

# Initial Environmental Examination – Appendices

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Project No. 41155-013  
April 2016

## NEP: Electricity Transmission Expansion and Supply Improvement Project

### Appendix F

Prepared by Nepal Electricity Authority for the Asian Development Bank.

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**Appendix F**  
**Impact Prediction Matrix; KII Guideline**  
**and Market Survey Checklist**

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# नेपाल विद्युत प्राधिकरण तामाकोशी-काठमाडौं ४०० के.भी. प्रसारण लाइन आयोजना को कृषिजन्य र अन्य वस्तुको मूल्य सम्बन्धि विवरण

१. जग्गा	मूल्य (प्रति रोपनी/विगाहा)		
सिंचित खेत			
असिंचित खेत			
खरबारी			
पाखा/वारी			
२. खाद्यान्न	मूल्य (प्रति किलो)	३. फलफूल	मूल्य (प्रति ईकाई)
किलो/दर्जन)			
धान		सुन्तला	
गहुँ		कांगती र निबुवा	
मकै		आरु	
कोदो		नासपाती	
जौ		अम्बा	
दाल (मासको)		कटहर	
दाल (मुगी)		केरी	
दाल (रहर)		मैदा	
दाल (मुसुर)		आप	
आलु		अन्य	
मुग			
मासको दाल			
राहत			
तोरी			
अन्य			
४. अन्य उत्पादन	मूल्य (प्रति लिटर/माना)	५. मासु	मूल्य (प्रति ईकाई)
		कुखुरा	
दही		खसी	
धु		रांगो	
तेल		सुँगुर	
		माछा	
६. घर निर्माणमा प्रयोग हुने सामान र मूल्य			
काठ			
ईटा			
सिमेण्ट			
बाँस			
फलामे डण्डी			
ढुंगा			
७. ज्याला मजदुरी (प्रति दिन)	ज्याला	खान्न	जम्मा
कृषी मजदुर (पुरुष)			
कृषी मजदुर (महिला)			
सिकर्मी			
डकर्मि			
अन्य			





## Tamiakoshi-Kathmandu 400 kV TL Project

S.N.	Name	Type	Focus Area	Major activity/prog.	Target Group	Beneficiaries (%)				
						All	Women	Janjati	Dalit	Others
1										
2										
3										
4										

**M. Key Stakeholders of the VDC**

1. Pls provide the names and address of important stakeholders related to development activities/transmission line project of your VDC

S N.	Name	Position	Address	Contact No.	Remarks
1					
2					
3					
4					
5					

**N. Issues and Concerns**

1. Do you know about the project? 1. Yes 2. No

1.1. If yes, what do you know about the project?

1..... 2..... 3.....

1.2. Who had provided you the information? 1..... 2..... 3.....

2. Are there issues related to social, economic and culture regarding the project? 1. Yes 2. No

2.1. If yes, what are they?

Social

Economic

Cultural

1.....

1.....

1.....

2.....

2.....

2.....

3.....

3.....

3.....

3. What do you expect from the project?

1.....

2.....

3.....

4. What is your opinion regarding implementation of the project?

1.....

2.....

3.....

5. How this project could be successfully implemented?

1.....

2.....

3.....

6. What are the important felt needs of the local people of your VDC?

1.....

2.....

3.....

7. What could be done to address the needs of the local people?

1.....

2.....

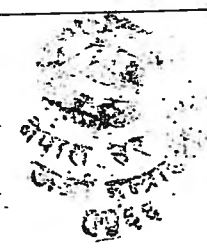
3.....

8. Do you have other issues/concerns regarding the project?

1.....

2.....

3.....



Natural Resource

VDC

Cause of Conflict

- |        |        |        |        |        |
|--------|--------|--------|--------|--------|
| 1..... | 1..... | 1..... | 2..... | 3..... |
| 2..... | 1..... | 1..... | 2..... | 3..... |
| 3..... | 1..... | 1..... | 2..... | 3..... |

## J. Cultural Features

- What are the major festivals of your area VDC? 1..... 2..... 3.....
- Is any festival is unique in your VDC? 1. Yes 2. No

1.1 If yes, which festival and why?

Festival

Reason

- |        |        |        |        |
|--------|--------|--------|--------|
| 1..... | 1..... | 2..... | 3..... |
| 2..... | 1..... | 2..... | 3..... |
| 3..... | 1..... | 2..... | 3..... |

- How do you assess the relationship of various ethnic minorities and high caste groups in the your VDC?  
1. Good 2. Average 3. Poor

- Are there important historical, religious, archeological and cultural sites in your area? 1. Yes 2. No

3.1 If yes, what are the historical, religious, archeological and cultural sites and why they are important?

Name

Location

Importance

- |        |        |        |
|--------|--------|--------|
| 1..... | 1..... | 1..... |
| 2..... | 1..... | 1..... |
| 3..... | 1..... | 1..... |

- Do you think the proposed project will affect religious, archeological and cultural sites of your VDC/area?  
1. Yes 2. No

- 4.1 If yes, what are the historical, religious, archeological and cultural sites and how to protect it?

Name

Location

Measures to Protect

- |        |        |        |        |
|--------|--------|--------|--------|
| 1..... | 1..... | 1..... | 2..... |
|--------|--------|--------|--------|

## K. Development Activities/Programs in the VDC

- Has any major development activities/programs implemented in your VDC during the last 12 months?  
1. Yes 2. No

1.1 If yes, please provide the following information?

Implementing agency

Activity/program

Beneficiary (group & HHs)

- |        |        |        |        |
|--------|--------|--------|--------|
| 1..... | 1..... | 1..... | 1..... |
| 2..... | 2..... | 2..... | 2..... |

- How do you assess its implementation process of the development activities/programs?  
1. Good 2. Average 3. Poor

- What should be the appropriate process to implement development activity/program in your VDC?  
1..... 2..... 3.....

- What are the source of information on new development activities/other recent happenings in your VDC?  
1..... 2..... 3.....

## L. Governmental Institutions and NGOs/CBOs

- Are there government institutions, important NGOs/CBOs working in your VDC? If, yes pls provide the following information.



Strengths:

Weaknesses:

Appendix F

**H. Migration**

1. What is the status of migration (family member away from home for more than two months for work reason) in your VDC?
  1. High
  2. Medium
  3. Low
2. Which are the popular destinations of the migrants? 1. .... 2. .... 3. ....
3. What is the status of remittance flow in your VDC?
  1. High
  2. Medium
  3. Low
- 3.1 Where the households normally use the remittance?
  1. Food/clothing
  2. Education
  3. Health
  4. Purchase land/plot
  5. House/building construction/repair
  6. House assets
  7. Others (specify) .....
4. What are the positive and negative impacts of migration in your VDC? (Probe for negative impacts such as work load to women, problem of STD/HIV AIDS, family dispute etc.)
 

Positive: 1. .... 2. .... 3. ....

Negative: 1. .... 2. .... 3. ....
- 4.1 How the negative impacts of migration could be minimized? (Probe for negative impacts such as work load to women, problem of STD/HIV AIDS, family dispute etc.)
 

1. .... 2. .... 3. ....

**I. Natural Resources**

1. What are the main natural resources of your VDC? 1. .... 2. .... 3. ....
2. Who are the main users of the resources?
 

1. .... 2. .... 3. ....
3. Is there right (defacto/dejure) to use the resources by the people of your VDC? 1. Yes 2. No
4. Pls provide the following details of natural resources of your VDC ?

Resource	Distance from VDC	Accessibility		Availability		
		Accessible	Inaccessible	High	Average	Low
Forest						
Water						
Grazing land						
Public land						
Mine						
Other.....						

5. Are the households of your VDC satisfied regarding the accessibility and availability of the natural resources? 1. Yes 2. No.
 

5.1 If no, why? 1. .... 2. .... 3. ....
6. Do the people of your VDC have conflict with people of other VDC regarding use of natural resources?
 

1. Yes 2. No.
7. If yes, for which resource and why? Probe for use of forest resources, grazing, public land, mine and water resources and the cause of conflict?





Strengths: 1..... 2..... 3.....  
Weaknesses: 1..... 2..... 3.....

9. What are the major issues of women? (probe for abuse, discrimination, domestic violence etc.)  
1..... 2..... 3.....

## G. Livelihood

1. What are the major economic activities of male and female of your VDC for their livelihood?

Male: 1..... 2..... 3.....

Female: 1..... 2..... 3.....

2. What % of HHs of your VDC is able to produce enough food to meet their requirement? .....%

2.1. How the food deficit households of your VDC fulfill their food requirements?

1..... 2..... 3.....

3. What percentage of households in your VDC is landless? .....%

3.1 What are the main activities of the landless households for their livelihood?

1..... 2..... 3.....

3.2 What could be done to increase the livelihood of poor and landless households?

1..... 2..... 3.....

4. What are the main agriculture products of your VDC?

1..... 2..... 3.....

5. What important commodities are exported from this VDC?

Commodities: 1..... 2..... 3.....

6. Please provide following inform regarding cropping pattern and area of your VDC?

Khet Irrigated: 1..... 2..... 3..... 4.....

1..... 2..... 3..... 4.....

1..... 2..... 3..... 4.....

Khet un-irrigated: 1..... 2..... 3.....

1..... 2..... 3.....

1..... 2..... 3.....

Bari: 1..... 2..... 3.....

1..... 2..... 3.....

1..... 2..... 3.....

7. Are there NGOs/INGOs working to improve livelihood of local people in your VDC? 1. Yes 2. No

7.1. If Yes, pls provide the following details.

Name of NGOs/INGOs

Focus areas

1..... 1..... 2..... 3.....

2..... 1..... 2..... 3.....

3..... 1..... 2..... 3.....

7. Has the work of NGOs/INGOs contributed to improve livelihood of local people? 1. Yes 2. No

8. What are the strengths and weaknesses of the programs/activities of the NGOs/INGOs?





4.1 If no, what could be done to fulfill the water demand of the households?

1..... 2..... 3.....

5. What percentage of HHs has constructed toilets in this the VDC? .....%

6. How do you assess condition of environmental sanitation in your VDC? 1. Good 2. Average 3. Poor

7. What could be done to improve drinking water and sanitation condition of your VDC?

Drinking water : 1..... 2..... 3.....

Env. Sanitation : 1..... 2..... 3.....

8. Are there NGOs/INGOs working in the drinking water and sanitation sectors in your VDC?

Drinking water : 1. Yes 2. No

Sanitation : 1. Yes 2. No

9. Has their work contributed to improve the health status of local people? 1. Yes 2. No

10. What are the strengths and weaknesses of the programs/activities of the NGOs/INGOs?

Strengths: 1..... 2..... 3.....

Weaknesses: 1..... 2..... 3.....

## F. Gender

1. What are the major activities of women of your VDC?

1..... 2..... 3.....

2. Are there cultural/social/religious barriers/areas for women to work in certain areas of certain caste/ethnic groups? 1. Yes 2. No

2.1 If yes, what barriers/area and how break the barriers?

Caste/ethnic group	Barriers	Suggestions for improvement
1.....	1.....	1..... 2..... 3.....
2.....	1.....	1..... 2..... 3.....

3. Are there potential income generating activities for women in your VDC? 1. Yes 2. No

3.1 If yes, what are they?

1..... 2..... 3.....

4. Do women of your VDC have special interests/capacity to undertake certain enterprise? 1. Yes 2. No

Areas of interest: 1..... 2..... 3.....

Existing capacity: 1..... 2..... 3.....

5. What are the potential income generating activities (agriculture/ off farm/ forest, local skill based activities etc.) for women in this VDC?

1..... 2..... 3.....

6. Are there NGOs/INGOs mainly working for women empowerment in VDC? 1. Yes 2. No

6.1. If Yes Pls provide the following details.

Name of NGOs/INGOs	Focus areas
1.....	1..... 2..... 3.....
2.....	1..... 2..... 3.....

1..... 2..... 3.....

1..... 2..... 3.....

7. Has the work of NGOs/INGOs contributed to empower the women of your VDC? 1. Yes 2. No

8. What are the strengths and weaknesses of the programs/activities of the NGOs/INGOs?

8. Are there NGOs/INGOs working in the education sector in your VDC? 1. Yes 2. No
9. Has their work contributed to increase the educational status of local people? 1. Yes 2. No
10. What are the strengths and Weaknesses of their programs/activities?
- Strengths: 1..... 2..... 3.....
- Weaknesses: 1..... 2..... 3.....

#### D. Health

1. What are the existing health facilities in your VDC?
- 1..... 2..... 3.....
2. What are the prevalent diseases and their common treatment practice in your VDC?
- | Disease | Treatment Practices |
|---------|---------------------|
| 1.....  | 1.....              |
| 2.....  | 2.....              |
| 3.....  | 3.....              |
3. How do you assess service quality provided by the government health facilities in your VDC ?
1. Good 2. Average 3. Poor
- 3.1. If poor, why? 1..... 2..... 3.....
4. How the government health facilities of your VDC could be strengthened?
- 1..... 2..... 3.....
5. How do you assess the awareness level of local people regarding STD/HIV AIDS?
1. High 2. Average 3. Low
6. What is the prevalence rate of STD/HIV AIDS in your VDC? STD:.....% HIV AIDS:.....%
7. Are there NGOs/INGOs working in the health sector in your VDC? 1. Yes 2. No
- 7.1. If Yes, pls provide the following details.

Name of NGOs/INGOs	Focus areas
1.....	2.....
1.....	2.....
1.....	2.....

- 1..... 2..... 3.....
- 1..... 2..... 3.....
- 1..... 2..... 3.....
8. Has their work contributed to increase the health status of local people? 1. Yes 2. No
9. What are the strengths and weaknesses of the programs/activities of the NGOs/INGOs ?
- Strengths: 1..... 2..... 3.....
- Weaknesses: 1..... 2..... 3.....

#### E. Drinking Water

1. What are the main sources of drinking water for the households of the VDC? (Priority order)
1. Public piped water 2. Private piped water 3. Spring/well 5. Others.....
2. How do you assess the quality of the drinking water? 1. Good 2. Average 3. Poor
3. Percentage of population covered by piped water in the VDC.....%
4. Are the existing drinking water sources sufficient to fulfill the demand of the households? 1. Yes 2. No



**Nepal Electricity Authority**  
**Tamakoshi-Kathmandu 400 kV TL Project**  
**Key Informant Interview Guidelines**

**A. Background Information**

1. District:..... 2. VDC:..... 3. Ward No:..... 4. Village/Tole:.....  
 5. Name of Respondent:..... 6. Age:..... 7. Sex:.....  
 8. Education:..... 9. Main Occupation:..... 10. Position (if any):.....  
 11. Interviewer:..... 12. Date:..... 13. Checked by:.....

**B. Major Settlements, Caste/Ethnic Groups and Housing Pattern**

1. Major settlements and dominant caste/ ethnic groups in the VDC

S.N.	Major Settlements in th VDC		Settlements Near the Major Project Structure.....<500m				
	Name of Settlement	Dominant Caste/Ethnic Group (In Priority)	Name	Estimated HHs	Caste/Ethnic Group (%)		
					Janjati	Dalit	Others
1							
2							
3							
4							
5							
6							
7							
8							

2. How do you assess relationship between Dalit/ethnic minorities with other caste/ethnic groups in VDC?  
 1. Good                      2. Average                      3. Poor  
 3. Explain housing pattern of the area (scattered/dense, types of houses by cast/ethnicity etc.)  
 .....  
 .....  
 .....

**C. Education**

1. What is the literacy status of local people of this VDC? Over all literacy:.....%  
 2. What is the literacy status of women of this VDC? Literacy:.....%  
 3. What is the literacy status of ethnic minor (Dalit/Janjati) groups of this VDC? Literacy:.....%  
 4. What are the existing educational facilities in the VDC? 1:..... 2:..... 3:.....  
 5. What is the overall status of physical facilities of educational institutions of your VDC?  
 1. Good                      2. Average                      3. Poor  
 6. What are the major problems of educational institutions of your VDC?  
 1:..... 2:..... 3:.....  
 7. What could be done to strengthen the educational facilities of your VDC?  
 1:..... 2:..... 3:.....



## Appendix F: Impact Assessment Matrix

S. No.	Issues	Impacts	Identification and Evaluation of impact				
			D	IND	M	E	Du
Physical Environment							
1.	Watershed and Drainage						
2.	Topography						
3.	Land take and land use						
4.	Air Quality						
5.	Noise level						
6.	Water Quality						
7.	Waste generation						
Biological Environment							
1.	Forest Vegetation Loss						
2.	Demand for Fuel wood and Timber						
3.	Exploitation of Non timber Forest Products						
4.	Wildlife and Avifauna						
5.	Rare, Protected, Endangered and Threatened Species of Flora and Fauna						
Socio-economic and Cultural Environment							
1.	Permanent Land Acquisition						
2.	Permanent Land Restriction						
3.	Private/Public Structures						
4.	Crop Loss						
5.	Health, water-supply and sanitation						
6.	Occupational Hazard and safety						
7.	Crossing of power cables, communication lines, foot trails, roads/highways						
8.	Communal resources						
9.	Alteration of land and property values						
10.	Electric and Magnetic field						
11.	Gender and Vulnerable group						
12.	Economic activities						

Note: D: Direct, IND: Indirect

Extent (E)

SS= Site Specific;

L= Local;

R= Regional

Magnitude (M)

L= Low;

M= Medium;

H= High

Duration (Du)

LT= Long Term;

MT= Medium Term;

ST= Short Term

