

Environmental Monitoring Report

Bi-Annual Report No. 1

Loan/Grant Number: L2808 NEP/G0270 NEP/G0271 NEP
January - June, 2016

Nepal: Electricity Transmission Expansion & Supply Improvement Project

Prepared by the Government of Nepal for the Asian Development Bank.

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CURRENCY EQUIVALENTS

04 August 2016

Currency unit	–	Nepalese Rupees (NPR)
NRs. 1.00	=	\$ 0.0093
US \$ 1.00	=	NPR 107.42 ¹

ABBREVIATIONS

ADB	Asian Development Bank
CSR	Corporate Social Responsibility
DDR	Due Diligence Report
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ESSD	Environment and Social Studies Division
ETESIP	Electricity Transmission Expansion and Supply Improvement Project
GIS	Geographical Information System
GoN	Government of Nepal
GWh	Giga Watt Hour
IEE	Initial Environmental Examination
km	Kilometer
MOE	Ministry of Energy
MOF	Ministry of Finance
MoPE	Ministry of Population and Environment
MVA	Mega Volt Ampere
MW	Mega Watt
NEA	Nepal Electricity Authority
RoW	Right of Way
SPS	Safeguard Policy Statement 2009 (SPS)
SS	Substation
TL	Transmission Line
kV	Kilo volt

¹ <http://www.nrb.org.np/>

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1. Background

1. Electricity Transmission Expansion and Supply Improvement Project (ETESIP) has been proposed for reliability of energy supply in Nepal and its capacity for power import and export across the border. Following are the three main groups of project outputs (refer **Annex 1** for project data sheet):

Part A: Increased Electricity Transmission Line

- Second Circuit Stringing of Kohalpur-Mahendranagar 132 kV line
- Construction of 400 kV Tamakoshi (Khimti)-Kathmandu TL and associated facilities
- Expansion of 132 kV Chapali sub-station

Part B: Expanded Electricity Distribution System

- Rehabilitation of 12 distribution sub stations and associated facilities in both DSC east and west
- New distribution system along 400 kV Tamakoshi (Khimti)-Kathmandu TL

Part C: Enhanced Electricity Generation

- Rehabilitation of hydropower stations Sundarijal and Tinau Hydropower plants

2. Project Location

2. Project components are located at various places of Nepal as shown in the **Figure 1**.

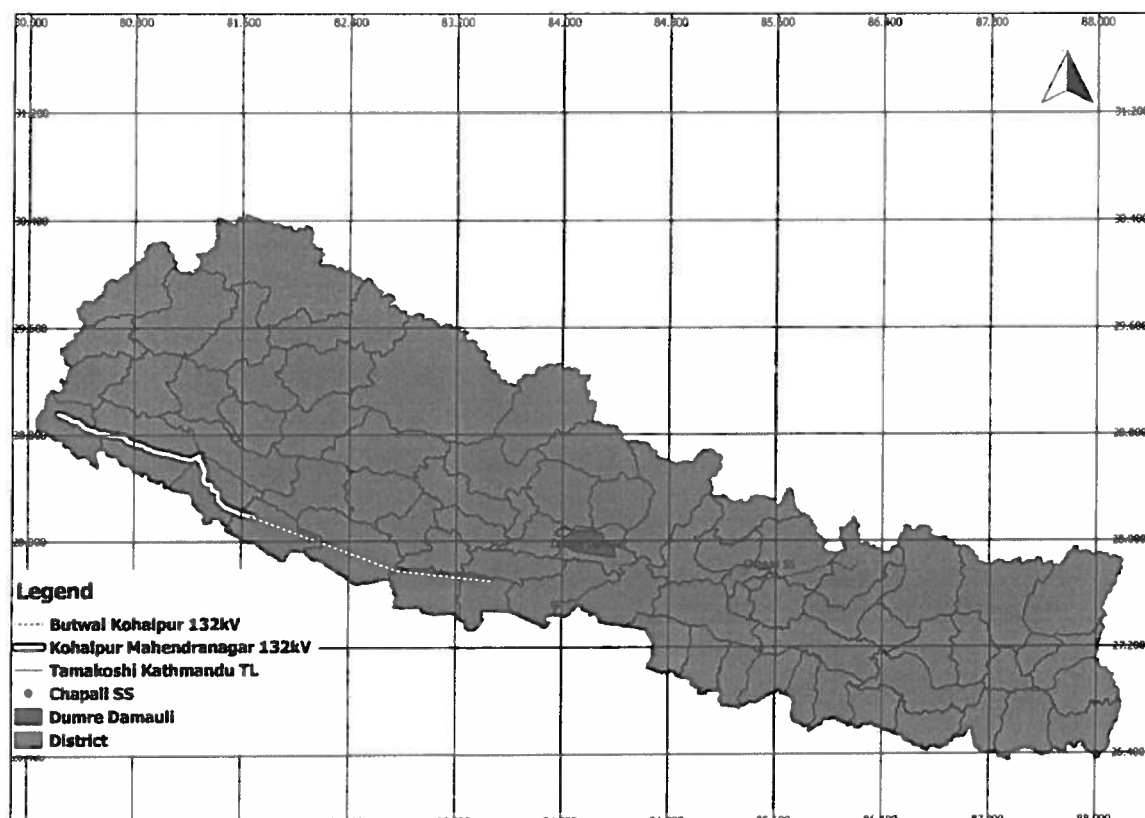


Figure 1: Map of Nepal Showing Project Locations

3. Environmental Safeguards

3. ETESIP will ensure the timely and adequate implementation of the environmental management plan (EMP) for the project and will ensure that all activities comply with the applicable national and local environmental laws and regulations, in addition to ADB's Safeguard Policy Statement 2009. In the event a sub project requires modifications to its design or configuration prior or during project construction, NEA will ensure to revise and update the EIA, IEE, EMP accordingly, and will submit these to ADB for approval and clearance. The mitigation measures will be incorporated into the contractor's contract document.

4. Construction Approach

4. Construction approach to reduce adverse environmental effects, cost and promote local jobs will be applied. This method will reduce construction of access road to the site. Hazardous chemicals and oils are required to be stored separately in polythene drums with prevention in any form to mix in aquatic environment at the vicinity of the work site. It will be ensured that all construction based contracts are implemented in an environmentally and socially suitable and responsible manner.

5. Compliance Status with Environmental Covenants

5. Environmental safeguard related project activities are in compliance with covenants as regular follow up actions are being taken although improvements are needed (please refer **Annex 2** for details).

6. Institutional Arrangement

6. There is a Grievance Management Department headed by Director within NEA. Grievance redress mechanism acceptable to ADB has been established in the project but it is not proactive. No safeguard desk has been established and there is no environmental focal person in the project office. Project Management Directorate of NEA has started procurement of environmental and social safeguards experts from by signing a MOU with NEA's ESSD.

7. Compliance with Environmental Safeguards Measures

7. Since, most of the projects activities have been stopped due to rainy season and some projects have yet to be started, overall environmental compliance of ETESIP is being partially complied as given in **Table 1** and **Annex 3 & 4**.

Table 1: Environmental safeguard compliance matrix

Issues	Kohalpur-Mahendranagar 132kV TL	Khimti-Kathmandu 400kV TL Line	Distribution system	Rehabilitation of Hydropower stations
Spoil management	Stringing work has not commenced	Yet to be started	No major issues	Work has not started
Landslide protection and bioengineering	The project site is in Terai plains using existing RoW, so	Yet to be started	No major issues	Work has not started

Issues	Kohalpur-Mahendranagar 132kV TL	Khimti-Kathmandu 400kV TL Line	Distribution system	Rehabilitation of Hydropower stations
	there are no major issues.			
Drainage management	Stringing work has not commenced.	Yet to be started	No major issues	Work has not started
Compensatory plantation	The stringing will be done on existing transmission line, so there will be no vegetation loss	Total 270,492 seedlings will be planted in the forests of Bhaktapur, Kathmandu, Kavre Palanchok, Sindhupalchok and Dolakha districts.	No tree loss	No tree loss
Safety gear	Stringing work has not commenced	Yet to be started	Safety gears are provided to workers	Work has not started
Workers camp, health & sanitation facilities	Stringing work has not commenced.	Yet to be started	Partially complied	Work has not started

8. Following describes environmental safeguard compliance status according to the project components.

7.1. Second Circuit Stringing of Kohalpur-Mahendranagar 132 kV line Project

9. Though the transmission line passes through Bardiya National Park and Suklaphanta Wildlife Reserve as well as part of Terai Arc Landscape, there are no major impact observed as the stringing will be on existing Right of Way (RoW) maintained by NEA. Issues of water logging at substation site of Pahalmanpur have also been reported. Stringing process will start after the monsoon season as all the materials have received clearance at the customs. Likewise, stopped works for substations of Bhurigaun and Pahalmanpur will be resumed after monsoon.

7.2. Khimti-Kathmandu 400kV Transmission Line Project

10. IEE of Khimti-Kathmandu 400kV Transmission Line Project has been approved by the Ministry of Energy. Similarly, tree cutting plan has been prepared with the support of DFOs of Bhaktapur, Kathmandu, Kavre Palanchok, Sindhupalchok and Dolakha and already submitted to Department of Forest DoF for obtaining tree cutting permission from MoFSC. There are 57 forests (51 community forests, 2 leasehold forests and 4 government forests) in five districts along the transmission line as given in **Table 2**.

Table 2: Total forest vegetation loss according to district and forest types

SN	Type of forest	District	No of forest	Forest area (ha)	Loss of vegetation (number)				Standing volume	
					Regeneration (<5" dbh)	Pole (5-11" dbh)	Trees (>11" dbh)	Total	Timber (cft)	Fuel wood (chatta)
1	Community Forest	Bhaktapur	1	1.01	95	125	17	237	74.62	0.79
		Kathmandu	2	5.63	1,198	1,682	220	3,100	1,951.16	1.90
		Kavre Palanchok	5	7.16	3,352	614	49	4,015	880.89	1.78
		Sindhupalchok	27	50.94	62,052	8,761	2,743	73,556	44,024.20	56.00
		Dolakha	16	49.20	12,300	4,507	1,452	18,259	26,668.96	21.44
		Sub-total	51	113.94	78,997	15,689	4,481	99,167	73,599.83	81.91
2	Government Forest	Bhaktapur								
		Kathmandu								
		Kavre Palanchok	2	1.77		324	60	384	1,970.01	1.41
		Sindhupalchok	2	8.19	1,094	739	538	2,371	1,932.03	6.39
		Dolakha								
		Sub-total	4	9.96	1,094	1,063	598	2,755	3,902.04	7.80
3	Leasehold Forest	Bhaktapur								
		Kathmandu								
		Kavre Palanchok								
		Sindhupalchok	2	2.16	1,811	233	37	2,081	922.18	0.91
		Dolakha								
		Sub-total	2	2.16	1,811	233	37	2,081	922.18	0.91
Grand total			57	126.06	81,902	16,985	5,116	104,003	78,424.05	90.62

11. Environmental management unit will be established comprising of ESSD staff along with other staff for the construction phase environmental compliance monitoring of this Project. Percentage of total environmental cost to the total project cost is 9.93%. Detail of Environmental Management cost is given in **Figure 2**.

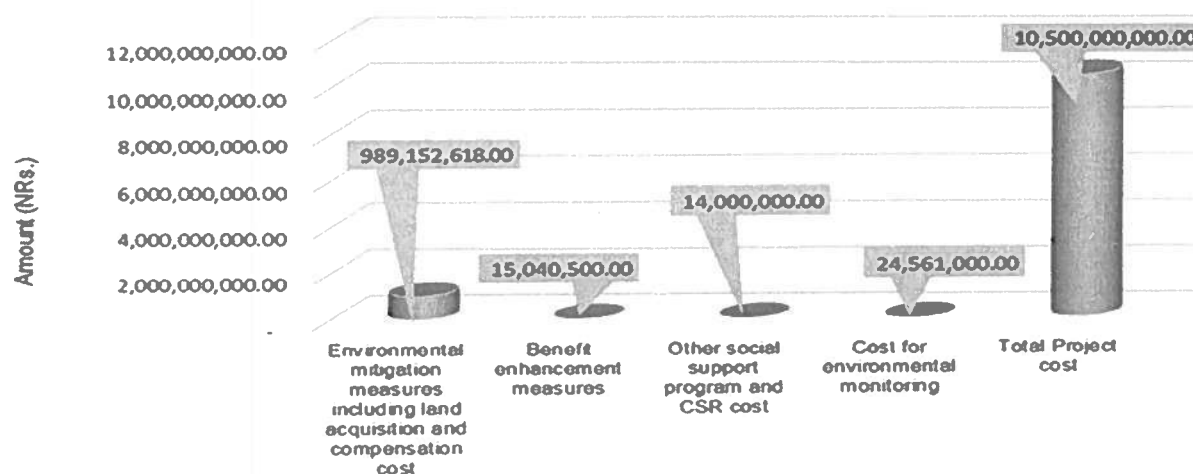


Figure 2: Environmental Management Cost

7.3. Electricity Distribution System

11. Altogether 9,000 domestic consumers are to be connected by 2017 in the project area. In the eastern part, 48.6MVA substations have ensured completion of distribution services while at the western part it is partially completed. Moreover, 85% of piling and 45% of stringing works have been completed. The distribution system in 11 towns in the eastern and western part consisting of 50km of 400V is to be rehabilitated. More than 60% of the civil works have been completed and most of the materials including transformers and underground cables have been delivered (4,800 poles out of 6,600 poles placed while 50% of stringing is completed). In both the eastern and western areas, NEA land is adequate for rehabilitation works. No major environmental issues are observed for these lines. Similarly, for rebuilding of 11kV feeders, relevant low-voltage networks, and associated facilities in pilot areas all components have been completed except for Suyambhu, Banskot, Mirmire and Mainapokhari where 85% of the work has been completed. Similarly, charging at Dhanushadham sub station is pending.

7.4. Rehabilitation of Hydropower stations

12. Major environmental issues are community health and safety issues while decommissioning of the equipment as well as materials. Bidding for Tinau Hydro is in progress while contract for Sundarijal Hydro has been awarded and work has already started. For both the hydro projects, NEA premises are adequate for repair and replacements.

8. Issues and Way Forward

13. Table 3 shows the main environmental issues and way forward for the effective implementation of issues and way forward.

Table 3: Issues and Way Forward

SN	Issues	Way Forward
1	Settlement of various issues (land acquisition, RP, RoW, bid evaluation) of Khimti- Kathmandu 400 kV Transmission Line Project	NEA to coordinate with local government offices for timely addressing of issues and timely award of contract.
2	Obtaining tree clearance for Khimti-Kathmandu 400kV TL project	Project office will expedite the tree cutting approval process in coordination with ADB
3	Slow progress of Second Circuit Stringing of Kohalpur-Mahendranagar 132 kV Line	Follow up to the MOF to settle the issues of delivery of materials and equipment on timely manner.
4	Environmental safeguard monitoring and reporting	ESSD has to take proactive role for environmental safeguard monitoring and regular reporting
5	Environmental Focal Person in Project Office (PO)	Assigning Environmental Focal Person for coordinating and addressing environmental safeguard issues in the project office
6	Grievance redress committee (GRC) in the project office	Formation of GRC at project level for timely addressing of grievances
7	Establishment of Safeguard desk	Establishing Safeguard Desk in the project office

ANNEXES

Annex 1: Project Data Sheet

41155-013 - NEP: Electricity Transmission Expansion and Supply Improvement Project	
Project Name	Electricity Transmission Expansion and Supply Improvement Project
Country	Nepal
Project Type / Modality of Assistance	Project loan
Project Number	41155-013
Source of Funding / Amount [Active]	Loan -2808- NEP: Electricity Transmission Expansion and Supply Improvement Project Asian Development Fund US\$ 42.00 million Grant -0271- NEP: Electricity Transmission Expansion and Supply Improvement Project Norway US\$ 25.00 million Loan -2808- NEP: Electricity Transmission Expansion and Supply Improvement Project Asian Development Fund US\$ 14.00 million Grant -0270- NEP: Electricity Transmission Expansion and Supply Improvement Project Asian Development Fund US\$ 14.00 million Grant -0270- NEP: Electricity Transmission Expansion and Supply Improvement Project Asian Development Fund US\$ 5.00 million
Thematic Classification	Regional cooperation and integration Environmental sustainability Economic growth Capacity development
Sector/Subsector	Energy / Electricity transmission and distribution Energy / Energy efficiency and conservation
Gender Mainstreaming Category	Effective gender mainstreaming
Description	The project will improve the reliability of energy supply in Nepal and strengthen the transmission infrastructure needed to promote Nepal's capacity for cross-border energy trade. It will provide support in three critical areas in the electricity supply industry, which has experienced severe underinvestment: (i) electricity transmission capacity expansion, (ii) strengthening of distribution systems including those along the Tamakoshi (Khimti)-Kathmandu transmission line, and (iii) rehabilitation of selected small hydropower plants.
Project Rationale and Linkage to Country/Regional Strategy	The current available generating capacity of 705 megawatts (MW) in Nepal comes predominantly from hydropower. At system peak time, up to 400 MW of load is shed countrywide, depending on variations in available water resources and transmission limitations. Six hydropower projects totaling 592 MW are presently under construction. Another six projects with a total capacity of 1,335 MW are planned or proposed in the near to medium term. Limited transmission capacity in Western region of Nepal has restricted additional electricity imports through the western border with India. The first large-scale cross-border transmission line with India between Dhalkebar (Nepal) and Muzaffarpur (India), with a capacity of 1,000 MW, is at an advanced stage of preparation. This will enable Nepal to import electricity from India initially and later facilitate hydropower export. However, the full benefits of this critical regional connection can be harnessed only when adequate strengthening of the related transmission infrastructure within Nepal is undertaken.

Impact	Increased access to reliable supply of electricity
Project Outcome	
Description of Outcome	Project Outcome Progress
Improved electricity supply	--
Implementation Progress	
Description of Project Outputs	Status of Implementation Progress (Outputs, Activities and Issues)
Efficient project management Enhanced electricity generation Expanded electricity distribution Increased electricity transmission	Procurement in various stages.
Geographical Location	Throughout Nepal
Safeguard Categories	
Environment	B
Involuntary Resettlement	B
Indigenous People	C
Summary of Environmental and Social Aspects	
Environmental Aspects	<p>The initial environment examinations were prepared following ADBs Safeguard Policy Statement (2009), the governments environmental impact assessment guidelines, and related national policies and legislation. Public consultation and information disclosure requirements have been met. Alignment of transmission lines has avoided any environmentally and ecologically sensitive areas. Out of the total length of the Tamakoshi (Khimti)-Kathmandu line, 16 kilometers will pass through some forest areas in Chanrawati Watershed, which is host to ecosystem services transaction but is not a legally protected area. Any loss of vegetation within the right-of-way will be directly offset by reforestation activities consistent with the requirements of the government. The NEA and ADB will provide oversight to ensure that ongoing reforestation initiatives within the Chanrawati Watershed will not be affected. Installation of the second circuit for the Kohalpur Mahendranagar line will not have any significant impacts as no new transmission towers will be required and the existing right-of-way will be maintained. Decommissioned equipment and materials from the rehabilitation of distribution substations and the small hydropower plants are not expected to cause any risk to community health and safety as these will be stored on site until they can be safely reused and redistributed to other substations. Disposal of unusable equipment will comply with national and international requirements such as the Stockholm Convention.</p> <p>The environmental management plan (EMP) includes mitigation measures, monitoring, and adequate budgetary provisions for its implementation. The EMP will be part of the bidding documents and the NEA will supervise the construction contracts and EMP implementation. Monitoring reports will be submitted semiannually by the NEA to ADB. EMPs will be updated if unanticipated impacts are identified during implementation. The NEA has sufficient capacity in its Environmental and Social Studies Department to implement the EMP. Third-party services will be utilized for monitoring and mitigation activities as necessary.</p>

Involuntary Resettlement	The project will have limited resettlement impacts. No landowner or household will lose 10% or more of their productive assets. A detailed resettlement plan will guide the resettlement process and describe the nature of impacts, range of and eligibility for entitlements, income and livelihood restoration, rehabilitation assistance, and compensation for losses incurred. The resettlement plan details the institutional arrangements for implementation, a procedure for grievance redress, a structure for periodic and regular monitoring and reporting of project activities, detailed cost and budget estimates, and a time-bound implementation schedule. The resettlement plan will be updated as needed and publicly disclosed to interested stakeholders on the ADB and NEA websites.
Indigenous Peoples	No adverse impacts on indigenous groups. People using or living along the transmission line will be temporarily impacted and restricted to using affected land for agricultural purposes. Affected persons will be eligible for compensation in line with ADB's Safeguard Policy Statement requirements. No further clearance or acquisition of land will be required for the project. Project-affected peoples will be consulted on a regular basis as needed, in a timely, open, transparent, and culturally sensitive manner and in the local language.
Stakeholder Communication, Participation and Consultation	
During Project Design	Consultations were conducted during project preparation with relevant stakeholder groups (i.e., Ministry of Energy, Nepal Electricity Authority, local authorities, civil society groups, the communities living around the facilities funded under the loan, electricity consumers who benefitted from the project and any associations representing them) through field visits and workshops.
During Project Implementation	Regular communication via fax and/or email is conducted with the Nepal Electricity Authority (the Executing Agency).
Business Opportunities	
Consulting Services	<p>The loan is recruiting a consulting firm to provide support for the 220/400kV Tamakoshi (Khimti)-Kathmandu Transmission Line and capacity building for staff of the Nepal Electricity Authority. The firm will be recruited using ADB's Quality and Cost-Based Selection (QCBS) method using a quality-cost ratio of 80:20. Consultants for the design and implementation of Part C (i.e., the rehabilitation of Sundarijal HPP (640KW) and Tinau HPP (1MW) will also be recruited based on the procedures acceptable to ADB for recruiting individual consultants.</p> <p>A national NGO and an international Technical Advisor have been engaged under the TA project in accordance with ADB Guidelines on the Use of Consultants (2010, as amended from time to time).</p>
Procurement	The procurement of goods and works for 9 packages are being undertaken in accordance with ADB's Procurement Guidelines on International Competitive Bidding (ICB).
Date of First Listing	06-Dec-2011
Responsible ADB Officer	Pushkar Manandhar (pmanandhar@adb.org)
Responsible ADB Department	South Asia Department
Responsible ADB Division	Nepal Resident Mission
Executing Agencies	Nepal Electricity Authority
Timetable	
Concept Clearance	26-Nov-2010
Fact Finding	22-Aug- 2011 to 26-Aug-2011

MRM	
Approval	15-Nov-2011
Last Review Mission	3-June-2016

0270

Loans						
				Closing		
Loan No.	Approval	Signing	Effectivity	Original	Revised	Actual
0270-NEP	15-Nov-2011	23-Mar-2012	21-Jun-2012	31-Dec-2017		
Financing Plan				Loan Utilization		
	TOTAL(Amount in US\$ million)	Date	ADB	Others	Net Percentage	
Project Cost	19.00	Cumulative Contract Awards				
ADB	19.00	30-Jun-2016	0.00	0.00	0%	
Counterpart	0.00	Cumulative Disbursements				
Cofinancing	0.00	30-Jun-2016	0.00	0.00	0%	
Status of Covenants						
Category	Sector	Safeguards	Social	Financial	Economic	Others
Rating	Satisfactory	Satisfactory	Satisfactory	Satisfactory		Satisfactory

0271

Loans						
				Closing		
Loan No.	Approval	Signing	Effectivity	Original	Revised	Actual
0271-NEP	15-Nov-2011	23-Mar-2012	21-Jun-2012	31-Dec-2017		
Financing Plan				Loan Utilization		
	TOTAL(Amount in US\$ million)	Date	ADB	Others	Net Percentage	
Project Cost	25.00	Cumulative Contract Awards				
ADB	0.00	30-Jun-2016	12.67	0.00	50.68%	
Counterpart	0.00	Cumulative Disbursements				
Cofinancing	25.00	30-Jun-2016	5.75	0.00	23%	
Status of Covenants						
Category	Sector	Safeguards	Social	Financial	Economic	Others
Rating	Satisfactory	Satisfactory	Satisfactory	Satisfactory		Satisfactory

7923

Financing Plan/TA Utilization				TA Amount	
ADB	Others	Gov	Total	Approved Amount	Revised Amount
250,000.00		0.00	250,000.00		0.00

2808

Loans						
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				Closing		
Loan No.	Approval	Signing	Effectivity	Original	Revised	Actual
2808-NEP	15-Nov-2011	23-Mar-2012	21-Jun-2012	31-Dec-2017		
Financing Plan				Loan Utilization		
	TOTAL(Amount In US\$ million)	Date	ADB	Others	Net Percentage	
Project Cost	109.05	Cumulative Contract Awards				
ADB	56.00	30-Jun-2016	24.56	0.00	43.85%	
Counterpart	28.05	Cumulative Disbursements				
Cofinancing	25.00	30-Jun-2016	15.21	0.00	27.16%	
Status of Covenants						
Category	Sector	Safeguards	Social	Financial	Economic	Others
Rating	Satisfactory	Satisfactory	Satisfactory	Satisfactory		Satisfactory

2808

Loans						
				Closing		
Loan No.	Approval	Signing	Effectivity	Original	Revised	Actual
2808-NEP	15-Nov-2011	23-Mar-2012	21-Jun-2012	31-Dec-2017		
Financing Plan				Loan Utilization		
	TOTAL(Amount In US\$ million)	Date	ADB	Others	Net Percentage	
Project Cost	53.05	Cumulative Contract Awards				
ADB	0.00	30-Jun-2016	0.00	0.00	0%	
Counterpart	28.05	Cumulative Disbursements				
Cofinancing	25.00	30-Jun-2016	0.00	0.00	0%	
Status of Covenants						
Category	Sector	Safeguards	Social	Financial	Economic	Others
Rating	Satisfactory	Satisfactory	Satisfactory	Satisfactory		Satisfactory

Annex 2: Status of Compliance with Loan and Grant Covenants for ETESIP

Product	Schedule	Para No.	Description	Status/ Remarks	Type
	5	17	The Beneficiary shall ensure and shall cause NEA to ensure that preparation, design, construction, implementation, operation and decommissioning of the Project, the Subprojects and all Project facilities comply with (a) all applicable laws and regulations of the Beneficiary relating to environment, health and safety; (b) the Environmental Safeguards; and (c) all measures and requirements set forth in the IEE, the EMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	Being Complied	Environment
	5	18	The Beneficiary's environmental laws, regulations, and procedures shall apply in addition to the Safeguard Policy Statement. The Beneficiary shall ensure through NEA that no construction work of any kind under the Project (including any Subproject) shall be commenced until all applicable environmental clearances have been obtained and that all the above requirements are incorporated in the bidding documents and civil works contracts to ensure compliance.	Being Complied	Environment
	5	19	The Beneficiary shall ensure or cause NEA to ensure that all land and all rights-of-way required for a Subproject are made available to the Works contractor in accordance with the schedule agreed under the related Works contract and all land acquisition and resettlement activities are implemented in compliance with (a) all applicable laws and regulations of the Beneficiary relating to land acquisition and involuntary resettlement; (b) the Involuntary Resettlement Safeguards; and (c) all measures and requirements set forth in the relevant RP, and any corrective or preventative measures set forth in a Safeguards Monitoring Report.	Being Complied	Land Acquisition and Involuntary Resettlement
	5	20	Without limiting the application of the Involuntary Resettlement Safeguards or the relevant RP, the Beneficiary shall ensure or cause NEA to ensure that no physical or economic displacement takes place in connection with the Subprojects	Being complied	Land Acquisition and Involuntary Resettlement

Product	Schedule	Para No.	Description	Status/ Remarks	Type
			until:		
			(a) compensation and other entitlements have been provided to affected people in accordance with the RP; and		
			(b) a comprehensive income and livelihood restoration program has been established, where relevant, commensurate with the size, scale and significance of Project impacts, in accordance with the RP.		
	5	21	The Beneficiary shall ensure that the Project does not have any impact on indigenous peoples within the meaning of the Safeguard Policy Statement. In the event that the Project does have any such impact, the Beneficiary shall ensure or cause NEA to ensure that the preparation, design, construction, implementation and operation of the relevant Subproject(s) comply with (a) all applicable laws and regulations of the Beneficiary relating to indigenous peoples; (b) the Indigenous Peoples Safeguards; and (c) any corrective or preventative actions set forth in a Safeguards Monitoring Report. Where impacts on IP groups are identified or foreseen during the planning, preparation or construction phases of project development, an IPP will be prepared, implemented and monitored in alignment with the SPS and the requirements set forth in the PAM.	Being Complied	Indigenous Peoples
	5	22	The Government shall make available or cause NEA to make available necessary budgetary and human resources to fully implement the EMPs and the RPs.	To be complied	Human and Financial Resources to Implement Safeguards Requirements

Product	Schedule	Para No.	Description	Status/ Remarks	Type
	5	23	The Beneficiary and NEA shall ensure that Works contracts and bidding documents under the Project include specific provisions requiring contractors to comply with all (a) applicable labor laws and core labor standards on (i) prohibition of child labor as defined in national legislation for construction and maintenance activities, (ii) equal pay for equal work of equal value regardless of gender, ethnicity or caste, and (iii) elimination of forced labor; and (b) the requirement to disseminate information on sexually transmitted diseases including HIV/AIDS to employees and local communities surrounding the Facility Sites. Such contracts shall also include clauses for termination by NEA in case of any breach of the stated provisions by the contractors.	Complied	Labor Law, Health, Social Protection
	5	24	The Beneficiary shall ensure that NEA implements the GESI in a timely manner over the entire Project Implementation Period, and that adequate resources are allocated for this purpose. In particular, the Beneficiary and NEA shall ensure that the targets stated in the GESI are achieved. NEA shall conduct training on GESI implementation for all staff involved in the Project. The Beneficiary and NEA shall ensure that implementation of the GESI is closely monitored, and progress is reported to ADB in accordance with the GESI and the PAM.	To be complied	Gender and Development

Annex 3: Environmental Safeguard Planning Status for ETESIP

S. N.	Name of Project or Subproject	Environmental screening is carried out? (Yes or No)	Environment category of the project / subproject (A/B/C/FI)	EIA/IEE/DDR with EMP is prepared (Yes/No)	ADB approved EIA/IEE with EMP (Yes / Under Review / Not Yet Due/Over Due)	Government approved EIA/IEE with EMP (Yes / Under Review / Not Yet Submitted)	Safeguard monitoring and coordination mechanism established (Yes/No)	GRC is established (Yes/No)	Automated safeguard monitoring system customized (Yes/No)	EMP cost in approved BOQ document is included in BOQ as an individual item (Yes/No)	Remarks
1	Kohalpur-Mahendranagar 132 kV Second Circuit Stringing	Yes	B	NA	NA	NA	NA	NA	NA	NA	
2	Khimti-Barhabise 400 kV TL	Yes	B	Yes	Yes	Yes	No	No	No	No	IEE approved by MoE.
3	Barhabise-Kathmandu 400 kV Transmission Line	Yes	B	Yes	Yes	Yes	No	No	No	No	IEE approved by MoE.

Note: EIA- Environmental Impact Assessment; IEE- Initial Environmental Examination; DDR- Due Diligence Report; EMP- Environmental Management Plan; GRC- Grievance Redress Committee; BOQ- Bill of Quantity

Annex 4: Status of Environmental Compliance for ETESIP

Name of Subproject	Compliance to Environmental Management Plan*												Grievances			Remarks	
	Physical				Biological		Socio-economic										
	Spoil Management compliance in %**	Landslide protection with Bio-engineering (compliance in %)**	Drainage Management (compliance in %)**	Others as per EMP (specify)	Compensatory Plantation	Target (Nos.)	Replanted (Nos.)	Firewood is used for cooking and heating (Y/N)	Others as per EMP (specify)	Occupational Health and Safety	Labor and work camps are healthy and have sanitary facilities (Y/N)	Community structures are compensated / reconstructed (progress in % of total estimated work)***	Others as per EMP (specify)	No. of grievances documented	No of grievances resolved		No of grievances under processing
Stringing of Second Circuit of Kohalpur-Mahendranagar 132 kV line																	
Khimiti- Barhabise 400 kV TL																	
Barhabise-Kathmandu 400 kV TL																	
Design, supply and construction of 132 kV Substations																	
Expansion of Chapali Substation	NA	NA	30			NA	NA	NA									

Name of Subproject	Compliance to Environmental Management Plan*													Grievances			Remarks		
	Physical				Biological			Socio-economic											
	Spoil Management compliance in %**	Landslide protection with Bio-engineering (compliance in %)**	Drainage Management (compliance in %)**	Others as per EMP (specify)	Compensatory Plantation	Target (Nos.)	Replanted (Nos.)	Firewood is used for cooking and heating (Y/N)	Others as per EMP (specify)	Occupational Health and Safety	Labor and work camps are healthy and have sanitary facilities (Y/N)	Community Structure 1	Community Structure 2	structures are compensated / reconstructed (progress in % of total estimated work)***	No. of grievances documented	No of grievances resolved		No of grievances under processing	Corrective Action Plans are prepared and implemented (Y/N)
Augmentation of Distribution Services (West)	NA	NA	NA		NA	NA	NA		Y	Safety Gears are sufficient and used (Y/N)	Laborers are insured (Y/N)	Community Structure 1	Community Structure 2	structures are compensated / reconstructed (progress in % of total estimated work)***					
Augmentation of Distribution Services (East)	NA	NA	NA		NA	NA	NA	NA	Y										
Up gradation of Distribution Lines	NA	NA	NA		NA	NA	NA	NA	Y										

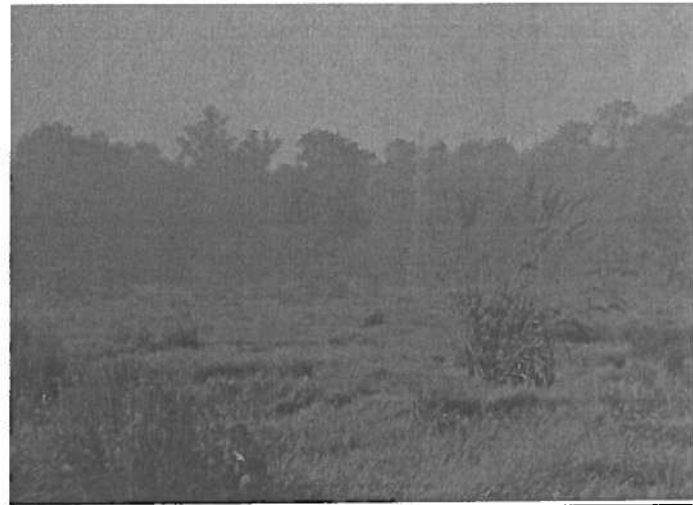
Note: * Add field as guided by EMP in EIA/EE/DDR; ** Write percentage of compliance in a scale of 100%; *** mention type of community structures

Progress status and issues in brief: For the above-mentioned subprojects minor earthworks are required for the foundations of structures. The construction of civil works for these structures create very little noise and dust impacts. Similarly, no adverse biological and social impacts are foreseen. Safety of workers/public places during work are regularly monitored by the subprojects/contractors. Chapali SS Expansion subproject has replaced the water supply pipes in some places which was damaged during UG cable laying. This sub-project has also constructed a *Mangal* for the proper disposal of liquid waste in the vicinity of project area.

Annex 5: Photographs



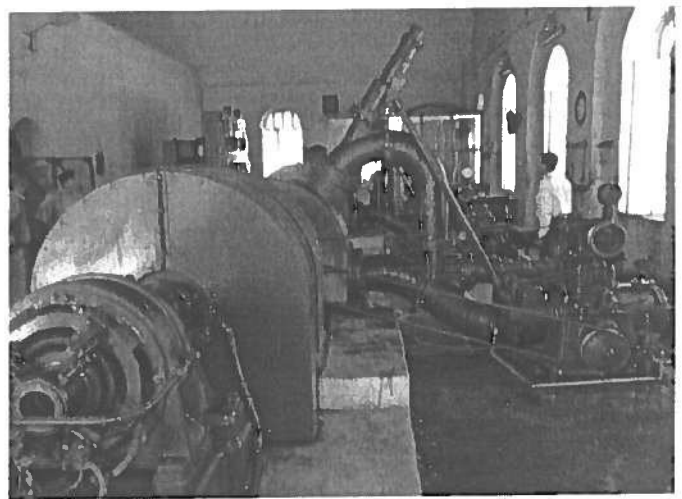
Kohalpur-Mahendranagar 132kV at Bardiya National Park stringing to be done on existing RoW



Kohalpur-Mahendranagar 132kV at Suklaphanta Wildlife Reserve Stringing to be done on existing RoW



Site for Land Acquisition at Barhabise SS for Khimti-Kathmandu TL Project



Sundarijal hydropower to be rehabilitated



Forest inventory for the preparation of tree cutting plan for Khimti-Kathmandu TL Project



Tree measurement and numbering for the preparation of tree cutting plan for Khimti-Kathmandu TL Project



Interaction with CFUG for conducting forest inventory



IEE data collection for Khimti-Kathmandu TL Project