Bahadur Rana Magar	10.00	0.25	2.50
	<i>Sub total (Kattha)</i>			<i>484.00</i>	<i>9.46</i>	<i>1.96</i>
	<b>Sub total (ha)</b>			<b>16.41</b>	<b>0.32</b>	<b>1.96</b>
	<b>Newar</b>					
1	Karmaiya	6	Januka Devi Shrestha	20	1.7	8.50
2	Karmiya	2	Isha Maskey	86	1.7	1.98
3	Hariwon Municipality	1	Laxm devi Shrestha	30	0.95	3.17
4	Ganeshman Charnath Municipality	5	Dhana Maya Shrestha	57.00	1.11	1.95
5	Goganpur	9	Digambar Bdr shrestha	17.00	1.875	11.03
6	Mirchiya	2	Harinarayan Shrestha	33	12.80	38.79
7	Karjhana	2	Muglal Shrestha	30	0.6	2.00
8	Karjhana	2	kalu Shrestha	15	0.45	3.00
9	Goganpur	9	Purna Maya Shrestha	17.00	0.625	3.68
10	Goganpur	9	Man Kumar Shrestha	10.00	0.05625	0.56
11	Rupnagar	2	Man kishan Shrestha	20.00	0.175	0.88

12	Goganpur	9	Harka narayan Shrestha	17.00	0.2	1.18
	<i>Sub total (Katha)</i>			352	22.24	6.32
	<b>Sub total (ha)</b>			<b>11.93</b>	<b>0.75</b>	<b>6.32</b>

## Annex-XII

## Caste Wise Land Acepquisition from Dalit HHs

SN	VDC/Mun.	Ward	Name	Total Land owned (Kattha)	Affected Land (Kattha)	% loss
<b>Others</b>						
1	Bokhara	7	Jogindar Mushar	8	4.00	50.00
2	Vakduwa	7	Kaji Bdr Sarki	2.00	0.08	3.91
3	Dharpur	8	Rajdhobi	40.00	0.6	1.50
	<i>Sub total(Kattha)</i>			50	4.68	9.36
	<i>Sub total (ha)</i>			<b>1.70</b>	<b>0.16</b>	<b>9.36</b>
<b>Mandal</b>						
1	Bokhara	7	Ram Prasad Mandal	20	9.00	45.00
2	Bokhara	7	Sambhu Mandal	30	6.00	20.00
3	Bokhara	7	uma Devi Mandal	20	3.20	16.00
4	Bokhara	7	Laxmi Mandal	64	7.00	10.94
5	Bokhara	7	Sanjeev Mandal	80	5.40	6.75
6	kalyanpur	1	Suklal Mandal	20.00	0.95	4.75
7	Mithila	4	Hari Prasad Mandal	10.00	0.15	1.50
8	Ganeshman Charnath Municipality	1	Ram Dulari Mandal	18.00	0.60	3.33
9	Dumra	9	Parmila Khatwe	9	0.30	3.33
10	Golbazar Municipality	2	Shyam Suner Mandal	23.00	0.93	4.02
	Sub total(Kattha)			294.00	33.53	11.40
	<i>Sub total (ha)</i>			<b>9.97</b>	<b>1.14</b>	<b>11.40</b>
<b>Das</b>						
1	Sitapur	3	Sita Devi Das	10.00	0.5	5.00
2	Vangaha	5	Neb Kumar Das	11.00	0.03	0.23

3	Daulatpur	2	Khusi lal Das	18.00	0.43	2.36
4	Badharmaal	5	Jaylal Das	13.00	1.00	7.69
5	Badharmal	5	Dinesh Das	10.00	0.05	0.50
	Sub total(Kattha)			62.00	2	3.23
	<b>Sub total (ha)</b>			<b>2.10</b>	<b>0.07</b>	<b>3.23</b>
	<b>Biswakarma</b>					
1	Singiya	9	Man Kumari Bk	20	0.60	3.00
2	Singiya	8	Bir Bdr kami	40	0.33	0.81
3	Hariwon Municipality	9	Subash Bika	14	0.64	4.55
4	Chhatiwan	8	Buddhi Bd. B.K.	10.00	1.00	10.00
5	Mithila	7	LilaMaya B.K	2.00	0.14	7.03
6	Vakduwa	7	Nar Bdr B.K	3.00	1.25	41.67
7	Badharmal	7	Murari Bishwokarma	20.00	8.00	40.00
8	Pushwalpur	7	Luk Bahadur Kami	13.00	0.13	0.96
	Sub total(Kattha)			122	12.08	9.90
	<b>Sub total (ha)</b>			<b>4.14</b>	<b>0.41</b>	<b>9.90</b>
	<b>Chamar</b>					
1	Theliya	1	Maja devi Ram	5.00	0.975	19.50
2	Madhupatty	7	Ram devi Mochi	6.00	1	16.67
3	Madhupatty	7	Lukhiwati Chamar	8.00	0.675	8.44
4	Khojpur	8	Jago Devi Mochi	20.00	0.85	4.25
5	Mithila	3	Harilal Mochi	17.00	1.00	5.88
6	Mithila	3	Ram Lal Mochi	8.00	1.00	12.50
7	Bastipur	5	Jhumra mochi	19.00	0.48	2.50
	<b>Sub total(Kattha)</b>			<b>83.00</b>	<b>5.975</b>	<b>7.20</b>
	<b>Sub total (ha)</b>			<b>2.81</b>	<b>0.20</b>	<b>7.20</b>
	<b>Total (ha)</b>			<b>20.71</b>	<b>1.97</b>	<b>9.53</b>

## Women headed Households

SN	VDCs/Mun.	Ward	Name	Total Land owned (Kattha)	Affected Land (Kattha)	% loss
<b>Sunsari</b>						
1	Bokhara	7	Pramila Devi Mahaato	80.00	50.00	62.50
2	Bokhara	7	Sita Devi Yadhav	30.00	5.00	16.67
3	Mahendranagar	8	Lila maya Basnet	12.00	0.50	4.17
4	Bokhara	8	Gita Devi Mahato	40.00	0.50	1.25
5	Dumra	9	Jaleswari devi shah	100.00	0.55	0.55
<b>Saptari</b>				<b>262.00</b>	<b>56.55</b>	<b>21.58</b>
6	Daulatpur	2	Rampari Devi Thakur	18.00	1.35	7.50
7	Pansera	6	Bhuti Devi Shah	20.00	0.95	4.75
8	Varuwakhal	4	Gaga devi katuwal	20.00	0.75	3.75
9	Khojpur	8	Samjhana Jha	20.00	0.66	3.31
10	Theliya	1	Uhadevi Rajput ni	30.00	0.75	2.5
11	Khosarparwa	2	Parmeshworai devi shah	40.00	0.95	2.38
12	Vangaha	6	Durgi Devi Shah	15.00	0.325	2.17
13	Khosarparwa	3	Pashupati Devi shah	10.00	0.2	2
14	Madhupatty	6	Durga Devi yadhav	40.00	0.7	1.75
15	Pansera	7	Mariya Khatun	10.00	0.15	1.5
16	Pansera	7	Rehna Khatun	10.00	0.15	1.5
17	Rupnagar	3	Rahim Khatun	10.00	0.125	1.25
18	Vangaha	7	Lalita Devi Shah	20.00	0.2	1
19	Theliya	1	Karodevi Shah	20.00	0.175	0.88
20	Pansera	6	Nathari Devi Haluwai	70.00	0.6	0.86
21	Khojpur	8	Chndeswori Pandit	20.00	0.15	0.75
22	Rupnagar	4	sairul vivi	80.00	0.05	0.06

<b>Siraha</b>				<b>453.00</b>	<b>8.24</b>	<b>1.82</b>
23	Golbazar Municipality	4	Rekha Devi Yadav	80	0.925	1.16
24	Golbazar Municipality	10	Sumitra devi Yadav	180	1.3875	0.77
25	Mirchiya	9	Niratini Yadabni	47	1.3875	2.95
26	Dhangadimai	8	Dhaneshwori devi Yadav	15	0.15	1
27	Lavtoli	4	Sukmaya Kamini	36	1.85	5.14
28	Badharmal	4	Rita kr. Rawat (BC)	160	2	1.25
29	Mirchiya	6	Ram pari Devi	17.9	1.05	5.87
30	Karjana	8	Sadulan Khatun	30	0.538	1.79
31	lovetoli	3	Indu Shahi	100	1.300	1.30
32	Badarmahal	9	Yosodha Pokheral	16	0.200	1.25
33	Bastipur		Usha Kumari shah	70	0.225	0.32
34	Bastipur	5	Sajan Kumari Yadhav	20	0.000	0.00
35	Nainpur	1	Urmila Yadhav	100	1.050	1.05
36	Karjana	7	Bechani Devi Mahato	20	0.288	1.44
37	Badarmahal		Bishnu Maya Thapa	50	1.200	2.40
38	Karjana		Jasodha devi Mahato	31	0.650	2.10
39	Fulbariya	7	Jiwachi devi Tharuni	7	1.300	18.57
40	Karjana	4	Babita devi Mahato	30	0.65	2.17
<b>Dhanusa</b>						
41	Mithila	9	Bhakta Devi Giri	24.000	0.800	3.333
42	Ganeshman Charnath Municipality	5	Sushila Devi Pangiyar	40.000	1.300	3.250
43	Ganeshman Charnath Municipality	1	Bachani Devi Yadav	120.000	0.888	0.740
44	Ganeshman Charnath Municipality	7	Malati Devi Sah Sudi	267.000	0.800	0.300
45	Mithila	4	Dulari devi Sah	19.500	15.000	76.923

46	Mithila	4	Phul kr. Mahato	50.000	5.850	11.700
47	Dhanuadham	9	Gauri devi Losya	10.600	0.700	6.604
48	Dhanuadham	9	Ambika devi KC	44.500	1.650	3.708
49	Dhanuadham	9	Manju Adhakari	4.000	0.100	2.500
50	Mithila	4	Janaki Kumari Baniya	18.000	0.053	0.295
51	Mithila	4	Kishori Shah	100.000	1.200	1.200
52	Mithila	4	Ganga Devi	11.000	0.575	5.227
53	Mithila	4	Shiwani Devi Kathwania	15.800	9.800	62.025
54	Mithila	3	Indradevi Yadhav	12.000	17.000	141.667
55	Hariharpur	8	Dlari devi Koirai	60.000	0.097	0.161
56	Pushwalpur	3	Laganwati devi	37.000	1.100	2.973
57	Pushwalpur	7	Sahabir Kami	42.000	1.400	3.333
58	Ganeshman Charnath Municipality	2	puja lama	52.000	1.050	2.019
59	Ganeshman Charnath Municipality	5	Niramal devi Karki	21.000	0.450	2.143
60	Ganeshman Charnath Municipality	5	Urmila devi yadhav	68.000	1.050	1.544
61	Mithila	5	Tilotama Raut	35.000	0.300	0.857
62	Dhanuadham	9	Sauraa Khatun	10.100	0.125	1.238
Sarlahi				<b>2071.40</b>	<b>77.44</b>	<b>3.74</b>
63	Hariwon Municipality	9	Bishnu Maya Mainali	9.00	0.95	10.56
64	Hariwon Municipality	9	Lilamaya Khadka	20.00	0.6875	3.44
				<b>29.00</b>	<b>1.64</b>	<b>5.65</b>
<i>Total ( Kattha)</i>				<i>2815.40</i>	<i>143.86</i>	<i>5.11</i>
<b>Total (ha)</b>				<b>95.44</b>	<b>4.88</b>	<b>5.11</b>