

Environmental Monitoring Report

Semestral Report
January 2023

Nepal: Electricity Transmission Expansion and Supply Improvement Project

CURRENCY EQUIVALENTS

(as of 31 December 2022)

Currency unit	–	Nepalese Rupees (NRs)
NRs1.00	=	\$0.01
\$1.00	=	NRs132.38

ABBREVIATIONS

ADB	–	Asian Development Bank
CF	–	Community Forest
CFUGs	–	Community Forest User Groups
CSR	–	Corporate Social Responsibility
CPP	–	Compensatory Plantation Plan
DFCC	–	District Forest Coordination Committee
DoF	–	Department of Forest
DFO	–	Division Forest Office
EM	–	Entitlement Matrix
ESMU	–	Environmental and Social Management Unit
ESSD	–	Environment and Social Studies Department
ETESIP	–	Electricity Transmission Expansion and Supply Improvement Project
GoN	–	Government of Nepal
GRC	–	Grievance Redress Committee
Ha	–	Hectare
HH	–	Household
HPP	–	Hydro Power Project
IEE	–	Initial Environmental Examination
IP	–	Indigenous People
IR	–	Involuntary Resettlement
LF	–	Leasehold Forest
LRO	–	Land Revenue Office
NF	–	National Forest
NEA	–	Nepal Electricity Authority
PAF	–	Project Affected Family
PCC	–	Plain Cement Concrete
PTDEEP	–	Power Transmission and Distribution Efficiency Enhancement Project
RAP	–	Resettlement Action Plan
RCC	–	Reinforced Cement Concrete
RM	–	Rural Municipality
RP	–	Resettlement Plan
RoW	–	Right of Way
RRM	–	Random Rubble Masonry
SDFO	–	Sub-divisional Forest Office
SPS	–	Safeguard Policy Statement
SOP	–	Standard Operating Procedure
TKTLP	–	Tamakoshi-Kathmandu 220/400kV Transmission Line Project
TL	–	Transmission Line

NOTE{S}

- (i) The fiscal year (FY) of the Government of Nepal and its agencies ends on 16 July. "FY" before a calendar year denotes the year in which the fiscal year ends, e.g., FY2021 ends on 16 July 2022.
- (ii) In this report, "\$" refers to United States dollars.

This environmental monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Background	1
1.2	Overall Progress Status of the Project	3
1.3	Implementation Status	6
1.4	Reporting Period	6
1.5	Monitoring Requirements and Frequency of Submission	6
2.0	COMPLIANCE STATUS WITH APPLICABLE STATUTORY REQUIREMENTS	6
3.0	INSTITUTIONAL ARRANGEMENT	6
3.1	Establishment of Safeguard Unit	6
3.2	Establishment of Grievance Redress Mechanism	7
3.3	EMP Implementation, Monitoring and Reporting	9
4.0	COMPLIANCE WITH ENVIRONMENTAL SAFEGUARD MEASURES	9
4.1	Planning Status of the Project	9
4.2	Construction Approach	9
4.3	Tree Marking and Tree Cutting Status	9
4.4	Status of Compensatory Plantation Plan	12
4.5	Consultation with Community	13
4.6	Monitoring Visits and Discussion	14
4.7	Implementation of Mitigation Measures	14
4.7.1	Material Storage Yards and Workshop	14
4.7.2	Establishment of Labor Camps/Camp Site Management	15
4.7.3	Occupational Health and Safety Measures	15
4.7.4	Slope Stabilization and Bio-engineering Work	17
4.7.5	Air, Water and Noise Quality	17
4.7.6	Debris Management	18
4.7.7	Drainage Management	19
4.7.8	Firewood Use	19
4.7.9	Safety Gear	19
4.7.10	Livelihood Restoration and Enhancement	20
4.7.11	Environmental and Social Awareness	21
4.7.12	Number of Grievances (Documented, resolved and under processing)	25
4.7.13	Summary of Environmental Compliance Monitoring	25
5.0	SAFETY ASSURANCE AS PER THE CONTRACTOR'S SAFETY PLAN	31
6.0	IMPAC AND SAFETY MEASURES FOR COVID-19	31
7.0	ISSUES AND FOLLOW UP ACTIONS	32
8.0	ACHIEVEMENT ON MAJOR ITEMS OF FOCUS ON PREVIOUS REPORT	33
9.0	PROPOSED MAJOR ITEMS OF FOCUS FOR NEXT REPORT	34

LIST OF FIGURES

Figure-1: New Khimti - Barhabise TL section with administrative boundary	2
Figure-2: Barhabise -Lapsipedi TL section with administrative boundary	2
Figure-3: Lapsipedi -Changunarayan TL section with administrative boundary	3
Figure-4: Current Institutional Arrangement and Organogram	6
Figure-5: Total no. of GRCs to be formed and GRCs formed till this period	8
Figure-6: CFs in Charnawati Watershed affected by TKTL	11
Figure-7: District wise tree cutting status	12
Figure-8: Air, Water & Noise quality monitoring test results	18

LIST OF TABLES

Table-1: Overall Progress Status of the project	3
Table-2: List of team members for Safeguard Implementation	7
Table-3: Tower Details and Trees to be felled	10
Table-4: Forest types of TKTL	10
Table-5: Environment Related Public Consultation Details	13
Table-6: Status of Storage of Construction Materials at each site	15
Table-7: Employment Data Record	15
Table-8: List of Grievances and its Status	20
Table-9: Brief Summary of Status of Environmental Compliance Monitoring	26
Table-10: Compliance Status for Impacts and Safety Measures Adopted in COVID-19	32
Table-11: Major Issues and Follow up actions	33
Table-12: Achievement on Major Items of Focus on Previous Report	33
Table-13: Major Items of Focus for Next Report	34

ATTACHMENTS

Annex-1: Regulatory Compliance Requirements	II
Annex-2: Environmental Compliances Status with Loan and Grant Covenants	III
Annex-3: Compliance Status in terms of General Conditions of Contract Clauses	V
Annex-4: Compliance Status in terms of Special Conditions of Contract Clauses	IX
Annex-5: Environmental Safeguard Planning Status	XII
Annex-6: Compliance Monitoring Status of Safety Facilities available to Labors	XIII
Annex-7: Safety Assurance as per the Contractor's Plan	XIII
Annex-8: Status of Environmental Compliance	XXI
Annex-9: Impact Mitigation Compliance on Environmental Issues	XXII
Annex-10: Location wise Tree Cutting Status in Tower Footings of TKTL	XXIII
Annex-11: Letter regarding payment of compensatory plantation	XXV
Annex-12: Tree cutting approval for RoW from DFO, Dolakha	XXVI
Annex-13: Shield app monitoring report	XXVII

PHOTOGRAPHS

XXVIII

1.0 INTRODUCTION

1.1 Background

Electricity Transmission Expansion and Supply Improvement Project (ETESIP) was approved on 15 November 2011, signed on 23 March 2012, and declared effective on 21 June 2012 with its initial loan closing date on 31 December 2017. However, due to certain changes/adjustments on the scope of Tamakoshi—Kathmandu Transmission Line (TKTL) and substation, the project has been extended till 31 March 2020 which has been further revised to 31 December 2021. The project has been extended for the third time until 31 December 2023 to allow completion of remaining activities. The ETESIP is a \$128 million project with financial assistance of 44% loan and 34% grant support from Asian Development Bank (ADB), Government of Norway, Nepal Electricity Authority (NEA) and Government of Nepal (GoN). The project also has an approved fund of \$2 million for capacity development assistance. The project comprises of following three major integrals:

- Transmission line expansion, including new transmission lines and substations
- Distribution system expansion
- Rehabilitation of hydropower stations

Based on these major integrals, the project has following components:

- a) Tamakoshi-Kathmandu 220/400kV TL
- b) Rehabilitation of 640kV Sundarijal HPP
- c) Rehabilitation of 1MW Tinau HPP
- d) Augmentation of distribution Services (East i.e., Jare, Gaur, Nijgadh, Chandraghadhi and Belbari)
- e) Augmentation of Distribution Services (West i.e., Parasi, Amuwa, Taulihawa, Krishnanagar, Gorkha, Mirm and Gaddachowki)
- f) Expansion of Chapali SS, Kohalpur-Mahendranagar 132kV second circuit
- g) Upgradation of distribution lines at Kathmandu, Bhaktapur, Kavrepalanchowk, Sindhupalchowk, Dolakha, Sindhuli and Ramechhap Districts

Among above components, rehabilitation of 640kV Sundarijali HPP, augmentation of distribution service (East i.e. Jare, Gaur, Nijgadh, Chandragadhi and Belbari), augmentation of distribution service (West i.e. Pasari, Amuwa, Taulihawa, Krishnanagar, Gorkha, Mirm and Gaddachowki), expansion of Chapali SS, Kohalpur-Mahendranagar 132kV second circuit have already completed. Similarly, beyond Sindhupalchowk, upgradation of distribution lines at Kathmandu, Bhaktapur, Kavrepalanchowk, Dolakha, Sindhuli and Ramechhap district have also completed. However, no implementation work has been done on the rehabilitation of Tinau HPP.

Among all the above components, this report is prepared for TKTL and thus contains major of its information and status. The TKTL is rigorously under construction. The TKTL is divided into two sections: i) New Khimti—Barhabise section (Package I) which includes construction of 42.63 kms double circuit 220/400 kV TL from New Khimti, Ramechhap to Barhabise, Sindhupalchowk as shown in **Figure-1** and ii) Barhabise—Kathmandu section (Package II) which includes construction of three different TL a) construction of 46.4 kms double circuit 220/400 kV TL from Barhabise, Sindhupalchowk to Lapsipedi, Kathmandu, as shown in **Figure-2** b) construction of 9.953 km double circuit 132 kV TL from Lapsipedi, Kathmandu to Changunarayan, Bhaktapur and c) construction of 4.098 kms multi circuit 132 kV TL from Changunarayan, Bhaktapur to Duwakot, Bhaktapur, as shown in **Figure-3**.

Some changes have been occurred in the ETESIP due to the shifting of three substations under Power Transmission and Distribution Efficiency Enhancement Project (PTDEEP) from ETESIP. The scope of acquisition, compensation and other associated activities of the mentioned three substation components have also been transferred under the PTDEEP. The shifted substations are: i) Barhabise SS, Sindhupalchowk, ii) Lapsipedi SS, Kathmandu and iii) Changunarayan SS, Bhaktapur.



Figure-1: New Khimti - Barhabise TL section with administrative boundary



Figure-2: Barhabise -Lapsipedi TL section with administrative boundary

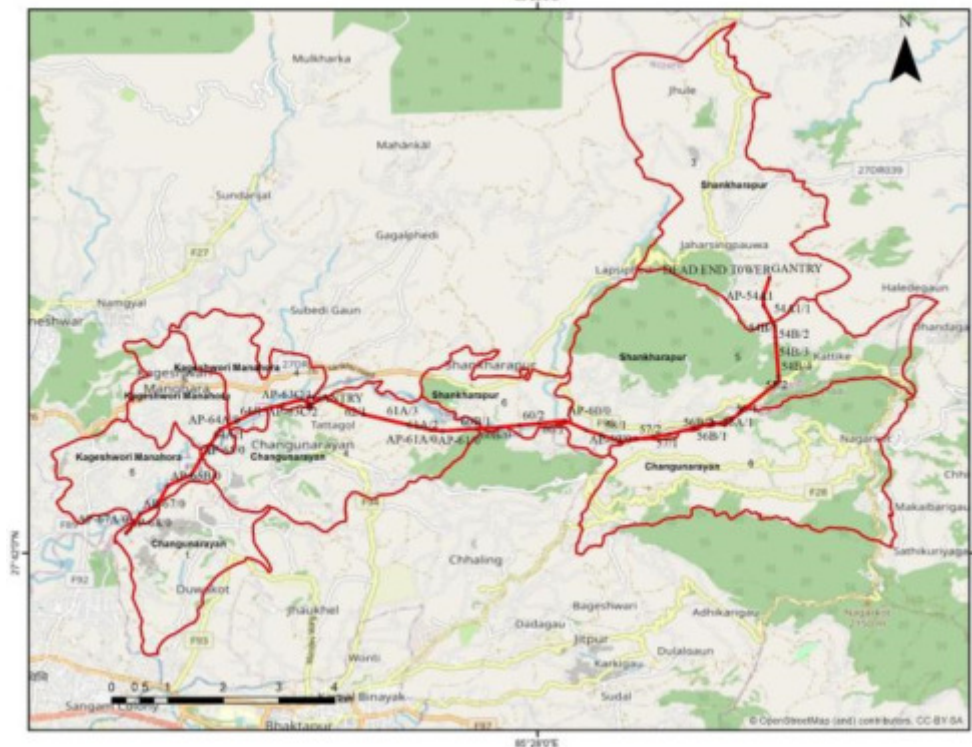


Figure-3: Lapsipedi -Changunarayan TL section with administrative boundary

1.2 Overall Progress Status of the Project

The overall progress status of sub-project components is summarized below in **Table-1**.

Table 1: Overall Progress Status of the Project

SN	Name of the Project	Project Details	Progress Status	Completion Schedule
Tamakoshi – Kathmandu 220/400 kV Transmission Line Project (TKTLP) – ETESIP				
a.	New Khimti - Barhabise TL section (Package I)	Construction of double circuit 220/400 kV TL from New Khimti, Ramechhap to Barhabise, Sindhupalchowk	<ul style="list-style-type: none"> i. Initial contract awarded on 26 September 2016 cancelled and recently the new contract agreement has been awarded on 20 May 2019 with the date effective from 20 July 2019 Route Alignment finalized and check survey has been completed. ii. Route alignment finalized and check survey has been completed. iii. Check survey completed for 118 tower locations. iv. Social and environmental public awareness campaign via installation of 30 hoarding boards at 30 different locations v. A 35-day public notice for land acquisition has been published on October 13, 2020 on Gorkhapatra daily for Dolakha district. vi. Public notice for land acquisition for Sindhupalchowk section has been published in 24 June 2021 vii. Divisional Forest Office, Dolakha has provided tree cutting approval for all the fifteen APs that falls on the eleven CFs (AP 10/1, AP 13/0, AP 16/1, AP 17/1, AP 18/0, AP 19/1, AP 21/0, AP 22/0, AP 24/1, AP 25/0, AP 26/0, AP 36/0, AP 37/0, AP 49/1 and AP 52/1) and tree cutting have been completed in all the fifteen APs. 	31 March 2023

SN	Name of the Project	Project Details	Progress Status	Completion Schedule
			<p>viii. Division Forest Office, Sindhupalchowk has provided tree cutting approval for 9 tower foundations (AP 53/0, AP 57/0, AP 57/1, AP 57/2, AP 57/4, AP 58/0, AP 58/1, AP 58/2 and AP 58/4) of Sindhupalchowk district and tree cutting has been completed in all 9 locations.</p> <p>ix. Handover of felled trees of tower foundation to respective CFs has been completed in Dolakha district.</p> <p>x. Handover of felled trees of tower foundation to respective CFs is ongoing in Sindhupalchowk district.</p> <p>xi. Division Forest Office, Dolakha has provided tree cutting approval for 11 community forests of RoW. Tree cutting is ongoing in RoW of Dolakha district and handover of felled trees is also ongoing to respective CF.</p> <p>xii. NEA has paid NRs. 165,058,031 for the acquired forest land to Forest Development Fund. Also, NEA has paid NRs. 238,404,819.47 for the cost of compensatory plantation as per the letter of Department of Forest and Soil Conservation dated 2079/03/14 BS.</p> <p>xiii. Foundation work completed in 88 out of 118 (74.57%) locations and ongoing in 19 locations</p> <p>xiv. Erection completed in 66 out of 118 (55.93%) locations and ongoing in 3 locations.</p> <p>xv. Stringing of 15.18 km stretch completed and ongoing on 2.4 km stretch.</p> <p>xvi. Compensation Determination Committee of Dolakha has finalized the cost estimate for compensation of structure, crops and fruit trees of tower pad.</p> <p>xvii. Conservation awareness raising program in two locations and Social Awareness Program in three locations of Dolakha district have been conducted to PAFs and stakeholders.</p> <p>xviii. Occupational Health and Safety Training has been completed in 2 locations (20 participants in each event.)</p> <p>xix. Health and Sanitation Program has been completed for 2 locations (20 participants in each event).</p> <p>xx. Skill Development Training has been completed for 41 participants from PAFs (Computer: Male: Female: ; Driving: Male: 21).</p> <p>xxi. Vegetable Farming and Livestock Management Training has been completed. Altogether 45 participants from PAF benefitted from the program.</p> <p>xxii. Training for the cultivation of NTFP under ROW and Forest Based Income Generation and Entrepreneurship Training is ongoing.</p> <p>xxiii. 15 out of 15 GRCs (100%) have been formed in Ramechhap, Dolakha, and Sindhupalchowk districts.</p>	
b.	Barhabise – Lapsipedi section (Package II)	Construction of double circuit 220/400 kV TL from Barhabise, Sindhupalchowk to Lapsipedi, Kathmandu	<p>i. Contract awarded on 13 June 2017 with the date effective from 13 August 2017</p> <p>ii. Check survey completed</p> <p>iii. Social and environmental public awareness campaign via installation of 30 hoarding boards at 30 different locations</p> <p>iv. Enumeration of trees to be cut in Sindhupalchowk and Kavrepalanchowk has been completed and accordingly Tree cutting approval has been granted from the Cabinet and hence the agreement has been done between Department of Forest and Soil</p>	Initially, 13 April 2020, which has been further renewed to 31 March 2023

SN	Name of the Project	Project Details	Progress Status	Completion Schedule
			<p>Conservation (DoFSC) and NEA; based on which the letter has been sent to the respective DFO.</p> <p>v. After the recipient of tree cutting approval letter from DoFSC, the tree cutting has been completed for tower pads and the tree cutting is under progress for RoW</p> <p>vi. An agreement has been done between Department of Forest and Soil Conservation and Nepal Electricity Authority to provide funds for compensatory tree plantation for all the trees to be felled in TKTL</p> <p>vii. Occupational Safety Training- 3 and Health and Sanitation Program- 3 has been conducted among labors (Participants- 22 in each)</p> <p>viii. Social Awareness program conducted in 3 different locations</p> <p>ix. GRC formation in Sindhupalchowk (11 out of 11), Kavrepalanchowk (10 out of 10) and Kathmandu (0 out of 1) completed</p> <p>x. Final field re-verification remaining (4 locations)</p> <p>xi. Basic Computer Training Completed (Total participant- 33; Male- 14, Female- 19)</p> <p>xii. Driving Training (Total participant- 8; Male- 7, Female- 9)</p> <p>xiii. Other soft skill trainings completed are</p> <ul style="list-style-type: none"> - Vegetable Farming Training (Total Participants—22; Male—8, Female—14) - Mushroom Farming Training (Total Participants—24; Male- 21, Female—3) - Fishery Training (2 events; Total participants—26; Male—21, Female—5) - Livestock Farming Training (2 events; Total Participants—32; Male—18, Female—14) - Training on Cultivation of Non-Timber Forest Products under RoW (3 events; Total participants—62; Male—39, Female— 23) - Conservation awareness raising program (3 events; Total participants- 66; Male- 41, Female- 25) <p>xiv. Tower foundation construction under progress (107 foundation completed & 4 under construction)</p> <p>xv. Tower erection under progress (101 erection completed & 2 under construction)</p> <p>xvi. Tower protection work under progress (17 completed and 1 under progress)</p> <p>xvii. Stringing in progress (AP 14/1 – AP 15/0 – AP 16/0 - AP 17/0 – AP 18/0, AP 24/0 – AP 25/0 – AP 25/1 - AP 25/2 - AP 25/3 – AP 26/0 – AP 26/1 – AP 27/0 – AP 27/1, AP 41/0 - AP 41/1 – AP 42/0 – AP 42/1 – AP 42/2 – AP 42/3 – AP 42A/0 – AP 43/0 - AP 44/0 – AP 44/1 – AP 45/0 – AP 46/0 – AP 46/1 – AP 46/2 – AP 47/0, AP 50A/0 – AP 50B/0 – AP 51/0, AP 51A/0 – AP 51A/1, AP 51A/2- AP 52/0: Rough = 9.429 km, Final = 6.042 km)</p>	

SN	Name of the Project	Project Details	Progress Status	Completion Schedule
c.	Lapsiphedi – Changunarayan section (Package II)	<p>Construction of double circuit 132 kV TL from Lapsiphedi, Kathmandu to Changunarayan, Bhaktapur</p> <p>Construction of multi circuit 132 kV TL from Changunarayan, Bhaktapur to Duwakot, Bhaktapur (LILO)</p>	<p>i. Contract awarded to L&T, that has been included as a complete package within Package II</p> <p>ii. Detailed survey has been completed for 14.13 km (57 towers)</p> <p>iii. Check survey completed for 57 towers</p> <p>iv. Contouring completed</p> <p>v. Final cadastral report submitted for publication of land acquisition notice (22 locations- 39%)</p> <p>vi. Final verified cadastral report to be obtained from Naapi (5 locations- 8%)</p> <p>vii. Final re-verification to be done in field (30 locations- 52%)</p> <p>viii. Enumeration of trees to be cut in Kathmandu and Bhaktapur Districts has been completed and accordingly Tree cutting approval has been granted from the Cabinet and hence the agreement has been done between Department of Forest (DoF) and NEA; based on which the letter has been sent to the respective DFO.</p> <p>xxiv. GRC formation in Kathmandu (1 out of 5) and Bhaktapur (0 out of 3) completed</p>	

(Source: Field visit, compensation disbursement data sheet, project document and consultation with project staffs)

1.3 Implementation Status

NEA has established a separate Project Management Directorate (PMD) to expedite decision making process for the timely implementation of all ADB funded projects and other subsequent projects. PMD is headed by Deputy Managing Director (DMD) responsible for preparation, procurement, construction and supervision of ADB funded projects.

1.4 Reporting Period

The Semi-annual Environmental Compliance Monitoring Report is prepared for the period of July-December, 2022.

1.5 Monitoring Requirements and Frequency of Submission

The Semi-annual Environmental Compliance Monitoring Report has been prepared by NEA and submitted to ADB as per the reporting guidelines and compliance with ADB requirements. The report has been prepared to cover and evaluate the environmental activities conducted by Environment and Social Management Unit (ESMU) under TKTL for the period of July-December, 2022.

2.0 COMPLIANCE STATUS WITH APPLICABLE STATUTORY REQUIREMENTS

The environmental safeguard related regulatory compliance requirements are as given in **Annex- 1**. Similarly, environmental compliance status with loan and grant covenants are presented in **Annex-2**, whereas the health & safety and environmental safeguard related project activities are in compliance with contract clauses as given in **Annex-3** and **Annex-4** respectively.

3.0 INSTITUTIONAL ARRANGEMENT

3.1 Establishment of Safeguard Unit

NEA is the main executing agency of this project. However, there are multiple layers directly involved in the implementation of the project: i) NEA as the project proponent, ii) Project Management Directorate (PMD) responsible for managing ADB projects, iii) Project office responsible for implementation of the project iv) Environment and Social Studies Department (ESSD) responsible for monitoring, supervision and implementation of safeguard compliances v) Environment and Social Monitoring Unit (ESMU) responsible for field based monitoring, supervision and implementation of safeguard compliances. The current institutional arrangement and organogram is described below in the **Figure-4**:

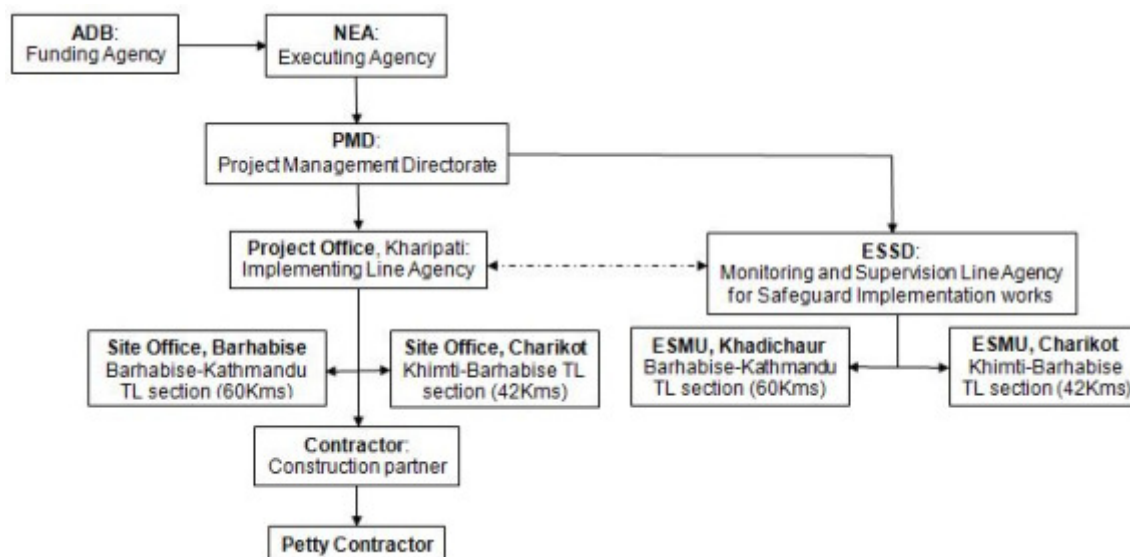


Figure-4: Current Institutional Arrangement and Organogram

The site office for ESMU has been established at Charikot, Dolakha for New Khimti-Barhabise TL section (Package I) and at Khadichaur, Sindhupalchowk for Barhabise – Changunarayan TL section (Package II). Since the establishment of the site office, the Environmental and Social Monitoring teams are in site for regular monitoring, supervision and implementation of Environmental and Social safeguard activities. The team consists of following team members listed in **Table-2**.

Table-2: List of team members for Safeguard Implementation

SN	Team Members	Designation
1.	Mr. Raman Raj Sharma	Project Manager, TKTL, NEA
2.	Mr. Bhakti Timsina	Assist. Director-ESSD, NEA, TKTL-Coordinator
Package I (New Khimti – Barhabise 220/400 kV TL)		
1.	Mr. Gajendra Narayan Yadav	Focal Person, Civil Engineer
2.	Mr. Navaraj Sanjel	Focal Person
3.	Mr. Saroj Shrestha	Environmental Safeguard Officer
4.	Mr. Santosh Kaphle	Social Safeguard Officer
5.	Mr. Amit Poonia	Project Manager, KEC International (Construction Contractor)
Package II (Barhabise – Lapsiphedi 220/400 kV TL; Lapsiphedi – Changunarayan 132 kV TL; Changunarayan – Duwakot 132 kV (LILO) TL)		
1.	Mr. Shiva Ram Dhimal	Focal Person, Electrical Engineer
2.	Mr. Rajendra Prasad Joshi	Focal Person, Electrical Engineer
3.	Mr. Mahendra Bhattarai	Environmental Safeguard Officer
4.	Mr. Pradeep Kumar Adhikari	Social Safeguard Officer
5.	Mr. Subash Chander Sharma	Project Manager, L&T International (Construction Contractor)

3.2 Establishment of Grievance Redress Mechanism

There is a Grievance Management Department (GMD) headed by director within NEA. The preparation of grievance redress mechanism acceptable to ADB will be complied. Moreover, under the PMD a separate department to overlook the safeguard implementation is being formed. Besides, the issues raised in local consultative meetings are first handled and solved in the field level Grievance Redress Committee (GRC) chaired by local elected representative and other representatives from project personnel, PAFs, contractor, ESMU. The issues not solved will then be forwarded to project level GRC, chaired by Project Manager and

representatives from project personnel, ESMU. Again, if the issues could not be solved there, then it will be forwarded to GMD.

The establishment of GRC for all the affected RMs' and Municipalities' wards is in the process of formation. Altogether, 45 GRCs are supposed to be formed in complete TKTL as per the available approved cadastral data till this reporting period. Among those, 15 GRCs are to be formed in New Khimti – Barhabise TL section, 22 in Barhabise – Lapsiphedi TL section and 8 in Lapsiphedi – Changunarayan - Duwakot TL section till this reporting period, which are subjected to change as the final re-verification survey and approval of cadastral report are still under process. In New Khimti-Barhabise TL section, 15 GRCs (100%) have been formed. Out of 22 GRCs to be formed in Barhabise-Lapsiphedi TL section 21 GRCs (95%) has been formed, similarly, 1 out of 8 (12%) GRC has been formed in Lapsiphedi-Changunarayan-Duwakot TL section. In Sindhupalchowk district, 5 GRCs are to be formed for New Khimti-Barhabise TL section and 11 GRCs for Barhabise-Lapsiphedi TL section. The GRC formation is being done following SOP for COVID-19 issued by PMD. Likewise, the letter has been dispatched to the ward offices of 132 kV TL alignment of Kathmandu and Bhaktapur sections. The ESMU team is in close consultation with ward chairperson and is in process to conduct meetings and GRC formation.

The details of GRC formation status have shown in **Figure-5**.

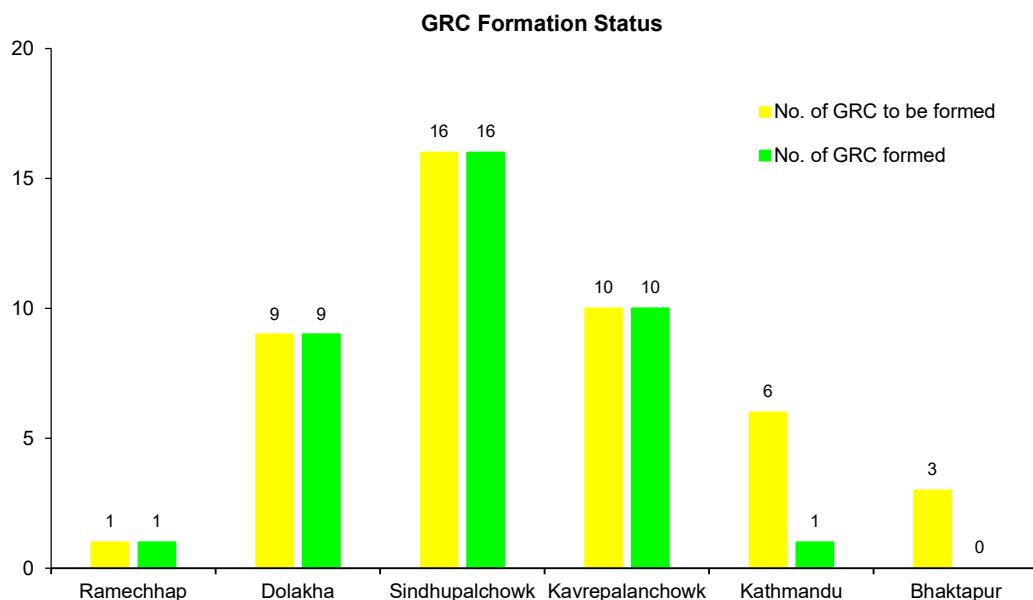


Figure-5: Total no. of GRCs to be formed and GRCs formed till this period

(Source: Field Data)

3.3 EMP Implementation, Monitoring and Reporting

Monitoring mechanism in each project has been established for regular compliance monitoring. Reports are prepared on monthly, quarterly and biannual basis. During monitoring and consultation, meetings are conducted with the contractors and contractor's supervisor and also with the labors/staffs employed in construction works; through informal meetings in a group and individually. The consultative process aimed to obtain required information feedback and advice from the participants i.e., Contractors and labors/staffs engaged for the civil construction to assess the actual scenario of the labor issues and concerns.

4.0 COMPLIANCE WITH ENVIRONMENTAL SAFEGUARD MEASURES

The environmental assessment with mitigation, corrective and compensatory measures for the development interventions is a major component in ensuring minimal adverse environmental impacts. According to Environmental Protection Act (EPA), 2019 and Environmental Protection Rules (EPR), 2020 of GoN and ADB Safeguard Policy Statement (SPS), 2009 Initial Environmental Examination (IEE) is mandatory for the electricity transmission line projects. However, if the transmission line passes from protected areas (National Park, Wildlife reserves, Conservation areas), Environmental Impact Assessment (EIA) is mandatory according to schedule 3 of EPR, 2020. With the promulgation of EPA, 2019 and EPR, 2020, EPA, 1996 and EPR, 1997 has been dissolved; however, the IEE of the project was prepared as per then EPR, 1997. Moreover, considering National Energy Crisis Alleviation and Electricity Development Decade concept note, Ministry of Energy, Water Resources and Irrigation has issued "IEE and EIA Working Procedures for Hydropower and Transmission Line Project, 2073 BS" effective from 2073 Kartik 4 (20 October 2016) to simplify and expedite environmental assessment approval process by assigning authority to Department of Electricity Development (DoED).

4.1 Planning Status of the Project

The transmission line projects are screened to be of Category B. The IEE of Tamakoshi-Kathmandu 220/400kV TL has been approved from ADB and GoN through the line ministry. The TL avoids any environmentally sensitive sites. A section approximately 16 km passes through forest areas of Charnawati Watershed (The watershed area set aside for carbon sequestration pilot site) although not a legally protected area the offsetting of the Right of Way (RoW) clearance has been proposed. The work for the transmission line is in progress where contractors have been mobilized and ESMU are established. The details of the project planning are provided in **Annex-5**.

4.2 Construction Approach

The construction approach is applied with focus on reducing adverse environmental impacts, costs and promoting local jobs. The preventive and corrective measures on handling hazardous chemicals, oils, occupational health and safety requirements are incorporated as per the safeguard requirements.

4.3 Tree Marking and Tree Cutting Status

The enumeration of trees to be cut has been completed in Ramechhap, Dolakha, Sindhupalchowk, Kavrepalanchowk, Kathmandu and Bhaktapur districts. The then obtained enumeration list has been submitted to the respective agency i.e., Department of Forest. The enumeration list shows more trees to be cut than expected from the IEE report and thus IEE has been updated and approved on October 2019, in the portion of Sindhupalchowk Forest area, especially in Balephi RM. The total number of trees to be cut is counted as 35,231 with the total timber volume of about 441,674.527 cft. The details are presented in **Table-3** and **Table-4**. The tree cutting approval has been approved/decided from the cabinet meeting and the authorized letter from the concerned agency/authority (DoF) has been dispatched. The request letter for approval of tree cutting submitted to Division Forest Office, Dolakha, Kavrepalanchowk and Sindhupalchowk by Project Office has been registered and the concerned agency has further provided the permission for tree cutting via respective Sub-division Forest Office in the respective districts.

Table-3: Tower Details and Trees to be felled

SN	TL section	Length	Districts	Total No. of approved towers			Number of trees to be felled	Remarks
				Towers in Government land/Forest area	Towers in Private land	Total Towers		
1.	New Khimti – Barhabise (220/400 kV)	42.759 km	Ramechhap	29	89	118	0	However, the tree cutting will be avoided in valleys and the trees with smaller heights that maintain conductor clearance.
			Dolakha				4291	
			Sindhupalchowk				28582	
2.	Barhabise - Lapsipedi (220/400 kV)	46 km	Sindhupalchowk	25	97	122	1424	
			Kavrepalanchowk				838	
			Kathmandu				93	
	Lapsipedi - Changunarayan (132 kV)	14 km	Bhaktapur	7	50	57	93	
Total		102.759 km	6	47	246	293	35231	

(Source: Project document, Updated IEE report)

Table-4: Forest types in TKTL

SN	District	Affected CF		Affected GF		Affected LHF		Total	
		No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)
1	Dolakha	17	35.34	0	0	0	0	17	35.34
2	Sindhupalchowk	27	53.6912	2	0.7678	2	1.9412	31	56.4002
3	Kavrepalanchowk	6	9.200					6	9.2
4	Kathmandu	2	2.0300					2	2.03
5	Bhaktapur	1	0.2500					1	0.25
Total	5	53	100.5112	2	0.7678	2	1.9412	57	103.2202

(Source: Updated IEE report)

New Khimti-Barhabise TL Section

The DFO, Dolakha has granted tree cutting approval in eleven community forests. With this approval from DFO, tree cutting in AP 10/1, AP 12/2, AP 16/1, AP 17/1, AP 18/0, AP 19/1, AP 21/0, AP 22/0, AP 24/1, AP 25/0, AP 26/0, AP 36/0 and AP 37/0 has been completed in presence of respective Sub-division Forest official and CFUG members. There are no trees in tower pads of AP 49/1 and AP 52/1, and thus only the shrubs that present there will be cleared during the time of foundation work in presence of CFUG members. Altogether 690 numbers of trees have been cut for tower pad in thirteen APs of nine CFs till this reporting period. Handover of the felled trees to respective CFUGs has been completed in presence of officials from respective Forest Sub-division Office in Dolakha district. Division Forest Office, Dolakha has provided tree cutting approval for RoW in 11 community forests. Altogether 1526 no. of trees have been cut in RoW in Dolakha district till this reporting period. Similarly, Division Forest Office, Sindhupalchowk has provided tree cutting approval for 9 tower pads of 3 community forests in Tripurasundari RM and tree cutting has been completed in all 9 locations. A total of 1221 number of trees of volume 18423.16 cubic feet will be felled in these 3 community forests. Till this reporting period, 1221 number of trees have been cut in 9 tower foundations in Sindhupalchowk district. Handover of felled trees to respective CF is ongoing in presence of officials from forest sub-division officials.

TKTL passes through Charnawati watershed, one of the watersheds among three selected for REDD pilot project. Out of 58 CFs in the watershed, twelve CFs are affected by New Khimti-Barhabise section where tower pads lie in five CFs and RoW impacts seven CFs as shown in **Figure 6**. The Charnawati watershed is resided by rare Thami people who are considered to have close connection with forest for their livelihood and culture. So, to offset the impacts by the intervention of TKTL, consultation meetings with CFUGs affected regarding their capacity development programs were conducted. As per the demanded forest related programs such as Forest Based Income Generation and Entrepreneurship Training, Training for Cultivation of NTFP under ROW, and Forest Management and Capacity Building Training by CFUG have been conducting in the watershed.

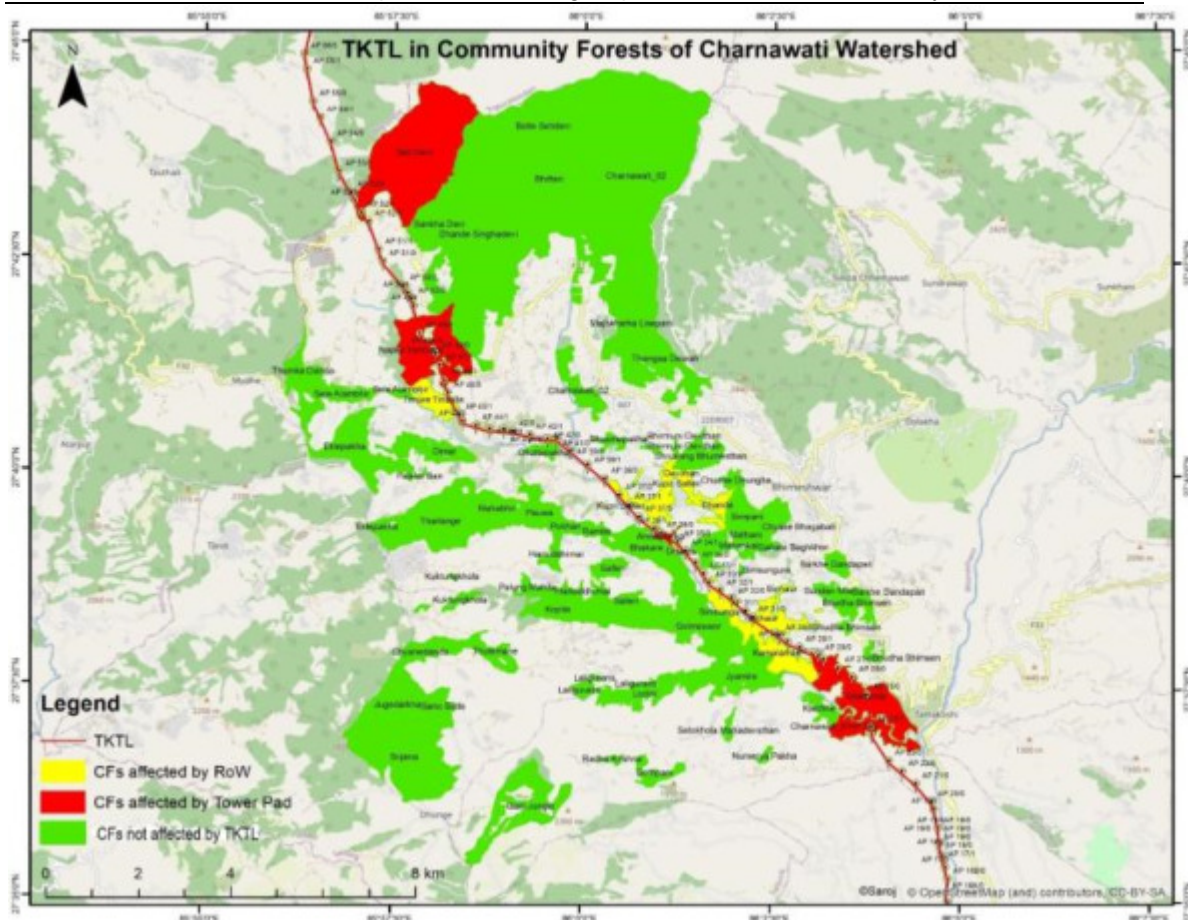


Figure 6: CFs in Charnawati Watershed affected by TKTL

Barhabise-Changunarayan TL Section

The enumeration list shows more trees to be cut than expected from the IEE report and thus IEE has to be updated, in the portion of Sindhupalchowk Forest area, especially in Balephi RM.

After the agreement between DoF and NEA, the letter has been dispatched to respective DFO, from where the required letter and approval has been granted. Based on those granted permission, hammer seal has been completed and tree cutting has been completed in direct supervision of representatives from respective Ilaka Forest Office for tower foundation location in Sindhupalchowk and Kavrepalanchowk, and Row: AP23/0-AP24/0, AP24/0-AP25/0, AP26/0 – AP27/1, AP41/0-AP42/0 and AP47/4-AP48/0 with the total 3143 number of trees being felled. All the felled trees have been handed over to respective CFUGs in presence of respective sub-divisional forest officials. The tree cutting for RoW has been initiated in Sindhupalchowk and Kavrepalanchowk section. However, the approval letter for tree cutting in ROW for all the community forest in Sindhupalchowk has not been granted yet. The complete cadastral survey has not been finished in Lapsipedi-Charangunaryan section and thus the further process for tree marking and cutting has not been preceded further in this section. Besides these 265 private trees has fell down till this period. The district wise tree cutting status in TKTL is shown in **Figure-7** below and the details are presented in **Annex- 10**.

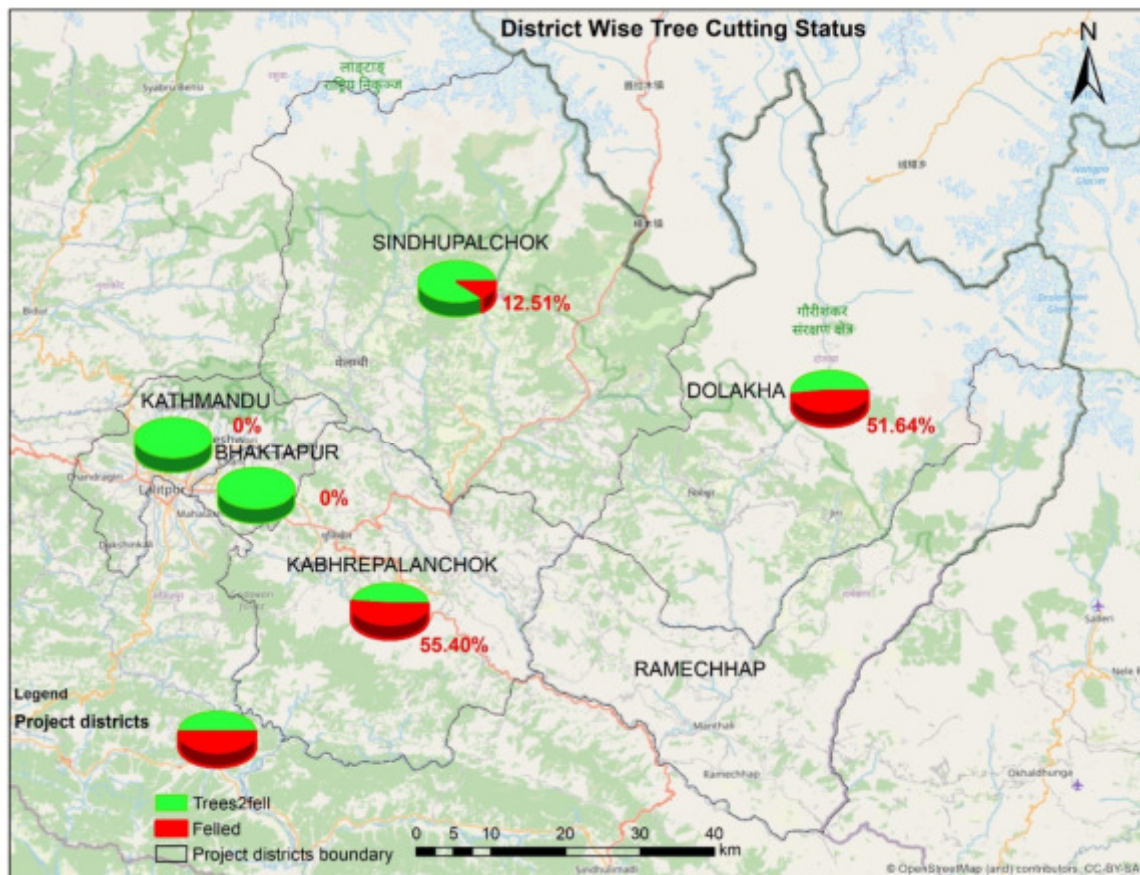


Figure-7: District wise tree cutting status in TKTL

4.4 Status of Compensatory Plantation Plan

An agreement has been done with Department of Forest and Soil Conservation and Nepal Electricity Authority to provide fund for compensatory tree plantation for all the trees to be felled in TKTL. A current tree enumeration shows that 35,231 trees to be felled in TKTL, however the trees number might decrease during the construction phase as the project will cut only the required tree for foundation clearance and the required trees for RoW clearance and will avoid tree cutting in valleys and trees with smaller height that does not obstruct the RoW clearance. Thus, the project will not clear all the trees that come in TKTL alignment.

The agreement between DoFSC and NEA clearly explains that the fund will be provided in three installments. The first installment will cover the compensation cost of all the trees that will be felled, the second installment will cover the compensation cost for the area of the land that has to be acquired and the third installment will cover the compensation cost for the caretaking of the compensatory plantation. The entire fund will be deposited in the Forest Development Fund of department of Forest and Soil Conservation. NEA has paid the cost of NRs. 165,058,031 for acquired land. In addition, the project has requested respective DFOs to provide detail estimates of compensatory plantation and has recently obtained the detail estimate. Based on those estimates, the project has disbursed NPR. 238,404,819.47 for the cost of compensatory plantation including the cost of land for compensatory plantation to the Department of Forest and Soil Conservation on 2079/03/23 BS. The compensatory plantation cost includes the cost for all five districts Dolakha, Sindhupalchowk, Kavrepalanchowk, Bhaktapur and Kathmandu. The compensatory plantation estimate has been done in the ratio of 1:10.

4.5 Consultation with Community

The regular consultation with the local peoples, PAFs and relevant stakeholders is conducted whenever needed. Information regarding project activities is shared with them and any questions/queries are answered. While implementing the RP, IR activities a meaningful consultation, group discussion programs is carried out with the PAFs. The regular field visit, consultation and interaction is being conducted by strictly following the Standard Operating Procedure (SOP) for COVID-19 issued by PMD as there are some evidences of COVID-19 cases in Nepal. There were 71 public consultations held during this reporting period with the total participant numbers 691 (Male – 614 and Female – 77). Among those consultations, environment related consultations are presented below in **Table 5**: Since, most of the consultations were informal, hence lacks proper minuting, however documented with photographs.

Table-5: Environment Related Public Consultation Details

SN	Location and Date	Major Issues in Discussion	Participant			Remarks
			Male	Female	Total	
New Khimti – Barhabise TL section						
1	Melung RM-1 (16/12/2022)	Regarding extraction of quarry materials from the forest for protection work and others	16	0	16	
2	Tripurasundari RM-4 (05/11/2022)	Compensation of medicinal herbs of tower foundation	11	0	11	
3	Pawati, Melung RM-1(10/11/2022)	Regarding tree cutting of RoW in Khahare Bhadaure CF	5	1	6	
4	Pawati, Melung RM-1(19/10/2022)	Regarding tree cutting of RoW in Khahare Bhadaure CF	7	1	8	
5	Pawati, Melung RM-1 (20/10/2022)	Regarding tree cutting of RoW in Baluwa Bhumethan CF	9	1	10	
6	Pawati, Melung RM-1 (21/10/2022)	Regarding tree cutting of RoW in Mulpani CF	5	0	5	
7	Boch, Bhimeshwar Municipality-8 (20/09/2022)	Regarding tree cutting of RoW in Napke Yanmara CF	7	1	8	
8	Sankhe, Ramechhap(2022/07/18)	Regarding detail survey for alternative route	7	0	7	
Barhabise – Changunarayan TL section						
1	Chautara (01/12/2022)	<ul style="list-style-type: none">Consultation and Discussion with CDO, DFO, AFO and Survey Department about the forest issues and progress details of TKTLP	12	2	14	
2	Balephi RM- 7 (24/11/2022)	<ul style="list-style-type: none">Regarding tree cutting in ROW	7	2	9	
3	Lamosangu, Balephi RM – 8 (12/10/2022)	<ul style="list-style-type: none">Discussion on safe management of wastes and mock generated from AP 13A/0	11	3	14	
4	Lamosangu, Balephi RM – 8 (13/10/2022)	<ul style="list-style-type: none">Discussion on safety precautions during the work on AP 13A/0	5	2	7	
5	Mandan Deupur – 9 (13/09/2022)	<ul style="list-style-type: none">Consultation with PAFs for initiation of stringing works and private tree cutting in private lands (AP 42/2, AP 45/0)	6	0	6	
6	Balephi RM- 6 (14/09/2022)	<ul style="list-style-type: none">Consultation for initiation of tower foundation works and tree cutting (AP19/0, AP20A/0)	7	0	7	
7	Changunarayan Municipality Office (18/09/2022)	<ul style="list-style-type: none">Consultation with PAFs and deputy mayor for the initiation of works in Changunarayan area; also shared the	12	0	12	

SN	Location and Date	Major Issues in Discussion	Participant			Remarks
			Male	Female	Total	
		information related to IEE and TKTL Project				
8	Dhulikhel CDO Office (21/09/2022)	<ul style="list-style-type: none"> Discussion about compensation rate for structure loss and crop loss 	14	2	16	
9	Dhulikhel Forest Office (23/09/2022)	<ul style="list-style-type: none"> Discussion about forest clearance and tree cutting in ROW 	4	1	5	
10	Mandan Deupur-9 (24/9/2022)	<ul style="list-style-type: none"> Consultation with PAFs about tree cutting under ROW 	8	1	9	
11	Dhulikhel CDO Office (21/09/2022)	<ul style="list-style-type: none"> Finalizing compensation rate for structure loss and crop loss 	16	2	18	
12	Bhaktapur (2022/07/11)	<ul style="list-style-type: none"> Consultation with CDO, Bhaktapur, Project Officials regarding documentation of forest 	7	0	7	
Total			176	19	195	

(Source: Field visit)

4.6 Monitoring Visits and Discussion

Each ESMU team is conducting regular compliance monitoring and supervision in their respective section. ADB has conducted a field visit on 2-4 November to New Khimti-Barhabise and Barhabise-Kathmandu TL section and discussed on environmental and social issues and other issues related to the project. Besides, there was a field visit on 22 September 2022 by a group of the team on Lapsipedi area. The team includes Mr. Kulman Ghising, MD NEA, Mr. Tara Pradhan Officiating Chief PMD, Mr. Ghanashyam Upadhaya CDO Kathmandu, Project team and Locals. The team discuss about the issues of Lapsipedi area and initiation of work. The team agrees to meet again to have further discussion and initiation of work.

4.7 Implementation of Mitigation Measures

4.7.1 Material Storage Yards and Workshop

The storage yard and workshop have been set up by contractor (KEC International Limited) at Kiratichhap of Bhimeshwor municipality-5 on a rented land for New Khimti-Barhabise section. The contractor has established another storage yard at Kharidhunga of Bhimeshwar municipality. Currently, including a security guard there are 6 full time staffs in New Khimti-Barhabise section in the storage yard.

The storage yard and workshop have been set up by contractor of Barhabise-Changunarayan TL section at Kuntabesi close to Cha Khola at Mandandeupur Municipality of Kavrepalanchowk District approximately 56 km away from Kathmandu and 10 km from Zero Kilo on a rented land. Currently, including a security guard there are 5 full time staffs in the yard.

Similarly, the storage of construction materials at different construction sites is kept adjacent to the site. The storage of those materials at each site is satisfactory. However, the contractors are regularly advised for proper storage of these materials at the designated sites. The detail description of the status of construction material on each site is described below in **Table-6**:

Table-6: Status of Storage of Construction Materials at each site

Transmission Line	Construction Material	Storage Type	Condition
New Khimti – Barhabise TL section	Cement	Stored in a temporary hut	Stored in elevated area free from water. Condition was in satisfactory condition
	Sand	Open Storage	Sand stored near the aggregates bordered by the bricks and was in satisfactory condition
	Aggregate	Open storage	Stocked on the construction site in a satisfactory condition .

Transmission Line	Construction Material	Storage Type	Condition
	Reinforcement bar	Open air storage	Stored in open ground with no ground clearance and in unsatisfactory condition
Barhabise – Changunarayan TL section	Cement	Stored in rented houses	Moisture and water proofing were done and the condition was good
	Sand	Open storage	Direct piling on simply labelled land, covering with simple plastics as a water proof layer, bordered by small boulders to restrict foreign material, however not enough separation distance from aggregate, however satisfactory condition
	Aggregate	Open storage	Direct piling on semi-labelled land, no water proof layer however bordered from direct runoff and foreign material, not enough separation distance from sand, however satisfactory condition
	Reinforcement Bars	Open air storage	Storage provided without sufficient clearance from ground, no water proofing layer, not satisfactory condition

(Source: Field visit)

4.7.2 Establishment of Labor Camps/Camp Site Management

New Khimti – Barhabise TL section

The contractor has rented private houses as well as established a temporary labor camp in the sites with basic accommodation including safe drinking water and lighting facility. The temporary tarpaulin camp is used to take rest during daytime. The contractor has been advised to follow the labor camp standard as per the EHS plan. The 54.9% (678 out of 1235) of labors were found to be local in New Khimti-Barhabise TL section during this period.

Barhabise - Changunarayan TL section

In Barhabise - Lapsipedi TL section, the contractor (Larsen & Toubro Ltd.) has rented private house with proper arrangements for accommodation (warm cloths, bed and lodging sets, mosquito nets and insect repellent), light/power system and drinking water. The contractor has been advised to follow the campsite plan as addressed by them in their approved EHS plan. The 34.31% (129 out of 376) of labors were found to be local in Barhabise-Changunarayan TL section during this period. The indicators were found complied in most of the sections whereas in some sections they were partially complied, the detail summary is presented in **Table-9**.

The 50.09% (807 out of 1611) of labors were local in all the sections of transmission line during this monitoring period. The detail employment data record is presented below in **Table-7**:

Table-7: Employment Data Record

Reporting month	Reporting station/TL	Total No. of labor	No. of local/Nepali labor				No. of women labor		
			Total	Marginalized labor			Skilled/Semiskilled	Unskilled	Total
				Skilled	Unskilled	Total			
July–December, 2022	New Khimti – Barhabise section	1235	678	27	128	155	0	0	0
	Barhabise – Changunarayan section	376	129	26	16	42	0	0	0
Total		1611	807	53	144	197	0	0	0
Percentage (%)		100	50.09	3.29	8.94	12.23	0	0	0

(Source: Field data)

4.7.3 Occupational Health and Safety Measures

The PMD has issued and circulated SOP for COVID-19 Risk Management at Workplace on 16 August 2020, both in English and Nepali version to all its associated units and requested to follow the guidelines strictly during construction, compliance monitoring, field visits and all

other associated working activities. After the outbreak of COVID-19, all the construction and other project related activities are being done following the circulated guidelines.

Similarly, for both the sections the contractor has submitted the EHS plan to NEA including SOP regarding COVID-19. The Health and Safety Officer has been recruited by the contractors for compliance in order to prevent potential harm to labors/staffs during construction activities. Regular instructions, orientations and pep talks in site during construction work regarding Occupational Health and Safety, and use of PPEs are being conducted. The construction workers and field staffs have been provided with Personnel Protective Equipment (PPEs) and safety gears like helmet, reflective jacket, facemasks, goggles, and boots etc. Health and Sanitation facilities to the construction workers have been installed and first aid kit box has been arranged in the sites. Also, the labors/staffs have been following the Standard Operation Procedure for COVID-19 during the construction work. The contractors have established isolation rooms in case of COVID case in their respective guest house fulfilling all the requirements for isolation.

The assigned Health and Safety Officer is regularly monitoring TL section. ESMU team has monitored the sites as per the approved EHS plan and if found non-compliance immediate action has been taken. The site in-charge, H&S officer has been advised to arrange and strictly maintain compliance as per the approved plan.

New Khimti-Barhabise TL section

The contractor has been advised to put the information board and safety signs related to OHS in local language in site instead of English language as labors and local people may not understand in English. As per the instruction, the contractor has installed the information board in Nepali language in construction sites. The contractor has been advised to tie up with the local hospital in case of emergency and as per the instruction, the contractor KEC International Ltd has tied up with Dolakha Community Hospital of Charikot where all medical treatment expenses of staffs and labors are borne by the contractor.

Barhabise-Changunarayan TL section

The contractor has been advised to submit the Occupational Health and Safety Measures and Plans for the continuation of work to abide the protocols and circulars issued by GoN after the global pandemic of COVID-19; and thus, they submitted the Supplementary Health and Safety Plan on account of COVID-19 Pandemic dated 20 July 2020.

Besides, the contractor is using SHEILD app to monitor the safe and unsafe work conditions for erection and stringing works. The app is regularly monitored by site in-charge, EHS officer and Project Manager. A sample report is attached in **Annex-12**. Also, EHS hazard and risk assessment has been conducted for foundation, erection and stringing activities. Similarly, sign and signage are being installed in each site. They include work information flex, hazard signage, safety signage and other precautionary signage. The contractor has been strictly advised to keep all those signage in a pictorial manner and the information written should either be in the local language and the language commonly used by the labors. No issue has been observed during this reporting period.

4.7.4 Slope Stabilization and Bio-engineering work**New Khimti-Barhabise TL section**

Precaution and special measures for protection of foundations are needed for towers and poles located in mountainous and rough terrain. In AP 32/1, a slope failure has been seen near the tower foundation, for which, protection work (Gabion wall and RRM wall) has been constructed. In AP 65/0, due to the subduction of road while foundation works, two masonry walls have been constructed. Protection works are ongoing in AP 10/0, AP 19/1 and AP 20/0. Also, in AP 62/0 a crevasse of nearly 20 m had seen on tower foundation. A team of geologist from NEA, project office team and ESMU team together inspected the location and geologist recommended shifting of the center point of the foundation towards 30 m south from the existing center point is safe. However, in late September, a huge landslide occurred in the location, because of which reroute of the alignment is needed with addition of three more towers. These rerouted alignment passes through a community forest. The contractor KEC International Ltd. has submitted the detailed survey data of the rerouted alignment and the alignment has been approved. The rerouted alignment passes through a community forest and requires to cut the trees.

Barhabise- Changunarayan TL section

The TL passes through private and community land along with public structures and utilities. Similarly, precaution and special measures for protection of foundations are needed for towers and poles located in mountainous and rough terrain. However, no tower foundations have been constructed so far with zero problem of slope instability. The construction of tower foundation protection wall will be started after the completion of all the pits of the specific tower. The construction will be done before labeling of the excavated debris/spoils and erection of the tower.

The slope stabilization and tower protection work has been started in few locations to mitigate and control erosion, surface runoff and slope instability. Those construction works are being done after the approval from NEA Project Office on the design and types of walls designed by the contractor in support of their external consultant. During this reporting period the status of the tower protection work is as follows: Completed: - AP 3/0, AP 3A/0, AP 4/0, AP 5/0, AP 5A/0, AP 6/0, AP 7/0, AP 13/1, AP 15/0, AP 16/0, AP 17/0, AP 22/0, AP 30A/0, AP 30A/2, AP 37/0, AP 40/0, AP 52A/0 and AP 53/0. In progress: - AP 13A/0.

4.7.5 Air, Water and Noise Quality

The major stretch of the TL traverses through rural setting with minimum settlements. The construction activities are limited to small area and the impact on the ambient air quality will be low in magnitude, site specific in terms of extent and short in duration. The main source of air pollution along the alignment is due to the vehicular movement along the earthen road and emission of dust during foundation activities, for which, contractor has been instructed to sprinkle the water.

There is possibility of water pollution especially in sections where tower pads are located nearby water bodies. Site specific and short duration permissible impacts on nearby river due to construction activities have found. The contractor has been instructed for proper disposal of solid waste, cement slurry, construction materials and human waste. The contractor is checking the pH level of drinking water of labor camp and has been instructed to test the other major drinking water quality parameters (Turbidity, Conductivity, Total Suspended Solids, Total Dissolved Solids, and heavy metals such as As, Cd, Pb, Hg, Cu, Zn, Mg) of labor camp as per the standard of National Drinking Water Quality Standards and Directives, 2005. The contractor has been testing the drinking water quality of labor camp regularly and till date all the drinking water quality parameters were found within the permissible limits.

Insignificant interruption in noise quality has found due to emission of noise and vibration during construction activities. Noise pollution is temporary and low in magnitude, site specific and for a short duration. The contractor has been prohibited for the construction work during night time. Similarly, air and noise quality monitoring are being conducted on quarterly basis

and the test results obtained are disclosed accordingly. In New Khimti-Barhabise section, the contractor has measured the noise level during foundation work in two locations of Dolakha and Sindhupalchowk districts with the support of laboratory of Water Engineering and Training Center (P.) Ltd, Kathmandu and found that the noise level is within the permissible limit.

L&T CONSTRUCTION
POWER TRANSMISSION & DISTRIBUTION IC

Issue 2-Rev 00

Ref: IM-9.1.1.1- D

ENVIRONMENT MONITORING REGISTER

Name of the Project: 400 KV BKT
Date: 31.10.2022

Job Code: LE 170523

BU/Cluster: Delhi

Environmental Attributes	Relevant Parameters	Permissible Limit	Test results	Method of Monitoring	Periodicity of Monitoring	Record reference
Air Monitoring	Dust	150-160 PPM	152	Real- Time Air Quality Index	Quarterly	As per Nepal Govt. Data
	CO2	250-400 PPM				
Water Monitoring	Drinking water- store	6.5-8.5	6.7	pH meter	Monthly	
	Drinking water- Guest house		7.4			
Noise Monitoring	At office	90 dB	15 dB	Google app sound meter	Quarterly	
	Near security gate		62 dB			
	Near crane working area		69 dB			
	Store premise		54 dB			
Other Factors						

(Name & Signature of EHSO)

L&T CONSTRUCTION
POWER TRANSMISSION & DISTRIBUTION IC

Issue 2-Rev 00

Ref: IM-9.1.1.1- D

ENVIRONMENT MONITORING REGISTER

Name of the Project: 400 KV BKT
Date: 31.12.2022

Job Code: LE 170523

BU/Cluster: Delhi

Environmental Attributes	Relevant Parameters	Permissible Limit	Test results	Method of Monitoring	Periodicity of Monitoring	Record reference
Air Monitoring	Dust	150-160 PPM	140	Real- Time Air Quality Index	Quarterly	As per Nepal Govt. Data
	CO2	250-400 PPM				
Water Monitoring	Drinking water- store	6.5-8.5	6.8	pH meter	Monthly	
	Drinking water- Guest house		7			
Noise Monitoring	At office	90 dB	20 dB	Google app sound meter	Quarterly	
	Near security gate		63 dB			
	Near crane working area		68 dB			
	Store premise		54 dB			
Other Factors						

(Name & Signature of EHSO)

Figure 8: Air, Water & Noise Quality Monitoring Test Result

4.7.6 Debris Management

The debris and spoil due to excavation of tower foundation have been partially managed in the project areas. The contractors are regularly advised to manage safe spoil dumping site with no adverse environmental and social impacts. Also, they have been advised to put separate bins for degradable garbage, plastic, glass and metal to dispose properly in labor camps.

New Khimti-Barhabise TL section

In AP 37/1, excavated debris during foundation work has made an irrigation canal stagnant, for which, contractor restored the canal after the completion of the foundation work. The excavated spoils were stored safely near the tower foundation and later used for back filling. Similarly in AP 47/1, the excavated debris and earth materials have damaged the cultivated potato field and private grassland and the contractor has compensated the loss of potato and reinstated the lands.

Barhabise-Changunarayan TL section

No issue/progress has been seen in this reporting period. However, few formal applications expressing their fear regarding erosion and mud flow in their land besides tower pad were received from the PAFs. All those applications were forwarded instantly to Project Office and even the issues were discussed with contractor and were advised for field visit/monitoring and take precautionary measures soonest.

4.7.7 Drainage Management

Since most of the tower pads are located at the top of subdued hillocks, on the ridges and on the flat agricultural land, the interference with drainage patterns due to the construction of the tower pads has minimal impact. The construction of tower foundation has not affected the natural drainage pattern yet. However, the contractors have been advised to store the excavated earth material without damaging the natural drainage pattern, if any. Due to the construction of access road during the foundation work of AP 28/0, a rivulet was obstructed causing water logging on the upstream of the road, for which 2 Hume pipes of 90 mm diameter has been installed and ease the natural flow of the water. Also, they have been instructed to manage the solid waste generated within the temporary labor camp site so that it won't make stagnant the nearby drainage pattern.

New Khimti-Barhabise TL section

No issue/progress has been made in this reporting period.

Barhabise-Changunarayan TL section

No issue/progress has been made in this reporting period.

4.7.8 Firewood Use

Since the initiation of the construction activities the EMSU monitoring team is stationed at respective site office and is monitoring regularly. The contractors and labors are using liquid petroleum gas (LPG) for cooking purpose. Firewood has not been used. No issue/progress has been seen in this reporting period.

4.7.9 Safety Gear

The compliance of safety gear or PPE is being monitored as the construction work is progressing. All of the contractors from New Khimti-Barhabise TL section and Barhabise – Changunarayan TL section have submitted their approved Environment Health and Safety (EHS) plan which includes health safety as well as PPE requirements. Also, the labors/staffs are following the SOP for COVID-19 during construction work issued by PMD. Also, the contractors have been advised to arrange and install waste management facility, barricade (Reflective and hard) the construction site, drainage system, safety sign and restriction zones/compartments etc. promptly when required. No issue/progress has been seen in this reporting period.

4.7.10 Livelihood Restoration and Enhancement

For livelihood restoration and enhancement of PAFs, especially for those households who lose their residential structures and whose land losses more than 50%, the trainings are being focused. The duration of training will be as per the CTEVT standards. ESSD is responsible to carry out the livelihood restoration and enhancement trainings under the mitigation measures of the project. The implementation status of livelihood restoration and enhancement trainings are as follows:

New Khimti—Barhabise TL section

Following trainings have been started in New Khimti—Barhabise TL section.

The participants have been selected on recommendation of respective GRC concerning the above-mentioned criteria.

- a) **Basic Computer Training:** The Basic Computer Training was of 2 months contributing an hour each day. The training has been conducted in Charikot, Dolakha. Twenty participants (Male-8, Female-12) have completed the training and the participants are from Melung Rural Municipality, Shailung Rural Municipality, and Bhimeshwar Municipality of Dolakha district and Tripurasundari RM of Sindhupalchowk district.
- b) **Driving Training:** Driving training was conducted in Charikot, Dolakha. The training was of a month duration contributing half an hour each day. Twenty-one participants from Melung Rural Municipality, Shailung Rural Municipality, and Bhimeshwar municipality of Dolakha district and Tripurasundari RM of Sindhupalchowk district have taken the training. All participants were male.
- c) **Vegetable Farming Training:** The Vegetable Farming Training has been conducted in Bhimeshwar Municipality-9, Lakuridanda of Dolakha district. Twenty participants from Dolakha and Sindhupalchowk districts were benefitted from the program. The program trained about seasonal and off-season vegetable growing, proper development of nursery, proper use of pesticides, transplanting, watering, weeding and seed production methods.
- d) **Livestock Management Training:** The Livestock Management Training has been conducted in Bhimeshwar Municipality-5, Mati of Dolakha district. Twenty-five participants were benefitted from the program. The trained about calving, care and feeding of livestock, vaccinating, castrating, ration balancing, sorting and breeding and marketing of livestock.

Barhabise—Changunarayan TL section

Skill Development and Soft Skill Training was conducted in Barhabise-Changunarayan TL section. The following training has been completed till this reporting period.

- a) **Basic Computer Course:** The basic computer course training has been completed in two different locations in this section with the total number of 33 participants (Male- 14, Female-19). The duration of the course was of 2 months contributing 1 hour each day and was conducted from 31 January to 22 April 2022. The participants were selected as per the above-described criteria. There are 13 participants being participated in Barhabise municipality covering the 6993.4 m span of transmission line from gantry tower to AP 11/0, total coverage for 24 towers from Barhabise municipality ward no- 4, 3 and 9. Similarly, there are 20 participants being participated in Chautara Sangachowkgadi Municipality- 13, Thulosirubari covering the 8138.3 m span of transmission line from AP 30A/0 – AP 40/0, total coverage for 24 towers from Chautara Sangachowkgadi Municipality- 9, 8, 13, Indrawati RM- 10.
- b) **Driving Training:** A total number of 8 participants are currently taking driving training classes. Among them 7 are males and one is female candidate. The training is being conducted for one month and it has been started from 20 December 2022.
- c) **Vegetable Farming Training:** The Vegetable Farming training was conducted in Mandan Deupur Municipality- 7, from 31 July to 4 August 2022. There was total 22 participants

(Male—8, Female—14). The participants were selected based on the above-stated criteria and were either the PAFs of tower pad or RoW. They were finalized and were recommended from the respective ward offices too. The training covers theoretical and practical sessions of vegetable farming.

- d) **Mushroom Farming Training:** The Mushroom Farming Training was conducted in Mandan Deupur Municipality—10, from 4 August to 8 August 2022. There was total 24 participants (Male—21, Female—3). The training was focused on teaching, learning about benefits of mushroom and its farming process. Both the theoretical and practical sessions were conducted.
- e) **Fishery Training:** The two events of Fishery Training were conducted to the affected Majhi community residing besides Indrawati River, Bhotekoshi River and Jhyandi Khola. First training was conducted for 7 participants (Male—7, Female—0) in Indrawati—10, Bhotesipa, from 10 August to 12 August 2022. Participants were PAFs residing besides Indrawati River and Bhotekoshi River.

Similarly, second training was conducted for 19 participants (Male—14, Female—5) in Indrawati—10, Jholunge, from 13 August to 15 August 2022. The participants were the PAFs residing besides Indrawati River and Jhyandi Khola. There were both the theoretical and practical session being conducted explaining about fish farming and sustainable fishing.

- f) **Livestock Farming Training:** The two events of Livestock Farming Training were conducted to the PAFs of TKTL. First training was conducted for 18 participants (Male—13, Female—5) in Balephi—5 from 12 August to 16 August 2022.

Similarly, second training was conducted for 14 participants (Male—5, Female—9) in Chautara Sangachowkgadi Municipality—13, Thulosirubari, from 17 August to 21 August. The trainer focused on livestock farming, diseases, importance and benefits.

- g) **Training on Cultivation of Non-Timber Forest Products under ROW:** The three events of Cultivation of Non-Timber Forest Products under ROW were conducted to the PAFs of TKTL. First training event was conducted for 32 participants (Male—20, Female—12) in Balephi—4, from 18 August to 20 August 2022. All participants were members of CFUGs (Dharampani CFUG, Chapbote CFUG, Falate Kalika CFUG).

Similarly, second training event was conducted for 17 participants (Male—11, Female—6) in Thulosirubari, from 21 August to 23 August 2022. All the beneficiaries were members of Thulichaur CFUG and Tamakhani CFUG.

Likewise, third training event was conducted for 13 participants (Male—8, Female—5) in Narsinghdanda, from 24 August to 26 August 2022. Training beneficiaries were members of Jhayali Khola CFUG, Rolpakha CFUG and Narayandevi CFUGs. The trainer provided skill-based knowledge on NTFP, its cultivation practices and its importance.

- h) **Microenterprise Development Training:** Participant selection process is ongoing.

4.7.11 Environmental and Social Awareness

- a) **Installation of Hoarding Boards:** ESSD prepared and installed 60 hoarding boards in TKTL consisting public awareness messages including environmental protection, bio-diversity conservation, health & safety issues, project information and general rules and regulations.
- a) **Social Awareness Program:** ESMU team conducted one-day social awareness program in 3 different locations in New Khimti - Barhabise TL section and 3 different locations in Barhabise - Changunarayan TL section. The participants were mostly from the TL affected households and people living close to TL. The awareness program covered about mode of compensation payment, Compensation Determination Committee and process,

economic opportunities due to TL, HIV AIDS and Gender Equality and Social Inclusion. Also, the ESMU team along with the Project officials from TKTL and Lapsipedi SS conducted 1 day presentation program at Changunarayan ward- 4, dated 2022/06/29. The major objective of the programs was as follows:

- Information disclosure about the current progress status of TKTL
 - Sharing of IEE study and its report
 - Sharing of TKTL alignment along with google maps & coordinates
 - Aware about the socio-economic and environmental impact & benefits of TKTL
 - Process and procedures of compensation determination & distribution, Land acquisition and GRM
- b) **Occupational Health and Safety Training:** ESMU team conducted occupational safety trainings to the labors in 2 different locations in New Khimti-Barhabise TL section and in 3 different locations in Barhabise - Changunarayan TL section. The training was focused on occupational safety, use of PPEs, safely handling of equipment and other safety measures to be followed during construction activities. The training explained the importance of EHS plan submitted by the contractor and the SOP guidelines provided by PMD.
- c) **Health and Sanitation Program:** The program was conducted to the labors in 2 different locations in New Khimti-Barhabise TL section and in 3 different locations in Barhabise - Changunarayan TL section. The trainer emphasized the training cum orientation program on personal hygiene, sanitation at workplace, proper hydration during work, toilet, labor camp and proper diet. Also, the trainer explained about the current global COVID-19 pandemic and its situation in Nepal. She oriented the participants about proper hand washing, social distancing, isolation and other mitigation measures to stay from COVID-19.
- d) **Conservation Awareness Raising Program:** Awareness raising programmes were conducted in two different locations of New Khimti-Barhabise TL section. Most of the participants were CFUG members, Foresters from Bhimeshwor Sub-division Forest Office, and local community. The programme covered about the importance of biodiversity, forest, wildlife and bird conservation, plantation and economic importance of forest and its role in rural livelihood improvement.

Similarly, four conservation awareness raising programme activities were conducted in Barhabise-Kathmandu TL section. The first programme was conducted in Irkhu, on 17 August 2022 among the participants from Irkhu and Thulosirubari areas. There were total 22 participants (Male-13, Female-9). The participants were the members of CFUG as well as few local PAFs. The other three events were conducted in Balephi on 22 August 2022, among the participants from Barhabise municipality, Ramche area and the whole of Balephi RM. There were total 21 participants (Male-9, Female-12), 22 participants (Male-0, Female-22) and 23 participants (Male-19, Female-4) respectively in each event.

e) **Other Trainings Conducted by Contractor:**

Below are the lists of other trainings conducted by the contractor (L&T Construction Company) to their staffs and workman in **Barhabise – Kathmandu TL section**.

SN	Month	Total PS Staff	Total RS Staff	Training Topic	Date of Training	Duration of training	Total training man hours	No of staff attended	% of staff covered
1	July	7	12	Cross functional training	7/14/2022	2 hrs	38	19	95%
		6	2	SOP Stringing	15.07.2022	1 Hr	8	8	
		5	4	Emergency Preparedness	20.07.2022	1 Hr	9	9	
2	Aug	3	3	Erection SOP	8/6/2022	2 hrs	12	6	95%

SN	Month	Total PS Staff	Total RS Staff	Training Topic	Date of Training	Duration of training	Total training man hours	No of staff attended	% of staff covered
		4	4	Roles & responsibilities	8/12/2022	2 hrs	16	8	
3	Sept	10	8	SOP Erection	9/11/2022	2 hr	36	18	95%
		5	5	fire fighting	9/10/2022	1 hr	20	10	
		2	3	Materials handling	9/23/2022	2 hr	10	5	
4	Oct	10	4	SOP Foundation	10/18/2022	2 hr	28	14	100%
5	Nov	10	4	SOP Foundation	20.11.2022	1 hr	14	14	100%
		10	4	SOP Stringing	24.11.2022	1 hr	14	14	
		1	6	Material Handling	15.11.2022	1 hr	7	7	
6	Dec	6	5	SOP Foundation	08.12.2022	1 hr	11	11	100%
		8	6	Defensive driving	14.12.2022	1 hr	14	14	
		3	6	Material Handling	16.12.2022	1 hr	9	9	
		4	6	Defensive driving	20.12.2022	2 hr	10	20	

SN	Month	Total Workman	Training Topic	Date of Training	Duration of training	Total training man hours	No of staff attended	% of staff covered
1	July	26	1. Materials Handling 2. Cardinal rules 3. Fire fighting & emergency preparedation	7/28/2022	2 hr	22	11	100
			Height work	7/12/2022	1 hr	3	3	
			Height work	7/10/2022	1 hr	12	12	
2	Aug	61	Shutdown Training	8/15/2022	2 hr	28	14	100
			Stringing SOP	8/22/2022	2 hr	32	16	
			Need of safety	8/28/2022	1 hr	12	12	
			Stringing SOP	8/30/2022	1.5hr	18	12	
			winch machine operation	8/18/2022	1 hr	7	7	
3	Sept	92	fire fighting	9/10/2022	1 hr	8	8	100
			First-Aid training	9/7/2022	2 hr	20	10	
			winch machine operation	9/6/2022	1 hr	4	4	
			Induction training	9/8/2022	2 hr	6	3	
			Induction training	9/13/2022	2hr	36	18	
			Safe insulator hosting	9/19/2022	2 hr	36	18	
			SOP on Stringing	9/27/2022	3 hr	54	18	
			Induction training	9/23/2022	2 hr	8	4	
4	Oct	52	Materials handling	9/23/2022	2 hr	18	9	100
			SOP on Stringing	10/14/2022	3 hr	30	10	

SN	Month	Total Workman	Training Topic	Date of Training	Duration of training	Total training man hours	No of staff attended	% of staff covered
			SOP on Stringing	10/31/2022	2 hr	20	10	
			winch machine operation	10/22/2022	1 hr	5	5	
			tree cutting method	10/15/2022	1.5hr	7.5	5	
			manual handling and wire rope splicing methods	10/28/2022	2 hr	24	12	
			winch machine operation	10/25/2022	2 hr	20	10	
5	Nov	65	SOP on Stringing	12.11.2022	1 hr	15	15	100
			SOP on Foundation	14.11.2022	1 hr	18	18	
			winch machine operation	15.11.2022	1 hr	13	13	
			SOP on Foundation	14.11.2022	1 hr	16	16	
			winch machine operation	17.11.2022	1 hr	8	8	
			Material Handling with Pick & Carry crane	20.11.2022	1 hr	9	9	
			SOP on Stringing	22.11.2022	1 hr	14	14	
			SOP on Stringing	22.11.2022	1 hr	13	13	
			Emergency Preparedness	28.11.2022	1 hr	18	18	
6	Dec	79	CPR	05.12.2022	1 hr	18	18	100
			Emergency Preparedness	08.12.2022	1 hr	18	18	
			winch machine operation	15.12.2022	1 hr	12	12	
			SOP on Foundation	14.12.2022	1 hr	14	14	
			Defensive driving	15.12.2022	1 hr	14	14	
			Material Handling with Pick & Carry crane	18.12.2022	1 hr	9	9	
			SOP on Stringing	19.12.2022	1 hr	17	17	
			SOP on Stringing	21.12.2022	1 hr	14	14	
			Emergency Preparedness	23.12.2022	1 hr	15	15	

SN	Month	Total Workman	Training Topic	Date of Training	Duration of training	Total training man hours	No of staff attended	% of staff covered
			Defensive driving	24.12.2022	1 hr	8	8	
			SOP on Stringing	26.12.2022	1 hr	10	10	
			Material Handling	29.12.2022	1 hr	12	12	

4.7.12 Number of Grievances (Documented, resolved and under processing)

The grievances raised on the substation and transmission line are being received and recorded. The GRCs are in the process of formation in local levels. From the starting of the project there are in total 68 grievances recorded till this reporting period. Among those recorded grievances 53 grievances are being resolved and remaining 15 are under process. The recorded environmental related grievances are presented below in the **Table-8**:

Table-8: List of Grievances and its status

SN	Location	Issues	Recorded (Type/Date)	Action
Tamakoshi-Kathmandu 220/400kV Transmission Line Project (TKTLP) – ETESIP				
New Khimti – Barhabise TL section				
1	Melung RM-1, Dolakha	Extraction of quarry materials from forest by petty contractor	CFUG/Verbal (2022/12/11)	Solved: Conducted a meeting between CFUG and petty contractor in presence of ward chair and came in an agreement with some support to CFUG by petty contractor.
2	Barhabise Municipality-4, Sindhupalchowk	Debris management spoiled on the foot trail	PAFs/Verbal (2022/12/07)	Ongoing: The contractor has been advised for safe tipping of spoil and rehabilitate the foot trail.
3	Bhimeshwar Municipality-7, Dolakha	Compensation of private trees cut under ROW	PAFs/Verbal (2022/11/17)	Ongoing: The project office is taking the estimate of private trees to be felled under the ROW and has planned to determine the rate through CDC meeting.
Barhabise – Changunarayan TL section				
1.	Mandan Deupur- 4	Damaged to Irrigation canal	PAFs/Verbal (2022/12/02)	Solved

(Source: Field visit)

4.7.13 Summary of Environmental Compliance Monitoring

The brief summary of the environmental compliance monitoring is presented below in **Table-9**.

Table-9: Brief Summary on Status of Environmental Compliance Monitoring

SN	Monitoring Indicators	Status	Action Taken	Recommendation
1	Assurance of EHS Plan submitted by Contractor (L&T- Package II, KEC, Package I)			
	Assignment of Health and Safety Officer	<ul style="list-style-type: none"> Appointed H&S Officer (Complied) and regular site visit has been started (Complied) (100%) Submitted updated EHS plan incorporating SOP guidelines by contractor 	<ul style="list-style-type: none"> Advised to be in regular touch with ESMU team Advised for the rotational field visit, in all the working sites Keep an updated accidental record, EHS and Campsite management report, follow EHS plan and SOP guidelines strictly 	<ul style="list-style-type: none"> Contractor should provide the full detail information of the H&S Officer prior to his assignment to ESSD/ESMU team Contractor should develop a provision for H&S Officer to be accountable to ESSD/ESMU team Contractor should update the

SN	Monitoring Indicators	Status	Action Taken	Recommendation
				<p>information and related reports to the ESMU team every month</p> <ul style="list-style-type: none"> A copy of updated EHS plan should be provided to ESMU team soon after the approval
	Occupational Health & Hygiene Inspection	Complied (90%)	<ul style="list-style-type: none"> Contractor has been advised to follow the plan strictly Advised for the measurement of body temperature before starting work every morning of all manpower Maintain enough social distancing 	
	Health Campaign	Complied (90%)		<ul style="list-style-type: none"> Contractor should inform about the program in advance to ESMU team
	First aid box	Installed & complied (95%)	<ul style="list-style-type: none"> Regular monitoring during site visit and the contractor is advised to keep all the necessary medicines and refill when used Advised to contact the nearby medical house for prompt response in case of accident Also advised to keep the ambulance standby, however, the contractors are using their own vehicle if incase needed 	
	Use of PPE	Complied (85%)	<ul style="list-style-type: none"> Advised contractor to provide PPE to all the staffs and labors before entering the working site Had been strictly advised "NO PPE NO ENTRY" Verbal warning was given to petty contractor, site in-charge of lead contractor if misuse and absence of use of PPE in site during monitoring was found by ESMU team several times in different locations Information has been shared to Project team during site visit 	<ul style="list-style-type: none"> Contractor should provide enough PPE sets in each location and should also advise their petty contractors to provide PPE to all the labors. Payment should be halted of petty contractors by contractors and lead contractor by project Office, in recommendation of ESMU teams in case of misuse, and absence of use of PPE in site
2	Assurance of Campsite Management Plan (Included in the approved EHS plan, section 14.10 of L&T)			
	Weekly Inspection	Complied (95%)	<ul style="list-style-type: none"> Advised site in-charge for regular inspection 	
	Supply of Drinking water	Complied (100%)		
	Toilet	Satisfactory (80%)	<ul style="list-style-type: none"> Advised site in-charge to provide mobile toilet facility, so that the labor can transfer in different construction site Advised site in-charge to arrange proper toilet facility in the temporary labor camp, 	<ul style="list-style-type: none"> Project office should enforce contractor to provide mobile toilets for the temporary labor camps

SN	Monitoring Indicators	Status	Action Taken	Recommendation
			however, most of the labor camps are in the rented house after COVID-19	
	Disposal of waste materials	Partially complied (85%)	<ul style="list-style-type: none"> Advised site in-charge for regular inspection and provide proper orientation to labor on waste management Prohibited labors to throw kitchen garbage and other waste materials unattended 	<ul style="list-style-type: none"> Project office should enforce contractor to provide bins for waste collection and proper disposal
	Washing facilities	Complied (95%)	<ul style="list-style-type: none"> 	
	Pest control and insect repellent	Complied (90%)	<ul style="list-style-type: none"> Advised site in-charge to provide mosquito nets, however, most of the labor camps are in the rented house after COVID-19 	
	Adequate fire fighting	Not complied (25%)	<ul style="list-style-type: none"> Advised site in-charge to provide fire extinguisher, either for the temporary camps or for the rented house 	
	Use of LPG	Complied (100%)		
	Firewood	Not used/Nil	<ul style="list-style-type: none"> Prohibited to use forest woods 	
	Bed sheets and mattress	Complied (75%)		
	Camps	Complied (75%)	<ul style="list-style-type: none"> Advised to provide water proof, leak proof camps, however most of the labors are stationed in nearby rented house after COVID-19 	
3	Labor			
	Use of Local Labor	50.09% till this reporting period (Marginalized- 12.23% - (Skilled- 3.29% & Unskilled- 8.94%))	<ul style="list-style-type: none"> Advised contractor to prioritize local labors for construction activities 	
	Women labor	Nil	<ul style="list-style-type: none"> Advised contractor to engage female labors too, however most female in current working sections are not interested to join the labor work 	
	Child Labor	Nil	<ul style="list-style-type: none"> Prohibited contractor in using child labor 	
4	Tower Foundation and Erection			
	Procedural Guideline	Prepared and complied (100%)	<ul style="list-style-type: none"> Advised contractor and petty contractors to follow the guidelines strictly 	<ul style="list-style-type: none"> Contractor should provide the approved Procedural Guideline to ESMU team soon after the approval Payment should be halted of petty contractors by contractors and lead contractor by project Office, in recommendation of ESMU teams incase found not following the guideline and

SN	Monitoring Indicators	Status	Action Taken	Recommendation
				working haphazardly
	Barricading of the area	Partially Complied (75%)	<ul style="list-style-type: none"> Advised contractor to barricade the area properly before starting of excavation and other construction activities 	<ul style="list-style-type: none"> Payment should be halted of petty contractors by contractors in recommendation of ESMU teams
	Construction Signboards	Complied (80%)	<ul style="list-style-type: none"> Advised contractor several times to keep proper signboards indicating construction activities going on in each location Shared information along with the project team too and even they have advised contractor several times to keep proper signboards prior to construction activities 	<ul style="list-style-type: none"> Project should not allow to start the construction activities without proper barricading and proper signboard installed in the proposed construction site
	Safety Instruction Board	80%	<ul style="list-style-type: none"> Advised contractor to provide safety training, instruction on each site before initiation of construction activities 	<ul style="list-style-type: none"> Project should not allow to start the construction activities without proper safety instruction each morning in the proposed construction site
	Stacking of construction materials	Partially Complied (60%) (Cements and other equipment are stored renting a house in most of the site, whereas other aggregates, sand and reinforcement bars are kept in open air)	<ul style="list-style-type: none"> Advised contractor to stack the material with proper coverage, protection and maintaining the distance from the excavated pit Advised site in-charge to check the condition of materials before using those materials Advised site in-charge not to provide and supply materials from the company warehouse if the petty contractor is missing the proper maintenance and proper stacking of materials in the field/site 	
	Inspection of excavated pit	Complied (90%)	<ul style="list-style-type: none"> Advised contractor to inspect the pit before concreting and other works Advised contractor to inform project technical team for inspection before concreting and other works Advised contractor to stop the further works in case of sliding, water sprouting before mitigating those hazards 	
	Placing of concreting mixer	Partially Complied (70%)	<ul style="list-style-type: none"> Advised contractor not to keep those machines near the pit and use proper canal to transfer the concreting mixture 	
	Lone worker	Restricted to enter alone, Complied (100%)	<ul style="list-style-type: none"> Advised contractor not to entertain lone workers in the excavated pit 	

SN	Monitoring Indicators	Status	Action Taken	Recommendation
	Spoils	Partially managed (85%)	<ul style="list-style-type: none"> Advised contractor for safe dumping of spoils and use the same material for backfilling Advised contractor to provide spoil management plan in the sensitize site Advised contractor to use hard barrier to stop slipping/flowing of excavated material 	<ul style="list-style-type: none"> It is hard to maintain the erosion and slipping of spoils in the hilly terrain thus the contractor should provide the spoil management plan of each sensitize site before excavation work.
	Lunch and refreshment breaks	Partially Complied (90%)	<ul style="list-style-type: none"> Advised contractor to give proper breaks to labors during construction works Advised contractor to provide/construct proper well sanitized toilets in each site 	<ul style="list-style-type: none"> Contractor should provide mobile toilets in each site wherever necessary
5	Vegetation Clearance	<ul style="list-style-type: none"> Tree enumeration completed (Total trees 35231, however, will be felled only the needed one, thus the number is expected to be reduced) Tree felled in 58 locations of 29 CFs (Total 6950 trees) 	<ul style="list-style-type: none"> Project Office has done an agreement with ministry to provide funds in three installments for compensatory plantation. As per the agreement the NEA has paid the fund. 	
6	Public Consultation	Complied (mostly verbally, though PAFs are happy with the compensation rate, they are unwilling to sign minutes as their high demand and expectation are not fulfilled, however photo of each meeting is being captured and included in the respective months report)	<ul style="list-style-type: none"> Consultation since July 2022- 71 (total participant- 691, M- 614, F- 77) Regularly conducted following SOP guideline Telephonic discussion when needed 	<ul style="list-style-type: none"> It seemed all of the public consultation meeting should not be minute as the local's expectation and demands are beyond the project scope and once the minuting is done, they started halting the work demanding those demanded projects to be completed first. Eg. Demand of swimming pool in Barhabise area, drinking water lifting project Some demands are beyond the project scope eg. Sub grading and black topping of rural road, cabling of distribution system, internet Wi-Fi facility to the whole village
7	GRC formation	Complied (82%)	<ul style="list-style-type: none"> 37 out of 45 (82.22%) GRCs formed Letter dispatched in almost all the respective wards and municipalities 	
8	Impacts and Safety Measures for COVID-19			
	Opening of Contractor's Office	Complied (100%)	<ul style="list-style-type: none"> Contractors are advised to follow the SOP strictly Regular cleaning and sanitizing, installation of hand washing and sanitizing 	

SN	Monitoring Indicators	Status	Action Taken	Recommendation
			stations along with pictures & signs <ul style="list-style-type: none"> Maintain distancing, body temperature screening, avoiding handshakes, hugging or any physical contact Always wear mask, isolation of person with symptoms 	
	Resuming work in the field	Complied (100%)	<ul style="list-style-type: none"> Barricading of the worksite, maintain record of the workers, installation of hand washing station Labor screening, COVID-19 test, regular medical checkup, daily body temperature measurement before work Avoid crowding and use of PPEs Minimize workers movement outside the camp, manage proper condition for workers accommodation Well ventilated and cleaned kitchen and toilet 	
	Emergency Protocols	Complied (100%)	<ul style="list-style-type: none"> Establish medical center with immediate access of Health worker and regular health checkup Establish mandatory health screening of all staffs and labors Establish enough number of quarantine and isolation shelters Establish dedicated vehicle for emergency 	
	SOP Implementation, Monitoring and Reporting	Complied (100%)	<ul style="list-style-type: none"> Established immediate access of certified health worker, assigned EHSO Maintained SOP compliance monitoring checklist and health screening register Regular inspection 	
9	Awareness and Training	Complied (80%)	<ul style="list-style-type: none"> EHSO regular field inspection and awareness program Pep talks, daily orientation conducted 	<ul style="list-style-type: none"> ESMU team also conducted Health and sanitation Programs and public awareness campaign

5.0 SAFETY ASSURANCE AS PER THE CONTRACTOR'S SAFETY PLAN

The contractors from both the sections have submitted their EHS plan to NEA incorporating SOP regarding COVID-19, and are following their respective plans during construction. Similarly, they have submitted the updated EHS plan incorporating the government guidelines, protocols and regulations in context of COVID-19 Pandemic. The objectives of the contractor's safety plan are as follow:

- To identify certain critical activities, assess the risk associated therein and suggest precautionary measures to avoid accidents
- To integrate Health, Safety and Environmentally friendly work practice
- To create EHS awareness to every individual associated with the project
- To provide the necessary EHS inputs
- To formulate and effectively maintain the accident prevention program of the project
- To achieve the prime objective of “**ZERO ACCIDENT**”

The contractor is committed to above mentioned objectives and in achieving the EHS performance standards by implementing and obeying following policies

- Compliance with applicable organizations Environmental, Occupational Health and Safety policies, guidelines and regulations
- Providing safe and healthy environment to all the staffs and labors being employed
- Establishing proper procedures in recognizing, implementing, maintaining, evaluating and monitoring EHS performances
- Continual improvement and periodical review of EHS performances and guidelines
- Providing appropriate health and safety training and awareness

6.0 IMPACT AND SAFETY MEASURES FOR COVID-19

The implementation of TKTL was affected due COVID-19 especially in field which includes construction activities, public consultation, GRC formation, GRC meetings, compensation distribution, CDC meetings, letter issuance from governmental bodies, tree marking/hammer seal, tree cutting, etc. Although the progress was halted to some extent, the virtual consultation meetings were conducted regularly and after the government loose down the construction activities had been initiated and progressed accordingly with the support and permission from local government bodies and District Administration Office. The contractors' regular staffs are vaccinated too. Still, there is no complete eradication or control of COVID and everyday a new variant is being spreading around the globe, all the activities are being carried out taking safety precautions, using PPEs, maintaining social distances and following the Standard Operating procedure. The **Table-10** below briefly describes the working procedure adopted and current status:

Table-10: Compliance Status for Impacts and Safety Measures Adopted in COVID-19

SN	Description	Indicators/Parameters	Compliance Status
1.	Opening of Contractors Office	<ul style="list-style-type: none"> • Cleaning, sanitizing and disinfecting before opening office • Installation of hand washing and sanitizing station, informative posters • Health screening, body temperature measurement of all the staffs • Arrange workstation maintaining proper physical distancing • Minimizing face to face meetings, avoiding hugging, handshakes & social gathering • Frequent hand washing and use of sanitizer and mandatory use of mask • Avoid touching eyes, noses, mouth with hands, sharing water bottles, coffee mug • Cover mouth, nose with tissues or elbow while coughing or sneezing • Providing hot water frequently • Immediate isolation of staff with cold and cough symptoms, information sharing with other staffs and immediate access to health worker 	Complied with
2.	Construction activities at site	<ul style="list-style-type: none"> • Barricading of construction site, entry allowed only of authorized person 	Complied with

		<ul style="list-style-type: none"> • Labor health screening, regular medical checkup, COVID-19 test & record keeping • Thermal screening, use of PPEs, mandatory use of face mask • Installation of hand washing station, cleaned toilets, proper drinking/hot water • Establishment of medical center with immediate access to health worker • Prohibit consumption of liquor and other tobacco related products • Avoid manual handling of the material, disinfect before handling • Minimize workers movement outside the camp and restrict outsiders to enter • Keep accommodation area clean, well-drained, dry, ventilated and hygienic • Emergency procedure and immediate contact to medical center in case of any symptoms 	
3.	Emergency Protocols	<ul style="list-style-type: none"> • Establish medical center with immediate access to certified health worker, arrange dedicated vehicle • Supply medical PPEs to health worker, guards and waste handling staffs • Enough number of clean and well-ventilated isolation and quarantine shelters being established • Tracing of all the persons in contact with the sick person and keep them quarantined 	Complied with
4.	SOP Implementation, Monitoring and Reporting	<ul style="list-style-type: none"> • Assignment of ESHO, certified health worker and conduct regular inspection • Prepare standard SOP compliance monitoring checklist and health screening register 	Complied with
5.	Awareness and Training	<ul style="list-style-type: none"> • Conduct regular awareness program on Health and Sanitation, Personal hygiene • Daily program on personal and occupational safety before initiation of work • Distribution of pamphlets and posters 	Complied with
6.	Infection and Recovery status	<ul style="list-style-type: none"> • No casualties recorded so far • 13 got infected and all recovered 	

7.0 ISSUES AND FOLLOW UP ACTIONS

The **Table-11** below shows the main environmental issues and follow up actions for the effective implementation of environmental safeguard measures.

Table-11: Major Issues and Follow up actions

SN	Major Issues	Action Taken
1.	Temporary labor camp improvement	Contractor, safety officer has been advised to take action for proper management of toilet, drinking water supply, mosquito nets and insect repellent
2.	Use of PPEs	Contractor has been advised to provide enough PPEs to the labors and all labors/staffs are instructed to use PPEs in site
3.	Proper management of excavated materials/spoils dumping	Contractor and sub-contractors have been regularly advised to prevent spoils leakage, haphazard dumping and excavation without proper precautions.
4.	Safe tipping site	Contractor has been advised to manage safe tipping site
5.	Noise Pollution	Contractor has been advised not to work at night producing noise
6.	Protection work	Contractor has been advised for protection work with bioengineering
7.	OSH plan to abide the Protocols and Circulars issued by GoN to safeguard workers/direct stakeholders from the virulence of COVID-19 pandemic	The contractor has prepared, updated and submitted the Operational Health and Safety Measures, and is working following the appropriate guidelines
8.	Following of SOP for COVID-19	All the labors/staffs are advised to follow the SOP for COVID-19 issued and circulated by PMD during construction work.
9.	Use of sign and signage	The contractors are strictly advised to use proper sign and signage in local language, or the language used by the labors.

(Source: Field visit)

8.0 ACHIEVEMENT ON MAJOR ITEMS OF FOCUS ON PREVIOUS REPORT

The detail status of the items and activities focused in previous report are presented in the **Table- 12** below along with the suggested corrective actions.

Table-12: Achievement on Major Items of Focus on Previous Report

SN	Location	Item of Focus	Status	Description	Corrective action plan
A. Tamakoshi-Kathmandu 220/400kV Transmission Line Project (TKTLP) – ETESIP					
1.	New Khimti – Barhabise TL section	Tree clearance in tower footings of Dolakha district	Completed	Tree cutting in 15 tower foundations have been completed.	
		Tree cutting in tower foundation of Sindhupalchowk district	Completed	Tree cutting in 9 tower foundations has been completed.	
		Tree cutting in RoW of Dolakha district	Ongoing	Tree cutting in ROW of some CFUGs has been completed and ongoing in some locations.	
		Forest Based Training to CFUG	Ongoing	NTPF training in some location has been completed and ongoing in other locations.	
		Consultation meeting with contractor, PAFs, and project authorities as per requirement	Ongoing		
		Regular monitoring on Environmental safeguard, OSH of labors and labor camp management compliance monitoring	Ongoing		
		Conducting of Social Awareness Program and Conservation Awareness Raising Program	Completed		
		Formation of GRCs and record of grievances	Completed		
2.	Barhabise – Changunarayan TL section	Consultation meeting with PAFs, contractors, community and project authorities whenever wherever required	Ongoing		
		Monitoring of environmental components regarding landslide, debris fall, soil loss, health and safety of labors, sanitation, PPE, first aid and labor site conditions etc	Ongoing		
		Compliance monitoring	Ongoing		
		Follow-up & Formation of GRC in the areas where the letter has already been dispatched	Ongoing	Completed in 400KV TL section and waiting for approval of cadastral report and final verification of land in 132KV TL section	
		Tree cutting in the tower pads	Completed		
		Tree cutting in RoW	Ongoing	Waiting for the tree cutting approval letter	Regular follow up is going on in respective Division Forest Office
		Conducting Livelihood enhancement and restoration programs (Skill and soft skill development trainings)	Ongoing		

9.0 PROPOSED MAJOR ITEM OF FOCUS FOR NEXT REPORT

The following activities presented in **Table 13** below are proposed for the next month monitoring in the project sites:

Table-13: Major Items of Focus for Next Report

SN	Location	Activities
A.	Tamakoshi-Kathmandu 220/400kV Transmission Line Project (TKTLP) – ETESIP	
1.	New Khimti – Barhabise TL section	<ul style="list-style-type: none"> • Hammer seal and tree cutting in remaining CFs of Dolakha and Sindhupalchowk district for ROW. • Conducting of livelihood restoration and enhancement trainings (Forest Based Income Generation and Entrepreneurship Training and Forest Management and Capacity Building Training). • Consultation meeting with contractors and project authorities whenever required • Environmental safeguard compliance monitoring • Implementation of CSR activities • Compensation distribution of private trees to PAFs
2.	Barhabise – Changunarayan TL section	<ul style="list-style-type: none"> • Consultation meeting with PAFs, contractors, community and project authorities whenever required • Monitoring of environmental components regarding landslide, debris fall, soil loss, health and safety of labors, sanitation, PPE, first aid and labor site conditions etc • Compliance monitoring • Follow-up & Formation of GRC in the areas where the letter has already been dispatched (132 KV TL section) • Speeding up the tree cutting process in RoW in coordination with respective Division Forest Office • Speeding up the remaining trainings

ANNEXES

Annex-1: Regulatory Compliance Requirements

SN	Legal Requirements	Applicable Attributes	Project's Compliance Status
1.	Forest Act 1993	<ul style="list-style-type: none"> This act is applicable when a project requires a national forest area. Prior approval has to be received before the construction of the project. In addition to this it provides insights on prohibitive activities 	<ul style="list-style-type: none"> Cabinet and DoF has approved and granted permission for tree cutting and the letter has been dispatched to respective DFOs. Tree cutting approval has been granted in Dolakha, Sindhupalchowk and Kavrepalanchowk from respective DFOs.
2.	Plant protection Act 1973	<ul style="list-style-type: none"> This act lists protected plant species name which needs to be protected during any intervention work in forest areas 	<ul style="list-style-type: none"> No such protected plant species has been cut.
3.	Forest Rules 2022 has repealed Forest Rules 1995	<ul style="list-style-type: none"> Government has enlisted 13 plant species in protection list of which it has banned felling, transportation and export of tree species Provides procedure of marking trees, measuring timber, and firewood and calculating their volume, determination of value and transportation of timber 	<ul style="list-style-type: none"> Agreement for compensatory plantation has been done with Department of Forest and Soil Conservation Fund has been released for felled trees in respective DFO
4.	Then Environmental Protection Act, 1997	<ul style="list-style-type: none"> This Act provides details of compensation in section 17 of the act in case of not abiding by the rules of the acts. Also, it directs a compensatory ratio of 1:25 for trees to be felled 	<ul style="list-style-type: none"> IEE done accordingly
5.	EPA, 2019 and EPR, 2020 has repealed EPA, 1996 and EPR, 1997 respectively	<ul style="list-style-type: none"> This Act provides details of compensation in section 35 of the act in case of not abiding by the rules of the acts. Also, it directs a compensatory ratio of 1:10 for trees to be felled. 	<ul style="list-style-type: none"> Incorporated the latest EPA rules and guidelines
6.	Use of National Forest area for National Priority Projects 2076 BS	<ul style="list-style-type: none"> Requirement of IEE along with mitigation measures in EMP for utilization of National Forest area Permission letter from DoF, CFUG Provision for providing compensatory land, compensatory plantation at the ratio of 1:10 and protection cost for five years or enough fund as per CPP incorporating all those activities 	<ul style="list-style-type: none"> IEE completed before initiation of project Permission and approval of tree cutting from cabinet and DoF obtained
7.	Bill for construction and development of National Priority Projects in Fast track, 2075	<ul style="list-style-type: none"> Preparation of report in coordination with respective forest office incorporating tree enumeration list to be cut during construction National Priority projects Responsibility for compensatory plantation and its protection cost for five years or equivalent fund to respective forest office Hammer seal process before tree cutting, stacking and handing over Conducting IEE before initiation of project, consultation with environmental experts and environmental protection and bio-engineering during construction phase 	<ul style="list-style-type: none"> IEE completed before initiation of project Permission and approval of tree cutting from cabinet and DoF obtained Environmental expert consultation and environmental team in field

Annex-2: Environmental Compliance Status with Loan and Grant Covenants

Schedule	Para No	Description	Compliance Status	Type	Responsibility
5	17	The Beneficiary shall ensure, and cause of 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.	Complied with:		NEA, Contractor
5	18	The Beneficiary's environmental laws, regulations and procedures shall apply in addition to the Safeguards Policy Statement. The Beneficiary shall ensure through NEA that no construction work of any kind under the project (including any subprojects) 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.	Complied with:		NEA
5	19	The Beneficiary shall ensure, or cause NEA to ensure that all the land and all rights of way required for the 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 the land acquisition and involuntary resettlement; (b) the Involuntary Resettlement Safeguards; and (c) all the measures and requirements set forth in the relevant RP, and any corrective or preventive measures set forth in a Safeguards Monitoring report.	Complied with:		NEA
5	20	Without limiting the applicable of the Involuntary Resettlement Safeguards or the relevant RP, the Beneficiary shall ensure or case of NEA to ensure that no physical or economic displacement takes place in connection with the subprojects until: (a) compensation and other entitlements have been provided to the affected people in accordance with RP; and (b) a comprehensive income and livelihood restoration program have been established, where relevant, commensurate with the size, scale and significance of the project impacts, in accordance with RP	Complied with:		NEA
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 not have any such impact, the Beneficiary shall ensure or case of NEA to ensure that preparation, design construction, implementation and operation of the relevant Subprojects 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 Ips	Complied with:		NEA

Schedule	Para No	Description	Compliance Status	Type	Responsibility
		groups are identified a foreseen during the planning, preparation or construction phases of the project development, an IPP will be prepared, implemented and monitored in alignment with the SPS and the requirements set forth in PAM			
5	22	The Government shall make available or case of NEA to make available necessary budgetary and human resources to fully implement the EMP and RPs.	Complied with:		NEA
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 works 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 communities surrounding the Facility sites. Such contracts shall also include clauses of termination by NEA in case of any breach of the stated provisions by the contractors.	Complied with:		NEA
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 GESI is closely monitored, and progress is prepared to ADB in accordance with GESI and the PAM	Complied with:		NEA

Annex-3: Compliance Status in terms of General Conditions of Contract Clauses

Contract Clause	Sub-Clause	Specification	TKTL	
			Current Status	Action Taken By
Volume-1, Section-7, General Conditions of Contract				
22.2 Labor	22.2.1 Engagement of Staff and Labor	a. Except as otherwise stated in the specification, the Contractor shall make arrangements for the engagement of all staff and labor, local or otherwise, and for their payment, housing, feeding and transport.	Complied with:	
		b. The Contractor shall provide and employ on the Site in the installation of the Facilities such skilled, semi-skilled and unskilled labor as necessary for the proper and timely execution of the Contract. The Contractor is encouraged to use local labor that has the necessary skills.	Complied with:	
		c. The Contractor shall be responsible for obtaining all necessary permit (s) and/or visa (s) from the appropriate authorities for the entry of all labor and personnel to be employed on the Site into the country where the site is located. The employer will, if requested by the Contractor, use his best endeavors in a timely and expeditious manner to assist the Contractor in obtaining any local, state, and national or government permission required for bringing in the Contractor's personnel.	Complied with:	
		d. The Contractor shall at its own expense provide the means of repatriation to all of its and its sub contractor's personnel employed on the Contract at the Site to the place where they were recruited or to their domicile. It shall also provide suitable temporary maintenance of all such persons from the cessation of their employment on the Contract to the date programmed for their departure. In the event that the Contractor defaults in providing such means of transportation and temporary maintenance, the Employer may provide the same to such personnel and recover the cost of doing so from the Contractor.	Complied with:	
	22.2.2 Person in the Service of Employer	The contractor shall not recruit, or attempt to recruit, staff and labor from amongst the Employer's Personnel.	Complied with:	
	22.2.3 Labor Laws	a. The Contractor shall comply with all the relevant labor Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.	Complied with:	
		b. The contractors shall, in all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous or disorderly conduct or behavior by or amongst its employees and the labor of its Subcontractors.	Complied with:	
		c. The Contractor shall, in all dealings with its labor and the connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs and all local laws and regulations pertaining to the employment of labor.	Complied with:	
	22.2.4 Rates of Wages and Condition of Labor	a. The contractor shall pay rates of wages and observe conditions of labor, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the	Complied with:	

Contract Clause	Sub-Clause	Specification	TKTL	
			Current Status	Action Taken By
Volume-1, Section-7, General Conditions of Contract				
		general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.		
		b. The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages and allowances as are chargeable under the Laws for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws.	Complied with:	
	22.2.5 Working Hours	a. No work shall be carried out on the Site on locally recognized days of rest, or outside the normal working hours stated in the SCC, unless i. Otherwise stated in the Contract, ii. The Project Manager gives consent, or, iii. The work is unavoidable or necessary for the protection of life or property or for the safety or the Works, in which case the Contractor shall immediately advise the Project Manager	Complied with:	
		b. If and when the contractor considers it necessary to carry out work at night or on public holidays so as to meet the Time for Completion and requests the Project Manager's consent thereto the Project Manager shall not unreasonably without such consent.	Complied with:	
		c. This Sub-Clause shall not apply to any work which is customarily carried out by rotary or double-shifts.	Complied with:	
	22.2.6 Facilities for the Staffs and Labor	a. Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Specification.	Complied with:	
		b. The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.	Complied with:	
	22.2.7 Health and Safety	a. The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractors and Employer's Personnel and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.	Partially Complied with: Although the first aid kit has been provided it need to be replaced if losses, broken or medicine are expired	The contractor needs to ensure the availability of properly dated medicine in safety box.
		b. The Contractor shall appoint an accident prevention officer at the site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the performance of the Contract, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.	Complied with:	

Contract Clause	Sub-Clause	Specification	TKTL	
			Current Status	Action Taken By
Volume-1, Section-7, General Conditions of Contract				
		c. The Contractor shall send, to the Project Manager, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Project Manager may reasonably require.	Complied with:	
	22.2.8 Funeral Arrangement	In the event of the death of any of the Contractor's personnel or accompanying members of their families, the Contractor shall be responsible for making the appropriate arrangements for their return or burial, unless otherwise specified in the SCC.	Complied with:	
	22.2.9 Record of the Contractor's Personnel	The Contractor shall keep accurate records of the Contractor's personnel on the Site and the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis in a form approved by the Project Manager and shall be available for inspection by the Project Manager. Until the Contractor has completed all work.	Complied with:	
	22.2.10 Supply of Foodstuffs	The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor's Personnel for the purposes of or in connection with Contract.	Complied with:	
	22.2.11 Supply of Water	The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel.	Complied with:	
	22.2.12 Measures against Insect and Pest Nuisance	The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce their danger to health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.	Complied with:	
	22.2.13 Alcoholic Liquor or Drugs	The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift barter or disposal by Contractor's Personnel.	Complied with:	
	22.2.14 Arms and Ammunition	The Contractor shall not give, barter or otherwise dispose of, of any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so.	Complied with:	
	22.2.15 Prohibition of All Forms of Forced or Compulsory Labor	The Contractor shall not employ "forced or compulsory labor" in any form "Forced or compulsory labor" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.	Complied with:	
	22.2.16 Prohibition or Harmful Child Labor	The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, Spiritual, moral, or social development.	Complied with:	
33. Loss of or Damage to Property; Accident or	33.1	Subject to GCC Sub-Clause 33.3, the Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or	Complied with:	

Contract Clause	Sub-Clause	Specification	TKTL	
			Current Status	Action Taken By
Volume-1, Section-7, General Conditions of Contract				
injury to Workers; Indemnification:		administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any person or loss of or damage to any property other than the Facilities whether accepted or not, arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its Subcontractors, or their employees, officers or agents, except any injury, death or property damage caused by the negligence of the Employer, its contractors, employees, officers or agents.		
34. Insurance	34.1 I Third Party Liability Insurance:	Covering bodily injury or death suffered by third parties including the Employer's personnel, and loss of or damage to property occurring in connection with the supply and installation of the Facilities.	Complied with:	
	34.1 I Workers' Compensation:	In accordance with the statutory requirements applicable in any country where the Contract or any part thereof is executed.	Complied with:	
38. War Risks	38.2	Notwithstanding anything contained in the Contract, the Contractor shall have no liability whatsoever for or with respect to a) Destruction of or damage to Facilities, Plant, or any part thereof; b) Destruction of or damage to property of the Employer or any third party; or c) Injury or loss of life If such destruction, damage, injury or loss of life is caused by any War Risks, and the Employer shall indemnify and hold the Contractor harmless from and against any and all claims, liabilities, actions, lawsuits, damages, costs, charges or expenses arising in consequence of or in connection with the same.	Complied with:	

Annex-4: Compliance Status in terms of Special Conditions of Contract Clauses

Contract Clause	Sub-Clause	Specification	TKTL	
			Current Status	Action Taken By
Volume-1, Section-8, Special Conditions of Contract				
22.2 Labor	22.2.1 Engagement of Staff and Labor	a) The Contractor shall comply with (i) the measures and requirements set forth in the resettlement plan to the extent it concerns impacts on affected people during construction; and (ii) any corrective or preventive actions set out in safeguards monitoring reports that the Employer will prepare from time to time to monitor implementation of the resettlement plan. The Contractor shall allocate a budget for compliance with these measures, requirements and actions.	Complied with:	
	22.2.3 Labor Laws	d) The Contractor shall not make employment decisions based upon personal characteristics unrelated to job requirements. The Contractor shall base the employment relationship upon equal opportunity and fair treatment, and shall not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment or retirement, and discipline. The Contractor shall provide equal wages and benefits to men and women for work of equal value or type.	Complied with:	
	22.2.4 Rates of wages and Conditions of Labor	c) The Contractor shall follow all applicable labor laws of Nepal. The Contractor shall i. Not use children as labor;	Complied with:	
		ii. Follow legally mandated provisions of labor, health, safety, sanitation, and welfare and working conditions; and	Partially Complied with: Contractor was unable to comply with minimum PPE's requirements, timely health checkup, sanitary working environment and their accommodation standards.	Field Safeguard Officers – Contractor was frequently informed for the issues.
		iii. Take steps to ensure priority employment for female headed households. Breach of these provisions by the Contractor shall cause termination of the contract.	Not Complied with: No any local women labor has shown any interest for work	Contractor was advised to hire local labors, when needed.
	22.2.7 Health and Safety	d) The Contractor shall throughout the contract (including the Defect Liability Period): (i) Conduct Information, Education and Consultation Communication (IEC) campaigns, at least every other month, addressed to all the Site staff and labor (including all the Contractor's employees, all Sub-Contractors and Employer's and Project Manager's'	Partially Complied with:	The contractors are advised to disseminate information and conduct campaigns.

Contract Clause	Sub-Clause	Specification	TKTL	
			Current Status	Action Taken By
Volume-1, Section-8, Special Conditions of Contract				
		employees, and all truck drivers and crew making deliveries to site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behavior with respect to of Sexually Transmitted Diseases (STD)—or Sexually Transmitted Infections (STI) in general and HIV/AIDS in particular;		
		(ii) Provide male or female condoms for all Site staff and labor as appropriate; and	Complied with:	
		(i) Provide for STI and HIV/AIDS screening, diagnosis, counseling and referral to a dedicated national STI and HIV/AIDS program, (unless otherwise agreed) of all Site staff and labor. The Contractor shall include in the program to be submitted for the execution of the Facilities under Sub-Clause 18.2 an alleviation program for Site staff and labor and their families in respect of Sexually Transmitted Infections (STI) and Sexually Transmitted Diseases (STD) including HIV/AIDS. The STI, STD and HIV/AIDS alleviation program shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this Sub-Clause and the related specification. For each component, the program shall detail the resources to be provided or utilized and any related sub-contracting proposed. The program shall also include provision of a detailed cost estimate with supporting documentation. Payment to the Contractor for preparation and implementation this program shall not exceed the Provisional Sum dedicated for this purpose.	Partially Complied with:	The contractors are advised to conduct program as per the contract clause.
		(iv) The Contractor shall disseminate information on the risks of socially and sexually transmitted diseases, including HIV/AIDS and malaria, to its employees during Project implementation and shall implement the HIV/AIDS and Human Trafficking Prevention and Sensitization Program among its employees for the duration of the Contract.	Complied with:	
	22.2.16 Prohibition of Harmful Child Labor	“Child” means a child below the statutory minimum age specified under applicable national, provincial or local law of Nepal.	Complied with:	
	46.	• The Contractor shall comply with all applicable national, provincial, and local environmental laws and regulations.	Complied with:	
		• The Contractor shall (a) establish an operational system for managing	Complied with:	

Contract Clause	Sub-Clause	Specification	TKTL	
			Current Status	Action Taken By
Volume-1, Section-8, Special Conditions of Contract				
		environmental impacts, (b) carry out all of the monitoring and mitigation measures set forth in the Initial Environmental Examination ("IEE") and Environmental Management Plan ("EMP") and (c) allocate the budget required to ensure that such measures are carried out. The Contractor shall submit semi-annual reports on the carrying out of such measures to the Employer.		
		<ul style="list-style-type: none">• More particularly, the Contractor shall comply with (i) the measures and requirements set forth in the IEE and the EMP and (ii) any corrective or preventative actions set out in safeguards monitoring reports that the Employer will prepare from time to time to monitor implementation of the IEE and the EMP.	Complied with:	
		<ul style="list-style-type: none">• The Contractor shall allocate a budget for compliance with these measures, requirements and actions.	Complied with:	

Annex- 5: Environmental Safeguard Planning Status

S. N.	Name of Project / 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 document is included in BOQ as an individual item (Yes/No)	Remarks
A. Tamakoshi – Kathmandu 220/400kV Transmission Line Project (TKTLP) – ETESIP											
1.	New Khimti-Barhabise 220/400 kV TL section	Yes	B	Yes	Yes	Yes	Yes	Yes (15-GRCs (100%) formed till this reporting period)	Yes	Yes	
2.	Barhabise-Changunarayan 220/400 kV TL section	Yes	B	Yes	Yes	Yes	Yes	Yes (22-GRCs formed till this reporting period)	Yes	Yes	
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											

(Source: Field visit)

Annex- 6 : Compliance Monitoring Status of Safety Facilities available to Labors

Annex - 5: Compliance Monitoring Status of Safety Facilities available to Laborers											
S. N.	Project Components	Availability of Safety Kits						Presence/ Absence Status of Other Facilities			
		Helm et	Boots / Shoe s	Glove s	Belts	Glas s	Ma sk	First Aid Kit	Toil et	Drinkin g Water facility	Chil d Labor
A.	Tamakoshi – Kathmandu 220/400kV Transmission Line Project (TKTLP) – ETESIP										
1.	New Khimti-Barhabise TL section	S	S	S (Partia lly compli ed)	S	NP	S	S	P	S	A
2.	Barhabise-Changunarayan TL section	S	S	S (Partia lly compli ed)	S	NP	S	S	P	S	A
Remarks: Safety shoes/gloves have been provided to the Contractor's personnel; however, they were found to be used partially during the monitoring. NA*- No workers are present Action: Safety shoes/gloves and mask, glass need to wear during the work time and same is notified during the monitoring to the worker, supervisor of contractor and project too. Note *: <i>S: Satisfactory, NA: Not applicable, U: Unsatisfactory, NP: Not Provided, P: Present, A: Absent</i>											

Annex-7: Safety Assurance as per the Contractor's Plan

S N	Activity		Current Status	Action Taken By
I. Tamakoshi – Kathmandu 220/400 kV Transmission Line (TKTL) – ETESIP				
1. New Khimti – Barhabise TL section (Package I)				
A. Health Plan				
1.	EHS officer shall conduct safety training programs on different topics on regular basis		Complied with:	
2.	The significance of personal protective equipment shall be impressed up on the workmen and their use ensured by all concerned.		Complied with:	
3.	Safety induction programs shall be conducted for the new workmen and refresher programs for the existing gangs on routine basis.		Complied with:	
4.	In case of accident and emergency, safety personnel and first aider should be responsible for evacuation and first aid treatment		Complied with:	
5.	Safe drinking water facilities with proper storage and kept clean and free from contamination		Complied with:	
6.	Mitigation measures shall be adopted during the work producing 'Criteria Air Pollutants'.		Complied with:	
7.	A record of all hazardous materials will be maintained and updated, EHS officer must train personnel in the use of MSDS ensuring Employees are fully conversant with them.		Complied with:	
8.	Only trained and experienced personnel will be allowed to handle hazardous substance.		Complied with:	
B. Personal Protective Equipment (PPE) “Safety starts with me; I am responsible for safety”				
PPE Matrix				
Activity	Workmen Category	PPEs Recommended		
Entry into work premises	All employees and workers	Safety helmet, safety shoes and Reflective jacket	Complied with:	
Excavation and Foundation work	All employees and workers	Gum boots and hand gloves of rubber	Complied with:	
Working at height above 1.8 m	All employees and workers	Safety harness	Complied with:	
Tower Erection	Riggers	Hand gloves, double lanyard safety belt	Complied with:	
Stringing	Stringing team	Helmet, boot, gloves and reflective jacket		The work has not started yet.
DG operators and Noise prone area	Operators	Ear muffler	Complied with:	
Scaffolding	Scaffolders	Cotton hand gloves		Not required yet.

S N	Activity		Current Status	Action Taken By	
	Electrical maintenance and repairs	Electricians	HV rubber hand gloves	Complied with:	
	Welding and Gas Cutting	Welders and cutters	Leather gloves, apron and face shield with tinted lens	Complied with:	
	Shut down of power line	Workmen	Leather gloves, boots, Reflective jacket and Helmet	Complied with:	
	Hand tools	Workmen	Safety glasses and gloves	Complied with:	
	Power tools	Workmen	Safety glasses and gloves	Complied with:	
	Concrete Batching plant	Operators and loaders	Nose mask	Complied with:	
	Quarry work	Loaders	Hand gloves, safety shoes	Complied with:	
C. Checklist for Tower Foundation					
1.	Excavated area will be appropriately identified with signs, warnings and barricades.		Complied with:		
2.	Work area shall be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavated pit. Concrete mixer machine should be placed 5 m away from the excavated pit's edge.		Complied with:		
3.	Rotating parts of the concrete mixer machine should be covered and fenced.		Complied with:		
4.	Connecting chute should be tied and supported properly to avoid its fall at the time of concreting.		Complied with:		
5.	Heavy construction equipment should be kept away from the edge of the pit at least 2 meters.		Complied with:		
6.	The slope or protective system should be constructed sufficiently to accommodate the safe handling of material adjacent to the utility structure.		Complied with:		
7.	A stairway, ladder or ramp shall be used as a means of access or egress in pit excavations that are four feet or more depth.		Complied with:		
8.	Employees are protected from loose soil or rock falling from excavation face.		Complied with:		
9.	Emergency rescue equipment such as a safety harness and line shall be readily available where hazardous atmospheric conditions exist or may reasonably be expected to develop during work in an excavation.		Complied with:		
10.	Gumboots, hand gloves and safety helmet and other safety equipment should be during the work.		Complied with:		
11.	First Aid box, first-aid trained personnel and first aid medicine should be available at site.		Complied with:		
12.	Unauthorized persons should not be allowed to enter in to the hazard zone, keep working area clear from obstruction.		Complied with:		
D. Checklist for Tower Erection					
1.	All construction personnel must wear minimum requirements of PPE as Helmet, safety shoes, hand gloves etc.		Complied with:		
2.	Personnel working or traveling near the unprotected/open sided must use safety belt with its lanyard attached to any permanent structure, fall protection appliances shall be born while erecting structure		Complied with:		
3.	No work should be allowed by standing over wooden boxes, empty barrels and other make shift arrangements		Complied with:		
4.	Ensure whether any live lines (HT or LT) are not running in the vicinity of 10 m of the pole to be erected, if "YES" the shutdown procedure is to be adopted along with safe procedures		Complied with:		
5.	Check back filling done and housekeeping should be maintained at site prior to erection activity		Complied with:		
6.	All fitters in work at height should bind the spanner to hand with rope to avoid fall of tools, proper size spanner should be use		Complied with:		
7.	Ensure incomplete tower has not left behind, do not leave any bolt hole empty, use step bolt for climbing, barricade the working area		Complied with:		

S N	Activity	Current Status	Action Taken By
8.	Ensure sufficient numbers of people are made available while lifting the assembled structure/heavy loads and also avoiding use of single sheave pulley, ensure ropes/wires are secured properly	Complied with:	
9.	Before commencement of work, safety belt/harness, ropes and pulleys should be checked for quality	Complied with:	
1 0.	Ensure the availability of proper communication facilities i.e., walky-talky or mobile phone, first aid facility, drinking water, emergency vehicle with appropriate aid	Complied with:	
1 1.	Ensure the trained workers to adopt safe working method and safe movement technique on tower i.e., proper use of spanner, tightening method and members assembling or joining method	Complied with	
1 2.	Ensure the firmness of crowbar for loose soil, sandy soil hard surface	Complied with	
1 3.	Ensure the tower erection not allowed in case of heavy wind, storm, lightning, rain, too hot, too cold weather.	Complied with	
E. Checklist for Conductor Stringing			
1.	Check the forecast of weather for the entire period of work	Complied	
2.	Ensure effective communication facility among the workers are available via walkie-talkie	Complied	
3.	Ensure adequate barricading/caution tape displaying of danger sign, warning sign/protection to public/children moving nearby	Complied	
4.	Check the availability of full-time emergency vehicle with appropriate first aid box deployed for stringing	Complied	
5.	Ensure the deputation of flagman at road crossing on both sides with sufficient distance	Complied	
6.	Ensure the use of safety Personal Protective Equipment and availability of First Aid box with required medicine at site	Complied	
7.	Check tower completeness and slope management	Complied	
8.	Check workers are trained to adopt the safe working method and safe movement technique on tower	Complied	
9.	Ensure the conducting of safety awareness training program	Complied	
1 0.	Ensure all the height workers have undergone medical fitness test	Complied	
1 1.	Ensure height pass is available to all the workers who are working for stringing activity	Complied	
1 2.	Ensure the adherence of safety at height work	Complied	
1 3.	Check whether everybody has given proper job assignment and supervised properly while hoisting insulators, paying out of earth wire and conductor	Complied	
1 4.	Ensure all workers are familiarized with electrical hazard and fall hazard	Complied	
1 5.	Ensure necessary protection/scaffolding/warning signals are provided for road/power line/P&T line	Complied	
1 6.	Ensure that a proper application is given to the section in-charge of electricity distribution division to obtain a shut-down where stringing work encounters live lines	Complied	
1 7.	Ensure the approval of authorized department/person before the commencement of tree cutting	Complied	
1 8.	Ensure trees and tall scrubs are cleared on either side of the center line of the route	Complied	
1 9.	Ensure tall trees outside the area of such height that they could fall within three meters of conductors shall be cut down after obtaining necessary permission	Complied	
2 0.	Ensure towers are tightened properly and all the members, nut/bolts are provided	Complied	
2 1.	Ensure that every tool and tackle that is required to carry out the work is available and in good working condition	Complied	
2 2.	Ensure the equipment (puller, tensioner etc.) are in good condition and with a valid test certificate and properly placed, firmly anchored and earthed	Complied	
2 3.	Ensure skilled manpower is available and only a competent and authorized person is operating the equipment	Complied	

S N	Activity	Current Status	Action Taken By
2 4.	Ensure availability of stringing material (Conductor, crimpers, traveler etc.)	Complied	
2 5.	Check whether double stays are provided on all cross arms and single stay is provided on the peak of the angle/section towers	Complied	
2 6.	Ensure conductor drums are placed properly to avoid bird caging	Complied	
2 7.	Ensure the device used to measure the temperature is calibrated and in good working condition	Complied	
2 8.	Check whether working on insulator, ladder or a safe arrangement for descending and ascending is used	Complied	
2 9.	Ensure roller grooves are rubber coating	Complied	
3 0.	Ensure scaffolding is provided at road/railway and powerline crossing	Complied	
3 1.	Check whether practice of ascending on and descending from the tower through the tower members were strictly disallowed	Complied	
3 2.	Ensure the ascending and descending the tower is done through the steps bolts with usage of fall arrestor rope and clamp	Complied	
3 3.	Check whether visual inspection of wire rope slings before use like sling not corrosion, bend without cracking, no wire cut is done	Complied	
3 4.	Check whether only tested lifting equipment, tools and tackles are being used for stringing work and record is available	Complied	
3 5.	Check whether only stringing team members are allowed to stand near the tower while stringing is in progress	Complied	
3 6.	Ensure the use of ground roller to avoid rubbing of conductor on ground	Complied	
3 7.	Ensure towers vulnerable for one side load are guyed properly	Complied	
3 8.	Check whether backfilling of soil and revetment/benching wherever required is done	Partially complied	
F. Checklist for General (General points common for all activities during Excavation, Casting of foundation, Erection of tower and stringing of conductor)			
1.	Availability of required quantity of PPEs	Complied with:	
2.	Availability of First Aid box with required medicines and fire extinguishers at site	Partially complied:	The contractor has been advised to make available of a fire extinguisher
3.	Availability of work instruction register at site	Complied with:	
4.	Ensure of labors aware of their job and safety requirements	Complied with:	
5.	Ensure safety personnel and first aider are deployed in the site	Complied with:	
6.	Availability of rescue vehicle to nearby hospital/doctor in case of emergency	Complied with:	
7.	All driver and plant operators are holding valid driving license	Complied with:	
8.	Installation of safety sign in local Nepali language	Complied with:	
2. Barhabise – Changunarayan TL section (Package II)			
A. Health Plan			
1.	Occupational Health & Hygiene Inspection, frequency shall be minimum once in a month	Complied with:	Contractor has been advised to follow the plan strictly
2.	Health Campaign, at least once in six months	Complied with:	Contractor has been advised to follow the plan strictly
3.	Drinking water, available in accommodation facilities with clearly marked "Drinking Water Only", have tight fitting lids and be equipped with a tap, kept clean and free of contamination	Complied with:	
4.	Pest Control, EHS engineer disseminated the knowledge of handling, transporting, precautionary measures to be adopted for the chemical	Complied with:	
5.	First Aid, provided in prominent places, evacuation & action plan in case of accident, contingency plan formulated after the mobilization, only first aider will provide the first aid treatment	Complied with:	

S N	Activity	Current Status	Action Taken By
6.	Hazardous Materials, information contained in the MSDS shall be incorporated, supervised by a qualified person	Complied with:	
B. Personnel Protective Equipment (PPE) "NO PPE, NO ENTRY"			
	PPE MATRIX		Complied with:
	Activity	Workmen Category	PPEs Recommended
	General-Entry into work premises	All Employees	Safety Helmet & Safety Shoe
	Working at Height/ Tower- More than 2.0 meters	All	Safety belt with Double lanyard
	Involved with cement lime and line mortars	All	Gum Boots & Rubber Hand Gloves
	Breaking of ceramics & Agglomerate materials	Chippers	Eye protection – Clear Goggles
	Welding & Gas Cutting	Welders & Cutters	Leather gloves, Safety shoe, Welding shield with proper number
	Working with slush	Unskilled & Excavation gang	Gum Boots
	Forming and Making shuttering materials	Carpenters and Wood workers	Face shield & Nose mask
	Rebars handling & working	Bar benders	Cotton/Leather Gloves
	Scaffolding	Scaffolders	Cotton hand gloves
	Painting	Painters	Clear goggles
	Rock Drilling	Rock Drillers	Nose mask of appropriate type
	Erection	Riggers	Hand gloves, Double Lanyard Safety Belt
	DG Operators & Other Noise prone areas	Operators	Ear muff
	Electrical Maintenance & Repairs	Electricians	HV Rubber hand gloves
	Concrete Batching Plant	Operators & Loaders	Nose mask
	Handling of Boulders with sharp edges (Quarry)	Loaders	Hand gloves, Safety shoes
C. Checklist for Tower Foundation			
1.	Check construction materials are stacked at safe place and also does not cause any danger. (Away from pit 105m or half the depth of the pit, whichever is more)	Complied with:	
2.	Check arrangement of illumination at construction site. (If required)	Complied with:	
3.	Ensure life saver arrangements has been made during construction of well foundation in river bed. (When necessary)	Complied with:	
4.	Check that the concerting mixer machine is placed at safe place. (Not very near to pit)	Complied with:	
5.	Check proper/adequate arrangement is made for extension of electricity supply. (Proper size of cable, use of fuse, no loose connection for dewatering pumps/illumination/electric compressors active applicable)	Complied with:	
6.	Ensure lying of temporary cable used during construction should not cause any danger for electrocution of workmen.	Complied with:	
7.	Inspection of excavation shall be made by a competent person every day. In case possible cave in/slide in is apparent, all working in the excavation shall cease until the necessary	Complied with:	

S N	Activity	Current Status	Action Taken By
	precautions have been taken to safeguard the possible cave-in/slide.		
8.	Jacks and vertical supports shall be positioned in such a manner that the vertical loads are distributed equally and do not exceed the capacity of the jacks and the jacks are placed away from pit edge etc.	Complied with:	
9.	Proper jacking arrangement is made to take the entire load of template.	Complied with:	
10.	In case of long template in stub setting more jacks has been provided and to check that the jacks are placed on levelled and hard surface to avoid the unbalancing and fallen.	Complied with:	
11.	Wire mesh rolls shall be secured in order to prevent dangerous recoiling action.	Complied with:	
12.	Lone worker should not be allowed to work in the excavated area.	Complied with:	
13.	Check that sufficient strong ladder of suitable length is available for ingress/outgress of persons in the pit.	Complied with:	
D. Checklist for Tower Erection			
1.	Check proper communication facility is available at site during tower erection (if required)	Complied with:	
2.	Check damages or uneven settlement of foundation.	Complied with:	
3.	Ensure the derrick used before tower erection has been checked for adequate strength/ size. Ensure for copy of test certificate for all lifting machines and tackles.	Complied with:	
4.	Ensure that the pulleys used before tower erection has been checked for adequate strength / proper size (diameter), also in case of open type pulleys proper locking arrangements like providing of safety pin is made, Ensure for copy of test certificate for all lifting machines and tackles.	Complied with:	
5.	Ensure the ropes used before tower erection has been checked for adequate strength /physical condition (free from break of strands and knots etc.)	Complied with:	
6.	Check that the lifting tools and tackles i.e., Winch machine, Chain Pulley Block, Trifor, D-Shackle etc. are in healthy condition and has been tested periodically. (Attach a copy of test certificate)	Complied with:	
7.	Ensure permission has been obtained from Aviation Authority for erection of special towers. (Where Necessary)	Complied with:	
8.	Ensure permission has been obtained from Aviation Authority for erection of special towers which comes in the vicinity of flying zone (Where necessary)	Complied with:	
9.	Check that the safety measures have been taken before undertaking for the road /Rail / River Crossing jobs involving likewise stretches.	Complied with:	
10.	For rail or road crossing check whether written working plan is available at site with specific reference to safety eg. Local earthlings, skilled and experienced manpower, proper T&P, strength and height of scaffolding to maintain the required clearance etc.	Complied with:	
11.	Ensure that all the members and proper size of nuts and bolts of lower section are fitted properly before erection of the upper section of tower is taken up.	Complied with:	
12.	Check that the anti-climbing devices are provided in the tower after erection job.	Complied with:	
13.	Check that the danger plates have been provided.	Complied with:	
14.	Check only erection team members are allowed to stand near the tower while the erection is in progress and should wear the safety helmet / Safety shoes.	Complied with:	
15.	Working area of the tower has been demarcated during erection.	Complied with:	
16.	Check proper guying arrangement has been made. And also, to see that proper size of the crowbars has been used which has been fixed at hard surface in case of sandy or loose soil.	Complied with:	

S N	Activity	Current Status	Action Taken By
1 7.	Check that the proper arrangement is made while lifting tower members and fixing them at height i.e. proper size and strength of the hook used for lifting the tower members.	Complied with:	
1 8.	Check sufficient members of guys are made while lifting the assembled cross arm and also avoiding use of single sheave pulleys while lifting the assembled cross arm / heavy load.	Complied with:	
E. Checklist for Conductor Stringing			
1.	All drivers and plant operators are holding the valid driving license.	Complied with:	
2.	Check the permit has been obtained from the competent Authority for stringing of conductor while crossing through Road /Rail /River / Vulnerable areas etc. (Where necessary)	Complied with:	
3.	Check that required painting has been made on tower falling in the vicinity of aviation zones. (Where necessary)	NA	
4.	Check that all the safety measures have been taken during string of conductor crossing the EHV / HV / LT lines (Earthing of existing)	Complied with:	
5.	Ensure proper size of nuts and bolts are rigidly tightened and punching /tacking /tack welding is done in towers before undertaking stringing job.	Complied with:	
6.	Ensure proper scaffolding arrangements made during stringing of conductor (While road crossing /power line crossing etc.	Complied with:	
7.	Ensure that all members are fitted in tower before undertaking conductor stringing work.	Complied with:	
8.	Check that the back filling of the foundation has been done as per specifications.	Complied with:	
9.	Ensure that the discharge rod is electrically tested before use.	Complied with:	
1 0.	Stringing machine / Tension puller machine is properly earthed.	Complied with:	
1 1.	Check the brake arrangement of the TSE Machines is working.	Complied with:	
1 2.	Ensure that the pulleys used before conductor stringing is been checked for adequate strength /proper size (diameter) also in case of open type pulleys proper locking arrangements like providing of safety pin is made. Ensure for copy of test certificate for all the lifting machines and tackles.	Complied with:	
1 3.	Ensure the ropes used before conductor stringing has been checked for adequate strength /physical condition (Free from break of strands and knots etc.,)	Complied with:	
1 4.	Check that the lifting tools and tackles i. e. Winch machine, Chain pulley Block, Trifor, D-Shackle etc. are in healthy condition and has been tested periodically. (Attach a copy of test certificate)	Complied with:	
1 5.	Check for the brake arrangement of the Drum reel of conductor during laying / paying out of conductor.	Complied with:	
1 6.	Check proper communication facility is available at site during stringing of conductor (if required)	Complied with:	
1 7.	Whether tower has been permanently earthed.	Complied with:	
1 8.	Check that Sag Board is provided at two locations.	Complied with:	
1 9.	Check that the Sag Board arrangement is made by the experienced / trained persons.	Complied with:	
2 0.	Check approved Sag tension chart is available and followed at site.	Complied with:	
2 1.	While clamping of conductor / Earth Wire to be done, check for earthing.	Complied with:	
2 2.	Ensure sending signal to puller to stop when last layer of conductor /EW being pulled.	Complied with:	
2 3.	Check tension applied on the dynamometer dial and check values with approved data.	Complied with:	
2 4.	Before stringing starts check that the villagers do not come underneath the job of the concerned section	Complied with:	
2 5.	Only nylon or polypropylene ropes should be used during conductor stringing gin vicinity of live overhead lines.	Complied with:	

S N	Activity	Current Status	Action Taken By
2 6.	Ensure that PTW has been taken from the concerned authority.	Complied with:	
2 7.	Ensure that Winch, Pulleys etc. are properly earthed.	Complied with:	
2 8.	For LT lines, whether special persons are posted at each point of isolation till return of permit (PTW)	Complied with:	
2 9.	Whether the network of LT lines has been thoroughly checked and precautions taken Against inadvertent charging.	Complied with:	
3 0.	Check that proper arrangement is made / available for development and use of portable Earthling and Short-circuiting Devices which can be engaged and disengaged to and from the LT lines, keeping away from LT lines until all operations on the same are completed and all men and materials are removed from LT lines.	Complied with:	
3 1.	Check the provision and proper positioning for the guying and back staying (Where necessary)	Complied with:	
3 2.	Check demarcation of feeder is done for D /C Line	Complied with:	
3 3.	Ensure that all the insulator strings are thoroughly checked for availability and proper fixing of cotter / spilt pins before hoisting the same.	Complied with:	
F. Checklist for General (General points common for all activities during Excavation, casting of foundation, Erection of tower and stringing of conductor)			
1.	Check whether the contractor has procured required quantity of PPE considering maximum numbers of erection gangs deployed at site.	Complied with:	The contractor has been advised to provide enough PPEs for all labors.
2.	Supervisors/Workmen have been provided with required healthy PPEs like (Safety helmet/ Safety shoes/ Gum boots as applicable)	Complied with:	
3.	Availability of First Aid box with required medicines at site.	Complied with:	
4.	Instruction register is available at site.	Complied with:	
5.	Ensure Supervisor/ Gang leader always issues instruction to the workmen before start of work.	Complied with:	
6.	All driver and plant operators are holding valid driving license.	Complied with:	
7.	Check the vehicle for rescue is available at site.	Complied with:	
8.	Ensure engaged labor are aware of the job.	Complied with:	
9.	Check that the unskilled laborers are not engaged in skilled job.	Complied with:	
1 0.	Ensure supervisor/ workmen engaged in the field are aware of First Aid Techniques (such as in case of Electric shock, fall from the height, Snake bite and the person rescued from buried under the debris etc)	Complied with:	
1 1.	Check for nearby Hospital/ Doctor in case of emergencies arises.	Complied with:	
1 2.	While transporting heavy consignment of conductor or earth wire drums from central stores to site by the use of Cranes, Trucks, Tractors, the safety aspect for construction and failure of brake system of moving machinery is to be checked.	Complied with:	
1 3.	At least one dry powder type of portable fire extinguisher shall be provided especially where explosive or blasting agents are used for excavation.	Complied with:	
1 4.	Check the competence (Qualification /experience) of supervisor / gang leader of contractor.	Complied with:	

Annex-8: Status of Environmental Compliance

S.N. Name of Subproject		Compliance to Environmental Management Plan*											Grievan ces		Remarks				
		Physical			Biologic al		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.) Plantated (Nos.) Firewood is used for cooking and heating (Y/N) Others as per EMP (specify)		Occupational Health and Safety Safety Gears are sufficient and Labors are insured (Y/N) Labor and work camps are healthy and have sanitary		Community structures are compensated / reconstructed (progress in % of total estimated)*** Community Structure 1 Community Structure 2 Others as per EMP (specify)		No. of grievances documented No of grievances resolved No of grievances under processing								
1	New Khimti-Barhabise 200/400 kV TL	80	85	100	N	N	N	Y	Y (Only in working hours)	Y				7	5	2	Y	Y	Spoils are stored safely and used for back fill later.
2	Barhabise – Changunayayan 220/400 kV TL	85	70	90	N	N	N	0	Y	Y (85%)				3	3	0	Y	Y	Spoils are dumped inside tower pad and refilled back to pit.

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

Annex- 9 Impact Mitigation Compliance on Environmental Issues


S.N.	Construction Stage and Impact	Mitigation Measures	Tamakoshi–Kathmandu 220/400 kV TL	
			New Khimti - Barhabise TL section	Barhabise - Changunarayan TL section
1	Surveys, Alternative Analysis, enumeration of trees.	Better Route Alignment	Complied with:	Complied with:
2	Adverse effect on topography from development of Quarry Site and stacking of construction materials	Restoration of exposed areas	Complied with:	Complied with:
3	Tagging of Trees and clearance causing erosion, effect other utility lines, wildlife habitat and corridors during clearing of Right of Way (RoW)	Compensation, restoration and consultation with forest stakeholders on wildlife habitat and corridors	Complied with:	Complied with:
4	Environmental Investigations	Soil investigations to avoid adverse effects on project	Complied with:	Complied with:
5	Pollution of aquatic environment and adverse impact as poaching and felling of tree from temporary workers camp	Adequate cleaning facilities, toilets with soak pits and use of liquefied petroleum gas. Ensure the camp site is cleaned and restored while relocating. Solid waste disposal on pits minimum 500m away from water sources.	Complied with:	Complied with:
6	Soil erosion, wastes and pollution temporarily from unloading of material, storage and workshop in local environment	Avoiding sensitive sites. Recyclable materials such as cement bags, plastics and scrap metals to be segregated and sold for recycling. While decomposable wastes to put in a pit and covered away from surrounding water sources.	Complied with:	Complied with:
7	Adverse impact on local aquatic environment, soil erosion and loss of agricultural land while pit marking and digging of foundation	Compensation, restoration of site and proper maintenance of vehicles used	Complied with:	Complied with:
8	Contamination of Surface and Ground Water, Soil Erosion while construction of foundation and revetment	Restoration of exposed areas, adequate maintenance of engines to prevent oil leakage. Sensitive Sites include AP 9, AP 11 and AP 12	Complied with:	Complied with:
9	Disturbance to existing utilities and population during erection process	Rerouting the utility lines, installation of warning signboards, traffic management and use of safety equipment or Personal Protective Equipment (PPE). Construction activities to be carried out during dry season when farming activities are minimal	Complied with:	Complied with:
10	Accidents at tower site and soil run off from exposed surface while installing earth wire or optical ground wire	PPE are worn and exposed surface are covered. Safe Distance are maintained from other power lines as well as power is temporarily cut off scaffolding is used in areas crossing rivers, roads, telecom lines, overhead power lines and other similar structure. The vegetation to be lopped to be quantified	Complied with:	Complied with:
11	Snapping of stringing blocks or loose hanging of wires and excessive lopping of vegetation while stringing, final sagging and tensioning earth wire as well as power conductor	Adequate tension is maintained scaffolding is used in areas crossing rivers, roads, telecom lines, overhead power lines and other similar structure. The vegetation to be lopped to be quantified	Construction has not begun yet	Complied with:

Annex-10: Location wise Tree Cutting Status in Tower Footings and ROW of TKTLP

SN	District	Location		Name of Community Forest	Number of trees felled		Remarks
		Tower Foundation	RoW		Tower Foundation	RoW	
New Khimti—Barhabise TL section							
1.	Dolakha	AP 10/1		Paleko Sajheko Salkhoriya CF	67		
		AP 12/2	AP 12/1-AP 14/0	Bhyakure Dhokebhir CF	28	161	
		AP 16/1	AP 16A/0-AP 17/0	Baluwa Bhumethan CF	50	124	
		AP 17/1	AP 17/1-AP 18/0	Khahare Bhadaure CF	22	137	
		AP 18/0			50		
		AP 19/1	AP 19/0-AP 20/0	Mulpani CF	64	345	
		AP 21/0	AP 21/0 – AP 22/0	Charnawati CF	102	317	
		AP 22/0			87		
		AP 24/1			92		
		AP 25/0	AP 25/0 – AP 26/0	Sitakunda CF	41	157	
		AP 26/0			24		
		AP 36/0	AP 34/0 – AP 36/0	Amale Kharka CF	22	199	
			AP 35/0 - AP 36/0	Dhade Jogi Rumta		11	
		AP 37/0	AP 36/0 - AP 37/1	Kupri Salleri CF	41	29	
			AP 48/0 - AP 49/0	Napke Yanmara		46	
Total		13	10	11	690	1526	
2.	Sindhupalchowk	AP 53/0		Dadar CF	2		
		AP 57/0		Ratochaur Hile CF	98		
		AP 57/1			54		
		AP 57/2		Manthala CF	195		
		AP 57/4			213		
		AP 58/0			169		
		AP 58/1			207		
		AP 58/2			183		
		AP 58/4			100		
Total		9	0	3	1221	0	
Total (400 kV NKBTL)		21	10	14	1911	1526	
Barhabise—Lapsipedi TL section							
1	Sindhupalchowk	AP 13/1		Salghari CF	21		
		AP 13A/0			192		
		AP 19/0		Jure Thumka CF	215		
		AP 20/0		Devasthan CF	80		
		AP 21/0		Dharam Pani CF	50		
		AP 22/0		Falate Kalika CF	151		
		AP 23/0			82		
	AP 23/0 - AP 24/0	Falate Kalika CF,		407			

SN	District	Location		Name of Community Forest	Number of trees felled		Remarks
		Tower Foundation	RoW		Tower Foundation	RoW	
			AP 24/0 – AP 25/0	Harrebhir LF		54	
		AP 26/0		Chipchipe CF	15		
		AP 27/0		Rani Pokhari CF	52		
		AP 27/1			24		
			AP 26/0 – AP 27/1	Rani Pokhari CF		103	
		AP 34/0		Tamakhani CF	111		
		AP 36/0			46		
		AP 36/1		Rol Pakha CF	249		
		AP 36A/0			228		
		AP 37A/1		Teenpakhe CF	90		
		AP 38/0			31		
		AP 38/1		Thulitar CF	33		
		AP38/2			120		
Total		18	3	12	1,790	564	
2	Kavrepalanchowk		AP 41/0 – AP 42/0	Sleni Baguwa CF		101	
		AP 46/0		Dhaitar Dundhe Pakha CF	128		
		AP 47/1		Nauledanda CF	271		
			AP 47/4 – AP 48/0	Tharbade CF		212	
		AP 50/1		Government Managed Forest	51		
		AP 52/0		Batase CF	26		
Total		4	2	6	476	313	
Total (400 kV BKTL)		22	5	18	2,266	877	
Total (400 kV TKTL)		43	15	32	4,177	1,247	
Lapsiphedi—Changunarayan TL section							
Total (TKTL)		43	15	29	4,177	2,773	
		58			6,950		

Annex-11: Letter regarding payment of compensatory plantation cost to Forest Development Fund

 **नेपाल विद्युत प्राधिकरण**
(नेपाल सरकारको स्थापित)
आयोजना व्यवस्थापन निदेशनालय
तामाकोशी-काठमाण्डौ २२०/४०० के.भि.प्र.ला. आयोजना

दरबारमार्ग, काठमाण्डौ
फोन नं. ०१६६२००१६
फ्याक्स नं. ०१६६२००१६

पत्र संख्या: ०७८/०७९
च.नं. २५८

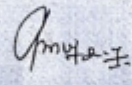
मिति : २०७९/०३/२३

श्री वन तथा बातावरण मन्त्रालय
वन तथा भू-संरक्षण विभाग
बबरमहल, काठमाण्डौ



विषय :- वन बिकास कोषमा रकम पठाईएको बारे।

उपरोक्त सम्बन्धमा मिति २०७९/०३/१४ मा च.नं. २२२७ र मिति २०७९/०३/२० मा च.नं. २२६८ को पत्रबाट यस आयोजनाको रामेछाप जिल्लाको न्यू खिम्तीबाट दोलखा, सिन्धुपाल्चोक, काभ्रेपलान्चोक, काठमाण्डौ हुदै भक्तपुर जिल्लाको दुवाकोट सम्म कुल १०४ कि.मि. मा Row भित्र पर्ने वन क्षेत्रको जग्गा भोगाधिकार तथा तहां रहेका रुख विरुवाहरु हटाउने सम्बन्धमा नेपाल सरकार (मन्त्रिपरिषद) बाट मिति २०७६/०९/२८ मा निर्णय भई ने.वि.प्रा.तामाकोशी-काठमाण्डौ २२०/४०० के.भि.प्र.ला.आयोजना र वन तथा भू-संरक्षण विभाग बीच वन संग सम्बन्ध ऐन, नियम तथा कार्यविधिको अधिनमा रही वन क्षेत्रको जग्गा उपयोग गर्न/गराउन मिति २०७६/११/२९ गते १०३२२ हेक्टर जग्गा २५ वर्षको लागि सम्झौता भएको जानकारी गराईन्छ।

सो सम्झौता अनुसार जग्गा सट्टा भर्ना जग्गामा गर्नुपर्ने वृक्षरोपण, काटिएका/काटिने रुखहरुको १:१० का दरले वृक्षरोपण र सो को ५ (पाँच) वर्ष सम्म गरिने हेरचाह समेतको लागि तंहाबाट प्राप्त पत्र अनुसार जम्मा रकम रु २३,८४,०४,८९१/४७ (तेइस करोड चौरासी लाख चार हजार आठसय उन्नाईस रुपैया र पैसा) मात्र (मिति २०७९/०९/१४ बाट रु २९,८९७०,९८९/४७ र २०७९/०३/२० बाट रु २०२३३८३८/०० गरी जम्मा रु २३,८४,०४,८९१/४७) माग भएअनुसार सो रकम यस आयोजनाको मिति २०७९/०३/२३ को चेक नं ६३७७७७७३४ बाट तहां पठाईएको व्यहोरा अनुरोध छ।


रमण राज शर्मा
आयोजना प्रमुख

Annex-12: Tree cutting approval for RoW from DFO, Dolakha


बागमती प्रदेश सरकार
वन तथा वातावरण मन्त्रालय
वन निर्देशनालय
डिभिजन वन कार्यालय, दोलखा


चरिकोट, नेपाल

पत्र संख्या: ०६९/८०
चलानी नं.: ६९८

मिति:२०७९/०७/३०.....

कटान सहमति सम्बन्धमा ।

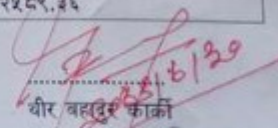
विषय :

श्री नेपाल विद्युत प्राधिकरण
तामाकोशी-काठमाण्डौ २२०/४०० के.भि. प्रसारण लाइन आयोजना
खरिपाटी, भक्तपुर

प्रस्तुत सन्दर्भमा नेपाल विद्युत प्राधिकरणद्वारा प्रस्तावित तामाकोशी काठमाण्डौ २२०/४०० के.भि. प्रसारण लाइन आयोजना निर्माणका लागि वन क्षेत्र प्रयोग गर्ने र रुख विरुद्ध हटाउने स्वीकृति दिने सम्बन्धमा श्री वन तथा भू-संरक्षण विभाग र नेपाल विद्युत प्राधिकरण, तामाकोशी-काठमाण्डौ २२०/४०० के.भि. प्रसारण लाइन आयोजना बिच मिति २०७६/११/२१ गतेको सम्झौता अनुसार तारमुनी (ROW) का रुखहरू हटाउने प्रयोजनका लागि मेलुङ सब डिभिजन वन कार्यालय, सितली दोलखाको च.नं. २१ मिति २०७९/०६/३१ को पत्रानुसार भ्याकुरे डोकेभिर सामुदायिक वन उपभोक्ता समूह, मेलुङ गा.पा. वडा नं. १ को वन क्षेत्रको रुखहरूमा डिभिजन वन कार्यालय, दोलखाको व. वि. १५३ का टाँचाबाट छपान तथा मुल्याङ्कन भई पेश भएको तथा सामुदायिक वनको वन पैदावार बिक्री वितरण निर्देशिका, २०७१ को दफा १० बमोजिम छपान चेकजीच गर्दा नियमानुसार पाइएको प्रतिवेदन प्राप्त भएको हुँदा उक्त छपान तैरिज अनुसारका विभिन्न जातका तपसिल बमोजिम सामुदायिक वनका रुखहरू सम्झौता एवं प्रचलित कानून बमोजिम कटान गर्नका लागि यो कटान सहमति दिइएको छ । छपान तैरिजमा उल्लिखित बाहेकका अन्य रुखहरू कटान गरी अनियमित भए गरेमा सोको जिम्मेवारी सम्बन्धित आयोजना नै हुने तथा प्रचलित कानून अनुसार कारवाही हुने व्यहोरा अनुरोध छ ।

तपसिल

सि.नं.	जात	थान	रुखको जम्मा आयतन (व्यु.फि.)
१	उत्तिस	६	४०६.३६
२	खोटेसन्ता	५	२४९.७२
३	हल्लुडे	७२	५२४.०३
४	अन्य	७८	१४०९.३५
	जम्मा	१६१	२५८९.३६




 धीर बहादुर कार्की
 डिभिजन वन अधिकृत

बोधार्थ :-
 श्री भ्याकुरे डोकेभिर सा.व.उ.स. मेलुङ गा.पा. १, दोलखा:- उल्लिखित बाहेकका अन्य वन पैदावार हानी नोक्सानी नहुने व्यवस्था मिलाउनु हुन ।
 श्री मेलुङ सब डिभिजन वन कार्यालय, सितली:- कर्मचारीको रोहबरमा नियमानुसार कटान मुखान कार्य गराउनु र सहकलन कार्यमा अनियमितता हुन नदिन आवश्यक व्यवस्था मिलाउनु हुन ।

इमेल: doldfo.mofe@bagmati.gov.np

फोन नं. ०८९-८२९९३५

Annex 13: Shield App monitoring report



Unsafe Observation

Form ID	1038224	Location	42A/D
Activity	Tower erection	Sub Activity	Erection of tower parts
Job Code	LEE70523	Job Name	400KV BKTL
Submission Date & Time	26-03-2022 10:02	Current Status	Approved By EHS Incharge
Submitted By	R RAGURAJ	Pending with	

EHS Observations

Qn. 1	Sub-activity/Category			
Response:	Violation of tower erection SOP			
Qn. 2	Type of observation (UA/UC)			
Response:	Violation of erection methodology			
Qn. 3	Observations			
Response:	Diagonal fixing not completed			
Qn. 4	Location Name			
Response:	42A/D			
Qn. 5	Subcontractor name			
Response:	Tajjal			
Qn. 6	Date & Time of Observation			
Response:	26/03/2022 09:00 AM			
Qn. 7	Corrective / Preventive Actions proposed			
Response:	All the center Diagonal & bottom Diagonal to be fixed before installing X-arm			
Qn. 8	Category of Observation			
Response:	Unsafe Act, Unsafe Condition			
Qn. 9	Observation Frequency			
Response:	First time			
Qn. 10	Observation Potential			
Response:	Low			
Qn. 11	Remarks			
Response:	-			
Qn. 12	Section in charge name			
Response:	244438-R RAGURAJ			
Qn. 13	Compliance report			
Response:	All center diagonal and bottom diagonal fixed.			
Comment(s):				
Username	User Role	Date & Time of Comment	Comment	Attachment

4/1/2022 11:04:23 AM

Page: 1 of 3

Copyright 2022 LNT-NTT All rights reserved

PHOTOGRAPHS

A. New Khimti – Barhabise TL section

Plate 1: Meeting with Mulpani CFUG members, Dolakha regarding construction of fireline



Plate 2: Consultation with PAFs of AP 11/1, Dolakha regarding demolish of structures



Plate 3: Consultation with PAF at AP 63/0, Sindhupalchowk regarding rehabilitation of foot trail



Plate 4: Meeting with ward chair, Barhabise Municipality-4, Sindhupalchowk



Plate 5: Excavated material dumped at foot trail at AP 63/0



Plate 6: Private nursery on tower footing at AP 55/1, Sindhupalchowk



Plate 7: ADB team consulting with PAFs at Lakuridanda, Dolakha



Plate 8: ADB team consulting with PAFs at Bhedpu, Dolakha



Plate 9: Meeting with ADB team after field visit



Plate 10: Meeting with complainants of Sankhe and Shittali regarding alternative route



Plate 11: Pep talk before erection work



Plate 12: Use of safety net during erection



Plate 13: Stringing work with full of PPEs for work at height



Plate 14: Livestock Management Training at Bhimeshwar Municipality-5, Dolakha



Plate 15: Certificate distribution to the Livestock Management Training Participants



Plate 16: Group photo after the completion of Livestock Management Training



Plate 17: Training for cultivation of NTFP under ROW



Plate 18: Group photo after the completion of Training for cultivation of NTFP under ROW



Plate 19: Vegetable Farming Training at Lakuridanda, Dolakha



Plate 20: Group photo after the completion of vegetable farming training



Plate 21: Construction of RRM wall for the protection of houses near tower footing, Sindhupalchowk



Plate 22: Construction of RRM wall for the protection of tower, Dolakha



Plate 23: Demonstrating emergency response in case of accident during Occupational Safety and Health Program



Plate 24: Health and Sanitation program for construction labors, Dolakha



Plate 25: Group photo after the completion of Health and Sanitation Program, Dolakha



Plate 26: Verification of marking of trees by Division Forest Office, Dolakha staff



Plate 27: Stringing of conductor ongoing



Plate 28: Protection work at AP 19/1, Dolakha



Plate 29: Installation of hume pipes through CSR in Bhimeshwar Municipality, Dolakha



Plate 30: Construction of gabion wall at AP 11/0



Plate 31: Consultation with locals at AP 35/0 regarding compensation of private trees and crop loss during stringing



Plate 32: CDC meeting at Chautara regarding compensation determination of structure



Plate 33: Briefing to Ward chairs before walkover survey in Dolakha



Plate 34: Inspection of location for proposed AP 0 in Ramechhap



Plate 35: Private trees in proposed alternative alignment in Ramechhap



Plate 36: Community Forest in proposed alternative alignment in Dolakha



Plate 37: Structures along the proposed alternative alignment



Plate 38: Walkover survey team



Plate 39: Consultation with locals before felling of private trees in Dolakha



Plate 40: Meeting with landowners of AP 9/0 regarding rehabilitation of irrigation canal

B. Barhabise – Changunarayan TL section



Plate 1: Consultation with PAFs in Barhabise- 9



Plate 2: Public consultation in Balephi



Plate 3: Conservation awareness raising program in Irkhu



Plate 4: Fishery training in process



Plate 5: Fishery training theoretical session ongoing



Plate 6: Fishing net handing over to participants



Plate 7: Fishery training practical session ongoing



Plate 8: Fishery training participant group photo



Plate 9: Livestock farming training participants group photo



Plate 10: Mushroom farming training ongoing



Plate 11: Mushroom farming training ongoing



Plate 12: Mushroom farming participants group photo



Plate 13: Vegetable farming training photo



Plate 14: NTFP training photo



Plate 15: Public consultation ongoing



Plate 16: Consultation in CDO Office, Dhulikhel



Plate 17: Safety instruction before initiation of work



Plate 18: Foundation work ongoing, AP 47/3



Plate 19: Presentation in Changu



Plate 20: Field verification ongoing in Changu



Plate 21: Labor attendance for safety orientation



Plate 22: EHS induction and vertigo test



Plate 23: Tools inspection before work



Plate 24: Tools inspection before initiation of work



Plate 25: Monitoring and safety check

Plate 26: Stringing ongoing



Plate 27: Public consultation ongoing



Plate 28: Route alignment



Plate 29: Driving training in process



Plate 30: Driving training ongoing



Plate 31: Good practices at work



Plate 32: Good practices at work



Plate 35: EHS training for staffs



Plate 36: EHS training for workman

PS STAFF VACCINATION DETAILS (Since 18 Years)					
Total PS Staff	Total staff Taken 1st Dose	Balance 1st Dose	Total Staff Taken 2nd Dose	Balance 2nd Dose	
12	12	0	12	0	
RLS STAFF VACCINATION DETAILS (Since 18 Years)					
Total RLS Staff	Total RLS Taken 1st Dose	Balance 1st Dose	Total RLS Taken 2nd Dose	Balance 2nd Dose	
21	21	0	21	0	
WORKMEN VACCINATION DETAILS (Since 18 Years)					
Total Workmen	Total Workmen Taken 1st Dose	Balance 1st Dose	Total Workmen Taken 2nd Dose	Balance 2nd Dose	
70	70	0	70	0	

Plate 37: Vaccination record for L&T staffs/workforce

Shield app status									
Reporting 1st Time	Reporting 2nd Time	Reporting 3rd Time	Reporting 4th Time	Reporting 5th Time	Reporting 6th Time	Reporting 7th Time	Reporting 8th Time	Reporting 9th Time	Reporting 10th Time
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1

Plate 38: Shield app status

