

# Sustainable Tourism Enhancement in Nepal's Protected Areas

## Environmental and Social Management Framework



## National Trust for Nature Conservation

GPO Box 3712, Khumaltar, Lalitpur, Nepal  
May 2020

## Executive Summary

**1. Description of the Project:** Tourism is one of the major contributors to the sustainable economy of Nepal. The direct contribution of the tourism sector in the national GDP was at 4% in 2017 and is forecasted to rise by 3.8% per annum to reach 4.2% in 2028 (World Travel and Tourism Council, 2018). Despite tremendous growth potential in tourism sector, Nepal stands as a low-cost tourist destination with much lower daily tourist spending than the regional average. This is a high time for Nepal to think about and harness high value nature-based tourism.

Nature based tourism is a key driver of Nepal's tourism, providing the sector both comparative and competitive advantages in the unique setting of rich topographic, biological and cultural diversity. In this context, the World Bank is supporting GoN to implement the project entitled "Sustainable Tourism Enhancement in Nepal's Protected Areas (STENPA)".

**Project Destinations:** The project focuses on areas with Nature-Based Tourism (NBT) potential with the aim of piloting a sustainable tourism approach that can be replicated across Nepal's protected areas (PAs). The project destinations include PA at their core, nearby gateway cities and surrounding areas with NBT potential, and has identified six PAs as the initial project destinations (Bardia, Banke Shukla Phanta and Rara National Parks, and their buffer zones; and Annapurna and Manaslu conservation Areas). Additional areas may be added as project destinations during implementation, subject to the selection criteria.

The Project Development Objective (PDO) is to improve the sustainability, inclusiveness and value generation of nature-based tourism in selected destinations. The project has five components: Component 1: Improving destination management, planning and coordination, Component 2: Enhancing infrastructure for access, environmental management and tourism diversification, Component 3: Adapting tourism products and providing economic opportunities in tourism-related value chain, Component 4: Project management, monitoring and evaluation, and Component 5: Contingency emergency response (CERC).

Under these components, the project will invest in variety of activities, which may be placed into three different group. Group I will include TA support to policy, regulations, plans and programs such as sustainable tourism development strategy for PAs, updating of PA Management Plans, landscape zonation development and DVIPs. Group II include activities to strengthen capacity and institutions such as improvements of ICTs, access to finance and training and awareness programs. Investment in physical infrastructures such as road upgrading works, construction of culverts and helipads, trekking trails fall under Group III.

**2. Overview of ESMF:** This ESMF has been developed as part of project preparation to ensure sustainable preservation of natural and cultural heritage and maintaining acceptable standards for avoiding/minimizing adverse impacts during the implementation of the project. ESMF provides clear steps, processes, procedures and responsibilities including various tools to be used during the project implementation ensuring environmental and social integration in the planning and implementation of the project supported activities. ESMF is prepared in line with the World Bank's environmental and

social Operation Policies and Government of Nepal's national laws and regulations. ESMF will be a 'live document', will be updated/ revised, if needed during implementation, only in mutual agreement between the World Bank and the Government of Nepal. If Contingency Emergency Response Component (CERC)/Component 5 is activated, this ESMF may be updated or a specific CERC-ESMF may be prepared, as required, and disclosed.

**3. Policies and Regulatory Requirements:** ESMF assess the prevailing policy and legal framework of GoN and applicable World Bank's Safeguards policies for the implementation of the project. The project triggers OP 4.01 Environment Assessment, OP 4.04 Natural Habitats, OP 4.36 Forestry, OP 4.11 Physical Cultural Resources, OP 4.12 Involuntary Resettlement, OP 4.10 Indigenous Peoples, and OP 4.20 Gender and Development. Gaps are identified between the relevant Nepalese laws and regulations, and the World Bank safeguard policies by comparing them; and recommendations are made to address the gaps in the context of the STENPA Project.

**4. Potential Environmental and Social Impacts and Mitigation Measures:** The project will not finance activities with potential significant adverse environmental or/ and social risks and/or impacts that are diverse, irreversible, or unprecedented (*Annex 1 (a): Exclusion List of Project Activities*). Nonetheless, moderate social and environmental impacts are likely from the physical infrastructure activities. Environmental and social impacts/ issues and risks may also arise from or linked to policy and plan that may be prepared through Technical Assistance (TA) under the project. The project is, hence, classified as "B Category" with possibility of limited/moderate adverse environmental and/or social impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures.

The project, inter alia, finances environmental management and conservation activities including wildlife conservation, wildlife rescue center, wilderness enhancement and habitat management, sanitation and waste management, landslides/erosion protection, and watershed protection works, etc. These are expected to result in beneficial environmental impacts. In addition, the project aims to initiate and promote environment and nature-friendly practices in the physical infrastructure.

The following negative environmental impacts, at moderate scale and limited to the vicinity of physical infrastructure, are expected from the investment in infrastructure.

- Loss or degradation or disturbances to wildlife and wildlife habitats;
- Loss of and/ or degradation of forest, trees, vegetation;
- Over and/or illegal harvesting of wild plants, herbs, NTFPs, and fishes, birds, wildlife;
- Increased human-wildlife conflict;
- Loss of topsoil from land clearing, soil erosion, landslides and stream sedimentation;
- Dust pollution, noise and other harmful emissions;
- Pollution due to solid waste; wastewater and effluents;
- Loss or degradation of good/fertile agricultural land;
- Damage to other/existing infrastructures;
- Degradation of aesthetic value and scenic value;

- Land use change due to expansion of hotels and new settlements;
- Degradation of physical cultural resources; and
- Health and safety risks to workers, community and visitors.

Similarly, possible adverse social impacts due to project intervention include:

- Loss of land, shelter and land-based assets/infrastructures and livelihoods sources;
- Damage/ disruption of community resources /local facilities;
- Discrimination in works and wage payment;
- Exclusion of indigenous peoples and vulnerable groups in decision making and planning;
- Pressure on local resources (drinking water, forest products like fuel wood/ timber, etc.);
- Local inflation of prices;
- Obstruction and noise pollution to tourists/ trekkers during construction/ maintenance;
- Loss of standing crops/orchards/trees;
- Conflicts associated with construction work forces or conflict between locals and outsiders;
- Increased social issues/problems;
- Child labor, child safety and other labor issues;
- Gender Based Violence (GBVs);
- Issues related to chance finds or issues encountered during works on physical cultural resources; and
- Increased burden on and competition for public service provision.

This ESMF, which is developed in line of GoN and World Bank's legal and policy framework, provides full guidance to address potential social and environmental issue/ risks/ impacts (to avoid, minimize, mitigate, and compensate adverse impacts; and enhance positive/ beneficial impacts).

- All the policies and plans prepared under the project will be subjected to environmental and social overview analysis for mainstreaming environmental consideration. Such an overview analysis would be based on an issue scoping exercise involving stakeholder participation.
- Each activities/proposal for strengthening capacity and institutions will be subjected to social and environmental review, and environmental and social best practices will be incorporated in the training plans and curriculums, E & S aspects will be mainstreamed/ strengthened in the proposal and/ or plan will be prepared, if needed.
- Each Investment in physical infrastructure subproject/ activity will be subjected to standard E & S process and procedures including screening, environmental assessment (EA), social assessment (SA), preparation of environmental and social management plans (ESMP), RAP, etc. and monitoring during implementation.

**5. Resettlement Policy Framework:** The Resettlement Policy Framework (RPF) is developed as part of ESMF as a guiding tool to avoid, minimize and mitigate adverse impacts caused by involuntary resettlement. This policy covers direct economic and social impacts that both result from the Bank-assisted investment projects and are caused by the

involuntary taking of land and involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the people. As per this policy, displaced persons will be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher. As per the framework, all project affected persons, irrespective of legal title such as tenants, encroachers /squatters will be eligible for compensation at replacement costs. The policy places emphasis on regular consultations with the affected groups and makes Free Prior Informed Consultation (FPIC) mandatory when vulnerable groups/IPs are affected by project activities. Valuation of assets is crucial to pay fair compensation and other assistances to the affected people and the process should be based on market value of land and assets. A comprehensive entitlement matrix has been developed as a crucial part of the RPF with all potential impacts, eligibility for entitlements and entitlement provisions spearheaded towards mitigating the impacts and livelihood improvement of the project affected people.

**6. Vulnerable Community Development Framework:** During implementation, the project may affect indigenous and vulnerable people both positively and adversely. While the positive impacts will contribute to bring improvement in the livelihoods of the vulnerable people, the adverse impacts will lead to further impoverishment. The project interventions may also result in discriminatory impacts causing further hardships in the livelihoods of poor and vulnerable groups including indigenous people and *Dalits*, if the project activities/intervention are not aligned well with the needs and aspirations of these people.

Vulnerable Community Development Framework (VCDF) has been developed to apply in the projects/subprojects to be supported under the Project. The framework provides guidelines to help develop systematic procedure of identifying project's impacts on vulnerable people and develop mechanism for meaningful consultations, FPIC, participation and information disclosure. The framework also outlines measures to develop culturally appropriate assistances and supports to the target groups in accordance with their priorities and needs. A framework for gender development is also outlined to mainstream gender development into the project and provides guidelines for designing Gender Development Plan (GDP).

The project, because of its nature, could trigger a wide range of issues related to gender and gender-based violence in the project area. The civil works of varied infrastructures viz road, trails, hotels, lodges, etc. involving women workers, both local and outsiders, could possibly result in different types of gender issues and violence in the construction sites. Besides, different service and commercial activities related to tourism viz women guide, women workers and entrepreneurs involved in trekking, hotel and restaurant business, could pose higher risks leading to violence against women and sex tourism. The close proximity of Indian border in case of Banke, Bardia and Shukla Phanta National Parks may pose further risk of trafficking of girls and child labor outside Nepal. Considering these potential issues and based on GBV Risk Assessment, different actions have been recommended to address GBV risks as per the "Good Practice Note" of the World Bank. Similarly, a framework on gender has been developed to mainstream gender development into the project which provides guidance for preparing Gender Development Plan (GDP).

**7. Consultation, Communication and Citizen Engagement** Meaningful consultations and communications are key for effective planning and implementation of the activities to be implemented under the project. These are integral part of planning, design and implementation of activities at subproject level which will be useful for the project in different ways such as informing the people about project benefits, flagging out people's concerns and incorporating their knowledge into subproject planning/design and implementation. A framework has been developed pertaining to (i) stakeholder identification and consultation hierarchies, (ii) consultation strategies, (iii) future consultations, (iv) communication strategy, and (v) citizen engagement. It also outlines consultation and stakeholder engagement strategy to be considered when there are constraints in conducting public consultations as a result of infectious disease like COVID-19 or an emergency response under Component 5.

**8. Grievance Redressal Mechanism:** Effective grievance hearing and resolution is crucial to make project implementation effective. A functional grievance redress mechanism (GRM) will be put in place in the project where any individuals or groups may file their grievances seeking fair decisions and actions. The mechanism involves a structure with different committees formed from unit to sub-project and Project Implementation Entity (PIE) and/ or Project Implementation Unit (PIU) level. All these committees will be responsible for executing the GRM process which grievance filing, grievance review, decisions on the grievances and hearing within specific timeframe.

**9. Institutional Arrangement for ESMF Implementation:** The Ministry of Forests and Environment (MoFE) will be the main implementing agency (MIA) considering the focus of the project on nature-based tourism (NBT). Ministry of Culture, Tourism and Civil Aviation (MoCTCA) will be the implementing agency (IA) responsible for the implementation of a smaller part of the project for activities (component 1.2). A Project Steering Committee (PSC) chaired by the Secretary, MoFE and comprising representatives from MoCTCA, the Ministry of Finance (MoF), other key ministries and departments will provide strategic oversight and guidance. A Project Technical Committee (PTC) chaired by the DG DNPWC with NTNC, and Department of Tourism (DoT) as members, will be provide technical guidance through periodic meetings. NTNC will be the main Project Implementing Entity (PIE), and the DoT will be a Project Implementation Unit (PIU) in charge of implementing Component 1.2 activities. A PA Oversight Committee (PAOC) and a Field Implementation Unit (FIU) will be established in each Province where project destinations are located.

PIE will have dedicated Social and Environmental Unit (SEU) and the field teams will comprise safeguard persons. PIE, in coordination with MOFE/DNPWC and MOCTC/NTB/PIU, will be responsible for the overall oversight and implementation of this ESMF and E&S measures in the project, ensuring that any adverse impacts of the project activities are avoided, and/or minimized and/or mitigated fully. PIE at NTNC and PIU at DoT, for the project activities under their respective jurisdiction, will have social and environmental specialists to implement safeguard measures.

NTNC's and DoT's capacity in managing environmental and social impact, and risks is limited as there is lack of dedicated staff, expertise and experience in managing environmental and social safeguard. The project includes capacity strengthening support for environmental and social management through trainings and orientations, hiring of safeguard consultants, and external monitoring. The field staff will be oriented and trained in the relevant safeguard roles and functions.

**10. E&S Compliance, Supervision, Monitoring and Reporting:** PIE and PIU, within their respective jurisdiction, are responsible for,

- Environmental and social overview of policies, regulations, plans and programs (including TAs).
- Ensuring each investment in physical infrastructure subproject/activity will be subjected to screening, EA, SA, ESMP, RAP, etc. and monitoring during implementation. E&S planning will be carried out for all subprojects at site level and will involve - (i) E&S Screening (desk review followed by site visit, if needed), (ii) preparation if EA/IEEs, ESMPs, RAP, VCDP, GAP etc., (iii) reviewing design and bid document for safeguard consideration, (iv) approval of plans, (v) consultation and disclosure, and (vi) implementation and monitoring of E&S safeguard measures.

The E&S safeguard experts of the project will be primarily responsible for regular supervision of E&S measures at the sites. The central E&S team at PIE and PIU will coordinate with and/or mobilize the field-based team, including FIU and PAOC as may be relevant, for regular supervision at sites. The FIU, with support from center, will ensure day-to-day supervisions and implementation of the safeguard measures. The contractors and user groups are responsible for and accountable to comply with the construction period safeguard measures.

E & S Monitoring will be an integral part of overall project management and carried out on a periodic basis. Regular monitoring will be carried out internally by the project, centrally or through the FIU as may be appropriate. The external monitoring will be carried out by the independent consultant/firm. The PIE and PIU, respectively for the activity within their jurisdiction, will have the responsibility of monitoring the E&S compliance, documentation and data, permits, process and procedures, grievances, works covering inputs, process and outputs. PIE and PIU will use risk-based approach in monitoring and visit sample sites for monitoring. The Conservation Area Management Committee (CAMCs), and/ or PA Oversight Committee (PAOC), and/ or responsible unit of the National Park will be engaged in field level regular monitoring.

The E&S team will produce periodic E& S status reports – field team (e.g. FIU) may produce E&S status report of the relevant site(s) on a regular basis, and central E&S team at PIE and PIU will provide summary of E&S progress in the quarterly progress report and a consolidated status report in six-months, coinciding with the Bank’s supervision mission. External monitoring report will be prepared at the end of the external monitoring, annually until the Mid-Term Review (MTR) and as decided by the MTR thereafter. The PIE and PIU will be responsible to report the progress on safeguards compliance during their regular reporting to the World Bank.

**11. Budget for Implementing ESMF:** The budget includes the cost for planning and implementation of safeguards activities including recruiting consultants, training & orientation, supervision & monitoring. The budget covers the cost for environmental and social screening, implementation of ESMP, RPF, VCDP, GAP, E&S expert fees, GRM implementation, safeguard capacity building and M&E. The total estimated budget for the implementation of ESMF is NRs 107,075,000.

**12. CERC-ESMF:** This ESMF has been revised in response of the newly added Component 5 (CERC). The occupational health and safety risks, and impacts related guidance has been further strengthened considering the COVID-19 pandemic. This ESMF does not address risks and impacts in relation to the CERC, given that the type and nature of likely emergency and indicative list of activities that will be supported through CERC cannot yet be determined. Thus, this ESMF may not cover potential social and environmental issues in relation to the CERC. All activities financed through the CERC are subject to the World Bank safeguard policies. In the event that CERC is activated, this ESMF may be updated or a specific CERC-ESMF may be prepared or additional E&S safeguard instruments as required will be prepared to cover CERC activities and disclosed, within three months from the time CERC is activated.

## **Abbreviations**

ACA	Annapurna Conservation Area
AP	Affected Person
A-RAP	Abbreviated Resettlement Action Plan
BDS	Business Development Services
BaNP	Banke National Park
BNP	Bardia National Park
BZUC	Buffer Zone User Committees
CAMC	Conservation Area Management Committee
CERC	Contingency Emergency Response Component
CBO	Community Based Organization
CDC	Compensation Determination Committee
CEDAW	Convention on the Elimination of all forms of Discrimination Against Women
CFUG	Community Forest User Group
CoC	Code of Conduct
DDC	District Development Committee
DDM	Digital Destination Monitor
DFO	District Forest Office
DNPWC	Department of National Parks and Wildlife Conservation
DOT	Department of Tourism
DVIP	Destination Vision and Investment Plan
EA	Environment Assessment
E&S	Environment and Social
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EPA	Environment Protection Act
EPR	Environment Protection Regulations
ESMF	Environment and Social Management Framework
ESMP	Environment and Social Management Plan

FGD	Focal Group Discussion
FIU	Field Implementation Unit
FPIC	Free Prior Informed Consultation
GAP	Gender Action Plan
GBV	Gender Based Violence
GDP	Gross National Product
GESI	Gender Equality and Social Inclusion
GoN	Government of Nepal
GRC	Grievance Redress Committee
HH	Household
IA	Implementation Agency
ICT	Information and Communication Technology
IEE	Initial Environmental Examination
IP	Indigenous People
ITDP	Integrated Tourism Development Plan
KII	Key Informant Interview
LAA	Land Acquisition Act
LAPA	Local Adaptation Plan
LG	Local Government
M&E	Monitoring and Evaluation
MAPs	Medicinal Aromatic Plants
MCA	Manaslu Conservation Area
MFI	Micro Finance Institution
MoFE	Ministry of Forests and Environment
MoF	Ministry of Finance
MoCTCA	Ministry of Culture, Tourism and Civil Aviation
MTR	Mid Term Evaluation
NBT	Nature-based Tourism
NDHS	Nepal Demographic and Health Survey

NGO	Non-governmental Organization
NP	National Park
NTB	Nepal Tourism Board
NTFP	Non-timber Forest Products
NTSP	National Tourism Strategic Plan
NTNC	National Trust for Nature Conservation
OP	Operational Policy
PA	Protected Area
PAOC	Protected Area Oversight Committee
PAP	Project Affected People
PIE	Project Implementation Entity
PIU	Project Implementation Unit
P-MITFE	Provincial Ministry of Industry, Tourism, Forest and Environment
P-MPID	Provincial Ministry of Physical Infrastructure Development
PSC	Project Steering Committee
RAP	Resettlement Action Plan
RNP	Rara National Park
RPF	Resettlement Policy Framework
SA	Social Assessment
SEU	Social and Environmental Unit
SIA	Social Impact Assessment
SNG	Sub-national Government
ShuNP	Shukla Phanta National Park
SMEs	Small and Micro Enterprises
TA	Technical Assistance
ToC	Table of Contents
ToR	Terms of Reference
TSA	Tourism Satellite Account
VC	Vulnerable Community

VCDF	Vulnerable Community Development Framework
VCDP	Vulnerable Community Development Plan
UCO	Unit Conservation Office
UNDP	United Nations Development Programme
WBG	World Bank Group

## Table of Contents

<b>Chapter 1: Introduction</b> .....	1
1.1 Background.....	1
1.2 Project Objectives and Components .....	1
1.3 First year activities.....	6
1.4 Rationale and Approach for the Environment and Social Management Framework (ESMF) 7	
1.5 Objectives of ESMF .....	8
1.6 Method Applied to Prepare ESMF .....	8
1.7 Sources of Information used in preparation of ESMF .....	8
1.8 Potential Users of this ESMF.....	9
1.9 Revision/Modification of the ESMF .....	10
<b>Chapter 2: Policies, Acts, Regulations, Guidelines and Conventions</b> .....	12
2.1 GoN Relevant Polices.....	12
2.1.1 Policies Supporting Indigenous/Vulnerable Communities .....	19
2.1.2 Policies on Gender Mainstreaming .....	19
2.2 International Provisions and Guidelines .....	20
2.3 World Bank’s Environmental and Social (E&S) Safeguard Policies .....	21
<b>Chapter 3: Description of Existing Environment</b> .....	28
3.1 Bardia National Park.....	30
3.2 Banke National Park.....	31
3.3 Shukla Phanta National Park.....	32
3.4 Rara National Park .....	33
3.5 Annapurna Conservation Area .....	35
3.6 Manaslu Conservation Area.....	36
3.7 Existing Issues and Potential Threats in the Destinations.....	37
<b>Chapter 4: Potential Environmental and Social Impacts and Mitigation Measures</b> .....	40
4.1 Brief Overview of Project Activities .....	40
4.2 Potential Environmental Impacts of the Project.....	40
4.2.1 Potential Beneficial Environmental Impacts.....	41
4.2.2 Potential Negative Environmental Impacts .....	41
4.3 Potential Social Impacts.....	45
4.3.1 Potential Beneficial Social Impacts .....	45

4.3.2	Potential Adverse Social Impacts and Mitigation .....	47
4.4	Environmental and Social Approach .....	50
4.5	Social and environmental planning process and steps in infrastructure subproject .....	52
4.6	Consultation and Participation.....	57
4.7	Information Disclosure .....	57
4.8	Considerations where Component 5 (Contingency Emergency Response–CERC) is activated 57	
<b>Chapter 5:</b>	<b>Resettlement Policy Framework.....</b>	<b>59</b>
5.1	Introduction.....	60
5.2	Policy Objectives and Principles .....	60
5.3	Policy Gaps and Recommended Measures .....	61
5.4	Approaches for Obtaining Land for the Project .....	62
5.5	Resettlement Planning.....	64
5.5.1	Social Screening.....	64
5.5.2	Social Impact Assessment (SIA) .....	65
5.6	Resettlement Action Plan.....	66
5.7	Policy Measures at Operational Level.....	66
5.8	Eligibility, Assets Valuation and Entitlements .....	68
5.8.1	Eligibility .....	68
5.8.2	Assets Valuation .....	68
5.8.3	Entitlements.....	69
5.9	Consultations, Participation and Disclosure .....	76
5.9.1	Consultations and Participation.....	76
5.9.2	Information Disclosure .....	77
<b>Chapter 6:</b>	<b>Vulnerable Community Development Framework .....</b>	<b>78</b>
6.1	Introduction.....	78
6.2	Legal Framework and Policies .....	79
6.3	Indigenous People and Vulnerable Groups in Nepal .....	80
6.4	Potential Risks and Impacts .....	82
6.4.1	Beneficial Impacts .....	82
6.4.2	Adverse Impacts and Mitigation .....	82
6.5	Indicative Issues, Mitigation and Approaches for Vulnerable Community Development... 83	
6.6	Impact Assessment Procedure .....	85

6.7	Gender Development Framework.....	87
6.7.1	Overview .....	87
6.7.2	GoN Policies and Legislations on Gender Equity and Women.....	87
6.7.3	Gender Issues/Barriers and Interventions Required.....	88
6.7.4	Gender Inclusive Design and Preparation of GAP.....	91
6.7.5	Process for Preparing GAP.....	92
<b>Chapter 7:</b>	<b>Action Plan – Gender Based Violence Risk Mitigation .....</b>	<b>93</b>
7.1	Need and Purpose .....	93
7.2	Legal and Policy Environment for Women’s Safety.....	94
7.3	Recommended Actions .....	96
<b>Chapter 8:</b>	<b>Consultation, Communication and Citizen Engagement Framework .....</b>	<b>99</b>
8.1	General .....	99
8.2	Stakeholders Identification and Consultation Hierarchies.....	99
8.2.1	Stakeholder Identification .....	99
8.2.2	Consultation and Stakeholder Engagement Hierarchies and Strategies .....	100
8.3	Central/Federal level consultation at project design.....	103
8.4	Future Consultations.....	104
8.5	Communication Strategy .....	104
8.6	Citizen Engagement.....	105
8.7	Information Disclosure .....	106
<b>Chapter 9:</b>	<b>Grievance Redressal Mechanism .....</b>	<b>107</b>
9.1	Introduction.....	107
9.2	GRM Structures.....	107
9.3	Grievance Filing and Management.....	108
<b>Chapter 10:</b>	<b>Institutional Arrangements for ESMF Implementation.....</b>	<b>110</b>
10.1	Project Implementing Agencies .....	110
10.2	Safeguards Planning and Implementation .....	111
10.2.1	Central Level .....	112
10.2.2	Field Level.....	113
10.3	Capacity assessment and Capacity Building.....	113
<b>Chapter 11:</b>	<b>Supervision, Monitoring and Evaluation.....</b>	<b>115</b>
11.1	General .....	115
11.2	Supervision .....	115

11.3	Monitoring .....	116
11.4	Regular Monitoring .....	116
11.5	External Monitoring .....	117
11.6	Monitoring Indicators .....	117
11.7	Reporting .....	119
<b>Chapter 12:</b>	<b>Budget for Implementing ESMF.....</b>	<b>121</b>
<b>Annexes</b> .....		<b>122</b>
Annex 1 (a):	Exclusion List of Project Activities.....	123
Annex 1 (b):	Example of Activities that require Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA) as per Environmental Protection Rules of Government of Nepal	125
Annex 1 (c):	Example of Activities to be supported under STENPA Project .....	127
Annex 2:	Information used in preparation of ESMF .....	135
Annex 3 (a):	Environmental and Social Screening Guideline and Checklist .....	136
Annex 3 (b) -	Environmental Issues and Mitigation Measures during Subproject Planning, Design, and Construction & Operation Stage.....	141
Annex 3 (c):	An Indicative Checklist on OHS, CHS, Hygiene & Sanitation, Diseases Safety to safeguard against COVID-19 or similar infectious disease during executing small civil works .....	158
Annex 4:	Steps in ES Assessment (GoN requirement IEE &EIA) and (WB requirement on ESIA) ....	162
Annex 5:	Indicative Outline of ESMP.....	163
Annex 6:	Indicative Outline of RAP .....	165
Annex 7:	Indicative Outline of Social Assessment .....	166
Annex 8:	Indicative Outline of VCDP .....	167
Annex 9 (a):	Environmental and Social (E&S) Overview for Policy, Plan, and Program.....	168
Annex 9 (b):	Terms of Reference to Carryout Environmental and Social Overview .....	171
Annex 10:	Grievance Filing Format .....	173
Annex 11:	Specimen ToR for E&S Capacity Building Expert.....	174
Annex 12:	Land Donation Agreement Form .....	176
Annex 13:	IPs and Vulnerable Groups Impact Screening & Categorization Form .....	177
Annex 14:	Draft ToR for Third Party Monitoring.....	179
Annex 15:	Major Highlights of Labor Rules, 2018 (2075) related with the E&S Safeguard .....	181
Annex 16:	GoN prescribed National Standards on Air/Noise/Water/Effluent .....	184
Annex 17:	Guidelines for protecting Physical Cultural Resources Avoiding Impacts on Cultural and Historical Properties.....	191

Annex 18:	Species protected under Schedule-1 of NPWC Act.....	193
Annex 19:	Plant Species and Forest products protected under the Forest Regulations, 1995 (amended 2001).....	194
Annex 20:	Some Good Practices in Conservation and PA Management .....	195
Annex 21:	Description of Existing Environment of Destination Areas.....	203
Annex 22:	List of Participants - National Consultation Meeting of ESMF.....	228

## List of Tables

Table 1:	Comparison between GoN and World Bank policies and recommendations .....	25
Table 2:	Potential Adverse Impacts and Proposed Mitigation Measures .....	48
Table 3:	Key Steps and Procedures in E&S Management in Infrastructure Subproject ....	52
Table 4:	Key Policy Differences between World Bank and GoN Legal Framework.....	61
Table 5:	Entitlement Matrix.....	72
Table 6:	Presence of Indigenous Groups by Regions.....	80
Table 7:	<i>Dalit</i> Communities of Nepal .....	81
Table 8:	Indicative Issues and Activities for Vulnerable Community Development of STENPA Project .....	83
Table 9:	Gender and Development Framework.....	88
Table 10:	Recommended Actions to address GBV Risks .....	96
Table 11:	Consultation and Engagement strategy: Stakeholders / Institutions, Issues and Methods	100
Table 12:	Key Monitoring Indicators, Methods and Responsibility.....	118

## List of Maps

Map 1:	Protected areas of Nepal .....	29
Map 2:	Bardia National Park and its buffer zone.....	30
Map 3:	Krishnashar Conservation Area and its surrounding .....	31
Map 4:	Banke National Park and its buffer zone .....	32
Map 5:	Shukla Phanta National Park and its buffer zone.....	33
Map 6:	Rara National Park and its buffer zone .....	34
Map 7:	Annapurna Conservation Area .....	36
Map 8:	Manaslu Conservation Area .....	37

## Chapter 1: Introduction

### 1.1 Background

Travel and tourism is one of the world's largest employers and a key job creator. According to the World Travel and Tourism Council, one in ten jobs in the world is currently in Travel and Tourism, with the sector creating one in every five new jobs in 2017. In Nepal, tourism contribution to the national GDP in 2017 was 4 percent, generating 6.6 percent of the total employment. At present, nature-based tourism (NBT) remains a key driver of Nepal's tourism. The country's unique landscapes, rich biological diversity blended with culture and cultural heritage, and mountains attract nature lovers from all over the world. The importance of NBT is evidenced by the fact that about 60 percent of the total visitors to Nepal visit protected areas. Total incomes of protected areas from tourism in Nepal has increased by 68.32% over the last six years contributing substantially to poverty reduction, employment and income redistribution. However, Nepal is at the cross-roads and faces the risk of becoming a low-cost destination. The daily average spending per tourist remains low at US\$ 54 in 2017, compared to a regional average of US\$ 100 – 150. Nepal's tourism sector is lagging behind due to low quality of service, unhealthy competition among service providers, lack of adequate infrastructure and limited tourism products offering. This is a high time for Nepal to think about and harness high value NBT maintaining ecological and development balance with natural system to attract high class tourist to promote quality (value creation) tourism development in new destinations, sharing benefits to local people duly coordinating with stakeholders (local and international).

The World Bank is supporting the GoN to implement a project entitled "Sustainable Tourism Enhancement in Nepal's Protected Areas - STENPA". The project will invest in enhancing access infrastructures, upgrading tourism services and improving destination management capacity, geared to improve the sustainability and value generation of NBT in selected destinations.

### 1.2 Project Objectives and Components

The objective of the project is to improve the sustainability, inclusiveness and value generation of NBT in selected destinations. The project will focus on a set of selected nature-based destinations with the aim of piloting a sustainable tourism approach that can be replicated across Nepal's PAs. The core of the initial destinations areas of the project are Annapurna and Manaslu Conservation Areas; and Bardia (including Krishnasar Conservation Area), Banke, Shukla Phanta and Rara National Parks and their buffer zone areas. The project destination altogether covers about 36% of the total PA coverage. The project will also include activities for the promotion of NBT in the related gateway cities and surroundings with nature-based potential. Additional areas may be added as project destinations by mutual consent, (after the mid-term review of the project, subject to the selection criteria).

The project has five components as follows.

### **Component 1: Improving Destination Management, Planning and Coordination**

This component aims to promote an informed and coordinated approach to developing, managing, and marketing the tourism potential of the project destinations, in a way that is sustainable and strategically geared towards higher value. Project activities will provide key stakeholders such as federal agencies, sub-national governments (SNGs), private sector organizations, and local communities the expertise and tools for strengthening strategic monitoring, planning and coordination capacity, both at the destination level and at the broader national level. Importantly, the project will support full incorporation of sustainable tourism development in the conservation for development approach of PA management. This component will support the preparation of a detailed Destination Vision and Investment Plan (DVIP) for each project destination. The DVIPs will identify key tourism areas and products that can form a coherent tourism offering and a set of interventions and will also specify the institutional responsibility and budget needs for priority interventions.

#### **Sub-component 1.1. Enhancing Destination Management and Planning**

This sub-component will aim to enhance NBT planning and management in project destinations and at the national level, through provision of civil works, expertise, training and equipment, including sustainable tourism development strategy for all of Nepal's PAs, reviewing / updating/ upgrading PAs management plans and develop guidelines for integrating sustainable tourism development, citizen and beneficiary engagement strategy and tools at project destinations, develop detailed DVIPs for each project destination and an investment plan, land zoning and demarcation, community-level plans laying out tourism related structures, improve collaboration on sustainable tourism development at project destinations, strengthen the capacity of SNGs and local community organizations, enhance the capacity of MoFE, DNPWC, NTNC and other institutions; upgrade the design and enforcement of key regulations impacting conservation and commercial activities in PAs, and improve revenue management.

#### **Subcomponent 1.2: Integrating NBT into National Tourism Policies and Branding**

Implemented under the supervision of MoCTCA, this sub-component will support the integration of the project destinations and NBT development activities into Nepal's broader tourism policies, regulations and promotion by providing operational funds, expertise, training, and equipment to review, adapt and support implementation of the tourism policies and the related online tourism enterprise registration system at the project destinations, improve data collection, compilation and analysis relating to project destinations and support the establishment of a tourism satellite account (TSA), design and implement specific branding and marketing strategies that would contribute to the upgrading and visibility of Nepal's PA offering, in particular, and renovate or develop services in local

airports and upgrade visitors' centers in gateway cities of the project destinations that are under the management of the MoCTCA and its agencies

## **Component 2: Enhancing Infrastructure for Access, Environmental Management and Tourism Diversification**

The objective of this component is to design and implement the investments in works and goods identified in the DVIPs for the project destinations under sub-component 1. As explained above, these investments are part of a set of coordinated interventions that are specified in the DVIPs to bring about the envisaged tourism offering. Specifically, the investments will include upgrading physical infrastructure to boost sustainable tourism and facilitate increased integration of the private sector and local communities into higher value tourism services. These infrastructure investments will be designed with attention to environment, climate change and natural disaster risks resilience and favor nature-based approaches and incorporate gender aspects.

### **Sub-component 2.1. Enhancing Tourism Infrastructure for Accessing PAs**

This sub-component aims to enhance access by investing in the construction and maintenance of connectivity infrastructure at the project destinations. The investments will improve year-round accessibility by tourists, reduce the time needed to access the PAs from the gateway cities and between different points within the project destinations. To this end, the project will invest in civil works, goods and consulting services to, inter alia, prepare a tourism road upgradation development plan based on the DVIPs, rehabilitate and maintain existing road alignments, culverts and bridges at the project destinations; and develop small-scale facilities for enhancing public services and transport systems.

### **Sub-component 2.2. Upgrading Environmental Management and Tourism-related Infrastructure**

This sub-component will upgrade tourism-related facilities, enhance environmental sustainability and biodiversity conservation, and institute better systems for ensuring tourists' safety. The project will support the establishment or upgrading of local communities and public tourist facilities identified in the DVIPs, community-level development plans and innovative investments presented by beneficiaries aimed at enhancing economic activities, environmental sustainability, natural resource conservation and climate resilience. The project will also support the management of the small-scale infrastructure by CBOs and private sector operators, through providing assistance and/or agreements that would be procured using the procurement guidelines. Specifically, the project will finance investments in civil works, goods and consulting services to develop, upgrade and maintain, inter alia, museums, interactive visitor information centers, visitor information management system, check posts, trail heads with parking space and service facilities; trekking trails, fire lines, bridges and road crossings, safe drinking water stations,

campsites, viewpoints and rest stops, trail signage and safety barriers; wildlife conservation and promotion, view towers, conservation breeding and wildlife rescue centers, wilderness enhancement and wildlife habitat management and other activities; community-level infrastructure such as community halls, local markets, and public toilets and small infrastructure to facilitate tourism diversification in heritage tourism (upgrading of settlements infrastructure and beautification of heritage and culturally important villages), adventure tourism (archery playground, cave visit, horse riding ground), river tourism activities (rafting platforms, campsites, angling sites), mountain biking, NBT in community forests (such as bird watching, picnic spots, nature walks); small-scale public sanitation facilities, water drainage networks, solid waste management including reuse, recycle and disposal and treatment facilities, and garbage collection equipment; recycling and reduced import of plastic, community-level biological wastewater treatment, small-scale biogas digestion and composting, and regular water quality monitoring and reporting; development and implementation of local adaptation plans (LAPA) with actions for reducing climate and disaster vulnerability; including erosion & landslides protection, protection of micro-watershed/ catchment, flood, drainage & river-bank protection, and weather safety and control systems, rescue management systems, high altitude rescue shelters, and porter shelters.

### **Component 3: Adapting Tourism Products and Providing Economic Opportunities in Tourism-Related Value Chains**

This component will upgrade the quality and diversity of tourism services and products at the project destinations through a package of interventions to assist in repositioning Small and Medium Enterprises' (SMEs) products and services to the acceptable global standards. It will also improve participation of local communities and enterprise in tourism-related value chains. The proposed activities will be implemented through local trained business development services (BDS) providers. Services rendered by BDS providers may be both cross-cutting and value-chain (sector) specific, and they may act as incubators for business development and management. The BDS will help fill gaps in entrepreneurial skills and shall provide business advice as well as promote competitiveness among the private sector and community ecotourism groups.

#### **Subcomponent 3.1: Upgrading and Adapting Tourism Products to Emerging Market Trends**

This sub-component will help prepare an overarching vision for quality standards for tourism services and products and design and implement a package of business development services to facilitate local firms' accreditation, access to markets and finance. This will entail involving professional designers and hospitality experts to develop authentic local/ indigenous architecture designs and service quality standards for accommodation enterprises, developing a web-based platform, connecting firms with international accreditation programs, establishing partnerships with global travel website companies to

increase on-line presence, and providing training to meet the stipulated standards. In addition, the quality enhancement program will cover improvements in basic hygiene and sanitation, waste water management, solid waste management, energy efficiency, safety and security improvement, use of ICT solutions, marketing, branding and promotion (e.g. websites); skills (training owners and their employees); and compliance for quality certification. The project will train, develop and equip existing local community-based organizations, business organizations, financial institutions, and training providers to become BDS providers assisting local communities and enterprises to participate and increase their gain from tourism-related value chains. While specific BDS needs at each project destination will be identified through the quality enhancement program and a needs assessment at the beginning of project implementation, the BDS will also provide a broad menu of services including HR management, accounting and financial literacy, business plan development, bank loan proposal to access finance. In the first year of the project, prioritized training and capacity building will be provided to SMEs and female workers to adapting their products and services to the market trends that will emerge in the wake of COVID-19 pandemic. Interventions such as training in health and safety standards and COVID-9 prevention measures will be given priority as this will be crucial for the rebound of the sector.

### ***Sub- component 3.2 Promoting the Inclusion of Local Communities in tourism related Value Chains***

This sub-component will identify and screen homestays and related communities' products and services with high potential but in need of support, such as non-timber forest products (NTFP), agricultural products, souvenirs, accommodation, food, transport, cultural groups and guide services. The project will improve access to markets of such identified products and partner with potential clients and help aggregate the products for a potential agribusiness linkage. Furthermore, it will support access to financial institutions and Micro Finance Institutions (MFI) to offer adapted financial product to rural accommodation providers. This sub-component will also finance small-scale investments such as improving room insulation in mountain areas, upgrading processing equipment, rehabilitating processing factories, and storage to meet sanitation standards and to be fit for purpose, and packaging/branding equipment, with the overall objective to expand livelihood opportunities at the community level within the targeted PAs. The capacity building program will be implemented at local level with the assistance of the trained BDS providers. Beneficiaries of BDS providers will include micro and small firms, cottage industries, cooperatives, and community groups. Importantly, BDS providers will aim to increase the participation of disadvantaged communities in the tourism sector and promote female entrepreneurs and their integration in the tourism sector in skilled and management positions. In the first year of the project, interventions such as training in health and safety standards and COVID-19 prevention measures will be given priority.

## **Component 4. Project Management, Monitoring and Evaluation**

### **Subcomponent 4.1: Overall Project Management and Monitoring**

This subcomponent will finance training, goods and services, consultancies and incremental operational costs borne by the PIE at the central level and the Field Implementation Units at Project Destination level to ensure (a) project oversight and coordination; (b) fiduciary management, including external/internal audits and accounting; (c) adequate quality control and assurance systems; (d) environmental and social safeguards management; and (e) development and implementation of a communications and stakeholder engagement plan. This component will finance a M&E system that includes baseline and annual surveys among beneficiaries and tourists at the Project Destinations; knowledge generation and exchange; and annual networking among key project stakeholders at the local, provincial and national levels, including active private sector involvement. This subcomponent will also support the design and implementation of an inclusive and consistent citizen and beneficiary engagement strategy at the Project Destinations, including a user-friendly information-sharing platform and collaborative decision-making to increase citizens' and communities' participation in the project.

### **Subcomponent 4.2: Management of DoT Specific Project Activities**

This subcomponent will finance consultancies, training, goods, services, and operational costs, for oversight, procurement support and fiduciary management of activities implemented by the MoCTCA under subcomponent 1.2 and 2.1(d).

## **Component 5: Contingency Emergency Response (CERC)**

This component will allow for rapid reallocation of uncommitted project funds from other components to support immediate response and recovery needs in the event of a natural or man-made disaster or crisis. It also provides a mechanism to channel additional funds should they become available as a result of an eligible crisis or emergency.<sup>1</sup>

### **1.3 First year activities**

The focus of the first year of implementation will be on institutional setup, mobilization, preparation and detailed preparation of various activities. During the first year of implementation, the project will have one project launch workshop nationally as well as in

---

<sup>1</sup> As defined in the World Bank OP 8.00, "Rapid Response to Crises and Emergencies"

selected project destinations and local governments (LGs). Project does not envisage implementation of major physical/ civil work in the first year of implementation. Besides preparation of various plans, detailed engineering planning and design including Detailed Subproject Report of specific investment in physical infrastructure will be prepared during the first year.

The preparation of the social and environmental safeguards documents for each plan including DVIPs, PA Management Plan, community-level plan, etc. will be prepared synchronizing with the participatory preparation of those plans. Sub-project/ activity specific environmental and social safeguard documents will be prepared in tandem with the specific planning and design of each activity, ensuring that the environmental and social processes and engineering planning and design processes interact and benefit each other. Sub-project/ activity specific environmental and social safeguard documents is necessary for the finalization and approval of engineering plan and detailed design including Detailed Subproject Report of specific investment/ infrastructure. Hence, activity specific environmental and social safeguard document has not been prepared at the time of preparing the ESMF.

#### 1.4 Rationale and Approach for the Environment and Social Management Framework (ESMF)

Though the types of project activities are known, but their locations and details are yet to be finalized. At the current stage of project preparation<sup>2</sup>, the nature and magnitude of the potential environmental and social impacts that will arise cannot be precisely determined since they are influenced by the type, location, sensitivity and scale of activities. Formulation of subproject / investment/ activity specific safeguard instruments at this stage is difficult and not-pragmatic. Hence, a framework approach has been used in the project, and ESMF has been prepared – the ESMF presents generic assessment of potential impacts and mitigation by type of subproject activities, and provide guidance to steps, processes and procedures to follow during implementation in addressing the specific impacts at project sites. Therefore, the ESMF will apply to all the activities financed under the project to ensure compliance of safeguard standards, irrespective of project component or implementing entity PIE or PIU, and the ESMF incorporates a broad framework considering all the possible environmental and social impacts that may result from the project.

ESMF is prepared in line with the World Bank's OPs and in accordance with the Government of Nepal's national laws and regulations. Any activity to be prepared and undertaken by the

---

<sup>2</sup> No civil work is planned for the first year of implementation. Detailed preparation of subproject/ investment and activities including defining locations and detailed engineering plans and designs, preparation of DPRs, will be carried out in the first year of implementation.

project will be carried out in reference to the principles of sustainable development, including environmental, social and cultural, and economic considerations.

### 1.5 Objectives of ESMF

The objective of ESMF is to frame guidelines and procedures to address the environmental and social impacts associated with the implementation of this project. The specific objectives are as follows;

- Assess potential social and environmental risks and impacts from the project and project activities;
- Outline the clear steps, process, procedures and methodologies for screening, reviewing and monitoring environmental and social safeguards issues, risks and impacts;
- Define roles and responsibilities for supervision, management, reporting and monitoring environmental and social safeguard issues, risks, impacts and compliance;
- Provide a framework for consultation and information disclosure; and for preparing the environmental and social mitigation plans to address the adverse impacts; and
- Assess capacity and suggest capacity strengthening measures.

### 1.6 Method Applied to Prepare ESMF

The methodology adopted for preparation of this ESMF includes desk review, consultation, and review/insights, including from site visits and information obtained from potential subproject sites. In this process, relevant GoN environmental, land acquisition, tourism policies, tourism vision & development plans, WB operation Policies, etc. were reviewed. The other activities carried out during preparation of ESMF are:

- Destination Vision Investment Plans (DVIPs) for the selected destinations has been referred;
- Inputs from FGDs at selected destinations on E&S issues;
- Similarly, the feedbacks from the Ministries (MoFE and MOCTCA), provincial governments (P-MITFE and P-MPID) and park authorities has been incorporated; and
- Central level consultation with concerned stakeholders was organized and the feedback received have been incorporated in the final version of the ESMF.

### 1.7 Sources of Information used in preparation of ESMF

Using an array of available secondary sources of information, verified when possible through consultations at the field level, a comprehensive framework has been developed to ensure that project embraces the principle of sustainable development while undertaking project

activities. The secondary sources of information are (i) protected area and buffer zone management plans, (ii) national documents (policies, legislations, strategies and plans), (iii) relevant social and environment policies, acts and guidelines, (iv) World Bank safeguard policies, (iv) similar projects documents. A list of information sources used in preparation of this ESMF is provided in Annex 2.

## 1.8 Potential Users of this ESMF

This framework will mainly be used by the implementing agencies, Project Implementing Entity (PIE<sup>3</sup>) and Project Implementing Unit (PIU<sup>4</sup>) including the concerned Ministries (MoFE and MoCTCA), NTNC, NTB and DoT; and provincial and municipality/palika level stakeholders to fulfil the project's environmental and social responsibilities. The Environment and Social Unit/ desk within the Project Implementation Entity (PIE), NTNC is responsible for overall E&S oversight including supervising, monitoring, managing, supporting, providing guidance, organizing training, etc. on E&S aspects in the project.

---

<sup>3</sup> NTNC – National Trust for Nature conservation is Project Implementation Entity for Component 1.1, Component 2 & Component 3

<sup>4</sup> Department of Tourism (DoT) is project Implementation Unit (PIU) for Component 1.2

### Main Stakeholders and Users of the ESMF

S.N.	Main Stakeholders and Users
1	<p><b>Ministries and Departments at Federal Level</b></p> <ul style="list-style-type: none"> <li>• Ministry of Forest and Environment (MoFE);</li> <li>• Ministry of Home Affairs (MoHA)</li> <li>• Ministry of Culture, Tourism and Civil Aviation;</li> <li>• Ministry of Land Management, Cooperatives and Poverty Alleviation</li> <li>• Department of Forest;</li> <li>• Department of National Parks and Wildlife Conservation (DNPWC);</li> <li>• Department of Environment;</li> <li>• Department of Tourism;</li> <li>• National Trust for Nature Conservation- responsible units for project development and execution</li> </ul> <p><b>Province Level</b></p> <ul style="list-style-type: none"> <li>• Minister for Industry, Tourism, Forest and Environment;</li> <li>• Division Forest Office (DFO);</li> </ul> <p><b>Local Level</b></p> <ul style="list-style-type: none"> <li>• District Coordination Committee</li> <li>• Chief District Officer,</li> <li>• District Land Revenue Office,</li> <li>• District Survey Office</li> <li>• Municipalities and Rural Municipalities.</li> <li>• Nepal Army;</li> <li>• National Parks and PA Wardens</li> </ul>
2	<p><b>Consultants, Service provides and Contractors</b></p> <ul style="list-style-type: none"> <li>• Environmental/EIA Consultants;</li> <li>• Social/SIA Consultants;</li> <li>• Technical/Engineering Consultants;</li> <li>• Legal Consultants; and</li> <li>• Construction Implementing Contractors.</li> </ul>
3	<p><b>Community Level Stakeholders</b></p> <ul style="list-style-type: none"> <li>• Community Based Organizations;</li> <li>• Mother Groups;</li> <li>• CFUGs</li> <li>• I/NGOs;</li> <li>• Project Neighbors;</li> <li>• Conservation Activists;</li> <li>• Political Leaders and Representatives</li> <li>• Private Investors, etc.</li> </ul>

#### 1.9 Revision/Modification of the ESMF

The ESMF will be a 'live document', will be updated/revised, if needed during implementation, particularly if there is change in the scope of the project/activities, types of

interventions and/ or changes /modification introduced in the legal/regulatory regime of the country or policies of the World Bank. Also, based on the experience of application and implementation of this framework, the provisions and procedures may need to be updated, as appropriate. Any update/ revision/ modification in the ESMF will be done only in mutual agreement between the World Bank and the Government of Nepal.

This ESMF may not cover potential social and environmental issues in relation to the Component 5 (Emergency response) given likely nature of emergency and types of activities cannot be determined now. Hence, if CERC is activated, this ESMF may be updated or a specific CERC-ESMF may be prepared, as required, and disclosed, within three months from the time CERC is activated.

## Chapter 2: Policies, Acts, Regulations, Guidelines and Conventions

### 2.1 GoN Relevant Polices<sup>5</sup>

The Constitution of Nepal 2072 (2015 AD) has stated in the Article 30- **Right Regarding Clean Environment** that:

1. Each person shall have the right to live in a healthy and clean environment;
2. The victim of environmental pollution and degradation shall have the right to be compensated by the pollutant as provided for by law;
3. Provided that this Article shall not be deemed to obstruct the making of required legal provisions to strike a balance between environment and development for the use of national development works.

Article 51 (l) **Policies Regarding Tourism** stipulates that “developing environment friendly tourism industry as an important basis of national economy by identifying, protecting, promoting and publicizing the historical, cultural, religious, archaeological and natural heritage sites of the country, and prioritizing local people in the distribution of benefits of the tourism industry”. Tourism Policy, 2065 clause (b) lays emphasis on the inclusion of women together with Indigenous Peoples, *Madhesis* and other marginalized groups in accessing benefits arising from tourism related entrepreneurial activities as well as their access to tourism business opportunities through cooperatives.

### **Environment Protection Act 2019 and Environment Protection Regulations<sup>6</sup>, 1997:**

According to the EPA 2019, all development projects including project under tourism sector, shall first be screened using criteria that are based on project type, size, location and cost, stipulated in the Regulation to determine the level of environmental assessment required (whether Concise/ Rapid Environmental Assessment, or Initial Environmental Examination -IEE or Environmental Impact Assessment - EIA or none). Schedule 1 and Schedule 2, sector F, pertaining to rule 3 of EPR, 1997 determines the level of EA (IEE/EIA) required for different categories under Tourism Sector. Usually, small projects which only require rehabilitation such as trekking trails in rural area are not expected to cause significant environmental damage and require only concise/ rapid environmental assessment. Annex 1 (b) provides examples of projects and activities which require IEE or EIA by the EPA and EPR. Schedule 7 of the EPR also lists the industries that require pollution control certificate.

---

<sup>5</sup> Several GoN legislations are in the process of amendments as a part of implementation of federalism. The relevant changes, when taken place may be incorporated as and when they become effective and acceptable to the Bank.

<sup>6</sup> The Regulation is in the process of amendments following the Environment Protection Act 2019

**Forest Act<sup>7</sup>, 2019 and Forest Regulation<sup>8</sup>, 1995:** The proposed projects need to comply with the provisions of Forest Act and Regulation when the needs to acquire forestland for trail or bridge/or any other entities require construction/ improvements. Clause number 42 (1) to 42 (8) allows implementation of development project of national priority in forested area, if it does not pose significant adverse impact to environment and if there are no other alternatives, after approval of government (Divisional Forest Office - DFO) and local forest authority (e.g.; Community Forestry User Groups). The forest act and regulation allows implementation of priority projects within forested area with adequate compensation to affected people and prior permission. Plant species and forest products legally protected under Forest Regulations, are presented in Annex 19.

### **Department of Forest Guidelines**

The Department of Forest has made public various guidelines with relevance to environmental assessment of the development projects which are as follows:

- Forest Products Collection, Sale and Distribution Guidelines, (1998);
- Community Forest Guidelines, (2009);
- Community Forest Inventory Guidelines, (2005);
- Work Procedure for Obtaining National Forestland for Nationally Important Project, 2074 (May 2017)

The aforementioned guidelines detail the various procedures and formats for getting approval for vegetation clearance, delineation of lands for vegetation clearance, evaluation of wood volume among others and in developing the community forest through the active participation of the poor, disadvantaged, indigenous, *Janajati*, *Madhesi*, women, communities lagging behind due to various reasons. The Community Forest Inventory Guidelines details the processes and procedures for evaluating the forest stock and its harvesting potentials. The government offices and officials responsible for the approval, delineation and evaluation of the operational plans. Work procedure for the use of the forest area for development projects reiterates the use of the forest area only if other options are not available, and cleared EPA and EPR requirements including EIA or IEE. Prior approval for intervention in forested area is required from the District Forest Office (DFO), and Forest User Groups (FUGs). The loss of trees and forestland needs to be compensated - 25 seedlings need to plant for every tree felled, and the plantation sites needs to be protected and managed for five years. If the site involves the forest managed by Forest User Group(s), the Community's clearance is required. The Council of Minister approves the proposal of forest diversion to the project and approves the removal of listed trees.

**National Park and Wildlife Conservation Act, 1973:** This act prohibits any action that could be damaging to the park including; cutting of trees and other plants, any kind of residential structures, quarrying of materials, change in watercourse, etc. Activities

---

<sup>7</sup> The Act is in the process of amendment.

<sup>8</sup> The Forest Regulation is in the process of amendment following the Forest Act 2019

prohibited in protected areas includes; hunting, damage or removal of forest products, grazing, mining, digging earth or any other similar material, block or divert river systems flowing through the park, construction or possession of house, huts or other structures, Any intervention within National Park and Wildlife Conservation Area requires permission from Ministry of Forests and Environment (erstwhile, Ministry of Forests and Soil Conservation) after recommendation from Department of National Parks and Wildlife Conservation. Wildlife species protected under the Act is given in Annex 18.

**The Buffer Zone Management Regulation, 1996:** Buffer zones are peripheral areas of the national parks/reserves which serves as buffer between the park and the human settlements. This area also provides controlled access to resources for the local people, minimizing park-people conflict and thus, ensuring coexistence between human and wildlife. Communities inside the buffer zones are economically active and regulated development of infrastructures are permitted in accordance to the buffer zone user groups' and local development committees' recommendations. The Buffer Zone Management Regulation, 1996 has authorized the park authorities to provide permission to carry out following activities within a buffer zone area:

- Occupying any land without legal ownership or cutting trees, clear forest or cultivate forestland;
- Any activity damaging forest resources or setting fire in the forest;
- Excavating stone, earth, sand or mine or removing minerals, earth or other such materials;
- Using any harmful poison or explosive substances into the river, stream or source of water flowing in the buffer zone; and
- Hunting illegally and any act damaging to the wildlife.

**Conservation Area Regulations, 1996; Conservation Area Management Directives, 1999:** Conservation area management rules 2053 relates specifically to the conservation area management. It mentions about delineation of conservation area, establishment of head office and appointment of chief and also lists down the functions and duties of different committees such as conservation area management committees. The CAMCs are authorized to design and implement any activities for the protection of the natural environment, community development, development of natural heritage and its balanced management within own area by approving the work plan (operation plan) through the chief. They are also authorized to collect fees for, fishing, consuming of forest products, pasturing animal or using natural resources pursuant to these Rules and also to provide a license. The rules and regulations also mention about the list of prohibited activities within the conservation areas such as hunting, electrocution in rivers for fishing and using of illegal weapons. Any person shall take a license as prescribed to Schedule-5 from the Chief, paying the fee prescribed by the Chief, before doing commercial or any other activity by utilizing the natural resources of the government owned land of the Conservation Area or doing commercial activity in private

owned land causing impact on the natural resources of such Area. Any person by making a contract with the Institution, may operate a hotel, lodge, public transport or similar other service business in any land within the Conservation Area.

**Soil and Watershed Conservation Act, 1982:** for the conservation and management of watersheds of Nepal, the Soil and Watershed Conservation Act, 1982 was enacted. Section 4 of the Act provides an authority to watershed conservation officer to implement the following works in protected watershed areas:

- Construct and maintain dam, embankment, terrace improvements, diversion channels and retaining walls;
- Protect vegetation in landslide-prone areas and undertake afforestation programs; and
- Regulate agricultural practices pertinent to soil and watershed conservation.

Under Section 10 of the Act, Watershed Conservation Officer has authority to grant permission to construct dams, drainage ditches, canals, cut privately owned trees, excavate sand, boulders and soil, discharge solid waste, and establish industry or residential areas within any protected watershed.

**Environmental and Social Management: Safeguard Policies and Procedures, National Trust for Nature Conservation (2017):** In order meet the goal of promoting environmentally friendly and socially inclusive paths to harness the full potential of Nepal's conservation, NTNC has adopted a set of Environmental and Social Management Safeguard Policies (ESM) and Procedures. These strengthen NTNC's accountability to the societies and communities it aims to support; stakeholders in the conservation processes; and the broader conservation cooperation and donor community. The policy provides the NTNC team with a set of tools and guidance to be able to strategically design and implement environmentally and socially sustainable projects that support the achievement, equitability and sustainability of conservation results. It brings together in one process the various issues that need to be considered and mainstreamed into all of the work that NTNC does, providing a more streamlined approach to project management. The policy, safeguards and guidelines provided build upon and comply to the various policy and management instruments already developed and applied by Green Climate Fund (GCF), Global Environment Facility (GEF), the United States Agency for International Development (USAID), and other sources of financing and with its issuance, this policy is automatically applied to all NTNC-implemented projects.

This ESMP describes the environmental and social management policy with detail procedure and requirements, composed of following:

- Scope of application
- Principles
- Safeguard Policy on Natural Resource Management and Biodiversity Conservation
- Safeguard Policy on labour and working condition
- Safeguard Policy on Resource Efficiency and Pollution Control
- Safeguard Policy on Community Health, Safety and Security

- Safeguard Policy on Involuntary Resettlement
- Safeguard Policy on Cultural Heritage
- Safeguard Policy on Indigenous Peoples
- Policy delivery process and accountability

**Land Acquisition Act, 1977, Land Acquisition Regulations, 1969 and Land Acquisition, Resettlement and Rehabilitation Policy for Infrastructure Development Projects (2015):** The Land Acquisition Act 1977 and the Land Acquisition Regulation 1969 clearly outline the procedures of land acquisition and compensation for public purposes. The act states that, if the government has already used the land for public purposes in the agreement of land owner then it is not required to follow acquisition process but can determine compensation as per the act (Section 26). Section 27 of the act clearly states that land for public purposes can be acquired through negotiation and in such case, procedure laid down by the act do not have to be followed. Therefore, section 26 and 27 are applicable for obtaining land for the project. The applicable provisions in the act are:

- Report to be submitted in respect to findings of preliminary action for obtaining land;
- Notification of land acquisition (at local project office, district government office, local government body, district land revenue office, at locality) with following information.
  - a. The purpose for which land is required;
  - b. Whether other assets will be acquired along with the land to be obtained;
  - c. location detail of the land to be obtained;
  - d. plot number, area of the land to be obtained;
  - e. Land ownership transfer and adjustment in the Records of District Land Revenue Office;
  - f. Devolution of Ownership of land to GoN.

GoN, in 2015, has approved a policy on land acquisition, resettlement and compensation for infrastructure projects which is fairly consistent with the international practices of major donors. Section 6.4.1, 6.4.2 and 6.4.3 of the policy clearly outlines about “no displacement or reduce displacement” of the people as a result of the project. It also mentions that wherever displacement is unavoidable, the project should create conducive environment to complete the project in stipulated time making the process of land acquisition, compensation, resettlement, and rehabilitation simple, easy, transparent, and just.

**Labor Act, 2074 (2017):** The Labor Act, 2048 (1992) has been replaced by the Labor Act, 2074 (2017) and is passed for provisions for the rights, interest, facilities and safety of workers and employees in enterprises of various sectors. Chapter 2 of the Act provides directives for fundamental provisions relating to workers which forbids forced labor, child labor and discrimination. This Act in Chapter 12 describes the Provisions Relating to Health and Safety of labors that a proprietor shall make to his employee. The Proprietor shall make the arrangements of clean and healthy working environment, arrangements of necessary preventive personal devices for protection of health from adverse any other source, to make

provisions for sufficient supply of pure potable water during the working hours, to make provisions for separate toilets for male and female workers or employees at convenient place; necessary protective means shall have to be arranged for the protection of eyes and other organs of the workers and employees from injuries likely to be caused by dust or pieces while working in the Enterprise. This provisions under this Act are also in consistent with the International Labor Organization (ILO).

**Child Labor (Prohibition and Regulation) Act, June 21, 2000 A.D.:** This Act prohibits engaging child labor (below 16 years) in factory, mines and other risky works. This act along with others defines the construction enterprises as one of risky works.

**Labor Rules, 2050 (1993):** In chapter-3 of these rules describes that there will be no discrimination in remuneration to male or female worker or employee for engaging them in the works of the same nature of functions. This chapter also dictates regarding provision of compensation against injury, Compensation in case of grievous hurt resulting in physical disability, Compensation in case of death of any workers/ or employee.

**Environmental Guidelines:** The various Guidelines pertaining to infrastructure development works, provide guidance to project proponent on integrating environmental management and mitigation measures, particularly on the management of quarries, borrow pits, stockpiling of materials and spoil disposal, operation of the work camps, earthworks and slope stabilization, location of stone crushing plants, etc.

**Land Acquisition Guidelines:** The guideline describes the process of land acquisition according to provisions made by Land Acquisition Act 1977.

**Forest Policy, 2018:** The Forest Policy has clear objective to provide significant contribution in tourism promotion through protected areas, wetlands and forest management systems.

**Forest Sector Strategy (2016-2025):** This strategy has highlighted under outcome 5 to "increase the role of the private sector to encourage investment in cultivating forestry crops (including trees and NTFP/MAPs), in forestry operations, including service delivery, and forest-based enterprises and eco-tourism."

**Tourism Policy 2065/Nepal Tourism Strategic Plan 2016-2025:** Broadly speaking the current priorities of Nepalese tourism are shaped by these documents and these documents have set high priority for developing tourism infrastructure, increasing tourism activities, creating employment in the rural areas and sharing the benefits of tourism in the grassroots level. The National Tourism Strategic Plan (NTSP) for the period 2016-2025 is an all-encompassing strategy to support the growth of tourism through an integrated and detailed action plan. The NTSP's objective is to (i) position Nepal as a leading tourism destination in

the region and develop tourism as a significant contributor to the economy, and (ii) diversify current tourism offerings from the existing main hubs and provide a range of experiences of interest to international visitors from key markets.

**Government Policy Regarding Extraction of Construction Materials:** The local self-government regulation, 1999 has given authority to DDC and DFO (if the area lies within the forest boundary) to award license for extraction of riverbed materials. The EPR criterion requires IEE/EIA of such activities and approval from concerned ministry. The Mines and Mineral Act, 1985 requires that the extractable quantity of materials should be estimated, before tendering. There are no legal documents stating the specific conditions for protecting riverbed and surrounding environmental condition. Clause 33 of Mines and Mineral Regulation 1996 states measures to be done to protect environment of the area. The Environmental Management Guideline, 1999 (DoR) mentions that the quarry sites should be away from population centers, drinking water tank/supply, cultivation land, and bridge sites. For extraction of material from other areas including hill slopes, license should be obtained from Department of Mines and Geology, after meeting EPR criteria. The Forest Regulation, 1995 and National Park and Wildlife Conservation Act, 1972 also prohibits operation of quarry sites inside forested area, including community forestry.

**Violence Against Women and Non-discrimination:** The Constitution of Nepal (2015) prohibits untouchability and discrimination on the grounds of caste and recognizes such practice as an offence punishable by law. Article 18 of the Constitution (2015) guarantees equality and non-discrimination irrespective of caste and gender. Article 24 is explicit about citizen's right against untouchability and discrimination stating that "no person shall be subjected to any form of untouchability or discrimination in any private and public places on grounds of his or her origin, caste, tribe, community, profession, occupation or physical condition".

**CBDU Act (2011):** Nepal adopted the Caste Based Discrimination and Untouchability (CBDU) Act (2011) which is recognized as a landmark development to end the practice of untouchability and caste-based discrimination. The Act provides a legal regime of preventive and punitive measures to end caste-based discrimination and has outlawed caste-based discrimination in public and private spheres. Besides, Nepal has also endorsed number of international commitments in relation to non-discrimination, gender equality and social justice. Nepal became party to the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1991, and ratified International Covenant on Civil and Political Rights (ICCPR) and International Covenant on Economic, Social and Cultural Rights (ICESCR) without any reservations, demonstrating its commitment to eliminate all forms of discrimination against women.

**Gender Based Violence:** The Constitution of Nepal (2015) prohibits any form of Violence Against Women (VAW) and declares that such acts shall be punishable by law. According to Article 38 of the constitution, no woman shall be subjected to physical, mental, sexual,

psychological or other form of violence or exploitation on grounds of religion, social, cultural tradition, practice or on any other grounds and such act shall be punishable by law. The government enacted the Domestic Violence (Crime and Punishment) Act (2009) which illustrates physical and psychological violence within the definition of domestic violence. The Act further states about reporting of the crime both verbally or in writing and if the case does not get resolved through quasi-judicial bodies or mutual understanding, the victim can file a case directly to the courts.

### 2.1.1 Policies Supporting Indigenous/Vulnerable Communities

According to the 2011 census, there are 125 different social groups in the country with 123 different languages. Amongst these, the National Foundation for Development of Indigenous Nationalities (NFDIN) Act 2002 has recognized 59 different groups as indigenous nationalities/peoples (known as *Adivasi/Janajati* in Nepal). Further, the Nepal Federation of Indigenous Nationalities (NEFIN) has classified *Adivasi/Janajati* groups into five different categories while characterizing their economic and social features:

1. Endangered;
2. Highly marginalized;
3. Marginalized;
4. Advantaged; and
5. Disadvantaged groups.

These categories are based on their population size and other socioeconomic variables such as literacy, housing, land holdings, occupation, language and area of residence. Besides, the *Adivasi/Janajati*, there are other groups such as *Dalits*, Madhesi and Muslims, residing in Nepal that are not included as indigenous group but are equally if not more vulnerable. The 2011 census has listed 15 *Dalit* caste groups who are economically and socially most vulnerable, underprivileged and marginalized population in the country.

Nepal has ample legitimate provisions backed up by legislations to support the development of indigenous and vulnerable people. These are: **National Foundation for the Development of Indigenous Nationalities Act (2002)**, **National Human Rights Action Plan (2005)**, **National Women Commission (2002)**, and **National *Dalit* Commission (2002)**. These Acts and commissions are fully empowered to work for protection and promotion of rights of indigenous, marginalized groups, *Dalit* and women.

### 2.1.2 Policies on Gender Mainstreaming

The Nepal's Constitution has made provisions for women participation of at least 33% in its endeavor to ensure their inclusion. GoN, in its national level policies and plans, has also duly emphasized the importance of women in all spheres ranging from household to community and national level. Realizing the increased potentiality of women in the socio-economic and

political sectors, the government has increasingly provided more space for increased participation of women. In addition, GoN has established the National Women Commission, a national level well empowered body to look after the issues of women and take protective and defensive measures to address the issues and problems encountered by the women at all levels and in any forms such as domestic violence, women's right to properties and representation in the key positions with fair proportions.

The Government of Nepal (GoN), since the early 1990s, has been making important commitments to gender equity, equality and the empowerment of women in its policies, plans and programs. The GoN introduced a Gender Approach to Development in 1990 to enable women and men to participate equally in public and private life and realize their full potential in development. The Gender Equality and Social Inclusion Policy, 2014-2017 is the major guiding documents for GESI mainstreaming in Nepal.

Similarly, Nepal is signatory to a number of international human rights related conventions and declarations, which call for the elimination of all forms of gender-based discrimination, including those related to access to education, health and other services. The Convention on the Elimination of all forms of Discrimination against Women (CEDAW), signed by the GoN in 1991, commits Nepal to constitutional and legal equality, particularly in the fields of education, health, citizenship, property and employment. It also guarantees freedom from all kinds of violence and sexual exploitation.

Nepal Tourism Policy (2008) lays enhanced emphasis on rural tourism, community-based tourism and home-stays. The policy is explicit on augmenting shared benefits from tourism among the disadvantaged groups including women, *Madheshi*, indigenous people, etc. It also outlines about fostering tourism activities led by women or women groups with special promotional measures. The policy further specifies tourism advancement and development through the conservation of community based traditional knowledge and culture of indigenous people.

## 2.2 International Provisions and Guidelines

### **International Legal Provisions with likely Relevance for Tourism and Infrastructure**

**Projects:** Nepal is signatory in many international conventions, which deal with the protection of environment. For example, the convention on Biological Diversity was signed by Nepal at Rio De Janeiro on June 12, 1992. The convention provides a broad framework on the need for carrying out EIA to minimize adverse impacts of the projects and programs on biodiversity. The Article 14 of this convention provides the provision of impact assessment and minimization of adverse impacts. In broader sense, it calls upon the signatory parties to introduce appropriate procedures for EIA and ensure public participation, exchange information on adverse effects on biodiversity of other states, notify immediately possibly affected other states in case of danger or damage to biodiversity and to initiate action to

prevent or minimize such damages. Other legal obligations relate to the following international conventions and agreements:

- UN Framework Convention on Climate Change, 1992;
- The Plant Protection Agreement for the South East Asia and the Pacific (as amended), 1956;
- The Convention on International Trade in Endangered Species of Wild Fauna and Flora, (CITES), 1973;
- The Ramsar Convention (Convention on Wetlands of International Importance Especially as Water Fowl Habitat), 1971;
- The Convention for Protection of the World Cultural and Natural Heritage, 1972.

**ILO convention 169 on Indigenous and Tribal Peoples and UN Declaration for the Rights of Indigenous Peoples (UNDRIP, 2007):** The government of Nepal has committed to ILO Convention 169 and the UN Declaration for the rights of Indigenous Peoples in 2007. Both UNDRIP and ILO 169 advocates for the human rights and fundamental freedoms of Indigenous peoples. Following ILO 169, the government of Nepal has identified 59 indigenous ethnic groups and amended an Indigenous Nationalities Act 2002. The act categorized the 59 ethnic groups as advance ethnic group, deprived ethnic groups and endangered ethnic groups. ILO Convention 169 is a legally binding international treaty. UNDRIP is not mandatory. The project needs to pay high attention to such groups during consultation and mitigation of the impacts.

### 2.3 World Bank’s Environmental and Social (E&S) Safeguard Policies

The E&S safeguard policies of the WB applicable to “Sustainable Tourism Enhancement of Nepal’s Protected Areas (STENPA)” are mentioned below:

**Environmental Assessment (EA) OP 4.01:** This Policy is triggered if a project is likely to have potential (adverse) environmental risks and impacts in its area of influence. This is an overarching policy to maintain clean and healthy environment by minimizing, as far as possible, adverse impacts likely to be caused from environmental degradation on human, wildlife, plants, nature and physical objects. The OP 4.01 covers impacts on the natural environment (air, water and land); human health and safety and physical cultural resources; natural habits; forestry; Social aspects (such as indigenous peoples, involuntary resettlement) are covered by separate polices with their own requirements procedures, that is briefly discusses in following paragraphs.

**Natural Habitats (OP 4.04):** This policy is triggered by any project (including any subproject under a sector investment or financial intermediary loan) with the potential to

cause significant conversion (loss) or degradation of natural habitats<sup>9</sup>, whether directly (through construction) or indirectly (through human activities induced by the project).

**Forestry (OP 4.36):** The policy is triggered by whenever any Bank-financed investment project has (i) the impact potential on the health and quality of forests or the rights and welfare of people and their level of dependence upon or interaction with forests; or (ii) aims to bring about changes in the management, protection or utilization of natural forests or plantation.

**Physical Cultural Resources (OP 4.11):** This policy is applied to all projects located in, or in the vicinity of, recognized cultural heritages sites and projects designed to support the management or conservation of physical cultural resources.

**Involuntary Resettlement (OP 4.12):** Key objectives of the World Bank's policy on involuntary land acquisition are to avoid or minimize involuntary resettlement where feasible, exploring all viable alternative project designs; assist displaced persons in improving their former living standards, income earning capacity, and production level, or at least in restoring them; encourage community participation in planning and implementing resettlement; and provide assistance to affected people regardless of the legality of land tenure. The policy covers not only physical relocation, but any loss of land or other assets resulting in relocation or loss of shelter; loss of assets or access to assets; loss of income sources or means of livelihood whether or not the affected people must move to another location. When the policy is triggered, a Resettlement Action Plan (RAP) must be prepared. An abbreviated plan may be developed when the impacts on the entire affected population are minor<sup>10</sup> or less than 200 people are displaced by the project. In situations, where all the precise impacts cannot be assessed during project preparation, provision is made for preparing a Resettlement Policy Framework (RPF). The RAP /RPF must ensure that all the Bank's policy provisions detailed in OP 4.12 are addressed particularly the payment of compensation for affected assets at their replacement cost<sup>11</sup>.

**Indigenous Peoples (OP 4.10):** Key objectives of the Indigenous Peoples policy are to: ensure that indigenous people affected by World Bank funded projects have a voice in project design and implementation; (ii) ensure that adverse impacts on indigenous peoples are avoided, minimized or mitigated; and (iii) ensure that benefits intended for indigenous peoples are culturally appropriate. The policy is triggered when there are indigenous peoples in the project area and there are likely potential adverse impacts on the intended beneficiaries of these groups. When this policy is triggered an Indigenous Peoples

---

<sup>9</sup> Natural habitats are land and water areas where most of the original native plant and animal species are still present and natural habitats comprises many types of terrestrial, freshwater, coastal and marine ecosystem.

<sup>10</sup> Impacts are considered "minor" if the affected people are not physically displaced and less than 10 percent of their productive assets are lost.

<sup>11</sup> 'Replacement cost' is defined as method of valuation yielding compensation sufficient to replace assets, plus necessary transaction costs associated with asset replacement.

Development Plan is to be prepared to mitigate the potential adverse impacts or maximize the positive benefits of the project interventions.

**Gender and Development (OP 4.20):** The World Bank’s Gender equality strategy (2016-2023) is central to its twin goal of ending poverty and boosting shared prosperity. The strategy recognizes that stronger and better resourced efforts are needed to address gender inequalities. The World Bank’s gender development framework further identifies three pillars as fundamental towards achieving the goal. These are: i) human endowments ii) economic opportunities, and iii) voice and agency all of which are strongly interconnected to produce tangible outcomes. It is also recognized that gender-based violence is a constraint to the voice and agency which leads to reduced mobility, restriction in accessing jobs and long-term trauma and mental health issues of women. Given large variations on gender issues across the countries, the Bank’s OP/BP 4.20 requires each country to draw country gender assistance strategies and country partnership framework so that the interventions targeted to women are planned and implemented based on the ground realities. Projects in the sectors and thematic areas identified by the Country Strategy should be designed to adequately take into account the gender implications of the project. Preparation of a Gender Action Plan and its implementation should be ensured by each project undertaken with Bank support.

**Technical Assistance (TA).** All Technical Assistance (TA) activities in Bank assisted projects should be reviewed for their potential environmental and social implications, risks and impacts<sup>12</sup>. Since TA can take many forms, there are a range of safeguard instruments which could be appropriate. In virtually all cases it will be possible to prepare some level of analysis of potential environmental and social issues related to a proposed TA. Such an analysis or brief should be based on an issue scoping exercise involving stakeholder participation. The following guiding principles or concepts become relevant while applying safeguard in a TA: Integrate environmental and social objectives into the TA process; Promote transparency through stakeholder participation; Promote innovative environmental and social assessments; Promote analysis of alternatives; and promote environmental and social capacity building and institutional strengthening.

### **World Bank Group Environmental Health and Safety Guidelines**

The environmental, health, and safety (EHS) guidelines are technical reference documents with general and industry-specific examples of good international industry practice (GIIP) and these EHS guidelines are applied as required by their respective policies and standards. The EHS guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. Application of the EHS guidelines to existing facilities may involve the establishment of site-specific targets, with an appropriate timetable for achieving them. When host country regulations differ from the levels and measures presented in the EHS guidelines, projects are

---

<sup>12</sup> See Interim guidelines on the Application of safeguard Policies to Technical Assistance (TA) Activities in Bank-Financed Projects and Trust Funds Administered by the Bank.

expected to achieve whichever is more stringent. If less stringent measures than those provided in these EHS guidelines are applicable, in view of specific project circumstances, a full and detailed justification is needed as part of the site-specific environmental assessment.

### Comparison of the Government of Nepal and the World Bank Policies

Table 1: Comparison between GoN and World Bank policies and recommendations

Category	GoN Policy	WB Policy	The Gaps	Recommendations to bridge gaps	Actions to be taken
Environment (Natural Habitat & Forest including Terrestrial and Aquatic)	<p>Development project falling under EPR criteria shall be subjected to IEE/EIA based on the threshold criterion (for example- establishment and operation of hotels with fifty to hundred beds; opening of new areas for the promotion of tourism; operation of rafting activities on any river having fish or aquatic life; operation of new golf courses and organized water sports; promotion of tourism in a number exceeding 10,000/year at an altitude above 5000 meters and disposal and management of waste emitted from trekking points; preparation of management plans of national parks wild life sanctuaries, conservation areas and their buffer zones or launching of development and construction activities specified in such plans; construction of forest paths up to 5 kilometers long and of fire protection lines up to 10 kilometer long and collection of boulders, gravel, and sand and extraction of coal and other minerals from forest areas require IEE as per Schedule 1 pertaining to Rule-3. Similarly, the projects mentioned above crossing the limits require EIA and large construction activities such as establishment of resorts, hotels, safaris inside forest areas, buffer zones and environment conservation zones; operation of house boats on lakes, etc. require EIA. The approach often ignores potential risks and impacts based on the location and impacts associated with its development.</p> <p>Forest regulation requires permission from related authorities (DFO, CFUG, etc.) for any intervention in forested area. National Park and Wildlife Conservation Act demands permission from Ministry of Forest and Environment. Compensatory plantation ratio is not defined for service-oriented projects.</p>	<p>Environmental Assessment need to be carried out for identifying potential risks and adverse impacts, mitigation measures and environmental management plan. When natural habitat and forest policies are triggered environmental assessment and environmental management plan (EMP) will adequately address the relevant issues.</p>	<p>Activities listed in EPR Schedule I requires an IEE, and those listed in Schedule II requires EIA. The Schedule I and II is based on activity type, threshold/ size, as well as location. Potential risk is not formally considered for screening.</p>	<p>In order to fill the gap between WB and GoN requirements/approach, environmental screening is mandatory for each subproject, and consider potential environmental risk as stipulated in the project Environmental Screening Format. An Environmental Management Plan (EMP) shall be prepared for each contract during detail engineering design phase. The plan aims to address adverse environmental impacts arising due to project intervention. The project will strictly follow re-plantation and their ratio, if the project activity requires to fell the trees in close coordination with local forest authority and CFUG.</p>	<p>Screening of the subprojects based on potential E&amp;S risk;</p> <p>Environmental and Social Management Plan (ESMP) or SS-EMP for the activities identified during execution of the subproject;</p> <p>Compensatory Plantation Plan satisfying the ratio prescribed by the GoN against each felling of tree.</p>
Physical Cultural Resources	<p>Clause 28 of EPR states that physical and cultural resources shall not be disturbed or</p>	<p>EA needs to carry out in case such resources are</p>	<p>“Chance find” is not covered by the EPR requirements</p>	<p>ESMP shall address such issues following GoN and WB policy. Refer Annex 17 Guidelines for</p>	<p>ESMP and/ or SS-EMP shall be prepared.</p>

## STENPA Project – Environmental and Social Management Framework

Category	GoN Policy	WB Policy	The Gaps	Recommendations to bridge gaps	Actions to be taken
	damaged without the prior approval of the concerned authority.	found to be affected by the subproject		protecting Physical Cultural Resources.	
Acquisition of Land, Structures and other private facilities	<p>Clause 3 of this Land Acquisition Act states that any asset that is required for public purposes shall be acquired by providing compensation. Compensation Fixation Committee will establish the Compensation rates.</p> <p>Guthi Corporation Act, 2033 (1976). Section 42 of this Act states that Guthi (Religious Trust Land) acquired for a development must be replaced with other land, rather than compensated in cash.</p> <p>Land Reform Act (LRA) 2021 (1964). This Act establishes the tiller's right on the land, which he is tilling. The LRA additionally specifies the compensation entitlements of registered tenants on land sold by the owner or acquired for the development purposes.</p>	<p>Social Assessment (SA) needs to be carried to determine the impacts and an abbreviated or full Resettlement Action Plan is to be developed conducting census survey of affected families.</p> <p>RAP needs to be implemented to address impacts (losses and livelihoods needs) caused due to involuntary resettlement / land acquisition and provide compensation at replacement cost and R&amp;R assistance to the title holders and non-title holders including the customary land users.</p>	<p>No legal policy framework /legislations to address issues related to involuntary resettlement /physical and economic displacement/losses.</p> <p>GoN Act / regulation is limited to compensation payment to the title holders / owners but is silent about compensation to non- title holders (landless, encroachers or squatters).</p> <p>GoN national laws does not specify about provisions of mandatory replacement cost.</p> <p>No provision of R&amp;R assistance in GoN policies/Acts.</p>	<p>ESMP/RAP will be developed to address issues related to adverse impacts and payment of compensation and other assistance based on GoN and WB policy. Please refer Chapter Resettlement Policy Framework.</p> <p>Project requires paying full compensation at replacement cost (market price plus transaction cost) for lost asset to the title holders and also compensation and other assistance to squatters/encroachers in case of loss of structures.</p> <p>Project will provide R&amp;R assistance to the APs depending upon the impacts i.e relocation and loss of land/assets.</p> <p>Project requires to support APs to restore / improve their livelihoods through income/employment and skill training.</p>	<p>Resettlement Action Plan shall be prepared and implemented in case the project resulted in involuntary resettlement of the people. All entitlements based on eligibility will be provided to the APs.</p>
Indigenous People/ Community	<p>NFDIN Act 2002- The NFDIN Act-2002 defines indigenous nationalities (Adivasi Janajati) as distinct communities having their own mother tongues, traditional cultures, written and unwritten histories, traditional homeland and geographical areas, plus egalitarian social structures.</p> <p>NFDIN objectives are: i) to promote the overall development of indigenous nationalities ii) to preserve and promote indigenous languages,</p>	<p>Project needs to carry out social assessment to identify potential impacts on indigenous people and prepare IP plan to ensure that indigenous peoples receive social and economic benefits and are supported for culturally appropriate</p>	<p>GoN does not place emphasis in seeking broad consent or community support from the IPs while implementing the project.</p> <p>GoN process does not include FPIC and</p>	<p>Project will carry out free prior informed consultations with the indigenous community and other vulnerable communities to obtain broad consent for the project.</p> <p>Project will prepare Vulnerable Community Development Plan (VCDP) based on community needs of indigenous as well as other vulnerable communities.</p>	<p>Destination/subproject level VCDPs shall be prepared and implemented.</p> <p>Free Prior Informed Consultations shall be carried out and each consultation shall be documented.</p>

## STENPA Project – Environmental and Social Management Framework

Category	GoN Policy	WB Policy	The Gaps	Recommendations to bridge gaps	Actions to be taken
	script, culture, literature, arts, and history iii) to preserve and promote traditional indigenous knowledge, skills, and technology and iv) to promote the participation of indigenous nationalities in overall national development by maintaining good relations, goodwill, and harmony between different indigenous nationalities, castes, tribes and communities.	<p>livelihood improvement measures.</p> <p>WB policy requires to engage indigenous people (IP) using free, prior and informed consultation (FPIC) and obtain broad community support to the project.</p>	<p>engagement of IPs/ VCs.</p> <p>GoN has ratified ILO 169 and United Nations Declaration of Rights of Indigenous People (UNDRIP) which need to be fully adhered.</p>	<p>Provide opportunities, where possible, to deliver project benefits to the vulnerable communities from nature-based tourism subproject activities.</p> <p>Project needs to fully adhere GoN commitment to international conventions.</p>	
Loss of Income Source (Land based and others)	Compensation shall be provided for loss of crop damage/income source.	<p>Full compensation shall be provided to all loses including loss of income source/employment.</p> <p>Additional measures (training skills, technologies, etc.) will also be provided to restore the livelihood and standards of living of APs.</p>	<p>No explicit policy exists for the restoration and improvement of people's livelihood</p>	<p>Livelihood assistance shall be provided as per entitlement provision made by the project (if required).</p> <p>Straight forward policy shall be adopted rather than discretionary policy for providing full compensation and other assistance to the APs.</p>	<p>VCDP shall be developed in consultation with the affected IPs and vulnerable groups and implemented.</p>
Gender & Development	<p>The Constitution of Nepal has made provisions for women participation - at least 33% in all spheres of life at all levels. Moreover, GoN has established the National Women Commission, a national level well empowered body to look after the issues of women and take necessary measures to address them.</p> <p>GoN has also made its commitment to gender equity, equality and the empowerment of women by introducing a Gender Approach to Development. GoN is also a signatory to the Convention on Elimination of all forms of Discrimination against Women (CEDAW) since 1991, which call for the elimination of all kinds of gender-based discrimination.</p>	<p>Equal access will be ensured to female members as that of males in realizing benefits and utilizing the opportunities in Bank funded project.</p> <p>Appropriate gender action plans will be developed and implemented in close consultations and participation of women.</p>	<p>The GoN and World Bank policies are quite similar in terms of gender equality/ equity and empowerment.</p> <p>However, the planning and implementation mechanism remains weak to give desired results/impacts.</p>	<p>The project will carry out adequate consultations with the women, including FPIC with women of IP groups, right from early stage of project planning and implementation.</p> <p>Gender Action Plans for each destination/ sub-project will be prepared ensuring enhanced access of women to various opportunities created by the project, including but not limited to employment, skill development, use of technologies, business literacy and entrepreneurship.</p>	<p>Gender Action Plan for each subproject shall be developed and implemented.</p>

## Chapter 3: Description of Existing Environment

### Nepal

Nepal, a country of amazing extremes is the home of the world's highest mountains, historic cities and the forested plains where the regal tigers and the armor plated greater one-horned rhinoceroses' trundle at ease. Situated in South Asia and surrounded by the Tibetan Autonomous Region of China in the north and by India in the south, east and west, the of Nepal covers an area of 147,181 sq. km (between 80° 4' and 88° 12' East and 26° 22' and 30° 27' North). The length of the Kingdom is 885 kilometers east to west and varies between 145 to 241 kilometers north to south.

It represents a transitional zone of two bio-geographical realms: the Palearctic and the Indo-Himalayan. It is also at the crossroads of the Southeast Asian, Northeast Asian (Chinese) and Mediterranean tracts. Nepal can be divided broadly into three ecological zones: the lowland (Terai), the mid-hills and the high mountains.

The altitude of the Himalayan region ranges between 4,877 m. to 8,848 m. It includes eight of the highest 14 summits in the world, which exceed an altitude of 8,000 meters including the world highest mountain Sagarmatha (Mount Everest). The mountain region accounts for about 64% of total land area, which is formed by the Mahabharat range that soars up from 4,877 m. and the lower Churia range. The lowland Terai occupies about 17% of the total land area of the country.

The climatic condition ranges from the sweltering heat of the Terai in the lowland to the freezing cold in the Himalayan highland. As a result of extreme variations in altitude and climate, the flora and fauna of Nepal demonstrates a wide range of diversity. Competing for space within 1,000-km. east west and 200 km. north south, this small rectangle of topographical and hydrological extremes hosts over 6,500 flowering plant, 212 of mammal, 866 bird, 651 butterfly, 230 fish and 123 reptile species. It is also home to more than 23 million people.

Nepal's biodiversity conservation efforts are protected area focused that include a network of protected areas that totals an area of 34,419 km<sup>2</sup>, covering 23.39% of the land mass. The protected areas include 13 national parks, 1 wildlife reserve, 1 hunting reserve, 6 conservation areas, and 13 buffer zones. Nepal currently has 10 sites designated as Ramsar Sites (Wetlands of International Importance), with a surface area of 60,561 ha. Nepal is also home to 10 UNESCO World Heritage Sites, eight of which are cultural heritage sites (including Lumbini, birthplace of Buddha) and two are natural heritage sites (Chitwan National Park and Sagarmatha National Park).

The rich natural beauty and diverse cultural traditions also makes Nepal a sought-after tourism destination. The main tourism attractions of the country are the Himalayas,

protected areas, age long ancient cultures and unique biodiversity. The growing tourism sector is a significant part of Nepal’s national economy and the total contribution to GDP was 7.8% in 2017. The significant role in the national economy makes tourism as an inseparable part of the Nepalese society and carries huge potential to further contribute to the national economy.

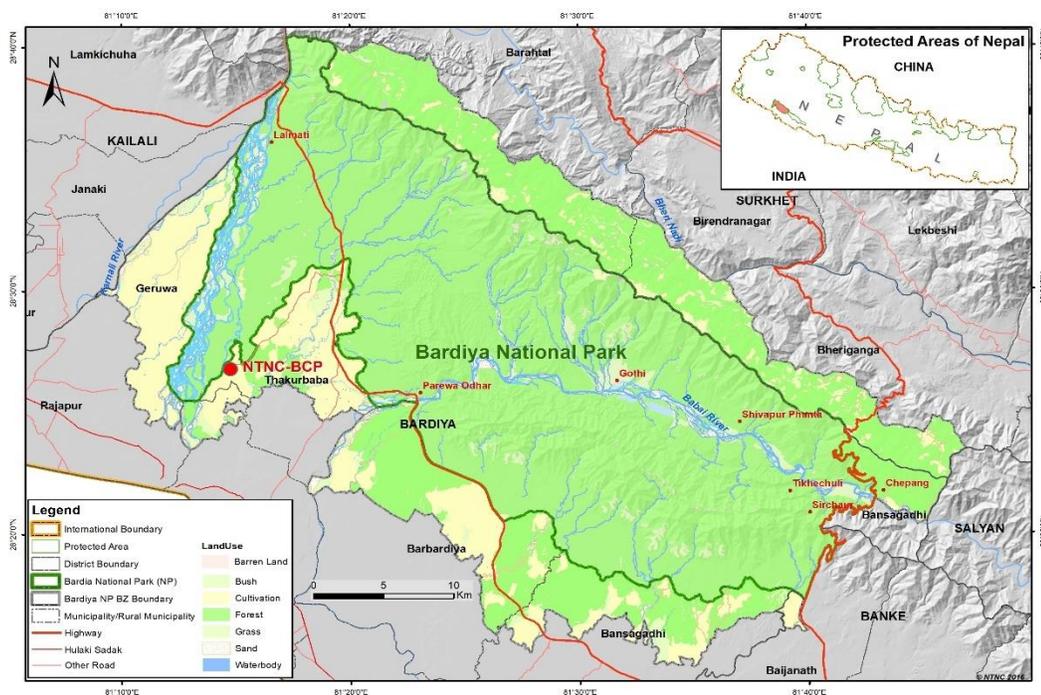


Map 1: Protected areas of Nepal

The core of the initial project destinations includes ACA, MCA, BNP, BaNP, RNP and ShuNP. The districts located in ACA, MCA and RNP are dominantly hilly and mountainous demonstrating a range of climatic zones from the sub-tropical lowlands and temperate rhododendron forests in the south to the dry steppe environment in the north. BNP, BaNP and ShuNP fall in the Terai region with sub-tropical to temperate climate containing a mix of forests, grasslands, and floodplain and foothill ecosystems. Traversing from the Terai lowlands to the high mountains, rapid change in the altitudinal gradient produces high turnover of the landscapes, climate and associated terrains that are niched by site specific cultural and natural characteristics. Hence, local environmental and social conditions in the two geographic areas of the project are dissimilar to each other because of distinct natural, historical and social context. The following section gives brief description of the destination areas. Detailed descriptions are included in Annex 21.

### 3.1 Bardia National Park

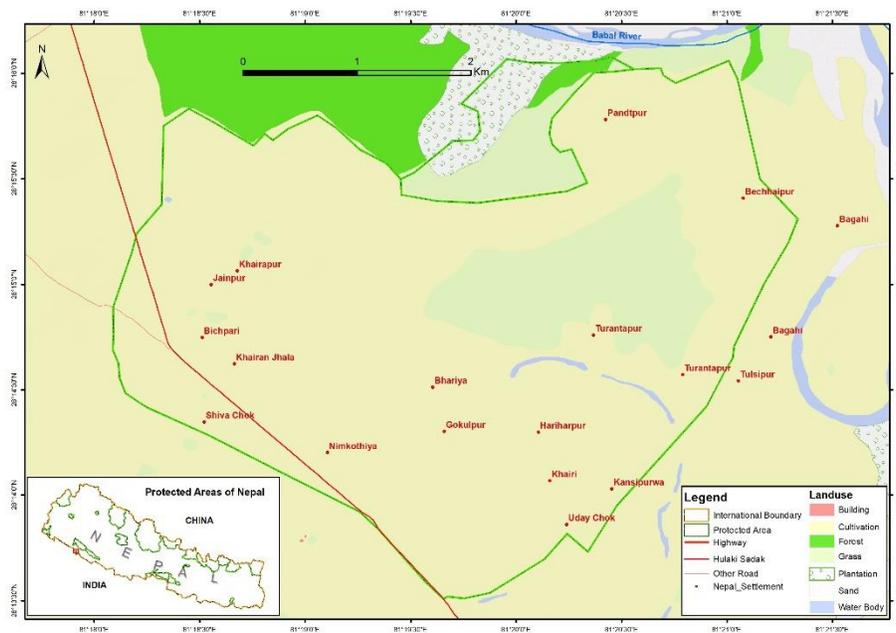
Bardia National Park stands as the largest protected area in the Terai region with an area of 968 km<sup>2</sup> in the core and 507 km<sup>2</sup> in its buffer zone, extending to Surkhet and Banke districts. The park is broadly characterized by Siwalik/Churia and flat Terai land consisting of important landscapes which are the Karnali flood plain, the Babai river valley and Siwaliks. The local climate exhibits tropical to sub-tropical climate causing hot and humid weather in summers and mild weather in winters. The park lies in the Karnali river basin, drained by Karnali, Babai and Orahi rivers. Land use type in the park is dominated by forests (76%) followed by cultivated lands (13%). Fifty-six species of mammals, 438 bird species, 52 herpetofauna species, and 121 fish species have been recorded from the park. Likewise, a total of 839 species of flora have been estimated in the park.



Map 2: Bardia National Park and its buffer zone

Bardia district encompasses most of the park with total area of 2,025 km<sup>2</sup> where 426,575 people of multiple ethnicity live. The *Tharu* community, which is recognized as an indigenous community are the most representative group and speak the *Tharu* language. Traditional agriculture is the mainstay of local livelihood and the bulk of agricultural production are rice and wheat harvests. Although 62.6% of the population have access to electricity, a large proportion of the population still rely on fuelwood as the main fuel for cooking. Overall literacy rate is low at 65% and women have less access to education than men. The customary way of life and religious customs and traditions of the *Tharu* community are the cultural attractions that thrive with wildlife tourism.

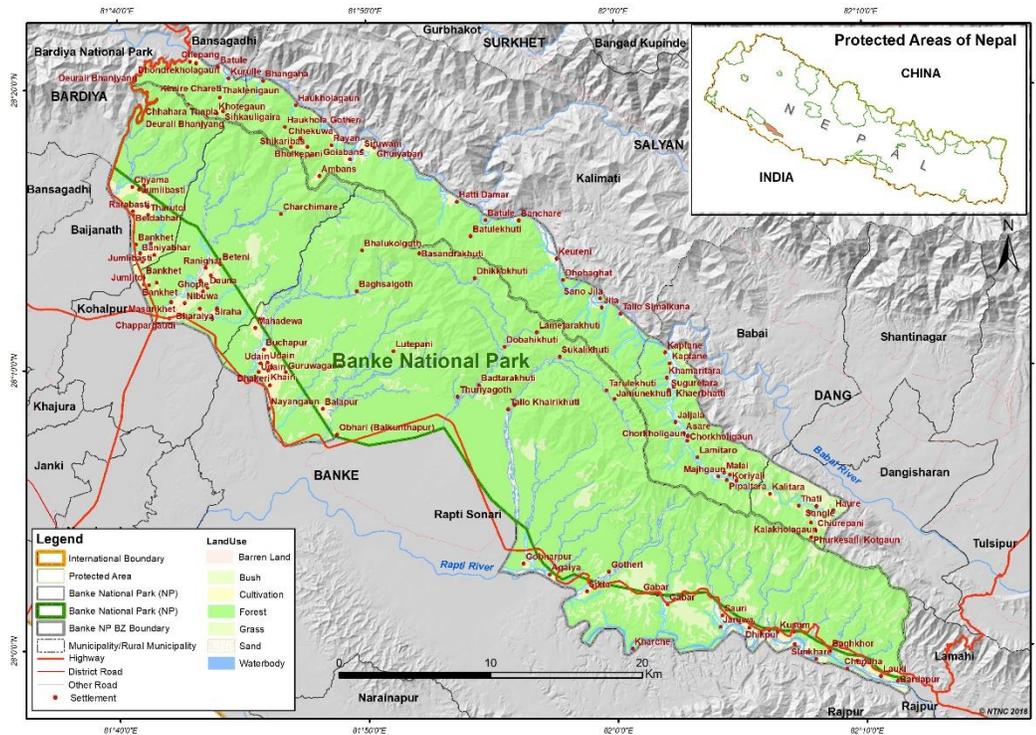
In addition, the adjoining Krishnasar Conservation Area located in Khairapur is also included as a part of the Bardia NP destination. Krishnasar Conservation Area, with an area of 172 ha, was declared in 2009 to aim to conserve the last remaining herd of Blackbucks in Bardia. Today, conservation efforts, with special protection measures have helped the blackbuck population to rebound, growing to 293 and standing as the northernmost surviving herd of blackbucks in the world. The first reintroduction of 28 captive blackbucks in Shukla Phanta NP have resulted in a population of 70 individuals in the wild. It stands as a potential tourism product which can attract tourists visiting the Bardia NP. The conservation area received 17,697 foreign visitors in 2017.



Map 3: Krishnashar Conservation Area and its surrounding

### 3.2 Banke National Park

Banke National Park extends over 550 km<sup>2</sup> in Banke district and its buffer zone, 343 km<sup>2</sup>, encompasses parts of Banke, Dang and Salyan districts. Added into the country's protected area system in 2010, it forms an important part of the Terai Arc Landscape providing additional habitat for tigers. The topography displays the flat plains, Bhabar foothills and Churia ridge containing various tropical and sub-tropical forest types. Ample rainfall during the summer monsoon is followed by relatively long, cold dry weather in the winters. The park is naturally demarcated by the Rapti and Babai rivers flowing through northern and southern edges, both originating from the Churia range. Land use in the park's buffer zone is dominated by forests (74%) followed by agriculture (11%). The park is home to 34 species of mammals, 236 species of birds, 24 species of reptiles and 55 species of fish. A total of 263 flora species are recorded in the park.

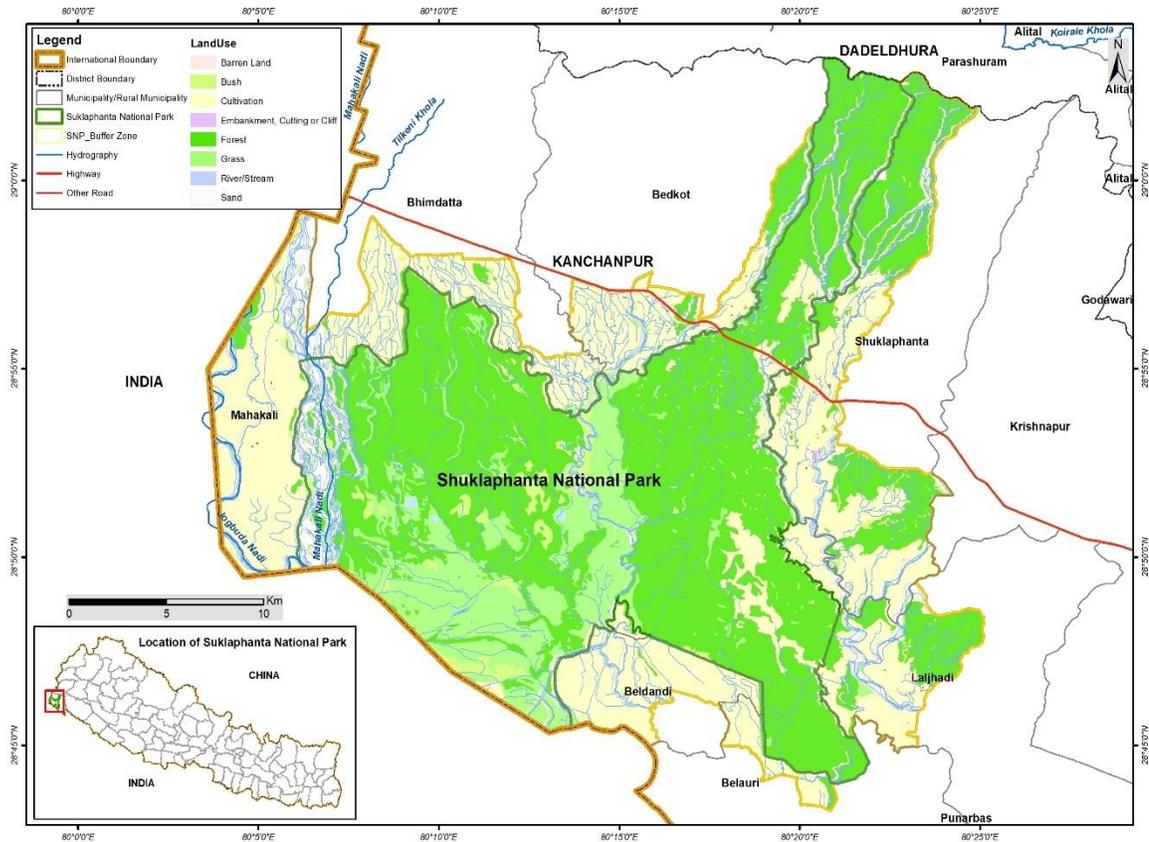


Map 4: Banke National Park and its buffer zone

Banke district covers an area of 2,337 km<sup>2</sup> and population of 491,313 people living in 94,693 households, about 24% of the total population are Indigenous People (IPs) with *Tharu* as the most populous ethnic group. Rice and wheat are the predominant crops cultivated. The average annual household income is \$1,133 with 26.4% of the population in poverty. The literacy rate is only at 62% where 55% of women are literate and 70% of males are literate; and 44.8% children under age five are malnourished. Banke National Park adjoins Bardia National Park and is equally rich in biodiversity and cultural attractions.

### 3.3 Shukla Phanta National Park

Shukla Phanta National Park (ShuNP), previously a wildlife reserve, was upgraded to national park in 2016. It is located in the Kanchanpur district of the far-west Terai and covers an area of 305 km<sup>2</sup> in its core area and 243.5 km<sup>2</sup> in its buffer zone. The park contains the largest grassland in the far-western Terai where the largest herd of swamp deer population survive. The park has the highest number of plant species recorded in Terai – 665 species and is also endowed with rich faunal diversity of 43 mammal species, 349 bird species, 2 reptile species, 21 fish species and 20 amphibian species. It also holds populations of megafaunas such as the Bengal tigers, one-horned rhinoceros, Asian elephants and Bengal florican.



Map 5: Shukla Phanta National Park and its buffer zone

Kanchanpur district covers an area of 1,620 km<sup>2</sup> and population of 451,248 people living in 82,134 households. About 29% of the population are Chhetris with Doteli as the most commonly spoken language. Rice and wheat are the predominant crops cultivated. The average annual household income is \$938 with 31.4% of the population in poverty. The literacy rate is only at 71% where 61% of women and 81% of males are literate; and 31.7% children under age five are malnourished.

### 3.4 Rara National Park

Rara National Park (RNP), with an area of 106 km<sup>2</sup> and elevation range of 2800 m - 4087 m, is located in the in Karnali Zone (Province 6) of Nepal. The park was established on August 1977. About 10.8 km<sup>2</sup> area of the park is occupied by Rara Lake, which is situated at an altitude of 2,990 m and declared as Wetlands of International Importance as Ramsar site on September 23, 2007. With an area of 198 km<sup>2</sup> buffer zone, the park extends in Mugu and Jumla districts.

Significant variation in forest types, vegetation and wildlife along the varied topography is the unique feature of RNP that includes the largest lake of Nepal. RNP comprises 11 forest

types, with estimation of 1,024 plant (including 16 endemic) species, and important NTFPs. RNP is home to 51 species of mammals, including endangered fauna such as Red panda, Musk deer, Himalayan Tahr, Serow, Goral, and Himalayan black bear. Among these, Musk deer and Red panda are considered as the flagship species of the park. The park is also rich in avifauna, with 272 species of birds, including 49 species of water birds. It is also one of the important sources of fresh water, with 3 species of endemic fishes, including Rara Snowtrout (*Schizothorax raraensis*).

The buffer zone is predominantly inhabited by Chhetris (49%) followed by Thakuri (15%), and mixed minorities of Dalits (15%) and Tamang (8%). According to 2011 census, population of the buffer zone is 13,876 of which 10,617 people live in Mugu district, and 3,259 people live Jumla district. There are 2,028 households in buffer zone of Mugu district, and 520 households in buffer zone of Jumla district.



Map 6: Rara National Park and its buffer zone

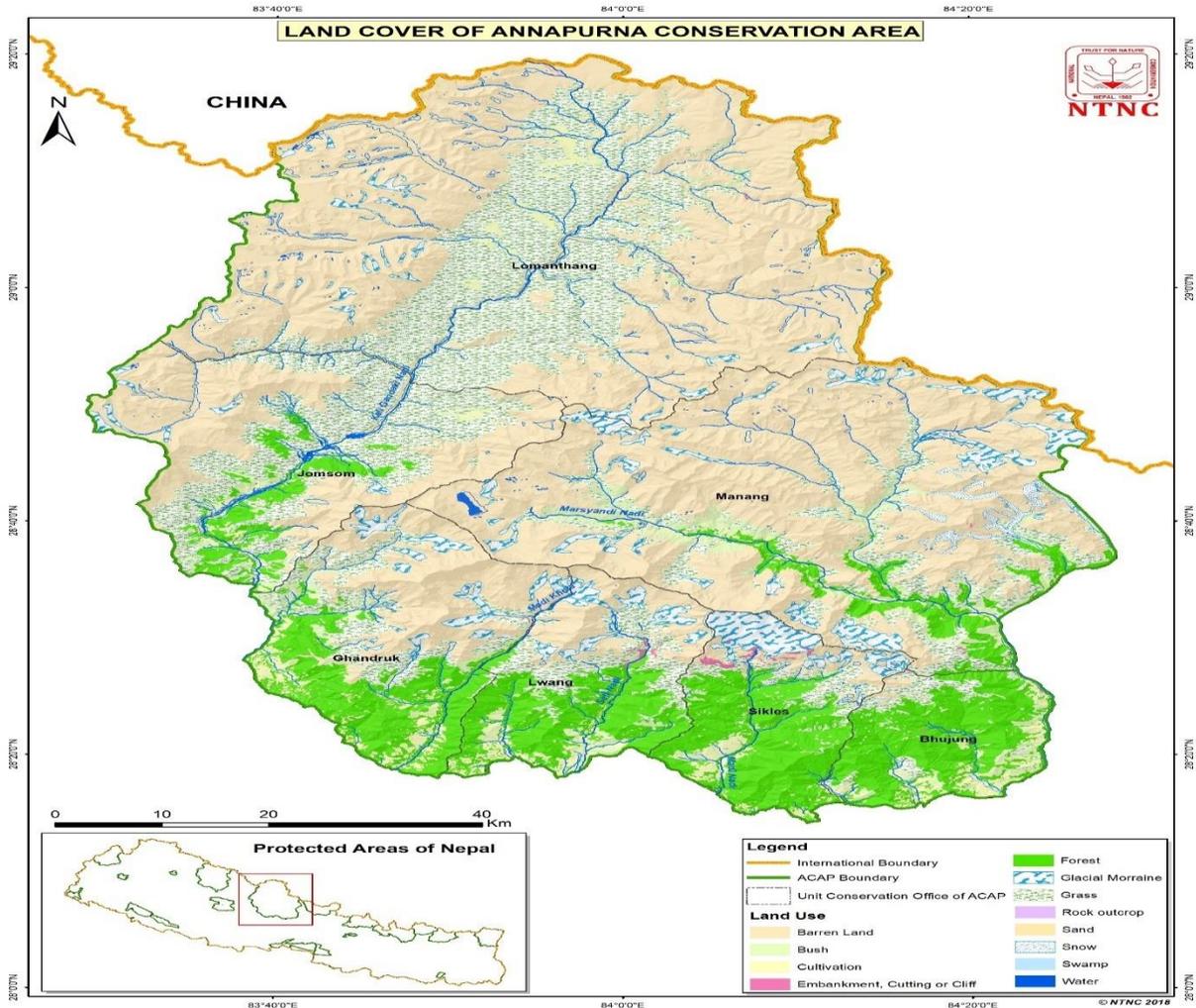
RNP is one of the potential tourism destinations in high mountains of Nepal. However, the number of visitors to RNP is low, nearly 200 foreign tourists are visiting RNP per year. Major reasons of low turn out of the visitors may be due to poor tourism infrastructure, lack of road

network, and communication facilities. The park and surrounding areas are rich in ancient temples and shrines, including Chhayanath temple, Khasma Malika temple of Mugu district. Whereas, Kanaksundari temple and famous temple of Chandananath are located in Jumla district.

### 3.5 Annapurna Conservation Area

Annapurna Conservation Area (ACA) is the largest protected area of Nepal with an area of 7,629 km<sup>2</sup>, covering 27% of the total protected area coverage. The conservation area includes the entire district of Mustang, some parts of Myagdi and large parts of Kaski, Lamjung and Manang districts. ACA is dominated by mountain ranges and peaks - the family of Annapurna peaks. The varied topography of ACA is nestled in two distinct eco-regions viz. the Trans-Himalayan region consisting of Upper Kali Gandaki Valley and Upper Marshyangdi Valley; and the Cis-Himalayan region consisting of Modi Valley, Bhujung region, Lower Kali Gandaki Valley, Lower Marshyangdi Valley and area west of Modi. ACA demonstrates ranges of climatic zones from tropical to nival and rainfall greatly correlates to the aspect, altitude and rain shade area. The Kali Gandaki; Marsyangdi; Seti; Madi and Modi Rivers are major river systems in ACA. Land use pattern is dominated by barren land (50%) followed grassland/rangeland (about 21%). ACA harbors 105 mammal species; 488 bird species; 41 reptile species; 23 amphibian species and 20 fish species. Plant diversity of ACA represents over 18% of country's flora; with 1,264 species of flowering plants including 41 species of orchid; 15 species of gymnosperm; and 73 species of pteridophytes.

ACA holds the human population of >91,000 with more than 45% of male and over 54% female. There exist more than 28 caste/groups with diverse cultural and linguistic variations. The *Gurung* are the dominating hill community comprising 30% of the population. Agriculture, remittance and tourism are the major sources of economy in ACA. Districts except Manang & Mustang are food surplus. The major crops grown are rice, maize, wheat and millet in Kaski and Lumjung, whereas maize; wheat; barley; buckwheat and potatoes in Manang, Myagdi and Mustang. Some unique traditions in ACA are *Amchi* (folk medicine practice in *Mustang*); *Ghatu* (folk *Gurung* dance blended with Hindu myth); *Losar* (the Tibetan New Year festive); *Saga Lug Ka* (Ritual for good faith on the climate for superior harvest); *Duk Chu* (Monk's dance for a prosperous year); *Tenji* (annual festive in *Lo-Manthang*); and *Toranla* (Festival in the lower *Mustang*). ACA is one of the most splendid ecotourism and the largest and the world-class trekking destinations where >126,000 tourists annually visit here.



Map 7: Annapurna Conservation Area

### 3.6 Manaslu Conservation Area

Manaslu Conservation Area (MCA) lies in the northcentral region of Nepal, on the eastern slopes of the Kali Gandaki river basin. It covers 1,663 km<sup>2</sup> and includes one rural municipality of Gorkha District, viz. Tsum-Nubri Rural Municipality with seven wards - Samagaon, Lho, Prok, Bihi, Chumchet, Chhekampar and Sirdibas. The elevation ranges from 1,239 m in the south to 8,163 m at its highest point, Mt. Manaslu. MCA has five climatic zones: viz. sub-tropical, temperate, sub-alpine, alpine and nival. Average annual rainfall is around 1,900 mm and significant portion of MCA is surrounded by high mountains, protecting it from direct southern monsoon clouds and creating partial rain-shadow areas. MCA constitutes the Cis-Himalaya in the south and the arid Trans-Himalayan high pastures in the north. The Budi Gandaki is the major river system which joins with Siyar Khola and drains most of MCA. Area coverage under agriculture is 1.8%, forest 13.28%, shrub land 2.79%, grassland 23.66%, river/riverbed 1.21%, snow/glacier 6.8%, lake/pond 0.047%, barren land 49.99% and cutting/cliff 0.38%. MCA harbors 39 species of mammals, 201 bird species 5 reptile species,

4 amphibian species and 1 fish species. A total of 756 species of plants have been recorded in MCA.



Map 8: Manaslu Conservation Area

The total population in MCA is 6,923 comprising of 3,665 females and 3,258 males in the 56 major villages. The Bhotias are the major ethnic group in almost all villages. The majority of the population (67.57%) above 6 years of age are illiterate. Of the total literate population, 44.25% are male and 21.98% are female. Around two third 62% of households in the MCA are involved in agriculture and livestock herding. Few proportions of households (1%) are involved in tourism related activities. The number of tourist visitors over the recent years has shown gradual increase with 7,091 visitors in 2017/18, about 19 percent increase from 2016/17 and 68 percent increase from 2015/16 figures. Majority of the population are Buddhists who celebrate the Lhosar festival and many communities also celebrate festivals of mane nach (dance), arrow shooting, and offering puja in Gompas. There are 92 gumbas in MCA the important gumbas being the Shringi Gumba in Bihi, and Mu and Rachen Gumbas in Chhekampar.

### 3.7 Existing Issues and Potential Threats in the Destinations

The Terai protected areas – Bardia, Banke and Shukla Phanta NPs (with other Terai parks) are famously critiqued to be '*islands in the sea of humans*' suggesting the sensitivity of these parks. With rapid growth in human population and the need for rapid infrastructure

development, more pressure to these parks is imminent. Within the park's core areas, multitude of problems persist that has implications to the long-term sustenance of the natural systems. Among the more prominent ones - succession of prime grasslands into woodlands pose major threat to the prey-base; prolonged dryness during winter cause shortage of water for wildlife and also increase the chance of large scale forest fires; rapid spreading of invasive species is a persisting problem which are detrimental to the native species and decline the quality of habitats and availability of forage; high monsoon floods temporarily inundate grasslands and riverine forest understory while frequent high floods are observed to have long term effects, altering landscapes; and scientists argue that global warming in the sub-tropical climate regimes is leading to alteration of local vegetation patterns and climate conditions which will ultimately influence the distribution of species in the long run (elephants shifting to higher altitudes, tigers occupying hilly forested areas, decrease in abundance of sensitive wildlife such as birds). Shrinking of important wetlands has connections to wider dynamics of catchment areas and necessitates better understanding of the lentic and lotic systems, the geology and their collective workings in the watershed system, and adopt holistic approach to watershed management.

Among the human induced problems, illegal occupancy of human settlements inside park core boundaries is a lingering problem since lot of these encroachers hold title to their land they occupy, causing legal hassles in relocating them, and rampant grazing of cattle inside the core is a major problem in some PAs such as Bardia NP. Although strong anti-poaching measures in the Terai PAs have led to significant decline in poaching, presence of this problem cannot be ruled out in the mountain PAs since law enforcement presence in far and remote parts is still lacking. Many communities in ACA and MCA follow Buddhist traditions and abstain from taking life (non-violence) but there are evidences that outsiders are engaged in poaching blue sheep, musk deer, etc. and even snow leopards, and it is difficult to detect poaching. Warming in the Himalayas is said to be at higher speed causing change in microclimatic conditions eg, prolonged droughts in some areas leading to desertification while other areas receive more than normal precipitation - these events are erratic and needs long term observation to ascertain the weather patterns. GLOFs due to melting of the glacier lakes are a major risk and a single GLOF event can lead to scores of problems downstream. Receding snow lines due to warmer temperature correlate to advancing tree lines which will result in pasture lands spreading up at higher altitudes and create more grazing competition between the domestic animals and wild ungulates. Such compressing of snow leopard habitat will further aggravate conflicts with humans and co-occurring species will experience more intense interspecies competition because of increased habitat overlap.

Similarly, on the social aspects, human development indices in most of the districts of the destinations are not encouraging in terms of indicators such as poverty rate, literacy rate, child mortality, etc. Destination such as ACA has multiple districts with variation in poverty levels between districts and notable difference in demography and socio-economy. With dominating landscapes of alpine and nival conditions, ACA and MCA have less prospect for

agriculture and local communities rely on tourism, livestock raising and jobs away from home. Most of MCA lies in upper Gorkha district which is relatively more remote, people have less access to economic opportunities, health care and modern communication. However, population density is low in MCA exerting less pressure to the environment, but integration of the population to the economy lags behind. In contrast, districts of Banke, Bardia and Kanchanpur have higher population density and similar poverty levels, economic activity are clustered in the city areas and rural places are still subsistence agriculture driven. The buffer zone areas are mostly agrarian, most households with less land ownership are vulnerable to economic shocks caused by unproductivity of cultivation, natural disasters (flooding) and conflicts with wild animals (especially near the core areas). Homestays, after the success in mountain destinations have found their way in Terai buffer zone communities, gradually establishing accommodation and culture-oriented tourism markets in these communities, mostly catering domestic tourists. Resources channeled through the park for local development in these areas cannot be better than the revenue generated, thus aspiring the tourism potential to grow and be actualized. Rara National Park and its buffer zone falls in Mugu and Jumla districts (situated in the Fore Himalaya physiographic zone) are among the districts with highest poverty levels and lowest performance in development indices. The districts are largely overlooked in development and have not received much outside interventions. The project will be the first of its kind intervention in the area presenting ample opportunity to bring impact on improving the socio-economic conditions of the local communities through the project's NBT approach.

The STENPA project will invest in support infrastructures such as last mile roads, trekking trails, information facilities, waste management, wilderness enhancement, etc. Since majority of the activities are to be invested inside PAs, the level of threat of negative environmental impacts can be presumed less since PA regulations have clear stipulation on the type and scale of development permitted. However, some involuntary resettlement cases, deprivation of vulnerable groups to the project benefits (or even worsening their conditions), gender issues /problems, etc. can be anticipated which will need to be considered in the project's social development plans. Those infrastructure works falling outside PAs and in purview of local and provincial districts may be liable to more environmental and social risks – impact on land and water resources, pollutants, labor influx, land acquisition, involuntary resettlement, etc. will need to be examined and mitigated through adequate plans such as ESMP, RAP, VCDP, etc.

## Chapter 4: Potential Environmental and Social Impacts and Mitigation Measures

### 4.1 Brief Overview of Project Activities

The STENPA Project will invest in activities aiming to diversify and promote long term sustainability of quality tourism in conservation areas, national parks, gateway cities, and areas with NBT potential. Bardia, Banke, Shukla Phanta National Parks, and their respective buffer zones in the Terai and Rara National Park, Annapurna and Manaslu Conservation Areas in the Middle Hills and Himalayas were identified as the cores of the initial project destinations. The project may also support in some religious sites and community forests to pilot small scale feasible and demand-driven NBT initiatives. Additional areas may be added as project destinations by mutual consent. Annex 1 (c) describes the project component and activities. The type of activities may be grouped in the following categories.

**Group I: TA to Policy, Regulation, Strategy, Plan and Programs** such as development of sustainable tourism development strategy for PA, NBT- provincial level tourism master plan, updating PA Management Plans, tourism road upgradation development plan, landscape zonation development, DVIPs, etc.

**Group II: Strengthening capacity and institutions** such as improvement of ICTs, access to finance, training programs related to tourism, environmental protections and skill development program for local communities.

**Group III: Investment in physical Infrastructure** such as road upgrading works, construction of culverts, trekking trail facilities, waste management facilities, develop public services and transportation system, develop helipads, develop and upgrade trekking trails, porter shelters, check posts, visitor centers, museums, works for developing and enhancing adventure/sports tourism, viewing platform/ wildlife observation towers, rescue shelters, renovate heritage (monasteries, cave, *Maane*, *Chhorten*, temples, etc.), camping site, water-hole for wildlife, restoration of wet-land, park facilities, signage, etc.

### 4.2 Potential Environmental Impacts of the Project

The project is classified as category B due to limited adverse environmental impacts which are site specific and can be addressed through mitigation measures. Project will not finance high risk activities that may result significant adverse impacts that are sensitive, diverse or unprecedented, and may affect an area broader than the site or facilities subject to physical works. (*Annex 1 (a): Exclusion List of Project Activities*). The project anticipates limited adverse impacts, except for the loss of land, damage to local infrastructure, loss of vegetation, and slope cutting. With prudent management options and readily available mitigation measures incorporated in the planning and design, most of these adverse impacts can

adequately be mitigated. ESMF makes provision that all infrastructure development works considered under this project will be screened and will have an ESMP. The project will also give high priority to the green and nature-based approach to infrastructures planning, design, and construction and operation stages to avoid/minimize negative environmental impacts and augment the possible positive impacts.

#### 4.2.1 Potential Beneficial Environmental Impacts

The beneficial environmental impacts due to the project will at large benefit the local communities and local environment at the project destinations by initiating environment- and nature-friendly practices. In addition to mitigating adverse impacts, the project finances environmental management activities including wildlife conservation, conservation breeding and wildlife rescue center, wilderness enhancement and habitat management, sanitation and waste management facilities, landslides/ erosion protection and watershed management, drainage and river-bank protection works, etc. All the policies and plans prepared under the project will be subjected to environmental overview analysis for mainstreaming environmental consideration which is expected to result environmental benefits. Feasibility studies to be conducted prior to construction works will provide opportunities to improve environmental outcomes of the project investments. Broadly, the following beneficial impacts are anticipated by the project:

- Development of tourism infrastructures will focus on addressing basic services gaps for the local population of the destination areas and reversing environmental degradation through environmental management and protection activities;
- The policies and plans (such as the ITDPs) will be prepared mainstreaming environmental consideration, thus avoiding the negative impacts of integrated tourism development and necessary preventive measures and management arrangement will be put in place;
- Improvement of the professional abilities of staff involved in tourism services sector as well as agencies to monitor negative environmental impacts and develop ways to reverse and enhance the natural environment systems; and
- Various feasibility studies will provide opportunities to incorporate environment, health and safety, and environment management aspects in the development of tourism business.

#### 4.2.2 Potential Negative Environmental Impacts

The negative impacts of the project will arise mostly from tourism infrastructure development activities that will involve excavation for roads, generation of waste and effluents, dust and smoke, visual pollution, etc. As mentioned above, the project will not undertake high risk activities listed in the *Annex 1(a)- Exclusion List of Project Activities*. Nonetheless, the following negative impacts are expected at moderate to low levels.

- Loss, or degradation or disturbances to wildlife and wildlife habitats;
- Loss of and/ or degradation of forest, trees, vegetation;
- Over and/or illegal harvesting of wild plants, herbs, NTFPs, and fishes, birds, wildlife
- Increased human-wildlife conflict;
- Loss of topsoil from land clearing, soil erosion, landslides and stream sedimentation;
- Dust pollution, noise and other harmful emissions;
- Pollution due to solid waste;
- Pollution of water bodies and land due to wastewater and effluents;
- Loss or degradation of good/ fertile agricultural land;
- Damage to other / existing infrastructures;
- Degradation of aesthetic value and scenic value;
- Land use change due to expansion of hotels and new settlements;
- Degradation of physical cultural resources; and
- Health and safety risks (accidents, injuries, falls, pollution, sanitation, hygiene, waste disposal & diseases) to workers, community and visitors.

The sources of the impacts and their potential mitigations are summarized in Table -1 below. Annex 3(b) contains more details of the issues/ impacts and mitigations.

Table- 1: Summary of potential environmental impacts/ issues and mitigations

SN	Potential environmental impact/ issue	Cause or source of impact/ issue	Potential mitigation measures
1	Loss, or degradation or disturbances to wildlife and wildlife habitats (including terrestrial, aquatic species and birds)	<ul style="list-style-type: none"> <li>➤ Infrastructures location / construction in or close to natural habitat</li> <li>➤ Noisy and/or disturbing construction activities</li> <li>➤ Influx of people</li> <li>➤ Pollution of habitats due to haphazard disposal of solid and liquid wastes (generated by construction activities, wastes from hotel/ restaurant/ lodges, generated by tourists etc.).</li> <li>➤ Forest fire (may be caused by workers, visitors, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Locate infrastructure away from the habitat and movement routes</li> <li>➤ Nature- / environment-friendly design of infrastructure</li> <li>➤ Environmental Management Plan to address noise, wastes, influx of people, etc.</li> <li>➤ Waste Management Plan (to avoid, minimize, reuse, recycle wastes)</li> <li>➤ Environmental standards to be followed by the hotels/ resultants/ lodges</li> <li>➤ Awareness and capacity buildings including forest fires related</li> </ul>
2	Loss of and/ or degradation of forest, trees, vegetation (cutting and burning of trees and vegetation)	<ul style="list-style-type: none"> <li>➤ Infrastructures located in forest areas</li> <li>➤ Site clearance for construction purpose</li> <li>➤ Pollution of forest areas due to haphazard disposal of solid and liquid wastes</li> <li>➤ Collection of fuel wood by workers and by the hotels/ restaurants</li> <li>➤ Encroachment of forest area for business, entrepreneurs etc.</li> <li>➤ Forest fire (may be caused by workers, visitors, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Locate infrastructure away from the forest to the extent possible or minimize forest land occupied by the infrastructure</li> <li>➤ Control disposal of soils and other construction wastes in the forest area</li> <li>➤ Control unauthorized entry of workers or other persons in the forest area</li> <li>➤ Control wastes disposal in the forest area/ waste management system</li> </ul>

			<ul style="list-style-type: none"> <li>➤ Provision of alternative fuel (renewable fuel)</li> <li>➤ Control encroachment (strengthen monitoring and enforcement)</li> <li>➤ Awareness and capacity buildings including forest fires related</li> </ul>
3	Over and/or illegal harvesting of wild plants, herbs, NTFPs, and fishes, birds, wildlife, etc.	<ul style="list-style-type: none"> <li>➤ This may be caused by the labor influx, or tourist flow, or demand by the tourists (by construction workers, tourists and travelers, entrepreneurs or local people to meet the increased demand of forest and natural products due to increased number of people including tourists)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Promote controlled and sustainable harvesting (no harvesting of certain species)</li> <li>➤ Strengthened monitoring</li> <li>➤ Provision of alternatives to wild products.</li> <li>➤ Raising awareness</li> </ul>
4	Increased human-wildlife conflict	<ul style="list-style-type: none"> <li>➤ Due to increase human movements, variety of disturbances created, and loss of/ degradation of habitat or forests (Item 1 and 2)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Locating infrastructure away from habitat, movement route, etc.</li> <li>➤ Control noise and other disturbances in the sensitive locations</li> <li>➤ Mitigations mentioned in item 1 and 2</li> <li>➤ Capacity building and awareness</li> </ul>
5	Loss of topsoil from land clearing, soil erosion, landslides and stream sedimentation (due to infrastructure construction)	<ul style="list-style-type: none"> <li>➤ Infrastructure located in erosion and landslide prone zones</li> <li>➤ Construction practices that are destructive, and poor management of construction sites</li> <li>➤ Due to drainage and surface run-off (disturbance to natural drainage patterns by infrastructures)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Locate infrastructure away from the unstable, landslide and erosion risky zones</li> <li>➤ Environmental Management Plan that includes environmental-friendly designs and construction practices</li> <li>➤ Water management measures</li> </ul>
6	Dust pollution, noise and other harmful emissions	<ul style="list-style-type: none"> <li>➤ This may be caused by infrastructure construction activities (e.g. heavy equipment, blasting, drilling, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Environmental Management plan that includes measures to control dust, noise and emission</li> </ul>
7	Pollution due to solid waste	<ul style="list-style-type: none"> <li>➤ Solid waste generated by tourism activities and services (generation of variety of wastes and improper disposal of wastes)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Provision and operation of Solid waste management facility, as needed</li> <li>➤ Reduce waste, as well as Reuse and Recycle (composting, waste to energy etc.)</li> <li>➤ Proper management of labour camp</li> <li>➤ Prepare and implement Environmental Management Plan</li> </ul>
8	Pollution of water bodies and land due to wastewater and effluents	<ul style="list-style-type: none"> <li>➤ Sewage and other wastes generated by the hotels/ restaurants, and by the visitors</li> </ul>	<ul style="list-style-type: none"> <li>➤ Provision of sanitation facility, including liquid waste management (e.g. sewage treatment facility)</li> <li>➤ Standards to be followed by the hotels/ restaurants</li> <li>➤ Proper management of labour camps</li> <li>➤ Mitigation item 7</li> </ul>
9	Loss or degradation of good/ fertile agricultural land	<ul style="list-style-type: none"> <li>➤ Due to construction of infrastructure</li> <li>➤ Due to unplanned expansion of settlement and construction of building (accommodation, hotels, restaurants, etc.) to meet the increased visitors need</li> </ul>	<ul style="list-style-type: none"> <li>➤ Land use zoning, land use plans, community level/ settlement level plans</li> <li>➤ Awareness raising, and capacity building of local government to plan and enforce</li> </ul>

10	Damage to other / existing infrastructures (for example construction of road damaging trekking trails, or damaging water supply lines, etc.)	<ul style="list-style-type: none"> <li>➤ Due to erroneous planning and location of infrastructure,</li> <li>➤ Inappropriate construction practices (such as construction spoils disposal, etc.)</li> <li>➤ Lack of coordination</li> </ul>	<ul style="list-style-type: none"> <li>➤ Careful location of the infrastructure to avoid damage or degradation of other infrastructure</li> <li>➤ Coordination with agency that is responsible for other infrastructure</li> </ul>
11	Degradation of aesthetic value and scenic value	<ul style="list-style-type: none"> <li>➤ Due to erroneous waste disposal (see item 6 and 7)</li> <li>➤ Due to inappropriate infrastructure</li> <li>➤ Due to haphazard construction of building to meet increased visitors flow</li> </ul>	<ul style="list-style-type: none"> <li>➤ Provision of Waste management facility (see item 7 and 8)</li> <li>➤ Promote infrastructure type and design that are compatible with the aesthetic and scenic value</li> <li>➤ Incorporate local architecture and material in the building design and construction</li> </ul>
12	Land use change due to expansion of hotels and new settlements e.g. conversion of agricultural land to settlements, etc.	<ul style="list-style-type: none"> <li>➤ Due to promotion of destination, and increased visitors flow in the area</li> <li>➤ Infrastructure development</li> </ul>	<ul style="list-style-type: none"> <li>➤ Land-use plan, community level-plan, etc.</li> </ul>
13	Degradation of Physical Cultural Resources	<ul style="list-style-type: none"> <li>➤ Excavation and filling activities, infrastructure construction in or close to the site of physical cultural resources</li> <li>➤ Waste (solid and liquid) disposal close to such site</li> </ul>	<ul style="list-style-type: none"> <li>➤ Locate infrastructure away from the physical cultural resources site</li> <li>➤ Provision of protection measures if infrastructure is located close to the site</li> <li>➤ Waste disposal away from such site</li> </ul>
14 (a)	Health and safety issues during construction (accidents, injuries, falls, waste disposal, sanitation, and disease) – to workers, and community and visitors	<ul style="list-style-type: none"> <li>➤ Health and safety of the workers during construction due to lack of Personal Protective Equipment (PPE) and/ or safety measures at construction site, as well as not-using the provided PPE by the workers</li> <li>➤ Health and safety risks to the community/ local people and visitors during construction due to uncontrolled access to construction sites</li> <li>➤ Risk of transmission of infectious and communicable disease like COVID-19 to the worker and community due to lack of hygiene, sanitation, waste management measures and practices</li> <li>➤ Livestock and wildlife may fall into construction sites, etc.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Provide PPE, and strict enforcement of PPE use at site, awareness to the workers, provide safety measures to protect the site</li> <li>➤ No unauthorized entry to construction site</li> <li>➤ Fence / barricade the construction site</li> <li>➤ Provide necessary safety and protection measures</li> <li>➤ Health safety measures designed and adapted to address risk of infectious disease such as COVID-19 (considering workers as well as community)</li> </ul>
14 (b)	Health and safety issues during operation to visitors, local people)	<ul style="list-style-type: none"> <li>➤ Health and safety risk to community, local people, and visitors during operation due to lack of safety consideration in the design of infrastructure</li> <li>➤ Health safety risks arising from improper or haphazard sanitation/ wastes (e.g. spread of sanitation-borne diseases)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Design to be sensitive to the safety aspects, e.g. protection from fall, hand-rails, railing, etc.</li> <li>➤ Waste management facility/ practices (see item 7 and 8)</li> <li>➤ Sanitation and hygiene standards</li> </ul>

### 4.3 Potential Social Impacts

The activities to be financed under the STENPA Project are expected to cause different types of social impacts to the individuals, households and the communities affecting their life and livelihoods to varied extent. These potential impacts warrant the project to consider effective mitigation measures and manage the adverse impacts. At the same time, the project should also consider augmentation measures to optimize the beneficial impacts.

The project will not finance activities that would have significant adverse social impacts (*Annex 1 (a): Exclusion list of project activities*). Each sub-project activity will be screened for eligibility as well as to determine the appropriate extent and type of E&S assessment needed. Nevertheless, the project activities are expected to cause some adverse social leading to increased vulnerability and risk of the local people. The expected adverse social impacts of the project are: i) loss of land/assets due to construction and maintenance of new or existing infrastructures, ii) loss of community facilities and resources, iii) noise and dust pollution, iv) loss of standing crops/trees/orchards, v) other social impacts related to child, labor, women, vi) lack of information/ awareness about project activities, and vii) possible exclusion in realizing project benefits, etc.

In view of these potential impacts, the project's ESMF that includes RPF and VCDF has been developed which provides full guidance for social screening, social assessment and development of social management plans and resettlement action plans depending upon the extent of impacts. The detailed procedure of identifying and managing impacts and preparing the plans viz ESMPs, RAP, VCDPs, GAPs, etc. are provided in subsequent chapters.

The project will result in several positive and adverse impacts. Given the nature of sub-project activities that would be supported under the project, the adverse impacts would be mostly of local level and their magnitude as minor. On the other hand, the positive impacts that would be contributed by the project will be of longer run bringing long lasting improvement in the livelihoods of people and also contributing to the nation's economy through foreign exchange earnings. The most likely impacts are discussed briefly in the following sections.

#### 4.3.1 Potential Beneficial Social Impacts

The implementation of planned activities under the project is anticipated to bring sustained social and economic wellbeing resulting in poverty reduction of the people. Improvement of local transport and road access, employment creation, skill enhancement, local capacity building and increased scope of business opportunities are amongst the most common benefits likely to be generated by the project. The potential positive impacts of the project are indicated below.

*Improved Tourism Facilities and Settlement:* Under the project, different plans such as ITDP, land zoning and planned settlement will be developed which will have long term benefits to the nation and local communities. These plans will provide opportunities to make best use

of lands for various purposes such as creation of tourism infrastructures and facilities, planned community settlement, improvement of urban/rural transport facilities, efficient management of resources eventually contributing to sustained growth of tourism activities. Land zoning helps develop attractive settlements and standardized facilities to the tourists, protect the property values, prevent haphazard growth of tourism sites and allows overall planned development of tourism destinations.

*Improved Access and Transportation:* Component 2 of the project (enhancing infrastructure for access and diversification) will have considerable impacts to a wide range of stakeholders including the local individual and communities. The rehabilitation and maintenance of existing roads within targeted project destinations (e.g. national parks roads, provincial and municipal roads, last miles connections) will improve the access to people through improved transport networks and facilities.

*Increased Work Opportunities:* The project intends to mobilize the local people and communities for the construction and maintenance of small projects developed locally. The already formed community user groups namely the Conservation Area Management Committees (CAMCs) and Buffer Zone User Committees (BZUCs) and NGOs with proven experience in minor construction as well as conservation and management will be benefited directly from similar activities implemented locally. Various construction works supported by the project at local level (i.e. construction/ improvement of roads connecting the parks and conservation area, public transport facilities, trekking trails, water and sanitation facilities, waste disposal and management and minor facilities inside parks) will contribute to increased employment and income of the locals.

*Benefits to Local Entrepreneurs:* All entrepreneurs engaged in tourism activities viz hotels, homestays, trekking and travel agencies including the small and medium entrepreneurs will be benefited by project supported activities. This will include diverse tourism operations and value chains (such as handicraft, guide services, adventure and cultural event organization, transportation) activities in the project destinations who will be benefited through increased demand for their services. Support for the establishment of cottage industries/ small and medium enterprises (SMEs) will directly contribute to increased opportunities for employment and income generation of local people. Local communities losing their traditional occupations (tailoring, iron works, shoemakers, etc.) will have opportunities to revive their occupations using modern efficient technologies.

*Benefits to Women and Indigenous Groups:* Women of indigenous groups viz Gurungs, Thakali, Tharus have significant presence in the project destinations. Given the experience of women groups of these communities in operating hotels and homestays in the past, these groups hold tremendous potentialities to upscale their business volume through enhanced quality services in future. The skills, knowledge and technologies supported by the project will significantly enhance their capabilities.

*Local Production and Marketing:* The project will also contribute to increased production and marketing of local farm (fruits, vegetables, fisheries, poultry, dairy products etc.) and off-farm products (woolen carpets, garments, other handicrafts) of the project areas. Increased

demand will come from the construction work force during project implementation whereas these products will have increased demand from the tourists in the long term.

*Increased Flow of Tourists:* Improved access and new facilities created within the park and destinations will attract new tourists intensifying their flow by much higher rate than at present. Small infrastructure to facilitate diversification of offering, such as heritage tourism (beautification of heritage and cultural sites), adventure tourism (archery playground, cave visit, horse riding ground), river tourism activities (rafting platforms, campsites, angling sites), mountain biking, green tourism in community forests (bird watching, picnic spots, etc.) will contribute to increased tourist flow<sup>1</sup>.

*Enhanced Opportunities for Heritage and Cultural Tourism:* The project destinations are inhabited by a large percentage of indigenous people viz Gurungs, Thakalis and Magars (about 30%) in Annapurna and Manaslu Conservation Areas and Tharus in Banke, Bardia and Shukla Phanta (more than 25%) National Parks. These groups are endowed with rich tradition and culture offering significant potential to blend cultural tourism events (dance, songs, indigenous food, etc.) as part of nature-based tourism which would create long lasting opportunities for increased employment and income locally.

*Capacity Building:* The activities supporting improved planning, implementation and monitoring, particularly at local level, will help enhance local level skills and capacity of the stakeholders working locally. The local government bodies viz Ward and Palika Offices, local committees and groups (CMACs/BZUCs) would particularly benefit from these activities.

*Appreciation of Assets Value:* The project will directly contribute to the appreciation of property value of the people, mainly the land and commercial structures. These opportunities will generate increased income to the locals through rental and leasing of these facilities.

#### 4.3.2 Potential Adverse Social Impacts and Mitigation

The adverse social impacts are not expected to be significant in the project. Most of the negative impacts would be from construction and renovation/maintenance of trails/trekking routes or other construction of small facilities might warrant a situation whereby acquisition of small pieces of lands for one or other physical activities would be essential during project implementation. Considering the likelihood of such a situation, a Resettlement Policy Framework (RPF) has been prepared as part of ESMF which will thoroughly guide the project to manage such issues. All adverse impacts of the project causing land acquisition and displacement of the households will be managed as per the RPF. Additionally, majority of the beneficiaries in the project are from IPs community and marginalized groups. There is a risk of exclusion of Indigenous Peoples and other vulnerable

---

<sup>1</sup> The total number of tourist arrival in the five project destinations was 185,814 in the year 2017 (144,409 ACAP, 5,475 Manaslu, 17,697 Krishnasar, 17,959 Bardia and 4 Banke National Parks, Source: Gandhi Associates, 2019).

groups leading to further impoverishment. Vulnerable Community Development Framework (VCDF) prepared as part of the ESMF provides a framework to prepare destination level Vulnerable Community Development Plan (VCDP) which will include a culturally appropriate support measures targeting the IPs and the vulnerable groups.

Table 2: Potential Adverse Impacts and Proposed Mitigation Measures

SN	Type of Impacts /Issues	Likelihood of Occurrence	Proposed Mitigation Measures
1	Loss of land and land-based assets/infrastructures and livelihoods sources	<p>Construction of new trails/ bridges, water and waste management or sanitation facilities and widening/ maintenance of roads would cause these impacts.</p> <p>These impacts will vary from minor to major for the affected households depending on the scale of losses.</p> <p>Land zoning plans, tourism plans, and community level settlement plans may lead to long term adverse impacts on physical and economic displacement of HHs.</p>	The project will avoid any kind of land acquisition through change in design. In case of any loss of land or assets, the project would adopt the RPF contained in this framework and pay compensation and other assistances to the affected households.
2	Damage/ disruption of community resources /local facilities	Construction may damage/disrupt the water sources, irrigation channels, trees, bushes; damage the local foot trails and animal trails used by locals.	The project requires holding consultations with the locals to identify the damages; it will develop and implement plans to replace the lost facilities in consultation and participation of affected people and get them rehabilitated.
3	Pressure on local resources (drinking water, forest products like fuel wood/ timber, etc.)	This may occur due to influx of outside laborers for construction works. Contractors often bring laborers from outside from their prior construction works.	In order to avoid such impacts, the project need to find ways to use local laborers and do the construction works through "local user groups" based on their availability and skills. The project should put such clause in the contract document.
4	Obstruction and noise pollution to tourists/ trekkers during construction / maintenance	This is likely to occur in case of renovation and maintenance of existing trails/ trekking routes and will be significant during peak trekking season.	The project will consider different measures to manage the impacts viz i) do the work during lean trekking season ii) take measures to minimize the pollution, and iii) regulate specific time/ hours for trekking.
5	Loss of standing crops/ orchards/ trees	This may take place while constructing new facilities viz trails/ trekking routes or widening the existing ones.	The owners of such losses should be compensated fairly as per ESMF provisions. The compensation provisions should be made in the contract documents.
6	Conflicts associated with construction work forces or conflict between locals and outsiders	This may occur if outside laborers are used in construction activities. This happens normally due to clashes between outside laborers and locals for different social, cultural and financial issues.	The project will take different measures to address the issue. This includes measures to: i) educate the laborers/ working force to understand local culture and value, and ii) use local laborers to the extent possible.

SN	Type of Impacts /Issues	Likelihood of Occurrence	Proposed Mitigation Measures
7	Increased social issues/problems  Increased rate of illicit behavior and crime	These issues normally occur in the form of alcohol consumption/ prostitution (including spread of communicable diseases) and gender-based violence and are associated with construction works.	The project needs to develop code of conduct and complied fully by contractors as well as workers. Besides, regular monitoring should be carried out by the project staff and consultant on a regular basis.
8	Social issues and tension between local and outsiders (e.g. workforce)	This may occur when the communities are exposed to disease such as COVID-19 and are competing for scarce resources and constrained health services. Relationship with the community can be difficult and conflict can arise.	The project will need to take adequate precautions to prevent local outbreak of disease like COVID-19. Both medical and non-medical measures should be put in place.  Regular communications with the community in vicinity should be put in place. Different communication approach and materials should be developed which is clear and designed to be easily understood, particularly by the vulnerable groups including indigenous people, people with disability
9	Child labor, child safety and other labor issues	There are chances of using child labor and child abuse by the contractor at cheap wage rate. The contractors also often pay different wage rates to the laborers based on caste and gender.	The project should take stringent measures to avoid the use of child laborers. Use of labor should be monitored on a regular basis and equal wages will be paid to the workers irrespective of ethnicity and gender. Strict enforcement of Code of Practice ensuring avoidance of child labor and child related malpractices will be ensured at subproject level.
10	Gender Based Violence (GBVs)	Potential risk of GBV due to increased workers for constructions activities coming from outside the target areas as well as through increased tourist arrival.	Identify key GBV risks in project areas. Sensitization of project staffs and different stakeholders. Develop Code of Conduct and inclusion in contracts. Establish a functioning GRM.
11	Issues related to chance finds or issues encountered during works on physical cultural resources	Physical cultural or chance find issues may occur during construction viz temple/shrines, spiritual/holy and mystic sites of cultural and religious importance found in construction sites.	Avoid such sites where possible or restore them if necessary, in consultation with the locals/priests ensuring that the measures taken do diminish the local cultural values.
12	Labor influx	Contractors often bring labor groups from their previous contract works and there can be large number of laborers coming for the proposed works.	Use of local laborers or laborers from neighboring areas, if employed, would minimize the potential influx of laborers from outside creating social, environmental and GBV related risks. Contract documents should include such clauses. A functioning GRM should be established and an effective community engagement should be carried out routinely.
13	Exclusion of IPs/VGs in decision making process, during planning/ implementation/ lack of informed consultations	This may happen during project design/ planning if project team did not conduct meaningful consultations with the locals, especially the IPs/VGs.	Project to comply fully with consultation, communication and citizen engagement process specified in the ESMF and shall undertake regular consultations with the APs/ local communities; deploy FPIC process to deal with IPs/VGs.

SN	Type of Impacts /Issues	Likelihood of Occurrence	Proposed Mitigation Measures
14	Project activities may unintentionally result in displacement of traditional occupations/ occupational groups in the communities	This may happen in absence of meaningful consultations with such groups and lack of measures to consider the preservation and promotion of traditional occupations and the groups during subproject design and planning.	Project will conduct consultations considering the risks of replacement of traditional occupational practices and erosion of associated social practices. Mitigation measures of such risks will be addressed in RAP/VCDP/GAP as relevant.
15	Human Wildlife Conflict (HWC) resulting in increased damage/losses in the communities	HWC is an ongoing problem in buffer zone areas where subproject interventions will be made. HWC as a conservation issue may also occur in this project.	The project will identify HWC prone subproject areas and give special consideration to reduce HWC during subproject planning and design. Although this is not the direct impact of the project activities, the project will make efforts towards mitigating/reducing HWC.

#### 4.4 Environmental and Social Approach

Environmental and social approach to types of subproject/ activity under the project will vary. The project supports Technical Assistance (TA) leading to or contributing to policies, regulation, strategy, plans and programs, as well strengthening capacity and institutions. Several environmental and social impacts and issues, and risks arise from or are linked to policies and plan that may be prepared through Technical Assistance (TA). Hence, TAs will be subjected to environmental and social assessment in the form of reviews or overview analysis so that social and environmental aspects are considered upstream. Such an overview analysis would be based on an issue scoping exercise involving stakeholder participation. Objective of such overview type review/analysis is to mainstreaming E&S issues into the policies and plan, and hence contribute to a socially and environmentally better policy and plan. The following guiding principles or concepts become relevant while applying E&S Overview in a TA:

- Integrate environmental and social objectives into the TA process;
- Promote transparency through stakeholder participation;
- Promote innovative environmental and social assessments;
- Promote analysis of alternatives; and
- Promote environmental and social capacity building and institutional strengthening.

The subsequent investment in physical infrastructure subproject/ activity will be subjected to standard E & S process and procedures including screening, assessment, preparation of environmental and social management plan, and monitoring during implementation.

#### **Approach to Technical Assistance to Policy, Regulation, Plan and Program**

These types of TAs will be subjected to environmental and social assessment analyzing potential environmental and social issues/implications, in the form of E&S Overview, preferably at the following stages: scoping and inception stage, and Draft Report stage (*Annex 9 (a) Environmental and Social Overview Assessment*). Scoping exercise will be done

in a participatory manner involving relevant stakeholders. Preparation of TAs and Overview E&S Assessment will be done in parallel, interacting each other so that Policies, Regulation, Plan and Program are informed of the potential environmental and social aspects, and internalize them. The level/depth of assessment required will depend upon the activity and the selected destination involving stakeholders at different levels. If there is presence of Indigenous Peoples, consultations should be carried out through free, prior, informed consultation that leads to broad community supports on the development scenario. PIE and PIU, within their respective jurisdiction, are responsible for environmental and social overview of policies and plans/TAs

If the project funds the infrastructure subproject included in a plan and program, these subprojects will be subject to *Approach to Investment in Infrastructure Subproject* described in the *Section 4.5*.

### **Approach to Strengthening capacity and institutions**

TA/activities aiming to strengthen capacity and institutions will be reviewed from the social and environmental perspective to ensure these activities derive and/ or enhance social and environmental benefits. Each proposal of this type will be subjected to review to identify if there are environmental and social issues, and to incorporate relevant environmental and social best practices in the training plans and curriculums. E&S aspects will be mainstreamed/ strengthened in the proposal, if needed. The review will also assess if there is land taking, and/ or other social and environmental issue, in which case training/consulting firm will be required to prepare specific environmental and social mitigation plan to ensure environmental and social mitigation measures are incorporated and implemented. Training facilities or upgrading plans which necessitate civil works will be required to follow the approach described in the section 4.5. PIE and PIU along with concerned agencies will be responsible for fulfilling safeguard requirements.

### **Approach to Addressing Issues related to Indigenous Peoples and Other Vulnerable Groups**

The project interventions will have an impact on IPs and other vulnerable communities who are the main beneficiaries of the project area. Each destination has unique socio-cultural features. Thus, screening and social assessment of the potential impacts of each project intervention on the IPs and vulnerable groups will be done for each destination based on the VCDF prepared as part of the ESMF (see Chapter 6 for details). Consultations should be carried out through FPICs with the affected IP communities and other vulnerable groups that will lead to broad community support. Based on the social assessment destination level VCDF will identify specific support measures to address IP and vulnerable groups issues for each of the project activity including preparation of plans, policies, regulations, trainings and infrastructure to ensure culturally appropriate benefits percolates to all groups. PIE and PIU along with related stakeholders such as BDS, contractors are responsible for implementation of support measures.

### **Approach to Investment in Physical Infrastructure Subproject**

Each infrastructure/ physical subproject investment will be subjected to standard social and environmental process and procedures including screening, assessment, preparation of ESMP, RAP, as needed, and monitoring during implementation. These are described below (Section 4.5).

#### **4.5 Social and environmental planning process and steps in infrastructure subproject**

The effectiveness in addressing the project's environmental and social impacts largely depends on how well these are identified on time and necessary measures are put in place to address them, in relation to subproject-cycle. This would require using different tools to identify the positive and negative impacts. The beneficial environmental and social impacts likely to occur due to subproject activities should be promoted through enhancement measures. Similarly, in case of identified adverse impacts, the subproject's environmental and social safeguards expert(s) should be able to identify them accurately and take appropriate measures.

A summary of the E&S procedures in infrastructure subproject during subproject Planning, Design, and Construction & Operation Stage are given in table below.

Table 3: Key Steps and Procedures in E&S Management in Infrastructure Subproject

<b>S.N.</b>	<b>Subproject cycle</b>	<b>Steps</b>	<b>Procedures</b>	<b>Responsibility</b>
1	Planning/Designing	1) Sub project identification and categorization 2) E&S screening 3) E&S planning/detail designing	<ul style="list-style-type: none"> <li>• Desk review</li> <li>• Detailed E&amp;S screening (walkthrough and consultation)</li> <li>• ToR development and preparation of E&amp;S plans (ESMP/IEE, RAP, GAP) ensuring safeguard considerations/budget in design/bid documents</li> <li>• Approval of the plans</li> <li>• Disclosure of the plans</li> </ul>	<ul style="list-style-type: none"> <li>• PIU/PIE</li> <li>• FIUs/Safeguard team</li> <li>• UCOs and CPs</li> </ul>
2	Implementation	1) Orientation and training 2) Implementation of E&S safeguards 3) Supervision and monitoring during execution	<ul style="list-style-type: none"> <li>• Preparation of E&amp;S guidelines/manuals/modules</li> <li>• E&amp;S safeguard compliance               <ul style="list-style-type: none"> <li>○ Consultation</li> <li>○ Contractor's safeguard implementation compliance</li> <li>○ Social safeguard compliance (RAP, VCDP, GAP)</li> <li>○ EHS compliance</li> <li>○ SS-EMPs compliance</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• PIU/PIE</li> <li>• FIUs</li> <li>• UCOs and CPs</li> <li>• Contractors</li> <li>• Local stakeholder committees</li> <li>• PA authorities</li> <li>• PG/LG</li> </ul>
3	Monitoring and Reporting	1) Monitoring 2) Reporting	<ul style="list-style-type: none"> <li>• E&amp;S regular monitoring</li> <li>• Third party monitoring - annual</li> </ul>	<ul style="list-style-type: none"> <li>• FIUs/E&amp;S team</li> <li>• PIU/PIE</li> </ul>

S.N.	Subproject cycle	Steps	Procedures	Responsibility
			<ul style="list-style-type: none"> <li>○ Baseline/Compliance/Impact monitoring</li> <li>● Monthly progress report at field level</li> <li>● Quarterly progress report</li> <li>● Annual reports</li> </ul>	<ul style="list-style-type: none"> <li>● E&amp;S team</li> <li>● External consultant/firm</li> </ul>

The process of identifying the impacts and mitigation measures, based on the subproject cycle, includes broadly the following steps.

Step 1: Environmental and Social Screening and Categorization of Subproject

Step 2: Environmental & Social (E&S) Assessment and Preparation of Management Plans

Step 3: Implementation of the E&S Mitigation Measures

Step 4: Safeguards monitoring and reporting

#### 4.5.1 Step 1: Environmental and Social Screening and Categorization of Subproject

**Checking subproject eligibility.** Certain types of subprojects/ activities are not-eligible for support under the project due to potentially high social and environmental risks and impacts. Subproject activities with potential significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented are excluded. The project has developed exclusion list of project activities which helps to make decisions on whether a subproject and/or activity therein should be processed for funding or not. First thing that needs to be done as part of screening is to check the eligibility of subproject and activities. The negative list of subprojects to be excluded for funding under the project is provided in *Annex 1 (a): Exclusion List of Project Activities*.

**Subproject E&S Screening and Categorization.** Environmental and Social screening is an essential and primary step in the assessment of environmental and social risks and impacts of subproject/ activities. The results of the screening form the basis for assigning the environmental and social risk category of activities and informs decisions on the extent and depth of environmental and social due diligence that will be undertaken. The process of screening identifies the key aspects that may need to be further examined and managed. The objectives of the E&S screening are to:

- Integrate the E&S aspects into subproject to strengthen social and environmental sustainability;
- Identify potential social and environmental risks associated with a subproject and their significance;
- Determine the sub-project's risk category (Type I, II and III); and

- Determine the level of E&S assessment and management required to address potential risks and impacts.

Sub-project will be screened and categorized based on the potential sensitivity of the environmental and social risks and impacts. Subproject categorization is essential for early understanding of the type, nature and scale of impacts. It is necessary to make such categories in order to take timely decisions about the planning requirements both from environmental and social considerations, proportionate to the risk/ impact of a subproject. The project will also pay particular attention to IP issues as per the support measures identified in the VCDP developed for each destination, as needed. See Annex 3 (a) for the information needed for the Subproject Categorization. The subproject may fall in one of the following types:

**(a) Type I:** A proposed subproject or activity is classified as *Type I* if it is likely to have adverse environmental and/or social impacts that are moderate, limited to site of a facility and its immediate surroundings, and can be addressed through mitigation measures that are known or readily available. Type I subprojects are of higher risks among the subprojects/ activities that are eligible for project support (*Annex 1 (a) – Exclusion List of Project Activities*) and may require Initial Environmental Examination (IEE) as per the government regulation.

Moreover, from social aspect, the Type I subproject may involve physical displacement due to involuntary land acquisition. Further, it is recognized that Type I subproject may have impacts on Indigenous Peoples.

*E&S assessments:* The Type I subprojects will be required to prepare ESIA or IEE and corresponding ESMP. If E&S screening indicates physical displacement, preparation of RAPs will be required. IP issues identified during the screening will be addressed through support measures suggested in the destination level VCDPs. Other plans may also be required, as determined by E&S Screening e.g. biodiversity management plan if a subproject is located within a protected area. Stakeholder engagement activities will be required. The safeguard documents of a Type I subproject, after review by the project team (final draft version), will be submitted to the World Bank for review, no-objection and/ or clearance. E&S risk as well as level of assessments required will be agreed with the World Bank.

**(b) Type II:** A proposed subproject is classified as *Type II* if its potential adverse environmental or social impacts on human and/or on environment are less adverse than those of Type I subprojects. These impacts are limited to sites of a facility, reversible, and mitigation measures are known or can be designed more readily than for Type I subprojects. Moreover, a proposed subproject is classified as Type II if the affected people are not physically displaced. Type II subproject may not require IEE as per the government regulation.

*E&S assessments:* Type II subprojects will be required to prepare site specific ESMP, and

EA or IEE may not be needed. Additionally, an abbreviated RAPs will be prepared if E&S screening indicates that a Type II Subproject take land. Destination level VCDP will guide the support measures required to address IP issues. The World Bank will review safeguard documents of Type II subprojects on random sample basis and/ or on case by case basis/ on the basis of perceived risk.

**(c) Type III:** A proposed subproject is classified as Type III if it is likely to have minimal or no adverse environmental and social impacts.

*E&S assessment:* In case the proposed subproject is classified as Type III WB will review the subprojects on sample basis. The Type III subproject will not require assessment beyond screening. The screening report of a Type III subproject will recommend mitigations measures for the minor issues/ impacts identified by the screening exercise – this may be in the form of good practices or code of practice. In some situation, a brief/ abbreviated and site-specific Environmental and Social Management Plan (ESMP) may be needed for Type III subprojects that may have minimal environmental and social impacts, and a stakeholder engagement activity may be needed where there are affected communities.

#### 4.5.2 Step 2: E&S Assessment and Preparation of Management Plans

Based on the E&S screening findings and type of subproject, appropriate safeguard instruments will be prepared. The subproject may need to address IP issues in accordance with the VCDP developed for each destination, as needed.

**Type I subproject:** will require ESIA and corresponding ESMP, and may require Initial Environmental Examination (IEE) as per the government regulation. RAPs may need to be prepared if physical displacement of people is likely. Support measures for any IP issues identified during the screening will be guided by the VCDP for destination. Other plans may also be necessary, e.g. biodiversity management plan if a subproject is likely to have impact on biodiversity/ protected area. Stakeholder engagement activities may also be needed. The safeguard documents of a Type I subproject, after review by the project (final draft version), will be submitted to the World Bank for review, no-objection and/ or clearance. E&S risk as well as level of assessments required will be agreed with the World Bank.

**Type II subproject:** Type II subprojects will be required to prepare site specific ESMP focusing on the issues/ impacts identified by the screening. Type II subproject may or may not require EA or IEE as per the government regulation. Additionally, an abbreviated RAPs may be prepared if E&S screening indicates that a Type II Subproject take land. VCDPs prepared at destination level will guide the support measures required to address IP issues. The World Bank will review safeguard documents of Type II subprojects on random sample basis and/ or on case by case basis/ on the basis of perceived risk

**Type III subproject:** Beyond screening, the Type III subproject will not require assessment such as IEE or ESIA, etc. The screening report of a Type III subproject will

recommend mitigations measures for the minor issues/ impacts identified by the screening exercise - this may be in the form of good practices or code of practice. In some situation, a brief/ abbreviated and site-specific Environmental and Social Management Plan (ESMP) may be needed for Type III subprojects that may have minimal environmental and social impacts, and a stakeholder engagement activity may be needed where there are affected communities. The World Bank will review Type III subproject on sample basis.

#### **4.5.3 Step 3: Implementation of the E&S Mitigation Measures**

The E&S management plans will be implemented as per the subproject schedule. The subproject specific environmental and social impact mitigation measures will be implemented to address the relevant E&S safeguard issues. Subproject's engineering plan and design, bidding documents, contract clauses, including DPR, will be reviewed by the E & S Specialists so that environmental and social mitigations/ recommendations of the ESIA, ESMP, RAP, VCDP, etc. are incorporated. The contractors and user groups are responsible for and accountable to comply with the construction period safeguard measures.

Public consultation including FPIC will be held with relevant stakeholders as appropriate. Capacity building training/orientation will be provided to the field-based staff, contractors and community members on safeguard related issues, planning and compliance. In order to facilitate the implementation of the safeguard measures, necessary guidelines/ToRs/manuals/modules will be prepared. Any corrective measures needed to improve the safeguard performance will be undertaken as necessary.

#### **4.5.4 Step 4: Safeguards monitoring and reporting**

Details on the Supervision, Monitoring and Evaluation are provided in Chapter 11.

E & S Monitoring will be an integral part of overall project management and carried out on a periodic basis. Regular monitoring will be carried out internally by the project, centrally or through the FIU as may be appropriate. The external monitoring will be carried out by the independent consultant/firm. The PIE and PIU, respectively for the activity within their jurisdiction, will have the responsibility of monitoring the E&S compliance, documentation and data, permits, process and procedures, grievances, works covering inputs, process and outputs.

The E&S safeguard experts of the project will be responsible for regular supervision of the implementation of E & S safeguard measures at the sites. The FIU, with support from center, will ensure day-to-day supervisions and implementation of the safeguard measures.

The E&S team will produce periodic E&S status reports – E&S team at PIE and PIU will provide summary of E&S progress in the quarterly progress report and a consolidated status report in six-months, coinciding with the Bank's supervision mission. External monitoring report will be prepared at the end of the external monitoring, annually until the Mid-Term

Review (MTR) and as decided by MTR thereafter. PIE and PIU will be responsible to report the progress on safeguards compliance during their regular reporting to the World Bank.

#### 4.6 Consultation and Participation

Consultation with key stakeholders will be an integral part of environmental and social safeguard studies, assessment and plan preparation and implementation. These consultations will include both formal and informal types but not limit to FGDs, KII, public meetings, community discussions, etc. Consultations will be undertaken to enable maximum participation of the affected people where they can raise their concerns. In these consultations, PAPs' participation will be fully ensured. Details of these consultations including dates, names of participants, issues raised and how these have been addressed will be documented and recorded.

Outbreak of infectious disease like COVID-19 may restrict consultation and stakeholder engagement with different stakeholders. In such situations, consultation mechanism will need to be adapted to prevent or minimize the risk of infectious disease. For details on project's communication, consultation and citizen engagement, please refer to Chapter 8.

#### 4.7 Information Disclosure

Final E&S safeguard documents, e.g. ESIA, ESMP, IEE, SA, RAP, VCDP, etc. will be disclosed both in the project website and the World Bank info site for public. Hard copied of these documents will be disclosed and disseminated at different levels viz. PIE, PIU, FIUs and local government offices in consistent with the Bank's policies. The summary of ESMF and E&S plans will be made available in Nepali language to the project offices, affected people, beneficiaries and Municipalities/Palikas.

#### 4.8 Considerations where Component 5 (Contingency Emergency Response- CERC) is activated

The Paragraph 12 of the IPF Policy 1 applies once the Component 5 (Contingency Emergency Response – CERC) is triggered. All activities financed through the CERC are subject to World Bank safeguard policies<sup>2</sup>. The CERC will rely as much as possible on the existing ESMF. However, this ESMF may not address all the potential environmental and social risks and impacts arising in relation to the CERC. The type and nature of likely emergency and indicative list of activities that will be funded through CERC cannot yet be determined. If CERC is activated, this existing ESMF will either be updated, or a CERC-ESMF will be

---

<sup>1</sup> Projects in Situations of Urgent Need of Assistance or Capacity Constraints

<sup>2</sup> Paragraph 17 of the Bank Guidance – Contingent Emergency Response Components, October 16, 2017

prepared and disclosed, within three months from the time CERC is activated. The additional costs of any needed instruments (preparation and implementation) should be included in the budget for the Emergency Action Plan (EAP). The EAP, to the extent possible, will focus on activities that can be readily implemented on the ground and which will not result in additional environmental and social risks. The EAP will include a summary of the safeguard implications of the proposed activities, and, if needed, list any new safeguard instrument(s) to be prepared. The sequencing for completing additional safeguard activities (including requirements for implementation and monitoring) will be determined at that time.

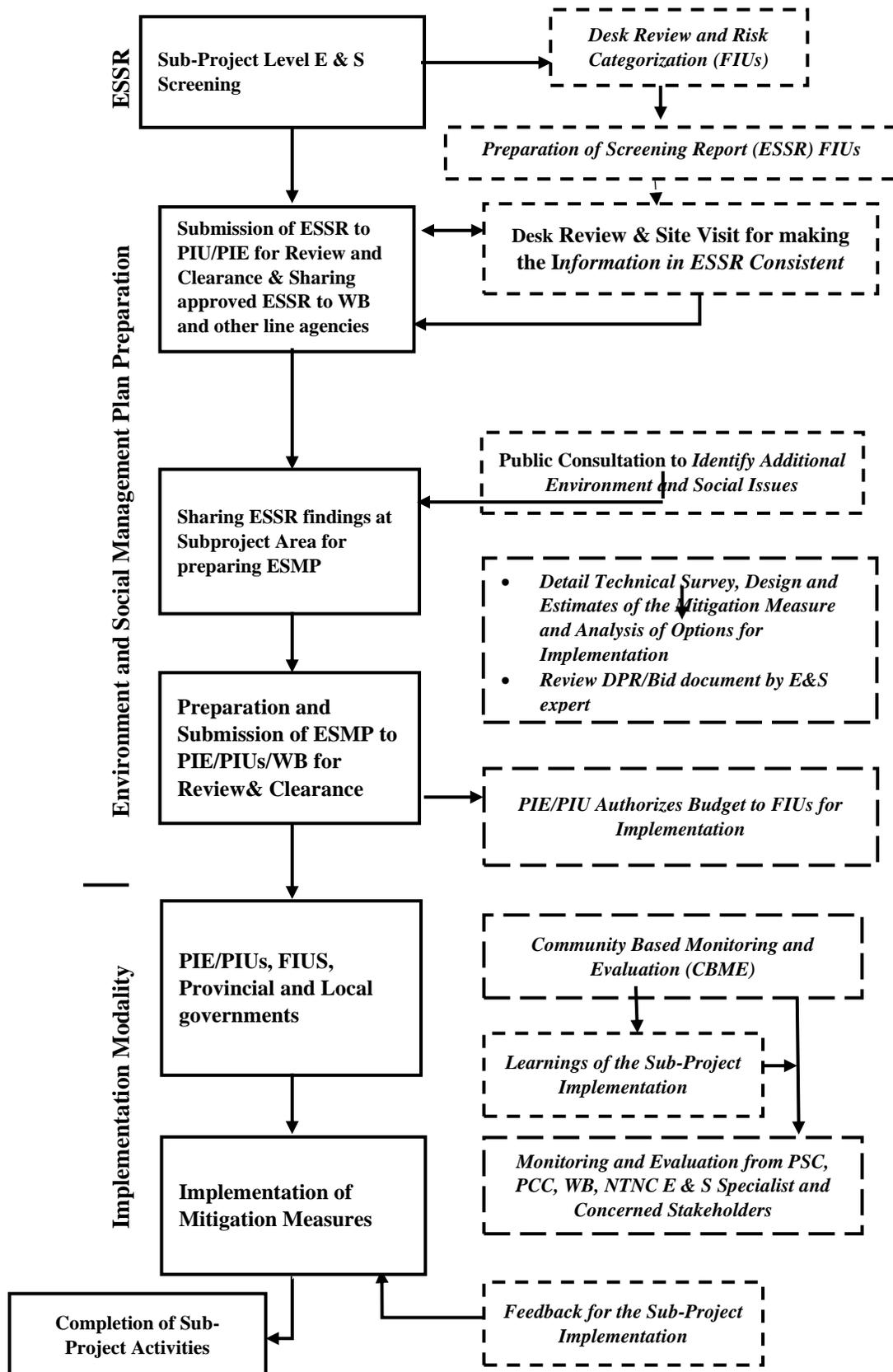
In the interest of delivering a rapid response in such emergency situations, the updated ESMF, or CERC-ESMF where prepared, will adopt a flexible, “adaptive management” approach. A rapid assessment of the environmental and social baseline of the CERC activities will be undertaken, based on readily available information. A phased approach to implementation may be used. Based on the EAP, the CERC activities will be grouped into: (i) those activities which can proceed as soon as the CERC is activated and with no additional environmental and social assessment; (ii) those activities which would require an environmental and social assessment, stakeholder consultation, and disclosure of the relevant management plans (eg ESMP), prior to CERC activities commencing.

The updated ESMF or CERC-ESMF will describe: the potential emergencies and the types of activities likely to be financed (positive and negative list) and an evaluation of the potential risks and mitigation measures associated with those activities; identify likely vulnerable groups and/or locations and includes, where needed, a social assessment to guide emergency responses, such as potential of exacerbating existing social conflicts. The ESMF will include a screening process for the potential CERC activities, the institutional arrangements for environmental and social due diligence, and any needed capacity building measures to implement the CERC-ESMF, generic guidance on emergency small scale civil works, and any additional safeguard instruments which may be required for the CERC.

It will be determined at the time of CERC activation whether MOFE, MoCTCA and NTNC will be retained as the implementing agency, or if a different agency will be responsible for implementing the CERC activities. If procurement of goods and services is required, the revised ESMF or CERC-ESMF will provide how this will be undertaken.

Additional details regarding CERC implementation will be outlined in the PIM for STENPA as well as in the CERC Implementation Manual.

**E&S Safeguard Planning**



## Chapter 5: Resettlement Policy Framework

### 5.1 Introduction

The project supports preparation of investment plans, construction or rehabilitation of tourism related physical infrastructure in PAs and gateway cities which may lead to taking of land. Thus OP/BP 4.12 (WB Policy on Involuntary Resettlement) is triggered. However, significant social impacts from the project interventions on land acquisition and resettlement is not expected. Activities that could have significant social adverse impacts (*See Annex 1(a): Exclusion Lists of Project Activities*) will not be eligible for project investment. The fact that many of the investment plans under the tourism project viz land zoning plans, integrated tourism development plans, community level settlement plans and construction or renovation of physical infrastructures and facilities, which are largely unknown at the moment, makes it necessary to develop this RPF for the overall project which serves as a planning tool which shall be complied fully by the project implementing agencies. The basic premise behind developing the RPF is to provide technical inputs and guidance to the project implementing agencies in identifying and managing the risks and impacts caused by involuntary resettlement of people.

This Resettlement Policy Framework (RPF) establishes the resettlement and compensation principles and procedures to address the needs of the people who are impacted adversely due to involuntary resettlement. This may involve impacts triggered by land and other property acquisition of the families resulting in loss of shelter, assets or livelihoods, and/or loss of productive resources by the activities under the project. This policy framework is prepared in consistent with the policy and legal framework of GoN and the World Bank Involuntary Resettlement Policy (O.P 4.12).

### 5.2 Policy Objectives and Principles

The objective of the RPF is to ensure that adequate measures are designed and implemented to make sure that affected families through loss of assets could improve or at least restore their living standards. Possible impacts may include loss of land (homestead, agriculture, community land), loss of structures (residential, commercial, community), loss of livelihood, loss of standing crops/trees, loss of access to common property resources and facilities.

The key policy principles of the RPF are as follows.

- (i) Involuntary land acquisition and involuntary resettlement should be avoided where feasible, or minimized, exploring all viable alternative project designs;

- (ii) Where it is not feasible to avoid involuntary land acquisition and resettlement, it should be executed as sustainable development program and displaced persons should be meaningfully consulted and resettled; and
- (iii) Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

### 5.3 Policy Gaps and Recommended Measures

The Government of Nepal (GoN) has its own policies and legal requirements for land acquisition and compensation while implementing the development projects. However, there are apparent gaps between the national policies and legal framework with that of the World Bank policies. These gaps, therefore, call for additional measures with further specifications for the entitlements that meet the requirements of the World Bank policies. Followings are the major gaps identified between the Bank and the GoN legal framework.

Table 4: Key Policy Differences between World Bank and GoN Legal Framework

Description	World Bank Policy	GoN Legal Provisions
Land/property acquisition and compensation	Compensation to land regardless of legal ownership.	Legal ownership is required, however, registered tenants with the Land Revenue Office also acknowledged.
	Compensation to all affected structures including encroachers.	Encroachers/squatters and customary land users are not entitled for compensation and assistance.
Compensation amount/value	Compensation for affected assets at replacement value.	Compensation determined by the Compensation Determination Committee (CDC); national law is silent on replacement value.
R&R assistance	The displaced persons of all categories (non-title holders) are entitled for R&R assistance.	No provision for assistance to the project affected/displaced persons to restore their livelihoods.
Consultations and Communications	Free, prior, informed, consultation (FPIC) is mandatory when APs include indigenous people.	National law is silent on consultations, especially FPIC when the vulnerable groups/IPs are affected.

From the above information, some gaps are apparent between the World Bank policy and the GoN legal provisions. Followings are the policy recommendations to fulfill these gaps and limitations:

- All project affected persons who have formal legal rights to land (including customary and traditional rights legally recognized by the Government of Nepal).

- All project affected persons irrespective of legal title such as tenants, encroachers /squatters will be eligible for compensation for loss at replacement costs.
- All affected people should be assisted for livelihood improvement and entitlements should be established for each category of loss including vulnerable groups to regain the assets, income and employment.
- The project should pay Resettlement and Rehabilitation (R&R) assistance for all displaced families/ people irrespective of legal ownership over the property.
- All land and non-land assets should be compensated at replacement value without deducting depreciation.
- This policy places emphasis on regular and meaningful consultations with the affected groups and makes FPIC mandatory when IPs are affected.

#### 5.4 Approaches for Obtaining Land for the Project

Different approaches are practiced obtaining land in Nepal for the development works. These include mainly the followings.

**Acquisition through Formal Procedure:** GoN can acquire the land through a formal procedure as per the Land Acquisition Act (1977). The Act empowers the government to acquire any land, on the payment of compensation, for public purposes or for the operation of any development project initiated by government institutions. The acquisition and compensation of privately-owned land and assets are completed according to a formal procedure which is broadly as follows.

- Preliminary Officer from the project initiates acquisition procedures;
- Investigation of land for acquisition (area selection, land size/ type, quality of land etc.) is carried;
- Formal acquisition notification issued to the land owners;
- Formation of Compensation Determination Committee (CDC) and land price fixation is completed;
- Compensation notification and payment; and
- Appeal procedure.

**Acquisition through Negotiation:** Negotiated settlement is considered as an alternative to formal expropriation proceedings. The project proponent negotiates directly with the owners over the terms of acquisition of the property deemed necessary for the public benefit. The owner retains the choice to either negotiate a satisfactory compensation amount or to contest eventual expropriation terms. The Land Acquisition Act (1977) includes a provision for acquisition of land through negotiations and thus provides space for voluntary donation. Clause 27 of the Act states that "notwithstanding anything contained

elsewhere in this Act, the Government may acquire any land for any purpose through negotiations with the concerned land owner. It shall not be necessary to comply with the procedure laid down in this act when acquiring land through negotiations."

**Willing Buyer Willing Seller:** Land acquisition can also be made based on willing buyer and willing seller. Project activity should not be site-specific. The Land in question must be free of squatters, encroachers or other claims or encumbrances. The willing-buyer willing-seller approach purchases or leases a property at a price voluntarily agreed to by both future user and present owner without explicit threat of state expropriation as an alternative means of acquisition. The owner(s) have a power of choice to refuse proposed transaction.

**Voluntary Donation:** In some circumstances, land to be used for the project is donated on a voluntary basis without payment of full compensation. Voluntary land donation is acceptable only if the project demonstrates that:

- The Project must not be site-specific.
- The potential donor or donors have been appropriately informed and consulted about the project and the choices available to them;
- Potential donors are aware that refusal is an option, and have confirmed in writing their willingness to proceed with the donation;
- The act of donation is undertaken without coercion, manipulation, or any form of pressure on the part of public or traditional authorities;
- Consultations with the affected households are conducted in a free and transparent manner; this needs to be complied fully with free, prior, informed consultation (FPIC) approach in case the donors are indigenous or vulnerable people;
- The amount of land being donated is minor and will not reduce the donor's remaining land area below that required to maintain the donor's livelihood at current levels;
- No household relocation is involved;
- The land being donated must be free of squatters, encroachers, or other claims or encumbrances.
- The donor is expected to benefit directly from the project;
- For community or collective land, donation can only occur with the consent of individuals using or occupying the land;
- All family members (including spouses) must be aware of the donation, to minimize the risks of women users of the land to be donated being passed over in decision-making on land donation and the risks of cross-generation conflicts;
- In case of nontitle holders, the PAPs will be considered as land donor and the process should offer them necessary compensation/ as title holder;
- A memorandum of agreement will be established as a means of recording the location and size of land being donated as well as the written consent and names of local witnesses for those community members donating lands voluntarily. A sample format of land donation and agreement between donor and the project or land users is provided in Annex 12.

The borrower will maintain a transparent record of all consultations and agreements reached. All alternatives will be explored to reduce the impacts to people due to loss of land, damage to structures, livelihoods. Repair and restoration assistance will be extended to the affected families as per the entitlement matrix.

**Leased Land:** The project or its grant recipients may use leased land for subproject implementation. However, this should comply with the conditions specified in the contract document and such contract document should have been prepared as per the legal provision of Nepal.

## 5.5 Resettlement Planning

Resettlement planning involves set of actions from screening to social assessment and preparation resettlement plan which will contribute not only to address adverse impacts to the affected people but also help restore and improve their livelihoods.

Resettlement planning under the project will follow the procedures that involve screening, preparation of relevant plans, implementation of plans and monitoring and reporting. The scope and level of detail of the resettlement plan vary with magnitude and complexity of the project impact. The normal procedures would involve following activities.

### 5.5.1 Social Screening

Every proposed activity will be subjected to social screening process before it is selected for inclusion in the project. Social screening will be undertaken at an early stage in all subprojects which will provide necessary information on the potential social impacts likely to be encountered during implementation. The objective of social screening is to establish the need to carry out any further investigation/survey/ assessment for preparation of Resettlement Action Plan (RAP) and to provide guidance regarding social requirements and steps that needs to be taken for addressing the identified issues.

Social screening will be carried out in close consultation with various primary stakeholders - beneficiaries; affected people, women, vulnerable and indigenous people, *Dalits* and other local key informants. Social screening report will provide information as determined by screening checklist presented in Annex 3 (a).

Social screening provides first stage information about the subproject area and also identifies: (i) beneficiary population living in the area by social groups (ii) land requirement and land availability for the subproject (iii) number of land owners adversely affected (iv) impacts on poor and vulnerable groups including needs and priority for social and economic betterment, (v) risks related to GBV in terms of women's safety/security, vulnerability and chances of activities related to sex tourism, and (vi) other impacts, if any. Social screening reports are crucial to decide whether or not a particular subproject should be considered under the project. A particular subproject or activity will be considered for funding under

the tourism project only if the social screening confirms that the subproject does not fall under the exclusion list (Annex 1).

### 5.5.2 Social Impact Assessment (SIA)

In case screening result showed adverse social impacts to larger communities including the indigenous and vulnerable people, the project will undertake a Social Impact Assessment incorporating socio-economic survey based on 15-20% sample households of sub-project area, will conduct survey for identification of the persons and their families likely to be affected by the project or subproject. Every survey shall contain municipality or ward (Palika) / village-wise information of the project affected families as follows.

- Information on socio-cultural and economic condition including livelihoods of the people in the subproject area.
- Details on the presence of various social groups including vulnerable and indigenous people, their mutual dependences and supports.
- Members of families who are residing, practicing any trade, occupation or vocation in the project affected area and livelihood sources taking into consideration the risk of traditional occupational and social replacement resulting due to subproject activities.
- Project affected families who are likely to lose various properties by types i.e. house, commercial establishment, agricultural and other land, employment, income wholly or partly from the main source of their trade occupation or vocation.
- Households losing access to private property or common property resources/ natural resources.
- Perceptions of affected families/households about compensation of their lost properties with their choices for resettlement.
- Presence of other stakeholders working in the area which could be the potential partners during planning and implementation of the project such as Government agencies, INGOs/NGOs, community-based organizations, etc.
- Incidence of any domestic violence or GBV/SEA in the area and mechanisms that exist for prevention, mitigation and response on these, including NGOs/CBOs actively engaged in these issues.
- Presence of trafficking for labor works, sex and any other activities and perception of communities.
- Presence of sex tourism in the area and observation on the chances of using tourism infrastructure for sex tourism including perception of the community and women in general.

The SIA will help in determining the magnitude of prospective losses, better targeting of vulnerable groups, ascertaining magnitude of the resettlement and costs, preparing and implementing resettlement and other plans as required.

## 5.6 Resettlement Action Plan

The Resettlement Action Plan (RAP) is a major planning document, which is based on their information gathered from census survey of affected people and inventory of lost assets. The content of full RAP should include a statement of involuntary resettlement objective and strategy, with (i) organization responsibilities, (ii) community participation and disclosure arrangements; (iii) finding of the socio-economic survey ; (iv) legal framework, including eligibility criteria and entitlement matrix; (v) mechanisms for resolution of conflicts and appeals procedures; (vi) compensation and resettlement measures; (vii) inventory, valuation of, and compensation for, lost assets; (viii) land ownership, tenure, acquisition, and transfer; (ix) access to training, employment, and credit; (x) shelter, infrastructure and social services; (xi) environmental protection and management; (xii) monitoring and evaluation; (xiii) a detailed cost estimate with budget provisions; and (xiv) an implementation schedule, showing how activities will be scheduled with time-bound actions in coordination with the civil works. The RAP should establish an eligibility cut-off date.

If the impacts are minor<sup>1</sup>, an Abbreviated RAP (ARAP) will be prepared. ARAP covers the following minimum elements:

- A census survey of displaced persons and valuation of assets.
- Description of compensation and other resettlement assistance to be provided.
- Consultation with displaced people about acceptable alternatives.
- Institutional responsibility for implementation and procedures for grievance redress.
- Arrangements for monitoring and implementation.
- A timetable and budget.

A sample table of contents (ToC) for RAP is provided in Annex 6.

## 5.7 Policy Measures at Operational Level

The policy aims to resettle and rehabilitate the affected persons in a manner that they do not suffer from adverse impacts and shall improve or at minimum retain their previous standard of living, earning capacity and production levels. Special attention will be paid for the improvements of living standards of marginalized and vulnerable groups.

Followings are the principles that will be followed in RAP preparation and implementation:

- i) The adverse impacts of the project induced activities/interventions would be either avoided to the extent possible or minimized. Where such impacts are unavoidable, the project-affected persons irrespective of their legal title will be assisted in regaining their standard of living.

---

<sup>1</sup> Impacts are considered ‘minor’ if the affected people are not physically displaced and less than 10 percent of their productive assets are lost.

- ii) The project will consider feasible alternative project designs to avoid or minimize involuntary land acquisition, placing due attention to the impacts on the people, especially the poor, disadvantaged, indigenous and vulnerable communities.
- iii) Under this policy, preference will be given to land-based resettlement strategies for affected persons whose livelihoods are land-based.
- iv) In the proposed project, the absence of formal titles will not be a bar to resettlement assistance and rehabilitation.
  - v) Attention will be paid to the needs of vulnerable displaced groups, especially those below the poverty line, the landless including squatters and encroachers, the elderly, women and children, indigenous peoples, ethnic minorities or other displaced persons who are not protected through national compensation legislation.
- vi) The project affected people will be adequately consulted and informed about their options and rights pertaining to resettlement and are offered choices and provided with technically and economically feasible resettlement alternatives.
- vii) Consultations will be carried out and culturally appropriate livelihood supports will be provided to the affected communities, especially the vulnerable and indigenous people. Affected people including indigenous people will be identified and assisted to improve their livelihoods.
- viii) No physical works will be carried out prior to the payment of compensation at replacement cost and other assistances to the affected people in accordance with this policy framework.
- ix) Grievance redress mechanism will be established at the project level to ensure timely redressal of the grievances and speedy resolution of disputes.
- x) All information related to resettlement preparation and implementation will be disclosed to all concerned, and people's participation will be ensured during planning and implementation of the project.
- xi) When possible, resettlement plans should be conceived as development opportunities, so that those affected benefit from project activities.

## 5.8 Eligibility, Assets Valuation and Entitlements

### 5.8.1 Eligibility

The World Bank Policy on Involuntary Resettlement Policy (O.P 4.12) makes it mandatory to pay compensation at replacement costs to all project affected persons both titled and non-titled holders (i.e. squatters, encroachers and tenants) and resettlement assistance for lost income and livelihoods.<sup>1</sup> In the project, the absence of formal titles will not be a bar to resettlement assistance and rehabilitation. However, the non- title holders, especially the squatters and encroachers, will be compensated for their structures only and not the land where they have been living.

The principles adopted herein contain measures and assistance for any vulnerable affected person (AP). Persons affected by land acquisition, and relocation and/or rehabilitation of structures/assets (businesses, houses, etc.) are entitled to a combination of compensation measures and resettlement assistance, depending on the nature of ownership rights of lost assets and scope of the impact, including social and economic vulnerability of the affected persons. Thus, the affected persons in the project will be entitled to various types of compensation and resettlement assistance that will help in the restoration of their livelihoods, at least, to the pre-project levels.

The cut-off date for title holders is based according to the Land Acquisition Act, and for non-titleholders the date of the census survey. Those who encroach into the subproject area after the cut-off date will not be entitled to compensation or any other assistance.

### 5.8.2 Assets Valuation

Valuation of affected assets is critical while determining the compensation to the affected families, and this calls for census survey of all families affected. All assets that will be affected, as identified by the survey teams, will be properly recorded and verified in the presence of the concerned persons and families. The detailed measurement survey of land and/or non-land assets will be used for determining actual impacts, and replacement cost surveys (or asset valuation) will be carried out. This information will be used by CDC for the determination of compensation or used to inform the negotiation of land value between the CDC and land owner as per the LAA.

The valuation of affected assets will be undertaken by the District-level Compensation Determination Committees (CDCs) of the government and the compensation will be

---

<sup>1</sup> Displaced persons or Project Affected persons may be classified in one of the following three groups: (a) those who have formal legal rights to land (including customary and traditional rights recognized under the laws of the country); (b) those who do not have formal legal rights to land at the time the census begins but have a claim to such land or assets--provided that such claims are recognized under the laws of the country or become recognized through a process identified in the resettlement plan, and (c) those who have no recognizable legal right or claim to the land they are occupying.

determined on the basis of replacement cost.<sup>1</sup> Replacement cost is the method of valuation of assets that helps determine the amount sufficient to replace lost assets and cover transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account. Normally, the valuation of land and other properties will take into account the followings.

- Market /replacement value of land by types of land
- Transaction costs involved in purchasing land i.e. registration/ transfer fees and other costs
- Replacement value of structures and facilities without deducting depreciation
- Prevailing wage rates for construction of structures
- Value of trees/fruits/ orchards based on the rates of concerned agricultural/forest offices

The CDC for the project activities will be the district level Compensation Determination Committee constituted by the Government of Nepal as per the law. The Project Director or project staff will represent the project in the committee and the decisions of the committee will be binding to all. Similarly, the committee will also be represented from among the PAFs to raise voice and do negotiations during assets valuation and determining the compensation.

### 5.8.3 Entitlements

The Entitlement Policy specifies compensation and/or rehabilitation measures for two units of entitlement; individuals (i.e. affected individuals and their households) and groups. Entitlements for each type of APs are based on the types and levels of losses. Generally, the entitlements under this project cover the followings.

- Full compensation of lost land and other assets at replacement value to the title holders. In case of vulnerable group (IPs, *Dalits*, socio-economically poor, women headed family), preference will be given for land compensation, if available,
- Resettlement and rehabilitation assistances as per the framework or RAPs as applicable,
- Compensation to non -title holders as per the framework or RAPs as applicable,
- Compensation to lost land even if the owners have no formal legal rights to land at the time of the census but have a recognizable legal right or claim to such land or assets, and

---

<sup>1</sup>"Replacement cost" is the method of valuation of assets that helps determine the amount sufficient to replace lost assets and cover transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account.

- Compensation to the land that has been used by affected persons under lease with.

### **Key Definitions**

The following definitions are used in the documents

*Cut-off date for eligibility to entitlement:* The cut-off date for eligibility to compensation and assistance would be the date of issuing the preliminary notice under the *Land Acquisition Act 2034*. In cases where people lack title, the cut-off-date shall be the date of start of the Census survey undertaken by the project authority.

*Project Affected Person:* Affected Persons are those who stand to lose all or part of their physical and non-physical assets including homes, productive land, community resources, commercial properties; livelihood; and socio-cultural network.

*Project Displaced person:* A displaced person is a person who is compelled to change his/her place of residence and/or work place or place of business, due to the project.

*Vulnerable Households:* Households defined as vulnerable in VCDF.

*Project Affected Family (PAF):* A family whose primary place of residence or other property or source of livelihood is adversely affected by the acquisition of land for a project or involuntary displacement for any other reason

*Wage Earner:* A person who is working with a commercial establishment or working as a labour in an agriculture land, which is being affected by the project.

*Encroacher:* A person, who has trespassed Government land, adjacent to his/her own land or asset, to which he/she is not entitled, and deriving his/her livelihood prior to the cut-off date.

*Squatter:* Squatter is a person who is landless and has settled on publicly owned land without permission and has been occupying publicly owned building without authority prior to the cut-off date.

*Vulnerable Person:* The vulnerable person includes both socially as well as economically disadvantaged persons such as Janjatis, *Dalits*, disabled/handicapped, woman headed households, destitute, orphans, widows, unmarried girls, abandoned women or persons above sixty years of age; who are not provided or cannot immediately be provided with alternative livelihood, small and marginal farmers, and landless wage earners.

*Entitled Person:* person adversely impacted by the project and is entitled to some kind of assistance as per the project entitlement framework

*Titleholders (THs):* Persons who possess legal documents in support of claims made towards ownership of structure or land are titleholder.

*Replacement Cost:* With regard to land and structures, “replacement cost” is defined as follows:

- For agricultural land, it is the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes.
- For houses and other structures, it is the market cost of the materials to build a replacement structure with an area and quality similar to or better than those of the affected structures or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labor and contractors' fees, plus the cost of any registration and transfer taxes.

*Temporary Impact:* Impact expected during implementation of the project in the form of earth, spoil, tremors, vibrations, etc. affected land and structure.

Table 5: Entitlement Matrix

Losses by Type	Entitled Persons/ Family	Entitlements	Implementation Procedures
1.1 Acquisition of private, tenancy, or Guthi land	<ul style="list-style-type: none"> <li>Titleholder</li> <li>Tenants</li> </ul>	<p>i) Land of equivalent size and quality (if available), or cash compensation at replacement value.</p> <p>ii) In case of vulnerable groups preference should be to replace land for land.</p> <p>iii) Any transfer costs, registration fees or charges to be borne by the project.</p> <p>iv) Legal tenants will be entitled for compensation as per the law.</p> <p>v) If remaining land becomes unviable as a result of land acquisition, land owner will have an option to relinquish the remaining parcel (s).</p> <p>vi) For loss of income due to land loss, one year of minimum agricultural wages as assistance towards loss of income.</p> <p>vii) Advance notice for harvesting standing crops and if not possible, pay compensation for the crop loss.</p> <p>viii) Training for skill upgradation to encourage for self-employment to restore the livelihood.</p>	<ul style="list-style-type: none"> <li>A list of available ailani land in each RM/M is required.</li> <li>A list of affected and entitled persons and the area of land loss is required.</li> <li>Notice to vacate will be served at least 35 days prior to acquisition date.</li> <li>Case-wise compensation will be either by cash or cheque, depending on the owner's preferences.</li> <li>To ensure fair compensation, determination of rates will be established not more than one year prior to property acquisition.</li> <li>Land registration in the name of both land owner and spouse (in case of land for land compensation)</li> <li>In case of cash compensation, deposited into a joint account in the name of both land owner and spouse.</li> </ul>
1.2 i) Loss of tenancy land	<ul style="list-style-type: none"> <li>Land owners and</li> <li>Tenants</li> </ul>	<p>i) Both the landlord &amp; the tenant will be entitled for 50 percent of land compensation amount each (As per 2058 B.S. amendment in Land Reform Act).</p> <p>ii) Non-registered tenant/renter/lease holder does not qualify for compensation for land losses; however, they will be entitled to compensation for crops. Any upfront cost for the tenancy agreement will be reimbursed.</p>	<ul style="list-style-type: none"> <li>Where a renter/leaseholder has a share cropping arrangement, the compensation payable should be apportioned according to the arrangement.</li> <li>An advance prior notice will be provided to landlord and tenant</li> </ul>
1.2 ii) Loss of land	<ul style="list-style-type: none"> <li>Non -title holders</li> </ul>	<p>i) Non-titleholders with traditional land use rights and recognized by GoN and who are in process of getting land ownership title will be provided compensation for land.</p> <p>ii) Resettlement assistance in lieu of compensation for land occupied (land, other assets, employment) at least to restore their livelihoods and standards of living to pre-displacement level.</p>	<ul style="list-style-type: none"> <li>60 days advance notice to shift from occupied land</li> <li>CDC to decide the status of such non-titleholder</li> <li>Assistance in finding alternative land</li> </ul>

1.2 iii) Land Use restriction on traditional, customary or community managed land	<ul style="list-style-type: none"> <li>• Non-title Holder</li> </ul>	<ul style="list-style-type: none"> <li>i) Land of equivalent size and quality (if available)</li> <li>ii) One-time grant equivalent to three months of minimum agricultural wage in case of loss of livelihood.</li> <li>iii) Advance notice for harvesting standing crops and trees and if not possible, pay compensation for the loss.</li> <li>iv) Alternatives to restore their livelihoods such as training for skill upgradation.</li> <li>v) Preferential involvement in project construction works.</li> </ul>	<ul style="list-style-type: none"> <li>• A list of available ailani land in the area is required.</li> <li>• Assistance in finding alternative land.</li> <li>• A list of affected and entitled persons and the area of land loss is required.</li> <li>• Inventory of the affected assets and livelihood loss is required.</li> </ul>
2. Temporary loss of land	<ul style="list-style-type: none"> <li>• Titleholder/ Non- title holders</li> <li>• Tenants</li> </ul>	<ul style="list-style-type: none"> <li>i) One-month Prior notice before civil works allowing the owners to salvage their assets and crops.</li> <li>ii) Compensation for any damage caused to structure/assets or standing crops (The contractor will be responsible for compensating for any temporary damage to property business, assets, crops and trees during civil works which will be reflected in the contract agreement)</li> </ul>	<ul style="list-style-type: none"> <li>• The owner/entitled party will sign temporary occupation contract specifying: period of occupancy, terms and conditions for calculation and production losses, frequency of compensation, annual inflation adjustment, and land protection and rehabilitation measures.</li> <li>• Contractor/developer to negotiate a contract agreement on the rental rate with the owner for temporary taking of land.</li> <li>• Land should be returned to the owner at the end of temporary acquisition period, restored to its original condition or improved as agreed with the owner.</li> </ul>
3. Loss of residential, commercial, and other structure	<ul style="list-style-type: none"> <li>• Owner/Title holders</li> <li>• Tenants</li> <li>• Non-titled holders</li> </ul>	<ul style="list-style-type: none"> <li>i) Compensation for full or partial loss at replacement cost of the affected structure(s) to both title holders / non-title holders.</li> <li>ii) Transportation allowance for residential and commercial structures to cover actual transportation cost.</li> <li>iii) Rental allowance equivalent to three months of agriculture wage income as one-time grant to the affected family losing residence.</li> <li>iv) Non-title holders will not be provided any compensation for land, but will be provided replacement value for the structure.</li> </ul>	<ul style="list-style-type: none"> <li>• Replacement cost at market value of structures will be determined by the CDC in consultation with local experts and compensation prices will be finalized with participation of AP representatives and CUG.</li> <li>• Other structures include: toilet, sheds, walls, fences, water mills, workshop, etc.</li> <li>• Materials may be salvaged with no deduction from compensation.</li> <li>• Notice to vacate at least 35 days prior to acquisition.</li> <li>• Renter/ lessee holder will not be entitled for compensation of structures. However if the structures are made by them, they will be</li> </ul>

			entitled to compensation or will be according to the lessee agreement
4. Loss of community structures and/or resources	<ul style="list-style-type: none"> <li>The users of the facility or community or group</li> </ul>	<ol style="list-style-type: none"> <li>Reconstruction of similar facilities in an equal or better condition than they were before, or</li> <li>Cash compensation to the legal/ community custodians at full replacement cost without depreciation of deduction for salvaged material; or</li> <li>Negotiated relocation of similar facilities in consultation with the community</li> </ol>	<ul style="list-style-type: none"> <li>The land revenue office in the district and concerned Rural Municipality (RM)/municipality will be requested to assist communities for land replacement identifying the area nearby.</li> </ul>
5. Loss of trees and crops	<ul style="list-style-type: none"> <li>Owner of the affected fruit/orchard</li> </ul>	<ol style="list-style-type: none"> <li>Cash compensation based on annual value of the produce and calculated according to Department of Agriculture (DOA) norms.</li> <li>Three months of minimum wage amount to the affected family against loss of future income from fruits/orchard</li> </ol>	<ul style="list-style-type: none"> <li>Inventory of the affected trees and crops and owner.</li> <li>Advance notice for crop harvesting. Crops grown after the issue of notice will need to be compensated.</li> <li>The works schedule should be adjusted considering the crop season to avoiding crop damage.</li> </ul>
	<ul style="list-style-type: none"> <li>Owner of the affected timber and fodder trees</li> </ul>	<ol style="list-style-type: none"> <li>Cash compensation based on calculation of the production and calculated according to the district norms as decided by the Department of Forestry</li> <li>One month of minimum agriculture wage amount to the affected family as assistance against loss of income.</li> </ol>	
	<ul style="list-style-type: none"> <li>Owners and sharecroppers of affected crops</li> </ul>	<ol style="list-style-type: none"> <li>Cash compensation based on local market prices for the produce of one year and calculated as per the norms of District Agriculture Development Office</li> <li>50% cash compensation of the lost crop for the sharecroppers/legal tenant (<i>Mohi</i>)</li> <li>Non-titled persons will be informed 6 months prior to construction or provide compensation for crops.</li> </ol>	
6. Business disruption losses compensation	<ul style="list-style-type: none"> <li>Permanent business (Shops/trade/other business)</li> </ul>	<ul style="list-style-type: none"> <li>It has been assumed that there will be no full closure of the business/ shops due to the project activities during construction/rehabilitation period. As a result, only partial disruption to some businesses is expected. A onetime grant equivalent to one week's earning (Rs. 2000.00 X 7 days) = Rs.14000.00 shall be compensated at minimum to those losing income from shops/ trade.</li> </ul>	
7. Loss of economic opportunity	<ul style="list-style-type: none"> <li>Persons in the sub project vicinity who may be affected adversely but may not lose assets</li> </ul>	<ol style="list-style-type: none"> <li>Preferential involvement in project construction works</li> <li>Skills training support for economic restoration</li> <li>One-time grant equivalent to three months of minimum agricultural wage in case of loss of livelihood.</li> </ol>	

8. Land donation	<p>Voluntary land donation is accepted only if:</p> <ul style="list-style-type: none"> <li>i) The PAF have been appropriately informed and consulted about the project, rights and the choices available to them</li> <li>ii) The amount of land being donated is minor and will not reduce the PAF's remaining land below that required to maintain the donor's livelihood at current levels</li> <li>iii) No household relocation is involved;</li> <li>iv) The donor is expected to benefit directly;</li> <li>v) All adult family members have agreed to donate;</li> <li>vi) PAF are aware that refusal is an option, and have confirmed in writing their willingness to proceed with donation</li> <li>vii) Land is free from disputes regarding ownership or tenure.</li> </ul>	<ul style="list-style-type: none"> <li>i) No compensation for the donated land, but entitled for compensation of other assets such as minor structure, trees, crops, allowances, etc.</li> <li>ii) Transfer of landownership</li> <li>iii) Free of any transfer costs, registration fees or charges</li> </ul>	<ul style="list-style-type: none"> <li>• Verify the requirements of the donation</li> <li>• Carry out due diligence on the owners and users of land donated: identify rightful owner(s); any competing claims of ownership or use; structures and assets on the land; any encumbrances on the land.</li> <li>• Ensure appropriate consultation and disclosure</li> <li>• Establish informed consent of the person donating land</li> <li>• Sign written commitment; local witness(es) or third-party verification to the commitment letter</li> <li>• Maintain a transparent record of all consultations and agreement reached.</li> </ul>
9. Assistance to vulnerable groups	Affected families from vulnerable groups as defined in the VCDF	<ul style="list-style-type: none"> <li>i) One-time financial assistance in case of loss; or</li> <li>ii) Skill training and income generation support</li> <li>iii) Preferential access to project construction and maintenance employment opportunities.</li> </ul>	

## 5.9 Consultations, Participation and Disclosure

### 5.9.1 Consultations and Participation

Consultations are the corner stone for successful planning and implementing the social management plans viz SMPs, RAPs, VCDP, GAP, etc.

This section outlines the consultation mechanism, particularly for the preparation of RAP and its implementation. Public consultation will include both local governments and civil society where the affected people would be regularly provided with information on the project and the resettlement process prior to and during the preparation for resettlement actions. The section below details the measures to be undertaken and the mechanisms of consultation and participation will include mainly the followings:

- Public meetings in the project area, especially with the affected families/communities;
- Interviews/surveys with the affected households/families to determine the losses/impacts;
- Focus group discussions with the affected groups viz owners of affected; properties, their perceptions about compensation and resettlement;
- Information/ awareness campaigns through different medias;
- Interactions with local government bodies i.e. Palika offices/ district offices as necessary; and
- Grievance handling and management: For grievances coming from the community and other stakeholders, drop-in boxes should be made accessible in publicly accessible locations and other mediums (such as phone calls, online platform and other locally accessible communication channels).

Consultations should be undertaken to enable maximum participation of the affected people where they can raise their concerns. PAPS' participation should also be ensured during final assessment of compensation, resettlement and monitoring. Details of these consultations including dates, names of participants, issues raised and how these have been addressed will be documented in the subproject SMPs/ RAPs.

Consultation is critical for resettlement planning, but outbreak of infectious disease like COVID-19 require the public to exercise specific measures such as social distancing to prevent spread of disease. This could have significant impact on project timelines. In such situation, the PIE will assess the level of consultation required, including location and categories of stakeholders. Based on the assesment different channels of communications will be considered considering the need for social distancing.

For details on project's communication, consultation and citizen engagement, please refer to Chapter 8.

### 5.9.2 Information Disclosure

In consistent with the Bank's policies, the summarized reports of Resettlement Action Plans including ESMF will be made available in Nepali language to the project offices, affected people and beneficiaries. Local NGOs and public offices in the project site will be provided copy of ESMF by PIE. The draft and final ESMF and the RAP will be disclosed in the websites of (World Bank Infoshop and project website) and concerned Municipalities/Palikas and public places.

For all activities under the project, information will be disseminated to beneficiaries at various stages. In the initial stage, the project office will be responsible for informing potential stakeholders/affected parties/persons (APs) and the general public about land acquisition requirements through leaflets and publication in local media outlets and newspapers. The project with support from its site offices will conduct consultations and disseminate information to all beneficiaries during the initial stages to create awareness about the project and inform the people about project impacts and mitigation measures.

## Chapter 6: Vulnerable Community Development Framework

### 6.1 Introduction

The project will make investment in diverse nature-based tourism development activities in the defined project areas where majority of the beneficiaries may be underserved, vulnerable and marginalized. It is expected that there would be Indigenous Peoples (IP) communities present in the project destinations. The World Bank's OP 4.10 (Indigenous Peoples) is therefore triggered. Given that the subproject sites are not known at the moment, Vulnerable Community Development Framework (VCDF) has been prepared in line with domestic and World Bank safeguard policies to guide the preparation of Vulnerable Community Development Plans (VCDP) for each destination to ensure negative impacts on these communities are reduced and positive benefits are enhanced.

During implementation, the project may affect indigenous and vulnerable people and communities both positively and adversely. While the positive impacts will contribute to bring improvement in the livelihoods of the vulnerable people, the adverse impacts will lead to further impoverishment of these people. Not only this, the interventions may also result in discriminatory impacts causing further hardships and difficulties in the livelihoods of poor and vulnerable groups including indigenous people and *Dalits*, if the project activities/intervention are not aligned well with their needs and aspirations. Similarly, women in developing countries like Nepal also fall under the vulnerable category because of prevailing discriminatory traditional/customary/religious practices hindering their upliftment; their lack of access to basic public services such as education, health and employment; and their overall backwardness in the context of prevailing patriarchal society.

The purpose of VCDF is to develop systematic procedure of identifying project's impacts on vulnerable people and develop mechanism for meaningful consultations, participation, information disclosure as well as deploying strategic measures to address the impacts. The framework also provides measures to develop culturally appropriate assistances and supports to the target groups in accordance with their priorities and needs. This framework is based on the national policies/strategies as well as the World Bank's Indigenous Peoples Policy (OP 4.10). The principal objectives of the framework are to:

- Ensure that project benefits are accessible to the vulnerable communities of the project area;
- Avoid adverse impacts on vulnerable communities and if unavoidable ensure that adverse impacts are avoided to the extent possible, if unavoidable, ensure that the adverse impacts are minimized and mitigated;
- Ensure that the project engages in free, prior, and informed consultation with affected Indigenous Peoples and other vulnerable communities leading to broader community support for the project;

- Ensure vulnerable peoples' participation in the process of preparation; implementation and monitoring of the sub-project activities;
- Ensure enhanced use of indigenous knowledge, skills and technology as appropriate during subproject designs and use appropriate measures/technologies to preserve and improve indigenous knowledge; and
- Minimize further social and economic imbalances within communities.

## 6.2 Legal Framework and Policies

Both the Government of Nepal (GoN) as well as the World Bank have their respective policies and framework that are designed to safeguard the indigenous and vulnerable people from getting exposed to higher risks and vulnerabilities while implementing development projects. The constitution of Nepal promotes cultural diversity and puts emphasis on enhancing skills, knowledge and rights of Indigenous people and other vulnerable groups. The National Foundation for the Upliftment of *Adivasi/Janajatis* Act, 2058 (2002) is the formal entity recognized by the Government to hear the voices of indigenous people and address them properly. Ever since its existence, the foundation has come across long way in crafting and reforming policies and legal provisions for the combined interests of indigenous people. The National Human Rights Action Plan 2005, the Environment Protection Act 2019, and the Forest Act 1993 have also placed emphasis on the protection and promotion of vulnerable groups in general and IPs' knowledge, and cultural heritage in particular. In 1999, the Local Self-Governance Act was amended to devolve more power to the local political bodies, including authority to promote, preserve, and protect the IPs' language, religion, culture, and their welfare.

The World Bank policy on indigenous people is aligned with poverty reduction and sustainable development ensuring that the development process fully respects the dignity, human rights, economies, and cultures of indigenous peoples. For all projects that are proposed for Bank financing and affect indigenous peoples, the Bank requires the borrower to engage in a process of free, prior, and informed consultation. The Bank recognizes that the identities and cultures of Indigenous Peoples are inextricably linked to the lands on which they live and the natural resources on which they depend. These distinct circumstances expose Indigenous Peoples to different types of risks and levels of impacts from development projects, including loss of identity, culture, and customary livelihoods, as well as exposure to disease. According to World Bank, indigenous peoples are frequently among the most marginalized and vulnerable segments of the population. Because of this, their economic, social, and legal status often limits their capacity to defend their interests and rights to lands, territories, and other productive resources, and/or restricts their ability to participate in and benefit from development.

### 6.3 Indigenous People and Vulnerable Groups in Nepal

GoN's Constitution identifies economically poor, socially or culturally backward women, *Dalits*, Janajatis, Khas Aryas, Madhesis, Tharus, Muslims, minorities, marginalized, endangered communities, gender-based and sexually oriented minorities and the disabled or those who are physically or mentally incapacitated or citizens of backward regions as vulnerable groups and has special provisions for the protection, empowerment or advancement of these groups.

In Nepal, the term indigenous people (*Adibasi*) equates with ethnic groups (*Janajati*). The constitution of Nepal recognizes indigenous people as *Janajatis* or Nationalities. The National Foundation for the Development of Indigenous Nationalities (NFDIN) has defined indigenous people as 'those ethnic groups or communities who have their own mother tongue and traditional customs, distinct cultural identity, distinct social structure and written or oral history of their own'. Based on this definition, NFDIN has identified 59 groups in Nepal as ethnic indigenous groups or nationalities.

Table 6: Presence of Indigenous Groups by Regions

Regions	Indigenous Groups	Total No.
Mountain	Barah Gaunle, Bhote, Byansi, Chhairontan, Dolpo, Larke, Lhomi (Shingsawa), Lhopa, Marphali, Mugali, Siyar, Sherpa, Tangbe, Thakali, Thudam, Topkegola and Wallung.	17
Hills	Baramo, Bhujel, Chepang, Chhantyal, Dura, Fri, Gurung, Hayu, Hyolma, Jirel, Kusunda, Lepcha, Limbu, Magar, Newar, Pahari, Rai, Sunuwar, Surel, Tamang, Thami, Kumal, Yakkha and Tin Gaunle Thakali.	24
Inner Terai	Bankaria, Bote, Danuwar, Darai, Majhi, Raji and Raute.	7
Terai	Dhanuk (Rajbanshi), Dhimal, Gangai, Jhangad, Kisan, kushubadia, Meche, Rajbanshi (Koch) Satar (Santhal), Tajpuria and Tharu.	11
	Total	59

Source: NFDIN, *Indigenous Nationalities Bulletin (Issue 3) 2005*.

Indigenous peoples have their wide presence in many districts of Nepal. Among the identified groups, the highest 24 groups have settled in hills followed by 17 groups in mountain, 11 groups in Terai and 7 groups in inner Terai.

*Adhibasi/Janajati* among themselves are diverse groups who also differ considerably in terms of socio-economic conditions. NFDIN has further classified these groups in five different categories mainly by their livelihoods or economic conditions. According to NFDIN, these constitute the followings:

- i) **Endangered groups** viz Bankariya, Kusunda, Kushbadia, Raute, Surel, Hayu, Raji, Kisan, Lepcha, Meche (10 groups)

- ii) **Highly marginalized groups** viz Santhal, Jhangad, Chepang, Thami, Majhi, Bote, Dhanuk (Rajbansi), Lhomi (Singsawa), Thudamba, Siyar (Chumba), Baramu, Danuwar (12 groups)
- iii) **Marginalized Groups** viz Gangai, Dhimal, Bhote, Darai, Tajpuria, Pahari, Dhokpya (Topkegola), Dolpo, Magal, Larke (Nupriba), Lhopa, Dura, Walung (20 groups)
- iv) **Disadvantaged Groups** viz Jirel, Tangbe (Tangbetani), Hyolmo, Limbu, Yakkha, Rai, Chhantyal, Magar, Chhaintan, Tingaunle Thakali, Bahragaunle, Byansi, Gurung, Marphali Thakali, Sherpa (15 groups)
- v) **Advanced Groups** viz Newar, Thakali (2 groups)

In addition to the indigenous groups, there are also substantial numbers of other groups that are not included in the indigenous *category* but identified by the GoN as marginalized groups, e.g., *Dalits* and Madhesis. The National *Dalit* Commission defines *Dalits* as most deprived social groups in the country, comprising some 13% of the total population. Recently, the government has passed National *Dalit* Commission Act, 2074 (2017) which was adopted to protect, preserve and promote the human rights and interests of the *Dalit* community and to reduce discrimination derived from caste-based bias.

The 2001 census has listed 15 different *Dalit* castes, while the National *Dalit* Commission in 2002 prepared a schedule of 28 social groups. *Dalits* generally tend to lag behind other groups in every human development indicator, as well as in terms of representation in state mechanisms. Countrywide, about 4.5 million *Dalits* are estimated to live below the poverty. The status of women, children and girls among *Dalits* are particularly worse.

Table 7: *Dalit* Communities of Nepal

Hill Group	Newar Group	Tarai Group
Badi, Chunar, Damai, Gaine, Kadara, Kami, Parki, Sarki, Sunar (9 groups)	Chyame, Kasai, Kuche, Kusule, Poda (5 groups)	Bantar, Chamar, Chidimar, Dhainr, Dom, Dusadh, Gothe, Halkhar, Jhangad, Khatawe, Lohar, Musahar, Paswan, Tatma (14 groups)

Source: National *Dalit* Commission, 2002

Other vulnerable community could be the communities who are commonly women headed households, landless, marginal farmers living below subsistence level and often *ex-kamaiyas* (bonded laborers). Moreover, these groups have no or limited access to public resources, and they almost never participate in national planning, policy, and do not participate in decision making processes or in development initiatives. As a result, their risk of falling below the income poverty line is extraordinarily high.

Different indigenous groups living the the priority project destinations are Gurung, Thakali, Loba, Lama, Magar in Annapurna and Manaslu Conservation Areas. In case of the buffer zone of National Parks, Tharus are the predominant indigenous groups.

## 6.4 Potential Risks and Impacts

### 6.4.1 Beneficial Impacts

The project will have positive impacts to the local people including the indigenous and vulnerable groups of the project area. In most subproject sites of the tourism project where project interventions are made, the local people including the vulnerable and indigenous people will realize the benefits as these groups tend to be the direct beneficiaries. The beneficial impacts of the project will occur in different ways as outlined below.

- Improved access to transport facilities in the conservation areas, parks and the buffer zones;
- Increased employment and income opportunities generated by project activities including civil works viz trails/ trekking routes, suspension bridge, last mile roads, local market development and other public tourism related construction works;
- Increased opportunities for production and marketing of local farm and off-farm products. In long run, increased flow of tourists and increased growth of hotels /restaurants will create demands of local products;
- Increased land value due to improved accessibility i.e. trails, road, bridges and other facilities created by the project;
- Increased opportunities for business/ trade of local as well as non-local products and materials as well as several services and facilities;
- Increased opportunities to promote cultural tourism utilizing the rich cultures and traditions of the indigenous people viz Gurung, Thakali, Loba, Lama, Magar, Tharu, etc.; and
- Capacity building of local people and user groups to engage in tourism related services and products, economic empowerment due to enterprise in tourism related value-chain, increased access to markets and finance, accreditation of business, business development services.

### 6.4.2 Adverse Impacts and Mitigation

The subproject activities and interventions are not expected to cause long lasting adverse impacts to the IPs and VCs. Nonetheless, following negative risks and impacts are anticipated:

- Risk of exclusion due to lack of information and voice, social discrimination, low literacy, remoteness, language;

- Risk related to gender-based violence and low-cost labor exploitation due to tourism infrastructure and services;
- Loss of intangible and tangible cultural heritage (their shared beliefs, customs, values, language and dialects), loss of indigenous knowledge and practices;
- Impact on cultural assimilation and community aspirations; and
- Disruption of customary rights of use and access to land and natural resources.

## 6.5 Indicative Issues, Mitigation and Approaches for Vulnerable Community Development

From the planning perspective, the following vulnerable groups are identified at this stage from the six destinations of the project.

- Indigenous Peoples – Bhote, Sherpa, Thakali, Chhantyal, Lepcha, Gurung, Jirel, Magar, Newar, Thami, Sunuwar, Bote, Majhi, Raji, Tharu
- Endangered Groups – Raji
- Highly Marginalized Groups – Majhi, Bote, Rana Tharu
- Marginalized Groups – Lepcha, Bhote
- Disadvantaged Groups – Tangbe, Magar, Thakali, Bahragaunle, Gurung, Marphali Thakali
- *Dalits* – Badi, Chunar, Damai, Gaine, Kadara, Kami, Parki, Sarki, Sunar, Musahar
- Madhesi
- Women headed households
- Landless and marginal landholders

Table 8: Indicative Issues and Activities for Vulnerable Community Development of STENPA Project

SN	Project Impacts	Barriers	Mitigation/Enhancement Measures	Responsibility
Project Component 1 – Improving Destination Management, Planning and Coordination				
1	Possible exclusion of VCs/IPs and women during planning process, exclusion of their priorities, needs and concerns in NBT plans	Lack of information about this project activity  Low level of knowledge  Language barrier  Cultural taboos/barriers	Detailed social mapping and identification of IPs and other vulnerable groups in destinations.  Incorporate a mechanism to ensure their meaningful participation, FPIC in planning and decision making.  Involve local facilitators who can speak the local language and cultural practices of the IPs and other vulnerable groups.	PIU and PIE, FIUs

			<p>IP/VC based networks identify and mobilize.</p> <p>Education and awareness.</p> <p>Ensure proportional representation of IPs and other VCs in local level committees and institutions, DMOs, Provincial level committees through guidelines and standards.</p>	
Project Component 2 - Enhancing Access Infrastructure, Environmental Management and Tourism Facilities for Diversification				
2	Risk of exclusion from planning and design of public infrastructures and services in the destinations and gateways resulting lack of ownership, benefits to the community	<p>Lack of information</p> <p>Social and cultural norms</p> <p>Weak implementation of policies and guidelines</p>	<p>Ensure meaningful consultations, FPIC during planning and design to accommodate the aspirations and needs of the IPs and the vulnerable groups.</p> <p>Targeted information dissemination and outreach.</p>	PIU and PIE
3	Loss of aesthetic value of the community with implication on cultural heritage	Lack of guidelines and standards with relevant requirements relating to cultural heritage in construction	<p>Mapping of cultural heritage (both tangible and intangible).</p> <p>Incorporating in the design.</p> <p>Review and revised standards and guidelines.</p>	PIU and PIE Contractor
4	Missed job opportunities	<p>Lack of skills</p> <p>Lack of information</p>	<p>Targeted information dissemination and outreach.</p> <p>Link to prime-minister's youth employment program to identify locally unemployed population.</p> <p>Link with various development program working skill development program.</p>	PIU and PIE
Component 3 - Upgrading nature-based tourism quality standards and promoting local communities' participation				
5	Possible exclusion of students belonging to VC/IP groups in getting access to internship opportunities potentially giving to the condition of youth diaspora to difficult foreign jobs	Students/youths from VC/IP groups are often in greater financial burden to support their family, repay debts, etc. leading to seclusion to the wider society (education, job options)	<p>Ensure VC and IPs are targeted in paid internship programme.</p> <p>Partnership with hospitality/tourism related academia to set IP/VC and women internship quota.</p> <p>Maintain disaggregated data.</p>	PIU and PIE FIU BDS, training firms

		Limited networks and information channels for internships		
6	Possible exclusion of VCs in getting access to skills training which may further lead to social bias/disparity and their further backwardness	Lack of information Social Cultural norms	Targeted information and dissemination and outreach. Ensure inclusive selection criteria and process. Set quotas for IPs and VCs participation.	PIU and PIE FIU BDS, training firms
7	Possible exclusion of VCs in operating NBT enterprise/business	No destination specific concessionaire mechanism in place that is also conducive for community investment Lack of information Social Cultural norms	Positive discrimination strategies for VCs: subsidies, support for proposal writings, facilitated registration and certification, etc. Set quotas for IPs and VCs. Targeted technical support to the IPs and VCs to upgrade their capacity to meet the eligibility for BDS services. Social Awareness campaigns.	PIU and PIE FIU BDS, training firms
8	No capacity in VCs to develop innovation business models/products, TCT solutions, web platforms will further aggravate social inequality	Low literacy Lack of knowledge and skill Limited access to IT facilities Lack of entrepreneurship skills	Targeting BDS services. Knowledge sharing. Formation of platforms or use of existing groups/networks for peer support with technical support from BDS.	PIU and PIE FIU BDS, training firms

## 6.6 Impact Assessment Procedure

The project destinations identified for supports are Annapurna and Manaslu Conservation Areas and Rara National Park in hills and mountains and Banke, Bardia and Shukla Phanta

National Parks in the Western Terai. Given the predomination of indigenous people in these areas, the VCDPs will be prepared for priority destination level. Following procedures will be applied in preparing VCDPs.

**i) Social Screening**

Social screening is the initial stage action to determine the magnitude of impacts on indigenous and vulnerable groups by project activities. The screening will also provide information about the potential damage / loss of community structures/ facilities, cultural and heritage sites. A sample screening checklist for the identification of vulnerable people is provided in Annex 13.

**ii) Social Assessment**

For each project destination, the project requires to undertake a comprehensive social assessment. The assessment is a systematic process to identify vulnerable groups, evaluate the project's potential positive and adverse effects on these people and explore design alternatives where adverse impacts are significant. The SA process involves various methods of information collection such as social mapping, socio-economic survey, focused group discussions with various stakeholders, etc. Free Prior Informed Consultation (FPIC) will be carried with the Indigenous Peoples that result in broad community support to the project. The significance of the impacts of the project activities on vulnerable communities will be determined by assessing the magnitude of impact in terms of (a) customary rights of use and access to land and natural resources, (b) socio-economic status; (c) cultural and communal integrity; (d) health, education, livelihood; (e) the level of vulnerability of the affected group (See Annex 7 for ToC for SA).

**iii) Preparation of VCDP**

VCDP will be prepared based on the findings from Social Assessment. The VCDP will include mitigation measures of potential negative impacts through modification of project design and development assistance to enhance distribution of project benefits. It will take into consideration aspirations and needs of IPs and vulnerable groups. In case of land acquisition or structural losses in vulnerable communities, the project will ensure that their rights will not be violated and that they will be compensated for the use of any part of their land or property in a manner that is socially and culturally acceptable to them. The compensation measures will follow the RPF of the project (See Annex 8 for indicative ToC for VCDP).

**iv) Disclosure of VCDP**

The implementing agency is responsible for the disclosure of the framework as well as the VCDP. It should also be ensured that the documents are available to the affected indigenous and vulnerable communities in an appropriate form, manner, and local language (Nepali and

other), if required. The hard copies of the framework and plans should be disclosed at PIE, unit offices and project offices as well as in the communities. Similarly, the soft copies will need to be disclosed in the website of the PIE as well as in the infoshop of the Bank.

## 6.7 Gender Development Framework

### 6.7.1 Overview

The Gender Development Framework (GDF) outlines the specific gender issues and indicates corresponding strategies/ intervention measures to address the issues under the tourism project. This will help ensure increased women's participation and gain optimal benefits from project activities. The major tools used to identify and deal with gender issues are: gender analysis, incorporation of gender issues in project design, gender-sensitive consultations, and gender related activities and indicators. Gender analysis will be an integral part of the initial social assessment carried out as part of the safeguard screening and social planning. All social issues identified at the screening stage including gender issues of the subproject area will be assessed during the preparation of the subproject investments plans, adequately addressed during implementation, monitored and reported.

The nature-based tourism development project offers ample scope to absorb sizable number of women and men through the generation or expansion of diverse income generating activities in the subproject sites. In case of tourism, especially on mountain trekking in ACA and MCA, women of indigenous groups, namely Bhote, Sherpa, Thakali, Chhantyal, Lepcha, Gurung, Jirel, Magar, Newar, Thami, Sunuwar, Bote, Majhi, Raji are traditionally the key actors playing important role in hotel and homestay business and there are opportunities to diversify and expand their business in future. Similarly, Tharu women living in the buffer zones of Banke, Bardia and Shukla Phanta National Parks could be involved as entrepreneurs in operating tourism based small and medium enterprises. In the case of Rara National Park, those below poverty and highly excluded groups will be benefited from the project. In order to tap these potentials, gender-informed approaches will be mainstreamed in the design and implementation of the project taking into account different needs and opportunities for women, men, and the youth. The project activities, particularly those targeted at communities living within the targeted protected areas, will be geared largely towards women of indigenous groups to the extent possible.

### 6.7.2 GoN Policies and Legislations on Gender Equity and Women

The government has made notable efforts with regard to gender equality and women's empowerment. The Constitution of Nepal 2015 is a major departure in this direction. Article 43 of the constitution deals with the rights of women that include rights to lineage, right to

safe maternity and reproduction, right against all forms of exploitation, and equal rights in family matters and property. The Gender Equality Act, 2006 brought tangible changes in laws related to sexual violence against women. Also important is the 2009 Domestic Violence (Crime and Punishment) Act, which for the first time recognizes domestic violence as a crime punishable by law. The National Women Commission is the constitutional body established to protect the issues of women and help them fight against all kinds of problems encountered.

The Government of Nepal is working to incorporate gender equality in all its development policies and programs attempting to promote women's participation and representation in political, social, economic and professional domains. The government's efforts are well reflected by some key policy measures viz gender parity in work, gender responsive budgeting, equal wage for equal works, etc. The donor funded development projects and INGOs/NGOs working in the country are also apparently implementing their activities placing due emphasis on gender with affirmative actions to empower women in many cases.

Tourism policy Nepal (2008) underlines about sharing benefits from tourism among the disadvantaged groups of society including women. The policy further highlights on fostering rural tourism activities led by women or women groups.

Also, Nepal's Tourism Strategic Plan (2016-2025) has identified women as key actors in destination communities on the ground that women play roles as caretakers of both households and communities at large.<sup>1</sup>

### 6.7.3 Gender Issues/Barriers and Interventions Required

Gender issues are very common and widespread at all levels and societies. In Nepal's case, gender issues normally occur in several forms and, quite often, remain the underlying reasons affecting adversely the psychosocial condition and productivity of women. These issues, no matter how serious they are, also get entrenched far and wide and are difficult to be identified and addressed at a one effort. Many of the issues require multiple interventions at varied levels backed up by legal reforms.

Table 9: Gender and Development Framework

Issues	Strategy	Proposed Activities/ Indicators	Responsibility
<b>Component 1: Improving destination management, planning and coordination</b>			
Difficulty in following formal	Understand the opportunities for increased	Carry out a gender assessment as part of social assessment to identify key gender gaps, opportunities as part of the project.	PIE+FIU

<sup>1</sup> Ministry of Culture, Tourism and Civil Aviation. 2016. National Tourism Strategic Plan 2016-2025. Kathmandu: Government of Nepal, p. 184.

<b>Issues</b>	<b>Strategy</b>	<b>Proposed Activities/ Indicators</b>	<b>Responsibility</b>
processes <sup>1</sup> serve as a constraint to take full advantage of opportunities in the tourism value-chain.	participation, employment and other benefits to women including IP and ethnic women.		
Under representation and participation in decision making with patriarchic and discriminatory values against women in many communities, especially in rural areas	Enhance women representation/ participation in key decisions makings in groups/committees.	Increase women representation/ participation in groups/committees mandatorily (at least 33%).	PIE+FIU
Men dominate the sector and women hold only a small proportion of higher end tourism jobs in terms of income, decision-making and positions, resulting to limited access to and control over resources.	Engage women beneficiaries, women led tourism enterprises, women in private sectors.	Consult women beneficiaries, women led tourism enterprises, women in private sectors and represent (at least 33%) them in consultations, planning and budgeting for NBT investments, and in preparation of DVIP in project destinations.	PIE+FIU
Nepal's tourism policies, strategies and destination management plans lack explicit attention to gender equality.	Consider gender related implications and adopt gender provisions into the National Tourism Policy and regulations.	Review the policies, strategies and plans from gender lens and incorporate gender friendly provisions.	PIE+PIU
Lack of data and studies available on the position of women in the tourism value chain and their value addition.	Strengthen national statistics with disaggregated data.	Collect sex disaggregated data.	PIU+PIE+FIU
Limited access to and control over resources (land, house, cash, family income, etc.) barring women to use properties as collateral for	Encourage women to own resources/assets in their name and their mobilization.	Conduct awareness programs for women beneficiaries.	PIE+FIU

<sup>1</sup> Such as lengthy paper works for registration and/or licensing, lack of subsidies, difficulty in accessing finance, lack of information on market, and other business development services, and lack of skilled human resources

Issues	Strategy	Proposed Activities/ Indicators	Responsibility
borrowing loans to operate commercial activities			
<b>Component 2: Enhancing access infrastructure, environmental management and tourism facilities for diversification</b>			
Women and other social groups are not adequately consulted and/or not part of the decision making resulting to them not wanting to use the infrastructure or be engaged in the maintenance of it.	Engage women beneficiaries, women led tourism enterprises, women in private sectors in meetings.	Consult women beneficiaries, women led tourism enterprises, women in private sectors and represent (at least 33%) them in decision making meetings.	PIE+FIUs
Safety and security issues of women – vulnerability of women in tourism sector and gender-based violence	Reform/develop rules/ regulations on safety/security of women/ GBV.	Design gender sensitive infrastructure i.e. separate sanitation facilities in along the trekking routes and public places, with adequate lighting and signage.  Regulate working hours during day time/close monitoring.	PIE+FIUs
Women are in more vulnerable position than men from being sexually exploited and abused in tourism sector.	Ensure their involvement in the management and maintenance of infrastructure investments.	Implement GBV mitigation plans as per the GBV risk assessment.	PIE+FIU+BDS
<b>Component 3: Upgrading tourism-related products and economic opportunities for local communities</b>			
Lack of capacity and skills to upgrade and diversify tourism related business by women	Impart training /skills and business literacy on capacity building of women to upgrade/diversify business.	Skill and knowledge enhancement through training/orientation based on needs assessment.	BDS
Inability to follow bureaucratic process for registration and licensing/bureaucratic huddles	Orientation /facilitation to women on business registration/ licensing in tourism sector.	Literacy and knowledge sharing on registration /licensing,	PIE+BDS
Lack of technical and marketing skills leading to less opportunity for jobs and as entrepreneur, lack of access to	Improve women's access to productive resources/ assets/ markets/MFIs.	Training/exposure visits on marketing/ business literacy and linkage development with MFIs.	PIE+FIU+BDS

Issues	Strategy	Proposed Activities/ Indicators	Responsibility
financial institutions for loans, etc.			
Lack of networks or support mechanisms to promote women enterprises /ventures.	Mobilization of women into groups and networks.	Develop networks to support women in tourism business.	PIE+FIU+BDS
Women in tourism are more likely to be undertaking part-time, informal, seasonal, and casual works.	Address constraints women face in continuing their jobs.  Develop special packages to support women farmers/ entrepreneurs and facilitate their participation in project activities.	Give capacity building orientation to service providers to enable them to provide better economic options, upscaling and jobs for women in an enabling environment that is safe and secure so that they are able to continue and retain their jobs.	FIU+BDS
Limited or lower figure of graduates that get internship opportunities and secure jobs within specified time	Increase internship opportunities targeting girls/ women in tourism sector activities.	Increase support to internship opportunities (at least 25% women).	PIE+FIU
<b>Component 4: Project management, monitoring and evaluation</b>			
Men dominate the sector and women hold only a small proportion of higher end positions in government institutions.	Ensure the project team is inclusive in terms of gender and caste/ ethnicity.	Encourage recruitment of women members/staff/trainers/supervisors/business development service providers in the project activities.	PIE+FIU

In the context of STENPA project, the opportunities to address women issues and get them empowered appear quite significant. To address the gaps identified, the project will ensure the participation of women in consultations and planning, infrastructure investments will be gender sensitive, and women-led enterprises and community members will be adequately targeted for project support and new skills and knowledge through new technologies.

#### 6.7.4 Gender Inclusive Design and Preparation of GAP

The Gender Action Plan (GAP) for the project require to be developed taking into account the needs and aspirations of the women in different project and subproject sites of ACA, MCA, Banke, Bardia, Shukla Phanta and Rara National Parks. In view of a large number of women who are already engaged in tourism business in these sites, it is important to visit these sites

to update the latest situation of women including their needs, capabilities, opportunities and aspirations for their betterment and minimize negative risks and impacts. Once the feedback from the target women groups are collected these may need to be fit in the project planning and design<sup>1</sup>. In general, different strategic measures specified in the table below should be considered to develop the proposed gender action plans for the women of different subproject sites.

#### 6.7.5 Process for Preparing GAP

The project should engage competent Gender Expert to prepare the GAP. The expert should undertake field visit of the subproject sites and collect sufficient information to prepare the plan. The minimum requirements to collect information are: i) consultations with the women groups to collect primary information, ii) interactions with local government offices, NGOs and micro finance agencies for their coordination and synergy building, iii) sharing the key elements of plans with the project officials, and iv) disclosure of the document.

---

<sup>1</sup> Field visit is suggested for the preparation of gender action plans as the activities/ actions tend to differ in different sites depending upon the needs and priorities of women

## Chapter 7: Action Plan – Gender Based Violence Risk Mitigation

### 7.1 Need and Purpose

Nepal ranks 118 out of 160 countries on the Gender Inequality Index<sup>1</sup>. In relation to that, most women face various kinds of violence since the time they are conceived to old age. Violence against women are gender based where there is unequal distribution of power dynamic between men and women. NDHS 2016 records 23 percent women experiencing physical violence. Madhesi *Dalit* women at 44 percent, Muslims at 38 percent experienced it the most while nine percent hill Brahmin had to face it. By province, women’s experience of physical violence varies from a low of 12 percent in Province 4 to a high of 34 percent in Province 2. About 12 percent women experienced emotional violence with 17 percent to 19 percent Madhesi Brahman Chhetri, hill *Dalit* and Newar women, respectively experiencing it. Marital control is high of men. Seven percent of women age 15-49 experienced sexual violence. Divorced, separated, or widowed women are much more likely to have experienced sexual violence (20%) than currently married women (8%) and never married women (2%). Women with only primary or no education are more vulnerable to sexual violence than educated women.

The current status of gender inequality and gender-based violence in Nepal reveals the serious need to mainstream gender sensitivity and GBV risk mitigation measure at all organization levels and all phases of project cycle. In Nepal, GBV is prevalent due to unequal gender relations and discrimination towards women in both public and private sphere. It has direct implications on the reproductive health status of women and physical, emotional, and mental health of their children.

The purpose of this action plan is to identify the issues, stakeholders, possible service providers and assess their capacity and document the legal and institutional mechanisms that aid in accessing grievance redressal. The action plan will focus on sensitizing the communities and other stakeholders, strengthening the institutional capacities. A survivor-centric approach is followed - all through, victim/survivors’ care and providing access to different referral mechanisms are considered key aspects of this plan.

The projects funded by World Bank in Province 4, 5, 6 and 7 primarily in the Bardia National Park, the Banke National Park and the Shukla Phata National Park, their buffer zones in the Terai; the Rara National Park and its buffer zone in the Middle Hills, and the Annapurna Conservation Area and the Manaslu Conservation Area in the Middle Hills and Himalayas. The sub-projects will include construction/ upgradation/ setting up of information centers and trails which will be executed by contractors whose workers (generally skilled) come from within and outside the target areas. It is likely that the workers will come into contact with the community and vice-versa. Also, the trails where the tourists travel will pass

---

<sup>1</sup> UNDP Human Development Report 2017

through the school areas and communities. With varied cultural and economic backgrounds, the likely interactions between communities, human resources and tourists may lead to potential women safety issues, making it pertinent to create awareness on gender issues, gender-based violence and risk mitigation, in particular. Moreover, due to the proximity to the Indian border, the destinations in Terai are at high-risk in terms of forced labor, trafficking for both labor and sex, and face greater vulnerability in terms of sexual and gender-based violence. Furthermore, according to the study by IFC Strategic Diagnosis of E&S Risks (SDESR) Report 2019, there are also instances of previous victims of modern slavery (the ex-Kamaiyas) becoming victims of human trafficking for labor, due to inadequate rehabilitation by the government. One of the risks in terms of trafficking of persons, in the tourism sector, is the use of facilities such as hotels, lodges etc. for movement of victims of trafficking and in terms of the risk of use of tourism infrastructure and the staff for sex tourism in Nepal.

Based on the GBV Risk Assessment checklist and assessment carried out on the project (Sustainable Tourism Enhancement in Nepal's Protected Areas) by the World Bank, the project's GBV risks are assessed to be "Low". Accordingly, this action plan has addressed "Table – 1: Recommended actions to address GBV Risks in IPF Projects" as per the "Good Practice Note" published by the World Bank in September 2018.

This action plan is intended for and applicable to project implementing agencies including contractors and cover project's foot print and adjoining communities.

## 7.2 Legal and Policy Environment for Women's Safety

Nepal is party to 16 international human rights instruments including the International Covenant on Economic, Social and Cultural Rights, 1966, the International Covenant on Civil and Political Rights, 1966, the Second Optional Protocol to the International Covenant on Civil and Political Rights, 1989, the Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, 1984 and the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW), 1979. By ratifying these conventions, the Government of Nepal has committed to guaranteeing equality to both men and women in all spheres of their lives, which entails ensuring that they are not subject to sexual harassment. General Recommendation No.19 (eleventh session, 1992) of the CEDAW Committee clearly stipulated that gender-based violence is a form of discrimination that seriously inhibits women's ability to enjoy rights and freedoms on the basis of equality with men.

Under the Constitution of Nepal 2015, GBV has been quoted under the fundamental rights of women (Article 38) as " No woman shall be subjected to physical, mental, sexual, psychological or other form of violence or exploitation on grounds of religion, social, cultural tradition, practice or on any other grounds." Similarly, Part 4 of the constitution, under directive principles, policies and obligations of the state, directs the policies relating to social justice and inclusion be directed toward making self-dependent the women who are vulnerable, subjected to social and family exclusion and victims of violence self-reliant by making their rehabilitation, protection and empowerment (Article 51-j-2). The constitution

under Part 27 makes provisions for various constitution commissions and under Article 253, filing cases against any persons or bodies on matters of violence against women or being subjected to social ill-practices or infringement of or deprivation of enjoyment of women's rights is listed as a major function, duty and power of National Women Commission.

The Gender Equality Act in 2006, brought tangible legal changes to sexual violence against women. A major achievement of this act is the provision that an offender convicted for rape must compensate the victim for mental and physical damage. Also important is the 2009 Domestic Violence (Crime and Punishment) Act, which recognized for the first time that domestic violence is a crime punishable by law. However, while the act recognizes domestic violence as a crime, it contains provisions for negotiations through police offices, which seems contradictory. Also, the National Civil Code Act 2017 states not to commit any inhumane or degrading treatment or domestic violence and the Criminal Code Act 2017 states that violence against women in form of accusing of witchcraft or practicing of '*chhaupadi*' tradition and sexual violence is treated as criminal offense. Although there are some laws and provisions against domestic violence, many victims are left without support mainly because of the poor mechanism to deliver support services as well as a lack of awareness among people regarding such provisions.

The Human Trafficking Act (2007) extended the definition of trafficking to include the offense of transportation for the purpose of trafficking. With this extended definition and other support measures, the new Act helps to control human trafficking and affords needed support and care for victims.

Apart from these actions, the Supreme Court has also issued orders at different times prohibiting different malpractices that contribute to GBV. For example, the Supreme Court issued a directive order that required the government to declare *Chhaupadi* as a malpractice based on superstitious beliefs. Similarly, the court issued a directive order requiring the government to launch a massive awareness campaign to stop the exploitation of women accused of practicing witchcraft.

The government's National Safe Motherhood Plan (2002-2017) recognizes GBV as an important issue for women's health. The Nepal Health Sector Implementation Plan 2010-2015 has outlined GBV as an integral component of health care provision. Protocols on the management of GBV, including sexual abuse, have been developed and are now operational. These protocols will study the feasibility of implementing a screening and support program at Maternity Hospital, Kathmandu for GBV.

### 7.3 Recommended Actions

Table 10: Recommended Actions to address GBV Risks

Objective	Indicator	Activities	Timeline	Responsibility
<b>Project Preparation and Appraisal</b>				
Train and sensitize PIU	PIU and project staff sensitized and trained	Training/orientation session carried out		TTL/Task Team, WB
Include assessment of GBV risks as part of the social/gender assessment in project's Environmental and Social Impact Assessment (ESIA)/ ESMP	GBV risks highlighted and preliminary mitigation measures identified	Conduct consultations and identify key GBV risks in project areas		PIE
Mapping of GBV service providers in project areas (in high risk project areas NGO service providers should be hired to provide services to GBV survivors, where relevant)	Mapping completed of available, quality services in the project affected area	Map out GBV prevention and response services in project area of influence		FIU
Inform communities in project areas of GBV risks and options for response	# of awareness and consultations held	ToR developed for community awareness raising activities (specialized service providers/contractors/NGOs identified and hired under contract) and awareness and consultations carried out		PIE/FIU
Formulate and adopt code of conduct including sections on safety of women and girls	CoC developed, included in all contracts, and staff, consultants, contractors trained.	CoC developed, include in all contracts and provide training to all		PIE
Hiring a Gender Specialist with expertise on GBV to advise and monitor action	Appointment of specialist	Implement the 'Action Plan'.  Provide technical support for conducting the trainings.		PIE

<b>Objective</b>	<b>Indicator</b>	<b>Activities</b>	<b>Timeline</b>	<b>Responsibility</b>
plan during project implementation		Develop modules, monitor and evaluate the action plan items and report monthly, quarterly and annual basis.		
<b>Project Implementation</b>				
Reflect GBV risks, and measures to address them, in project ESMP and Contractor ESMP including the costs.	<p>GBV Action plan included in the ESMP</p> <p>Procurement for GBV related activities and costs outlined in the contract.</p>	<p>Address how GBV-related costs will be paid in the contract, in the procurement documents to mitigate risks.</p> <p>Clearly define the GBV requirements and expectations in a note to bidders.</p>		PIE
Establish and strengthen grievance redressal	<p>GRM established that is capable of handling GBV/SEA related complaints.</p> <p>Availability of an effective GRM with multiple channels to initiate a complaint / parallel GBV.</p> <p>IEC material on GBV, Codes of Conduct, etc. put up in the work site, labor camps, surrounding communities.</p> <p>Number of GRM members trained.</p> <p>Inclusive GRM system in place.</p> <p>Number of GBV grievances that have been referred to GBV Services Providers</p>	<p>GRM guideline reviewed and mechanism for GBV/SEA related complaint established and made functional</p> <p>Proper documentation is maintained for complaint registration and management.</p> <p>Provide appropriate referral to complainants.</p> <p>At project level, select one women member as first point of contact for the survivors of GBV and provide appropriate training to them.</p> <p>Conduct community awareness raising about GBV mitigation measures – eg. Codes of Conduct, GRM, how to report and provide multiple entry-points</p>		Gender specialist of the project
<b>Project Monitoring</b>				
Undertake regular M&E of progress on GBV activities	Successful implementation of agreed GBV Action Plan (Y/N)	Conduct M&E field visits.		PIE, FIU, Gender Specialist

<b>Objective</b>	<b>Indicator</b>	<b>Activities</b>	<b>Timeline</b>	<b>Responsibility</b>
		Report in the quarterly progress report and review during ISR missions.		

## Chapter 8: Consultation, Communication and Citizen Engagement Framework

### 8.1 General

Consultations and communications will be an integral part in the environmental and social impact assessment and impact management. Effective consultations at subproject level will not only help identify the issues and impacts to different groups but also understand appropriate mitigation measures to address the impacts appropriately. As the local communities are better able to comprehend their economic, social, and biophysical surroundings, consultations with them will be useful in formulating environmental mitigation measures or resettlement options that address the needs of affected peoples and help improve the technical and managerial requirements of the options.

Consultations for implementing the activities in the designated tourism sites will be carried out from the early stage of subproject planning to implementation and monitoring. One of the prime concerns of the ESMF is to ensure that the local communities in all conservation areas and national parks including indigenous and vulnerable groups are well-informed, consulted and mobilized to participate in the project activities supported under the tourism project. Based on this framework, concerned stakeholders will be regularly consulted at all stages of subproject planning and implementation. Consultations will take place at all stages from screening to environmental and social impact assessment (ESIA), and preparation and implementation of ESMP, RAPs, VCDPs, and IEEs as relevant.

### 8.2 Stakeholders Identification and Consultation Hierarchies

#### 8.2.1 Stakeholder Identification

Each stakeholders group plays a distinct role in the planning and implementation of the activities under the project. A comprehensive participatory consultation process will be adopted which should be designed and implemented after identifying all potential project stakeholders along with their specific interests and needs. Stakeholders' identification, consultation and analysis will be continued throughout the project cycle and remain dynamic. The relevant types of stakeholders are the following.

- Beneficiaries of the activities /investments of different subprojects under tourism project;
- Peoples/communities affected adversely by the subproject investments, directly or indirectly;
- Poor and vulnerable groups, women groups and professional/occupational groups;
- Local committees such as Conservation Area Management Committees (CAMCs), Buffer Zone User Committees (BZUCs) and User Groups;
- Entrepreneurs engaged in tourism activities viz hotels, homestays, trekking, travel and tours;

- Community based organizations, INGOs/NGOs and community leaders;
- Government agencies, and government officials at national, provincial, Palikas (Rural and Municipal) and Ward level; and
- Donor agencies and donor supported projects.

### 8.2.2 Consultation and Stakeholder Engagement Hierarchies and Strategies

Consultations and stakeholder engagement will take place at central/federal level, project destination level and local/community levels. The project will differ between consultations and engagement strategies (issues, target groups, forms of engagement) depending on the level (as shown below in Table 11).

Table 11: Consultation and Engagement strategy: Stakeholders / Institutions, Issues and Methods

Consultation Levels	Stakeholders/ Institutions	Issues for Consultation	Methods/Tools
Central Level	<ul style="list-style-type: none"> <li>• MoFE</li> <li>• MoCTCA</li> <li>• DNPWC</li> <li>• NTNC</li> <li>• Nepal Tourism Board</li> <li>• NFDIN/NEFIN</li> <li>• National Women Commission</li> <li>• National <i>Dalit</i> Commission</li> <li>• Hotel and Trekking Associations</li> </ul>	<ul style="list-style-type: none"> <li>• National level issues on tourism development</li> <li>• Issues on nature-based tourism</li> <li>• Issues related to policy, legal and regulations in the management of the conservation areas, national parks/ buffer zones</li> </ul>	<ul style="list-style-type: none"> <li>National level workshops</li> <li>High level meetings /Discussions</li> </ul>
Project Level (Parks and Destination)	<ul style="list-style-type: none"> <li>• ACAP</li> <li>• Manaslu</li> <li>• Banke, Bardia, Shukla Phanta and Rara National Park</li> <li>• Province and District Offices/ Agencies</li> <li>• Hotel and Trekking Agencies</li> <li>• CAMCs/Buffer Zone User Committees (BZUCs) and User Groups</li> <li>• INGOs/NGOs</li> <li>• Local communities</li> </ul>	<ul style="list-style-type: none"> <li>• Project level (Parks and destination) issues</li> <li>• Feedback about project impacts/issues and mitigation measures</li> <li>• Planning and implementation modalities</li> <li>• Resource sharing/ utilization</li> <li>• Working modalities by CAMCs/User Committees/Groups</li> </ul>	<ul style="list-style-type: none"> <li>Project Area level workshops</li> <li>Meetings/ Discussions</li> <li>CAMC/User Committees</li> </ul>
Local/ Subproject Level (Community and household level)	<ul style="list-style-type: none"> <li>• Urban and Rural Municipalities</li> <li>• Project affected communities/households</li> <li>• Women groups</li> <li>• Indigenous and other vulnerable social groups (<i>Dalit</i> and marginalized groups)</li> </ul>	<ul style="list-style-type: none"> <li>• Impacts to local people by subproject interventions</li> <li>• Livelihoods issues of the people induced by the subprojects</li> <li>• Mitigation measures that are culturally acceptable to the affected people including compensation/ resettlement, rehabilitation and livelihood restoration</li> </ul>	<ul style="list-style-type: none"> <li>Community level meetings</li> <li>Surveys/Focused group discussions</li> <li>Interviews (groups/HHs)</li> </ul>

	<ul style="list-style-type: none"> <li>• Local community-based organizations (CAMCs/User Committees/Groups)</li> <li>• Agencies involved in tourism sector</li> <li>• Youth groups</li> <li>• Community forestry user groups</li> <li>• Buffer zone user committees/groups</li> </ul>	<ul style="list-style-type: none"> <li>• Roles and functions of different stakeholders in implementing the mitigation plans viz ESMPs/ RAP/VCDPs/GAP/ IEE, etc.</li> </ul>	
--	---	--	--

### **Consultation and Engagement Principles**

Consultations and stakeholder engagement will be an integral part of subproject design, implementation, impact assessment and impact management, M&E, and will rely on a set of important principles – in particular they should be:

- Focused in terms of consultation needs and information collection on the issue/impacts as well stakeholder selection;
- Be participatory in terms of social groups, gender or economic status of the project affected people/ beneficiaries;
- Free, prior and informed consultations (FPIC); in case of indigenous and vulnerable people, FPIC will be mandatory to hear their voices, obtain collective decisions and address the issues in culturally appropriate manner;
- Where necessary, organized in local language to allow indigenous people to express their needs/issues freely;
- Well facilitated by qualified persons to solicit the expected information from the participants of all types/categories;
- Two-way communications will be useful in order to communicate the information clearly between the participants and the project; and
- Well planned and organized in convenient locations to encourage maximum participation of the target groups.

Consultations will be held with special emphasis on diverse groups, however, not limited to the vulnerable groups viz indigenous people, women and other vulnerable groups.

### **Consultation and stakeholder engagement strategy when there are constraints on conducting public meetings infectious disease like COVID-19:**

Consultations are the corner stone for successful planning and implementing the environmental and social management plans viz ESMPs, SMPs, RAPs, VCDP, GAP, etc. However, with the outbreak and spread of infectious disease like COVID-19, people have been advised, or may be mandated by national or local law, to exercise physical distancing, and specifically to avoid public gatherings to prevent and reduce the risk of the virus transmission. Countries have taken various restrictive measures, some imposing strict

restrictions on public gatherings, meetings and people’s movement, and others advising against public group events. At the same time, the general public has become increasingly aware and concerned about the risks of transmission, particularly through social interactions at large gatherings. Owing to the unforeseeable future and the uncertainties surrounding the infectious disease like COVID-19 risks and its spread, alternative ways of managing consultation stakeholder engagement is important to stave off risks and spread of the virus.

This section outlines the consultation mechanism, particularly for the preparation and implementation of environmental and social management plans when there are constraints in conducting public gatherings. The Project shall:

- Review the infectious disease situation in the project area and the restrictions put in place by the government to contain the disease spread
- Set out a plan for consultation and stakeholder engagement, particularly the approach, methods and forms of engagement proposed, and assess the associated potential risks of transmission of disease in conducting various engagement activities. Appropriate adjustments to be made to take into account the need to prevent spread of infectious diseases.
- Make sure that all project personnel articulate and express their understandings on social behavior and good hygiene practices, and that any stakeholder engagement events be preceded with the procedure of articulating such hygienic practices.
- Avoid public gatherings (taking into account national restrictions), including public hearings, workshops and community meetings, and minimize direct interaction between project agencies and beneficiaries / affected people.
- Assess the level of proposed direct engagement with stakeholders, including location and size of proposed gatherings, frequency of engagement, categories of stakeholders
- If smaller meetings are permitted, conduct consultations in small-group sessions, such as focus group meetings.
- Identify vulnerable or disadvantaged individuals or groups and the limitations they may have in participating and/or in understanding the project information or participating in the consultation process amidst the restrictions (for example, language differences, lack of safe transportation to events, accessibility of venues, disability, lack of understanding of a consultation process).
- Where direct engagement with project affected people or beneficiaries is necessary, such as would be the case for preparation and implementation of Resettlement Action Plans and cannot be postponed, identify channels for direct communication with each affected household via a context specific combination of online platforms (where feasible only) or dedicated phone lines.
- If physical meetings are not permitted, diversify means of communication and consider which communication channels are applicable in the local context. Rely on local engagement partners to understand which channels are used by local community members in this non-normal situation in order to determine which

mechanisms can be used to reach the right audience. List out both ICT-based mechanisms and non-ICT approaches that suit local conditions.

- Information/ awareness campaigns through different medias;
- Interactions with local government bodies i.e. Palika offices/ district offices as necessary; and
- Grievance handling and management: For grievances coming from the community and other stakeholders, drop-in boxes should be made accessible in publicly accessible locations and other mediums (such as phone calls, online platform and other locally accessible communication channels).

Consultations should be undertaken to enable maximum participation of the affected people where they can raise their concerns. PAPs' participation should also be ensured during final assessment of compensation, resettlement and monitoring. Details of these consultations including dates, names of participants, issues raised and how these have been addressed will be documented in the subproject ESMPs/ RAPs or VCDPs.

### 8.3 Central/Federal level consultation at project design

A national level consultation workshop of the project's EMSF was held on April 30, 2019 to disseminate project information and discuss on environmental and social issues. (A list of the meeting participants is provided in Annex 22.) The workshop was participated by wide range of project stakeholders comprising of government officials from the relevant ministries and departments, participants from national NGOs working on gender and indigenous peoples, tourism and trekking associations, conservation partners, etc. The workshop was held to inform the stakeholders about the project, how it intends to address the environmental and social issues and gather their comments and feedback to enhance the document. The draft of the document was made available to the stakeholders through the PIE's website. The presentation about the ESMF was well received by the stakeholders who provided their comments/suggestions and feedback which are incorporated in finalization of this document. The major issues and recommendation voiced by the participants were as follows.

- Project activities may unintentionally result in social and occupation replacement and will have to be carefully analyzed and considered during the planning, designing and implementation of the subproject.
- Preparation of GAP will need to have meaningful participation.
- Implementation approach of project activities will need to gear for social change and not just participation.
- Most women and IPs are victims of conflicts with wild animals, perhaps consider their relocation.
- FPIC and participatory planning should be ensured in subprojects.
- More importance to IPs in the VCDF/VCDP should be given.
- Customary institutions should be incorporated in GRM.

- Cultural tourism in destination tourism planning should be incorporated.
- 50% in participation and access to benefits for women should be secured.
- GESI approach to social and gender planning needs to be considered.
- Depending on the subproject geographic location, consider transformative and sensitivity approach to social planning accordingly.
- Tourism policy needs to be revised from GESI perspective.
- Issues of child safety needs to be addressed in social planning.
- Local based solutions and traditional knowledge will need to be examined during subproject assessment and planning.
- Ensure people living around the PAs are directly benefitted by the project.
- Lessons from other Pas should be incorporated.

#### 8.4 Future Consultations

During project implementation, future consultations will be needed depending upon the activities envisaged under different components of the project. Component 1 of the project involves activities related to improvement of management, planning and coordination among the federal and destination level stakeholders involved in the tourism sector. This will also include activities involving central/federal level policy reforms, planning, coordination and regulatory provisions for effective conservation and management of the project destinations and national parks including touristic sites and the gateways. Central/federal level consultations will be crucial to refine and reform or formulate the policies and plans among wide range of stakeholders. Component 2- Enhancing infrastructure for access and diversification of the project involves activities related to access improvement, environmental management, and tourism diversification and safety plans. Similarly, Component 3 will involve upgrading nature-based tourism quality standards and promoting local communities' participation. Therefore, Component 2 and 3 would thus involve consultations at subproject levels engaging wide-range of participants in project area including affected people, women, IPs, private sector service providers in tourism sector, etc. (as described in Table 11)

For project M&E and impact assessment, along with interviews with federal land destination level stakeholders, local level consultations would take place in varied forms such as focus group discussions (FGDs), public meetings, community discussions, and in-depth and key informant interviews in addition to the socio-economic surveys required as part of the project M&E framework.

#### 8.5 Communication Strategy

Generally, effective communication is crucial in order to understand, document and manage the issues, at both destination and local/community levels. Special approach to communication will be particularly important where project effects areas with significant presence of indigenous groups and other ethnic groups- and in the context of higher

illiteracy of disadvantaged social groups including the women and *Dalits* in targeted areas. Well designed and implemented communication measures will allow the local people to express their needs, grievances and feedback that are important for the preparation of site specific environmental and social plans viz ESMP/RAP/VCDP/IEE, etc. The project communication strategies should build on the following principles (though not limited to them):

- To transfer the message effectively and to reach out, communications should use multiple channels (applications, face to face discussions, telephone, SMS, email etc.) depending on targeted audience;
- Communication strategy should be open and inclusive of all members of the community who will be affected by the project;
- To the extent possible, it should be in local language to enable the participants capture the details and to express their views/opinions in their own languages clearly;
- There should always be a two-way communication among the people and project;
- Information, Education and Communication (IEC) materials should be published and distributed widely and with the use of proper visitation among the public/project affected people;
- All information should be shared/disclosed among wider public where necessary; and
- All messages /information should be properly documented.

## 8.6 Citizen Engagement

Citizen engagement is an integral part of the above-described Communication and Stakeholder Engagement strategy (Chapter 8.2.2). In general, the project will place due priority for enhanced citizen engagement throughout the project cycle from planning to implementation and monitoring and evaluation. Enhanced citizen engagement will be ensured through different strategies and approaches that will be applied fully beginning from the planning and design of subproject interventions (see Table 11).

The project will also place enhanced emphasis in forging partnership with the stakeholders. The stakeholders will include local communities, hotel and restaurants, travel and trekking agencies, home stay operators and other entrepreneurs engaged in tourism sector catering different services to the tourists. Women and other entrepreneur groups working in tourism business will be encouraged to participate in programs designed for skill enhancement for promoting quality tourism. The Conservation Area Management Committees (CAMCs), Buffer Zone User Committees (BZUCs) and User Groups (UGs) already instituted in the project sites will be engaged in undertaking project activities at local level where appropriate. Likewise, participatory planning will be incorporated especially with local governments to carry out the local development works under the project. Besides, the project will invest in grievances redress mechanism (GRM) so that the stakeholders could channel their voice and concerns or provide feedback through a properly designed system

to elicit responses from the local governments. Functional feedback mechanisms will be deployed which will include but not limited to the public engagement in the baseline, mid-line and impact studies.

## 8.7 Information Disclosure

In consistent with the Bank's policies, the summarized reports of environment and social plans including ESMF will be made available in Nepali language to the project offices, affected people and beneficiaries. Local NGOs and public offices in the project site will be provided copy of ESMF by PIE. The draft and final ESMF will be disclosed in the websites of (World Bank Infoshop and project website) and concerned Municipalities/Palikas and public places.

For all activities under the project, information will be disseminated to beneficiaries at various stages. In the initial stage, the project office will be responsible for informing potential stakeholders/affected parties/persons (APs) and the general public about land acquisition requirements through leaflets and publication in local media outlets and newspapers. The project with support from its site offices will conduct consultations and disseminate information to all beneficiaries during the initial stages to create awareness about the project and inform the people about project impacts and mitigation measures.

## Chapter 9: Grievance Redressal Mechanism

### 9.1 Introduction

A grievance hearing and redress mechanism will be developed and put in place to address the grievances in the project. Given the large numbers of activities that are envisaged for implementation with project's supports, it is likely that there could be complaints coming from people and the communities on different aspects. In general, complaints tend to occur in a project when the activities result in adverse impacts to the property and livelihoods of the people.

In case of the project, complaints from local people and communities may occur on various issues such as use/misuse of project funds, governance, transparency, loss of income/livelihoods of people, etc. To settle such potential problems, a grievance redress mechanism will be established with different committees formed at three levels -one at the PIE level in the center, another at project destination level and the last at unit (community) level. Planning and designing of the project's GRM will also identify local customary grievance/dispute resolution systems in the destination communities and incorporate such practices in the project's GRM. These, for example, among others include the *Mukhiya (village head) system* in the communities of Manang/Mustang and *Badghar* in Tharu community. Any grievance or complaint regarding project impact and issues will be heard and managed in one or other level depending upon where such grievances have been filed.

### 9.2 GRM Structures

The GRM will have committees formed from among the project staff, beneficiaries, affected persons, and local government representatives. These committees will be formed at PIE level, project site level and unit level. At the central level (PIE), the Grievance Redress Committee (GRC) will consist of the following members.

1. Joint Secretary, Department of National Parks and Wildlife -Chairperson
2. Chief of Tourism Board- Member
3. Representative of Tourism Entrepreneurs- Member
4. Tourism Project Staff- Member
5. Project Leader, Tourism Project- Member Secretary

There will be Destination Level Grievance Handling Committee led by Conservation Area Chief or Warden in case of national parks. This committee will consist of following members to hear and redress the grievances.

1. Project Chief - Coordinator
2. Project Area Safeguards Expert- Member
3. Project Area/ National Park Buffer Zone Chief – Member
4. Elected Representative- Member

### 5. Representative of Affected People/Beneficiaries – Member

Similarly, a local level (unit) Grievance Handling Committee will be formed at the lowest level of grievance handling mechanism. This committee will consist of the following members.

1. Local project staff- Coordinator
2. Safeguards Expert- Member
3. Local elected Ward Chairman- Member
4. Elected representative- Member
5. Representative of Affected People/Beneficiaries- Member

These committees will be formed once the project becomes effective. The respective project chiefs leading the project site offices and unit offices will take lead role in forming the committees and making them effective in their operations. All these committees will be responsible to register the grievances at their respective level, assess each and every grievance and take timely decisions for actions within the specified time frame. Once the decisions are made, every grievance complainant will be notified on the decisions taken.

A sample format for submitting the grievances is provided in Annex 10.

### 9.3 Grievance Filing and Management

A complaint cell will be established under the PIE to collect complaints and transmit them to the GRC. The affected persons/communities can register their grievances through multiple ways including locked boxes at the project office that can only be opened by a designated person, email, a designated telephone number, and individual or joint applications of complains in the GRCs at unit, project or central level as relevant where the tourism project has been implemented. The affected family, person or groups can approach the GRCs directly and file their grievances through one or other means specified above.

All grievances filed shall be registered, categorized and prioritized by the complaint cell. All committees established at different levels will meet regularly on a fortnightly basis and the committees will review the grievances and take decisions for their resolution at their levels. The grievances filed in the unit and project offices will be redressed locally in a consultative manner and with full participation of the affected households, or their representatives, along with project officials and local government representatives. All grievances should be resolved within one-month time. Any grievances not settled at the unit (community) level within the timeframe will be referred to the project site office level. If the grievances/disputes are not resolved in this level, they will be referred to the PIE at the centre. The complainant may have final right to appeal the case in the court if she/he is not satisfied with the decisions made by GRCs.

Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanism as mentioned above or the WB's Grievance Redress Service (GRS). The Bank's GRS consists of an independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service, please visit <http://www.worldbank.org/GRS> and the World Bank's Inspection Panel Website- visit<http://www.inspectionpanel.org>.

## Chapter 10: Institutional Arrangements for ESMF Implementation

### 10.1 Project Implementing Agencies

The Ministry of Forests and Environment (MoFE) will be the main implementing agency (MIA) considering the focus of the project on nature-based tourism (NBT). Ministry of Culture, Tourism and Civil Aviation (MoCTCA) will be the implementing agency (IA) responsible for the implementation of a smaller part of the project for activities (component 1.2). A PSC chaired by the MoFE and comprising representatives from the MoCTCA, the Ministry of Finance (MoF) and other key ministries and departments, and NTNC will provide strategic oversight and guidance.

A Project Technical Committee (PTC) will be chaired by the DNPWC. It will comprise representatives of key departments and agencies involved in the project (that is DNPWC, NTNC, and Department of Tourism-DoT) and will meet periodically to review project progress to inform the Steering Committee meetings.

The Project Implementation Manual (PIM) will delineate responsibilities and detailed arrangements. NTNC will be the main Project Implementing Entity (PIE). DoT will be a Project Implementation Unit (PIU) in charge of implementing Component 1.2 activities. MoFE and MoCTCA will ensure that NTNC/PIE and DoT/PIU are adequately staffed with expertise from relevant technical, administrative, environmental and social safeguards, procurement and finance units. NTNC/PIE and DoT/PIU, in the activities within their respective jurisdiction, responsible for ensuring compliance with safeguard requirements as described in the project's ESMF. NTNC and DoT will consolidate their project progress reports and submit to the PTC as needed.

NTNC/PIE will have the overall responsibility of compiling data and reporting on the Results Framework. The project progress will be monitored and evaluated through multiple agencies, mechanisms, and data providers under with overall coordination of PIE. M&E will be overseen by a dedicated M&E specialist responsible in PIE.

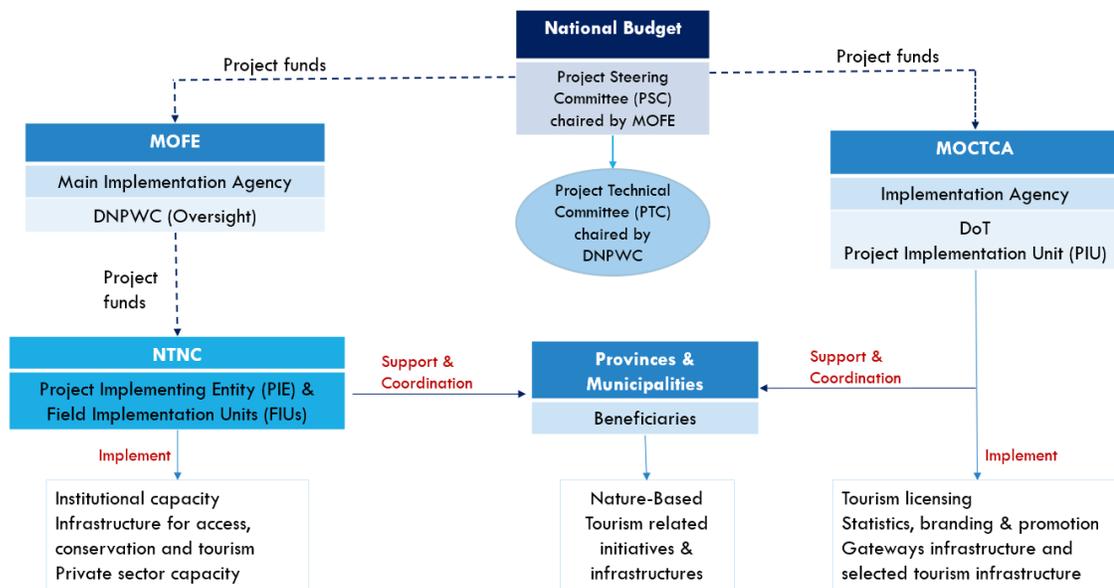


Figure: Project Implementation Arrangement

## 10.2 Safeguards Planning and Implementation

The overall safeguards planning in the STENPA project will take into account all potential environmental and social risks that might occur in any form or degree. The land zoning plans, community settlement plans or tourism destination plans, etc. to be developed under the project pertain mostly to systematic planning of land use for various purposes in the long term. The preliminary activities of these plans involve land use mapping for various purposes (rural or urban settlements, tourism spots for sightseeing/ trekking, adventures, hotels and recreation zones, forest and wildlife, etc.), resource assessment, infrastructure development, etc. Technical or expert judgement alone will not be sufficient while developing these plans. Intensive community consultations and due consideration of peoples' feedback in the planning and design will be of utmost importance during subproject planning and implementation.

In case where project activities involve the new establishment or upscaling of cottage industries viz small and medium enterprises (SMEs), the project will ensure fully that the fundamental policy principles of ESMF are duly adhered and put into practice. In such case, the financing agencies will require to complete the environmental and social screening of the activities to be funded under the project. It should be ensured that the financing agencies meet the safeguards requirements of NRB and World Bank.

Although resettlement planning and implementation takes place at community level, there must be a competent in-house mechanism within NTNC to perform all tasks on time. At central level, qualified social safeguards experts should be on board to provide continuous guidance to all the social teams working at subproject and destination / community level and they should have the capacity to undertake proper planning. This would require: i)

placement of qualified social experts/officers at subproject/destination level ii) social team should have possessed all safeguards planning documents viz ESMF as well as manuals /guidelines for screening and ESMP /RAP/VCDP iii) plan for orientation to the safeguards team at local level iv) periodic meeting on safeguards among the safeguards experts, and v) proper documentation as well as monitoring and reporting of safeguards compliance.

### 10.2.1 Central Level

The Project Implementing Entity (PIE) at NTNC will have dedicated Social and Environmental Unit (SEU<sup>1</sup>) responsible for overall safeguard oversight and management of project's social and environmental functions including planning, management, implementation, and monitoring of safeguard measures. Likewise, Project Implementation Unit (PIU) at DoT will have social and environmental specialists to support in the safeguard matters in the project activities under the jurisdiction of the DoT. The safeguard staff and M&E Officer will work together in coordination. The SEU at PIE will prepare consolidated safeguard report of the project, in coordination and collaboration with DoT's social and environmental specialists. The environmental and social safeguards experts based at PIE and PIU will be responsible for all planning as well implementation and monitoring of safeguards measures in their respective jurisdiction. Normally, the safeguards related activities will include the followings.

- Preparation of safeguards related guidelines and manuals for use at field level;
- Orientation to field level staff on safeguards planning, implementation and monitoring;
- Ensure project TAs are subjected to E&S Overview by conducting the E and S Overview or by providing guidance and support, as may be suited and needed;
- Ensure that each physical investment subproject/activity funded under the STENPA Project is subjected to social and environmental screening;
- Conduct /guide to carry out social and environmental screening, social and environmental assessment of subprojects, if required;
- Prepare/guide to prepare social and environmental plans viz ESMP/EMPs, RAP; VCDP, GAP, IEE, etc. based on the requirements of subproject interventions and as revealed by screening reports;
- Coordinate to implement the mitigation measures in compliance with the social and environmental management plans;
- Monitor the safeguards compliance; and
- Prepare progress reports.

---

<sup>1</sup> Though NTNC has prepared *Environment and Social Management: Safeguard Policies and Procedures (2017)*, this has not been effectively implemented. NTNC does not have safeguard experts and unit. Hence, NTNC may wish to adopt a strategy to gradually develop the STENPA Project's SEU to a formal and permanent safeguard unit of the NTNC by the end of the project.

In addition, the Safeguards Experts will be responsible to monitor, and report safeguard compliance to the Safeguards Team of the WB.

On a case by case basis, the project will provide technical and financial support to SNGs for implementing parallel projects identified in the DVIPs. The Ministries of Industry, Tourism, Forest and Environment of concerned Provinces (P-MITFE) will act as the main counterparts of the PIE and FIUs to ensure coordination at the provincial level.

### 10.2.2 Field Level

A PA Oversight Committee (PAOC) and a Field Implementation Unit (FIU) will be established in each province where project destinations are located. The NTNC's existing decentralized units in Pokhara, Bardia and Shukla Phanta will host the initial FIUs for the initial project destinations. The network of decentralized NTNC units will serve as FIUs at additional project destinations; in cases where there is no such decentralized unit in the proximity of a project destination, the NTNC will establish a new FIU in the concerned province. PAOCs will be established under the chairmanship of the concerned management institution of the PA and ensure there is adequate coordination between various departments, units and agencies operating in the concerned PAs.

The Field Implementation Unit (FIU) will implement the safeguards measures proposed for each subproject activity. The FIU will need expert support from the center (e.g. from SEU). Additional staffs will be hired at the field level to support field implementation with safeguard responsibility. The Conservation Area Management Committee (CAMCs) and responsible unit National Park (Banke, Shukla Phanta, Bardia and Rara National Parks) will be engaged in field level regular monitoring.

At field level, the contractors and user groups formed by the project will be the key actors in undertaking civil works. As such, all the contractors and user groups are responsible for and accountable to comply with the construction period safeguard measures. The contract clauses in the case of contractor, or Memorandum of Understanding or Agreement with the Users Group will have subproject specific safeguard clauses.

## 10.3 Capacity assessment and Capacity Building

**Capacity Assessment:** NTNC's current organizational structure at the main office consists of the Program, Finance and Administration sections with teams of supporting staff. There are about forty staff altogether engaged in various capacity from A3 (assistants) to D2 (director) positions. Senior staffs of O3 (manager) position hold the responsibility of supervising and managing NTNC's projects specific working areas in the mountains and Terai. The staff in O1 (officer) position have respective roles such as Conservation Officer,

M&E Officer, GESI Officer, Information Officer, Procurement Officer, Administrative Officer and GIS Officer. There are no separate units set up yet for the above-mentioned functions but is planned to upscale the institutional capacity in such manner. There is no dedicated Social and Environmental Unit, nor social and/or environmental safeguard expert. In view of this existing capacity, NTNC's capacity is short to handling a project of larger scope and size such as STENPA. Similarly, the field offices are managed by a team of staff comprising the Project Chief, Conservation Officer, Social Mobilizer, Tourism Officer, GESI Officer, etc., but no social and environmental safeguard staff and expertise. Therefore, the PIE will have to play key role in the capacity building of all actors. NTNC's capacity in managing environmental and social impact and risks is limited as there is lack of dedicated staff, expertise and experience in managing environmental and social safeguard.

**Capacity strengthening measures:** The project, in recognition of the limited capacity, includes capacity strengthening support for environmental and social management through trainings and orientations, hiring of safeguard consultants, and external monitoring. Orientation on safeguards planning and compliance to all stakeholders involved in the project activities is important and necessary. Therefore, the project will hire specialized experts to undertake various roles necessary for the project's smooth running. PIE's and PIU's capacity on E&S safeguards will be strengthened through different measures such as (i) hiring of specialized E&S experts at the center and field level, as may be needed (ii) training and orientation on safeguard planning and implementation (iii) hiring of gender expert, (iv) hiring of M&E expert, (v) hiring of social mobilizers, and engaging external monitoring. Capacity development activities will also be provided to other stakeholders which include DNPWC, Contractors, and CAMCS, User committees / groups and representatives of beneficiaries. Capacity building of the stakeholder agencies would involve orientation and training mainly in the following areas.

- Orientation on ESMF planning and mitigation, potential E&S issues/ impacts and mitigations;
- Trainings on safeguards planning process viz E & S Overview, E & S screening, EA, SIA survey, census survey, etc.;
- Consultation procedures and framework;
- Preparation of safeguards plans viz ESMP/EMP, RAP, VCDP/IEE etc.;
- Implementation of safeguards measures viz minimize adverse impacts, change in design, entitlements/compensation for losses;
- Grievance filing, recording and management; and
- Safeguards monitoring and reporting.

A specimen ToR for E&S capacity building expert is provided in Annex 11.

## Chapter 11: Supervision, Monitoring and Evaluation

### 11.1 General

Project implementation and monitoring will be mainstreamed within the project implementation arrangement<sup>1</sup>. The overall Project Implementation Entity (PIE) will be hosted by NTNC. NTNC, in coordination with the MOFE/ DNPWC and MOCTC /NTB will be responsible for the overall oversight and implementation of this framework and plans and ensure that any adverse impacts of the project activities are minimized and mitigated fully. NTNC/ PIE and DoT/PIU, in the activities within their respective jurisdiction, are responsible for ensuring compliance with safeguard requirements as described in the project's ESMF. NTNC/PIE may, among other staff, have the Social Safeguards, and Environmental Safeguards Specialist. Other staffs both at center and field level, as needed, may also be appointed. NTNC/PIE, will have dedicated Social and Environmental Unit (SEU). Dedicated implementation teams at the field level in ACA, MCA, Bardia NP, Banke NP, Shukla Phanta NP and Rara NP will be set up. At minimum, the field teams will comprise a Project Lead and dedicated officers responsible for finance, procurement, safeguards and M&E. The field staff will be oriented and trained in the relevant safeguard roles and functions.

NTNC and DoT will consolidate their project progress reports and submit to the PTC as needed. NTNC/PIE will have the overall responsibility of compiling data and reporting on the Results Framework. The project progress will be monitored and evaluated through multiple agencies, mechanisms, and data providers under with overall coordination of the PIEs. M&E will be overseen by a dedicated M&E specialist responsible in PIE.

### 11.2 Supervision

The contractors and user groups are responsible for and accountable to comply with the construction period safeguard measures. The E&S safeguard experts of the project will be primarily responsible for organizing regular supervision of the sites to check E & S compliance, collect documentations & data, provide expert guidance as may be needed etc. The central E & S team will coordinate with and/or mobilize the field-based team, including Field Implementation Unit (FIU) and PA Oversight Committee (PAOC) as may be relevant, for regular supervision at sites. All the works supported with the tourism project will be supervised by FIUs, with need-based support from center, on a day to day basis, provide expert guidance, and any faults noticed will be corrected immediately to maintain the standards. Important observations will be immediately shared with the PAOC, PIE or/and PIU as may be relevant and needed actions will be taken.

---

<sup>1</sup> See Chapter 10 of the ESMF, PAD paragraph 49 – 52, PAD Annex 1

### 11.3 Monitoring

**E and S Monitoring** will be an integral part of overall project management and carried out on a periodic basis. In the project, the PIE and PIU respectively for the activity within their jurisdiction will have the responsibility of monitoring the E & S compliance, documentation and data, permits, process and procedures, grievances, works covering inputs, process and outputs. Such monitoring is expected to provide feedback to the management in taking timely decisions to improve the E & S performance. PIE and PIU will use risk-based approach in monitoring and visit sample sites for monitoring. As part of the broader M&E framework, the project will also carry out different studies viz baseline study, independent studies and evaluation. Monitoring of safeguards implementation will be an integral part of tourism project cycle and include the followings.

- Undertake periodic monitoring<sup>1</sup> to ensure the implementation of safeguards compliance and mitigation measures;
- Ensure that information for all key indicators as depicted in table 14 below related to various social and environmental impacts/ compliances are fully captured and collected;
- Do the verification of data vis a vis key result monitoring indicator covered;
- Provide recommendations for corrective measures based on the findings from monitoring; and
- Report the outcomes of monitoring.

Two types of monitoring will be carried out under the project. One is regular monitoring which will be a part of project implementation and will be carried out internally by the project. The other is external monitoring which will be carried out by the independent consultant/firm.

### 11.4 Regular Monitoring

NTNC has a fully dedicated focal person (M&E Officer) for the monitoring of its regular program. Currently, monitoring is limited to occasional site visits to sample sites based on the risks. In order to carry out monitoring and evaluation of safeguards measures effectively, the M&E system of NTNC will be strengthened gradually with added safeguards experts at PIE. The safeguard experts at PIE/PIU will be responsible for implementing ESMF and carry out periodic monitoring to ensure that safeguards compliance has been made as per the requirements. Regular monitoring is part of project's internal monitoring, will be carried out by the project's E&S team (lead by the central teams), and will focus on key outcomes/ outputs and implementation progress.

---

<sup>1</sup> Periodic monitoring will be done on quarterly basis by the PIE and PIU.

## 11.5 External Monitoring

In addition to regular or internal monitoring as mentioned above, the project will engage consultant or consulting firm for external monitoring of the E&S compliance. External monitoring will be scheduled as follows:

- Annually until Mid-Term Review (MTR), one external monitoring report will be scheduled in such a way that it will inform the MTR; and
- Frequency/timing of the external monitoring after the MTR will be decided by the MTR.

The last external monitoring will be scheduled at the end of project implementation that will also serve the status report on E & S at project completion.

The scope of external monitoring will include, but not limited to:

- ESMF implementation status and compliance with the mitigation measures;
- Compliance with legal aspects including permits, clearances and no objections;
- Tracking environmental and social implementation performances;
- Reviewing stakeholder engagement and consultations;
- Reviewing grievance management;
- Undertaking site visits to validate documented information, meeting with workers, management, and stakeholders, etc.;
- Identifying corrective and preventive actions to be incorporated in management tool of the client in a manner acceptable to the Bank; and
- Identify good practices and lessons learned.

Example of potential monitoring indicators are provided in section 11.6, and a draft ToR for External Monitoring is provided in Annex 14.

## 11.6 Monitoring Indicators

Selection of correct indicators is important in order to come up with realistic monitoring plan and reporting. The Safeguards Experts assigned in the project will develop monitoring plans along with the key applicable indicators on various safeguards measures, guided by, however not limited to, the followings.

Table 12: Key Monitoring Indicators, Methods and Responsibility

Key Monitoring Indicators	Methods	Report Schedule	Responsibility
<b>A. Common Indicators</b>			
No. of safeguard documents prepared, Screening checklists/ ESMPs /EA/RAPs/ VCDPs, etc. prepared)	Review progress report, individual subproject documents	Quarterly report	PIE and PIU /Safeguards Team
Compliance with legal aspects (permits, clearances, No objections as may be needed)	Review progress report, individual subproject documents	Quarterly report	PIE and PIU /Safeguards Team
Disclosure and dissemination of safeguard documents			
No. of social/environmental issues incorporated in subproject design (i.e. change in design, route/place, etc. to avoid adverse impacts)	Review progress report, review of project documents/ DPR, etc., site visit to sample subprojects/	Quarterly	PIE and PIU /Safeguards Team
<b>B. Social Indicators</b>			
No. of affected families by type of loss/impacts recorded	Review progress report	Prior to Subproject approval	PIE and PIU /Safeguards Team
No. of user groups formed/ involved in various construction works/ wage payment to the local user groups within the conservation area/parks	Review contact documents/ site visit	Quarterly	Project site office/Safeguards Team
No. of community consultations held; IPs/ vulnerable groups and women participating in different consultations.	Review progress report	Quarterly	PIE/Safeguards Team
Compensation for losses as per entitlement matrix/ other assistance paid, if any, to the affected people (Rs)	Verify with CDC data/review progress report	Quarterly	PIE/Safeguards Team
No. of local user committees/groups awarded the construction works	Verify with Sub-project Office	Quarterly	PIE/ Subproject Office
Value of works awarded to local committees (Rs)	Verify with Sub-project Office	Quarterly	PIE/ Subproject Office
No. of grievances/disputes registered at different levels (PIE, PA/Parks, Unit) and number redressed	Review grievance records/progress report	Quarterly	PIE/Safeguards Team
<b>C. Environmental Indicators</b>			
Protection of forest and Compensatory Plantation/NTFP plantation carried out against tree felled as per GoN norms	Review Progress Report, project documents, sample site visits	Annually	PIE and PIU /Safeguard Team
Solid waste management (pollution, sanitation)	Review Progress Report, project documents, sample site visits	Quarterly	PIE and PIU/Safeguard Team
Wastewater, including effluent, management (pollution of water bodies, land)	Review Progress Report, project documents, sample site visits	Quarterly	PIE and PIU/ safeguard team
Protection of fertile agricultural land	Review Progress Report, project	Quarterly	PIE and PIU/ safeguard team

	documents, sample site visits		
Protection of infrastructure	Review Report, project documents, sample site visits	Progress project documents, sample site visits	Quarterly PIE and PIU/ safeguard team
Maintenance of scenic and aesthetic value	Review Report, project documents, sample site visits	Progress project documents, sample site visits	Quarterly PIE and PIU/ safeguard team
Pressure on wildlife and biodiversity (including hunting, poaching, fishing, NTFP etc.)	Review Report, project documents, sample site visits	Progress project documents, sample site visits	Quarterly PIE and PIU/ safeguard team
Conduction of Environmental awareness training program	Review Report, project documents, sample site visits	Progress project documents, sample site visits	Quarterly PIE and PIU/ safeguard team
Enhancement measures for Terrestrial, wetland habitats, etc.	Review Report project documents, sample site visits	Progress project documents, sample site visits	Quarterly PIE and PIU/ Safeguard Team
Increase/reduction of human animal conflicts or animal vehicle collision, etc.	Review Report project documents, sample site visits	Progress project documents, sample site visits	Quarterly PIE and PIU/ Safeguard Team
Landslide/ erosion prone area treatment with bioengineering or other indigenous techniques and conservation of top soil	Review Report project documents, sample site visits	Progress project documents, sample site visits	Quarterly PIE and PIU/ Safeguard Team
Health and safety of workers and community	Review Report project documents, sample site visits	Progress project documents, sample site visits	Quarterly PIE and PIU/ safeguard team
Land use change	Review Report project documents, sample site visits	Progress project documents, sample site visits	Quarterly PIE and PIU/ safeguard team

## 11.7 Reporting

The project will be responsible to make monitoring report public on a specified time frame. In the project, monitoring reports on safeguards compliance will be prepared by the safeguard teams. Internal reports will be prepared by field team (e.g. FIU) on a regular basis. Central teams, at PIU and at PIE, will produce periodic E& S status and progress reports, coinciding with the project quarterly progress (or as an attachment to the quarterly progress report – providing a summary of E&S progress and status). Additionally, the PIU/PIE will prepare separate consolidated safeguard progress and status report once in six-month, coinciding with the Bank’s supervision mission. Similarly, external monitoring report will be produced after the monitoring at the end of the external monitoring as scheduled in Section

11.5 - annually until the MTR and as decided by the MTR thereafter. The PIE and PIU will be responsible to report the progress on safeguards compliance during their regular reporting to the World Bank.

## Chapter 12: Budget for Implementing ESMF

This chapter provides the indicative budget for implementing the ESMF. The budget includes the cost for E&S screening, implementation of ESMP, RPF and VCDP implementation, E&S expert fees, GRM implementation, safeguard capacity building and M&E.

Safeguard Activities	Cost Estimation (NRs. In '000)	Remarks
a) Environmental and Social Screening	1000	Tentative buget for carrying out ES screening based on past experience One environmental and one Social Expert will be hired in the two geographical destinations (expert fee and travel)
b) Implementation of ESMP prescribed by Environment and Social Assessment	15000	Mitigation measures related with identified sub-project
c) Disclosures and dissemination of environmental safeguard documents	2500	Cost involve for FGD, public consultation, notice publication, uploading including logistic arrangement associated during consultation.
d) Supervision, Monitoring and Reporting	5000	Sub project level as well as monitoring from PIE (includes travel cost)
e) RPF and VCDP implementation	10000	Skill enhancement training, provision of equipment, etc., for the project staff
f) Environmental Safeguard Expert (Remuneration)	7500	As per your organogram or customize for this project, PIE, PIU, FIU, etc. level and subproject level.
g) Social Safeguard Expert (Remuneration)	5000	Same as above
h) E&S safeguard monitors and facilitators	10800	At subproject level
i) Grievance Readdress Committee	1500	Committees allowance, transportation, etc. at subproject level, Province level and PIE level
j) Gender Action Plan implementation	9875	Gender sensitization workshops and training for staff, hire GBV victim service providers, Gender Specialist,
k) External Monitoring during the project period	7500	It shall be carried out by independent consultant or firm
l) E&S Safeguard capacity building	23400	Hiring E&S experts, training and orientation at FIUs, GESI expert & M&E expert
m) Safeguard capacity building/training–Staffs (NTNC staffs PIE and field level, Wardens, provincial and local level, CBOs, CFUGs, Implementing entities, etc.).	8000	E&S safeguard screening, planning, designing, implementation and monitoring training
<b>Total</b>	<b>107,075</b>	

## **Annexes**

## Annex 1 (a): Exclusion List of Project Activities

The following type of activities (**Exclusion List**) will not be implemented under the project in order to avoid significant adverse impacts that are sensitive, diverse or unprecedented and may affect an area broader than the site or facilities subject to physical works. This exclusion list also excludes those activities that require a full EIA by the GoN's legislation and the Category A activities under the World Bank's OP 4.01 Environmental Assessment, OP/BP 4.04 Natural Habitats, OP/BP 4.36 Forestry, OP/BP 4.11 Physical Cultural Resources and OP/BP 4.12 Involuntary Resettlement.

### 1. Environmental Activity Lists

- New alignment and construction of through road in the core zone of protected area;
- Interventions to disrupt natural corridor function;
- High raising infrastructure construction that does not blend with local environment;
- Construction in important biodiversity areas that affects critical habitats;
- Mega construction projects e. g. hydropower, dam, high-tension line etc.
- Introduction of invasive species;
- Linear infrastructure that fragment critical habitats;
- Sub project creating excess pollution (sound, waste, toxins, water) and releasing excessive pollutants;
- Generation, production, storage, use or disposal of hazardous waste or materials
- Quarry of mines and minerals.
- Activity likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works
- Activity that would involve large scale/ significant conversion or degradation of critical forest areas or related critical natural habitats;
- Activity that involve significant conversion or degradation of critical natural habitats, including adjacent or downstream critical natural habitats (critical natural habit includes, but not limited to, legally protected or officially propose for protection or unprotected but of known high conservation value)
- Activity that would have severe adverse impacts on critical or otherwise valuable natural or cultural resources
- Activity that would likely have significant impacts on physical cultural resources (movable or immovable objects, sites, structure, groups of structures, natural features and landscapes that have archeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance) of international or national reputation (such as UNESCO sites, and/or included in the national registry of cultural sites etc.). The activity

may, for example include: (a) significant excavations, demolition, movement of earth, flooding, or other environmental changes; and (b) any activity located in, or in the vicinity of, a physical cultural resources site.

- Activity that contravene applicable international environmental agreements in which Government of Nepal and/or World Bank are/ is party to;

## **2. Social Activity Lists**

- Large scale involuntary resettlement and/or forced physical relocation of people.
- Increased community exposure to disease (water borne, water based, water related, vector borne disease as well as communicable disease);
- Application of adverse or discriminatory practices leading to impoverishment of people;
- Use of child labors and other forms of forced labors;
- Activities with enhanced risk of gender-based violence;
- No land with any kind of disputes/ conflicts will be used for the subprojects;
- Restriction to accessing land and natural resource of indigenous people subject to their traditional use and customary rights; and
- Excavations of archeological and cultural/national heritage sites.

Annex 1 (b): Example of Activities that require Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA) as per Environmental Protection Rules<sup>26</sup> of Government of Nepal

**IEE Required Activities** (activities that are larger than the IEE required activities, will require EIA)

- Clear felling or rehabilitation of national forests with an area of not more than 5 hectares
- Preparation of management plans of national parks, wild life sanctuaries, conservation Areas and their buffer zones or launching of development and construction activities specified in such plans
- Construction of forest paths up to Five Kilometer long
- Establishment of cold storage having investment of total fixed capital exceeding Rs. One million
- Construction of One to Five-Kilometer-long ropeway or cable car routes
- Construction of the following roads: (a) District roads (b) Urban roads (c) Rural roads (d) Small feeder roads
- Construction of major bridges
- Establishment and operation of hotel with Fifty to Hundred beds
- Extension of the areas of the existing airports
- Opening of new areas for the promotion of tourism.
- Operation of rafting activities on any river having fish or other aquatic life.
- Operation of new golf courses and organized form of water sports.
- Promotion of tourism in a number exceeding Ten Thousand per year at an altitude above Five Thousand meters.
- Disposal and management of waste emitted from trekking points
- Activities relating to compost plants in an area ranging between One to Five hectares.
- Commercial fish-farming in an area of more than One hectare

**EIA Required for activities located in the following type of sensitive areas**

- Historical, cultural and archeological sites.
- Environmentally weak and wet Areas.
- National parks, wild life sanctuaries and conservation areas.
- Semi-arid, mountainous and Himalayan regions.
- Flood prone and other dangerous areas.
- Residential, school and hospital areas.
- Areas with main sources of public water supply.

---

<sup>26</sup> The Environmental Protection Rule is in the process of revision following new Environmental Protection Act 2019. This list (Annex 1(b)) needs to be updated following the new Rule.

- Establishment of hotels, resorts, safaris, educational institution, hospital and industries of other construction activities inside forest areas, national parks, sanctuaries, conservation areas, buffer zones and environment conservation zones

## Annex 1 (c): Example of Activities to be supported under STENPA Project

Component 1: Improving destination management, planning and coordination		
Sub component 1.1: Enhancing destination management and Planning		
1	Develop a sustainable tourism development strategy for all of Nepal's PAs, review and update PAs management plans and develop guideline for integrating sustainable tourism development (all PAs)	Consultancy
2	Incorporate nature-based tourism development plan into the provincial level tourism master plan (All destinations)	Consultancy
3	Short-term trainings (fiduciary, E&S safeguard, M&E, financial, procurement, project management, tourism, GIS, wildlife management, trail auditing, etc.) to build capacity of MoFE, DNPWC, NTNC and other institutions involved in PA management	Service
4	Knowledge generation and exchange (national and international knowledge sharing platforms including IUCN, International Ecotourism Society, etc.)	Service
5	Analysis to identify project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF with GESI action plans in Terai and mountain	Consultancy
6	Project promotion and outreach (brochures, destination maps, leaflets, fam-trips, photographic documentation, video-graphic documentation, and other promotional materials)	Consultancy/ Service/Goods
7	Prepare a tourism road upgradation development plan and specific standards for sustainable tourism development	Consultancy
8	Training and beneficiary's engagement with SNGs and local community organizations - management committees, tourism committees and women's groups	Service
9	GIS and Remote Sensing software and equipment, project management software, surveillance equipment (drones), wildlife research tools (camera traps, GPS, field gears, Artificial Intelligence, etc.)	Goods/Service
10	Establish destination coordination mechanism and partnership with key representatives of federal and local government and communities	Services/ Consultancy
11	Upgrade the drafting and enforcement of rules and guidelines	Service/ Consultancy
12	Landscape zonation development and planning for tourism development using digital tools	Consultancy/ Works
13	Conduct a carrying capacity in all destinations	Consultancy/ Works
14	Design and implement a monitoring plan to analyze tourism impact in selected destinations	Consultancy/ Works

15	Assess rural tourism services and facilities (homestays, etc.)	Consultancy
16	Assess impact of climate change in tourism and livelihood	Consultancy
17	Assess and explore exclusive wildlife observation sites	Consultancy
18	Preparation of DVIP for ShuNP and RNP including demand and market analysis, connectivity gap analysis and identification of activities (ShuNP and RNP)	Consultancy
<b>Sub component 1.2: Integrating NBT into National Tourism Policies and Branding</b>		
1	Review adapt and support tourism act, online tourism service, online tourism enterprise registration system develop and implement etc.	Service/ Consultant/ Goods
2	TSA - improve data collection, compilation and analysis relating to destinations and support	Service/ Consultant/ Goods
3	Tourism branding and marketing strategies of Nepal PA's offering including support to national campaigns	Service/ Consultant
4	Develop and renovate services in local airports and Visitor Centers in gateway cities	Service/ Consultant/ Goods
<b>Component 2: Enhancing Infrastructure for Access , Environmental Management and Tourism Diversification</b>		
<b>Sub component 2.1: Enhancing tourism infrastructure for access to PAs</b>		
1	Develop a signage plan (all destinations)	Consultancy
2	Produce and place new trail signage (include directional signs, information signs, interpretative signs, etc.)- all destinations	Good/Works
<b>Annapurna Conservation Area (CA)</b>		
<b>Priority connecting road upgrading in ACA</b>		
1	Prepare detail survey report (DPR) along with E &S safeguard measures of prioritized last mile roads (2, 3 and 4)	Consultancy
2	Milan Chowk (Hemja) - Lwang	Work
3	Phedi-Dhampus	Work
4	Besi Sahar- Bhujung	Work
<b>Upgrade public tourism-related facilities</b>		
1	Survey for helipads sites in ACA, MCA and RNP	Consultancy
2	Develop helipads in identified sites in ACA, MCA and RNP	Work
3	Design, develop and enhance public services and transportation system (Bus stops and terminals taxi stands, street lights, rest stop with toilets)	Work/ Consultancy
<b>Manaslu Conservation Area (MCA)</b>		
<b>Priority connecting road upgrading in MCA</b>		
1	Prepare detail survey report (DPR) along with E &S safeguard measures of prioritized last mile roads (Aarughat - Jagat)	Consultancy
2	Upgrade Aarughat- Jagat	Work
<b>Upgrade public tourism-related facilities</b>		
3	Design, develop and enhance public services and transportation system (Bus stops and terminals taxi stands, street lights, rest stop with toilets)	Work/ Consultancy

<b>Bardia National Park (BNP)</b>		
	<b>Priority connecting road upgrading in BNP</b>	
1	Prepare detail survey report (DPR) along with E &S safeguard measures of access roads and park network roads	Consultancy
2	Develop and upgrade Thakuradwara - Betahani-Hattishar road and road to Banjaria and Blackbuck area	Work
	<b>Upgrade public tourism-related facilities</b>	
1	Design, develop and enhance park entry and public services (Bus stops, street lights, rest stop with toilets, information center, souvenir shops, restaurants, etc.)	Work/ Consultancy
<b>Banke National Park (BaNP)</b>		
	<b>Priority connecting road upgrading in BaNP</b>	
1	Prepare detail survey report (DPR) along with E &S safeguard measures of all-weather access road inside BaNP	Consultancy
	<b>Upgrade public tourism-related facilities</b>	
<b>Shukla Phanta National Park (ShuNP)</b>		
	<b>Priority connecting road upgrading in ShuNP</b>	
1	Prepare detail survey report (DPR) along with E &S safeguard measures of access road to the park and all-weather roads inside ShuNP	Consultancy
2	Develop access road to park HQ	Work
	<b>Upgrade public tourism-related facilities</b>	
1	Design, develop and enhance park entry and public services (Bus stops, street lights, rest stop with toilets, information center, souvenir shops, restaurants, etc.)	Work/ Consultancy
<b>Sub component 2.2: Upgrading environmental management and tourism-related infrastructure</b>		
1	Develop and implementation of local adaptation plan of action (LAPA) for reducing climate and disaster vulnerability (for all destinations)	Consultancy/ Work
<b>Annapurna Conservation Area (ACA)</b>		
1	Develop Detailed Project Report (DPR) along with E&S safeguard measures for Round Annapurna Alternative Trekking Trail (RAATT), Mardi Himal Trekking Trail, Nilgiri Trekking Trail, Annapurna Base Camp, Seven Passes Trekking Trail, Sikles-Timang and Ghandruk - Ghorepani Trekking Trail	Consultancy
2	Develop and upgrade trekking trail facilities in RAATT, Mardi Himal, Nilgiri, Annapurna Base Camp, Seven Passes, Sikles-Timang and Ghandruk - Ghorepani including bridges and safety barriers	Work
3	Develop signage, porter shelters, safe drinking water stations, location boards, peak pens for mountain identification, rescue shelters and waste management facilities RAATT, Mardi Himal, Nilgiri, Annapurna Base Camp, Seven Passes, Sikles-Timang and Ghandruk - Ghorepani	Work
4	Develop DPR with E&S safeguard measures for beautification, enhancement and access to lakes of ACA	Consultancy

5	Beautification, enhancement and access to lakes of ACA including information boards, permeable pavements, toilets, waste disposal, resting benches, fencing and tea shops	Work
6	Assessment and recommendation for solid waste management system	Consultancy
7	Development of state-of-art solid waste prevention and management; and biological waste water treatment system in ACA (reduction, collection, packaging and technology)	Work
8	Develop visitor tracking and safety management system	Consultancy/ Goods/Works
9	Establish digital weather stations	Goods/Work
10	Upgrading and management of tourist check posts with area specific information and weather information	Works
11	Develop DPR for heritage village development in ACA	Consultancy
12	Support to develop heritage villages	Work
13	Develop detailed inventory of tangible and intangible cultural heritage of ACA	Consultancy
14	Renovate tangible heritage (monasteries, caves, maane, chhortens, temples, and other archeological sites)	Work
15	Support to revive intangible heritage (festivals, indigenous culture, local cuisines, local costumes, traditional practices, etc.)	Service
16	Design, develop and upgrade heritage/cultural museums	Work/ Consultancy
17	Design and develop interactive visitor information center	Consultancy/ Work/Goods
18	Develop and enhance adventure/sports tourism (archery playground, cave visits, horse racing, mountain biking, rock climbing, etc.)	Work
19	Design and develop wildlife experiencing sites with special focus on snow leopard, Himalayan wolves, argali, demoiselle cranes, etc. (side trails, signage, wildlife hides/blinds, glamping/camping sites, viewing platform)	Consultancy/ Works
20	Design and promote heritage village and agro-based tourism in Tetang and Zhong villages	Consultancy/ Service/Work
21	Design and enhance religious tourism experience in Muktinath (waste management, biological waste water treatment, greening, shelter, upgrading tourism services, signage, information)	Consultancy/ Service/Work
22	Management of high-altitude rangeland (corrals, rangeland improvement, waterholes, solar lights, etc.)	Work
23	Support restoration work of rhododendron forest in Ghorepani	Service/Work
<b>Manaslu Conservation Area (MCA)</b>		
1	Develop Detailed Project Report (DPR) along with E&S safeguard measures for Tsum Valley trekking trail, Rubinala trekking trail, Ganesh himal trekking trail, Bihi-Chumchet trekking trail and Larke trekking trail	Consultancy
2	Develop and upgrade trekking trail facilities for Tsum Valley trekking trail, Rubinala trekking trail, Ganesh himal trekking trail, Bihi-Chumchet trekking trail and Larke trekking trail including bridges and safety barriers	Work

3	Develop signage, porter shelters, safe drinking water stations, location boards, peak lens for mountain identification, rescue shelters and waste management facilities in Tsum Valley trekking trail, Rubinala trekking trail, Ganesh himal trekking trail, Bihi-Chumchet trekking trail and Larke trekking	Work
4	Develop DPR with E&S safeguard measures for beautification, enhancement and access to Kaal Tal	Consultancy
5	Beautification, enhancement and access to Kaal Tal including camping site, information boards, permeable pavements, toilets, waste disposal, resting benches and fencing	Work
6	Development of state-of-art solid waste prevention and management; and biological waste water treatment system in MCA (reduction, collection, packaging and technology) based on MCA assessment	Work
7	Develop visitor tracking and safety management system	Consultancy/ Goods/Works
8	Establish digital weather stations	Goods/Work
9	Upgrading and management of tourist check posts with area specific information and weather information	Works
10	Develop DPR for heritage village development in Sama Gumba	Consultancy
11	Support to develop Sama Gumba heritage village	Work
12	Develop detailed inventory of tangible and intangible cultural heritage of MCA	Consultancy
13	Renovate tangible heritage (monasteries, caves, maane, chhortens, temples, and other archeological sites)	Work
14	Support to revive intangible heritage (festivals, indigenous culture, local cuisines, local costumes, traditional practices, etc.)	Service
15	Develop interactive visitor information center	Consultancy/ Work/Goods
16	Assessment and management of high-altitude wild animals (corrals, solar fence, fox lights, solar lights, etc.)	Work
<b>Bardia National Park (BNP)</b>		
1	Construct and upgrade culverts/ bridges	Work
2	Develop all weather road network inside BNP	Work
3	Design and upgrade Tharu cultural heritage museum	Work/ Consultancy
4	Design and develop interactive visitor centre at park headquarter	Work/ Consultancy
5	Assessment and recommendation for solid waste management system	Consultancy
6	Develop state-of-art solid waste prevention and management in BNP (reduction, collection, packaging and technology)	Work
7	Study on the potentiality of walking trails in Guthi-Hariharpur, Chisapani-Gainekanda, Telpani-Harre, etc.	Consultancy
8	Develop walking trails as per the recommendation of the study along with tourism facilities and services	Works

9	Improving wildlife safari experience through improved wildlife safe and silent safari vehicles	Goods
	<b>Improve park facilities</b>	
10	DPR of improve park facilities	Consultancy
11	Develop campsites	Work
12	Support to upgrade existing breeding centre	Work/Service
13	Design and construct wildlife observation towers, wildlife hides, bird blinds, etc.	Consultancy/ Work
	<b>Wilderness Enhancement</b>	
14	Grassland management	works
15	Water hole construction for animals	works
16	Wetland restoration	works
17	Endangered species monitoring involving high-end tourists	Service
	Tourism Product Diversification BNP	Service
18	Develop DPR for Tharu heritage village	Consultancy
19	Support to develop Tharu heritage village	Work
20	Assess, design and develop exclusive wildlife observation sites	Consultancy/ Service/Work
	<b>Banke National Park (BaNP)</b>	
1	Design and develop natural history museum and interactive visitor centre at park headquarter	Work/ Consultancy
2	Develop all weather road network inside BaNP	Work
3	Construct and upgrade culverts/ bridges	Work
4	Develop state-of-art solid waste prevention and management in BNP (reduction, collection, packaging and technology)	Work
5	Study on the potentiality of walking trails	Consultancy
6	Develop walking trails as per the recommendation of the study along with tourism facilities and services	Works
	<b>Improve park facilities</b>	
7	Develop Detailed Project Report (DPR) along with E&S safeguard measures for developing park's tourism facilities (campsites, wildlife rescue center, observation towers, wildlife hides, bird blinds, etc.)	Consultancy
8	Develop campsites	Work
9	Develop wildlife rescue centre	Work
10	Develop wildlife observation towers, wildlife hides, bird blinds, etc.	Work
	<b>Wilderness Enhancement and wildlife management</b>	
11	Grassland management	Service
12	Water hole construction for animals	Service
13	Endangered species monitoring	Service
14	Design and develop wildlife guiding fence along the canal	Consultancy/ Work
15	Protect and manage Kamdi Corridor with local participation (habitat management, livelihood, wildlife conflict management, wildlife monitoring, etc.)	Consultancy/ Work
	<b>Tourism Product Diversification BaNP</b>	Service
16	Design forest canopy walk with tourist information and facilities	Consultancy (international)

17	Design and develop forest canopy walk	Work/Goods
<b>Shukla Phanta National Park (ShuNP)</b>		
1	Develop all weather road inside ShuNP	Work
2	Construct and upgrade culverts/ bridges	Work
3	Design and develop interactive visitor centre at park headquarter	Work/ Consultancy
<b>Improve park facilities</b>		
4	DPR to improve park facilities	Consultancy
5	Develop campsites	Work
6	Design and construct wildlife observation towers, wildlife hides, bird blinds, etc.	Consultancy/ Work
<b>Wilderness Enhancement</b>		
7	Grassland management	Work
8	Develop Detailed Project Report (DPR) along with E&S safeguard measures for Rani Tal and Tara Tal restoration and beautification; and Blackbuck area	Consultancy
9	Wetland restoration and beautification of Rani Tal and Tara Tal	Work
10	Enhance Blackbuck habitat management	Work
11	Endangered species monitoring involving high-end tourists	Service
<b>Tourism Product Diversification ShuNP</b>		
12	Develop and enhance tourism facilities in Blackbuck area in Hirapur (visitor center, teashop, tower, toilet, etc.)	Work/Service
<b>RNP</b>		
1	Develop Detailed Project Report (DPR) along with E&S safeguard measures for developing three-tier trails (permeable pavement, horse riding trail and bicycle trail) around Rara lake and nature hiking trail	Consultancy
2	Develop three-tier trails (permeable pavement, horse riding trail and bicycle trail) around Rara lakewith tourism facilities (signage, rest/view platform, toilets, teashop, etc.)	Work
3	Develop nature hiking trail with tourism facilities (signage, rest/view platform, etc.)	Work
4	Design and manage upstream catchment area of Rara lake with bio-engineering	Consultancy/ Work
5	Design and develop interactive visitor information center in park HQ	Consultancy/ Work
6	Establish waste management system and sanitation improvement	Work/ consultancy
<b>Component 3: Adapting Tourism Products and Providing Economic Opportunities in Tourism-Related Value Chains</b>		
<b>Subcomponent 3.1: Upgrading and adapting tourism products to emerging market trend</b>		
1	Pre-assessment of existing standards of tourism services (accommodations, food, safety standards, sanitation, etc.)	Consultancy
2	Develop and institutionalize Business Development Services (BDS) Centers	Service/ Consultancy
3	Capacity enhancement and exposure of tourism operators to upgrade their offerings and equip existing local community-based organizations through BDS	Consultancy/ Goods
4	Assessment of tourism value chain	Consultancy

5	Improve Information and Communications Technology (ICTs) for branding, bookings, marketing	Work/Service
6	Improve access to markets through integrating with international accreditation programs and establishing partnership with global travel website companies	Work/Service
7	Support the local tourism entrepreneurs in the accreditation process (authentic local architecture designs, basic hygiene and sanitation, energy efficiency technology, safety and security improvement)	Work/Service
8	Generate employment opportunities and upscale service quality through internships (paid) for hotel management and hospitality graduates with high preference to female graduates	Service
<b>Subcomponent 3.2: Promoting the inclusion of local communities in tourism related value chains</b>		
1	Identify and promote viable community products and services (NTPP, agro-products, homestays, souvenirs, cultural groups, guide services, local cuisines, transport service)	Consultancy/Service/Goods
2	Support to improve access to finance (FIs and MFIs) for local entrepreneurs	Service
3	Establish and upgrade small scale tourism investments (room insulation, solar panel, processing equipment and storage, packaging and branding) to enhance livelihood opportunities with increased participation of disadvantaged communities	Service
4	Design and implement a training program related to tourism/environmental protection/TICs/and a skill development program (handicrafts, etc.), etc. for local communities/buffer zone communities	
<b>Component 4: Project Management, Monitoring and Evaluation</b>		
<b>4.1 Overall Project Management and monitoring</b>		
<b>4.2 Management of DoT's specific project activities</b>		
1	Conduct baseline study and perception survey in all destinations	Consultancy/Service
2	Meetings and workshops (inception workshop, steering committee meeting, project technical committee meeting, field coordination meeting, national tourism workshop, team building workshop, etc.)	Service
3	Office operation cost of PIE and FIU (Audit fee and expenses, printing and stationery, communication, utility, repair, fuel rent, etc.)	service
<b>Component 5: Contingency Emergency Response (CERC)</b>		
	This component will allow for rapid reallocation of uncommitted project funds from other components to support immediate response and recovery needs in the event of a natural or man-made disaster or crisis. The type and nature of activities are unknown at this stage.	

## Annex 2: Information used in preparation of ESMF

The following information were collected related to specific aspects:

### (a) Physical Resources

- Land, water and air;
- Maps (thematic, GIS maps), etc.;
- Relevant data published by Bureau of Statistics;
- Other published documentation on tourism, nature-based tourism and wildlife conservation areas.

### (b) Biological Resources

- Scientific publications on local biota surveys;
- Ecological studies carried out in the project area and buffer zones;
- Direct observation during field visits and site investigation;
- Information received during FGDs;
- Other relevant publication and research articles.

### (c) Socio-Economic and Cultural Resources

- Published demographic data and maps;
- Household surveys carried during field investigation;
- Information received during FGDs.

## Annex 3 (a): Environmental and Social Screening Guideline and Checklist

**Guideline for Conducting Environmental Screening**

1. The E&S screening team must be familiar with subproject's background through secondary information before walk-through survey;
2. During walk through the team should held discussion or inquires with communities and observation, inspection along the way;
3. Use ball pen or pencil to fill the checklist. Do not use washable ink or that can erase the information;
4. Insert new page if the spaces provided is not sufficient;
5. The team must carry topographical map with them, mark important environmental features/infrastructures on the map and refer to appropriate section of the checklist. The map should be included as annex to the screening report;
6. The team should take photographs of areas with environmental and social implications, and attach in the report with caption;
7. The team should include summary of the screening findings, listing main environmental and social issues /concerns related to subproject.

**A. Sub Project Introduction**

1	District and Municipalities/ Rural Municipalities:
2	Name of sub project:
3	Brief description of Activity to be undertaken:
5	Implementation approach and institutions involved:

B. Any activity /component not-eligible as per exclusion list (Annex 1)

**C. Baseline Information and Impacts of Sub-Project**

S.N. Major Attributes

**1 Protected /Buffer Zone Area (Name/Location with Flora and Fauna)**

If Yes, describe in detail.

S.N.

**Major Attributes**

If Potential Impacts are expected, describe in detail.

**2 National Park, Wildlife Conservation, Forest Area (Name Location, Flora and Fauna)**

If yes, describe in detail

If Potential Impacts are expected, describe in detail.

**3 Major water sources- streams/rivers/ponds/lakes/springs (Name, location with aquatic animal)**

If yes, describe in detail

If Potential Impacts are expected, describe in detail.

**4 Landslides location with current condition**

If yes, describe in detail

If Potential Impacts are expected, describe in detail.

**5 Settlement (Name, Location, with major Caste/Ethnicity)**

If yes, describe in detail

If Potential Impacts are expected, describe in detail.

**6 Trade Centers (Name/Types and Nature of Trade)**

If yes, describe in detail

If Potential Impacts are expected, describe in detail.

**7 Public Utility (Name/Number)**

If yes, describe in detail

If Potential Impacts are expected, describe in detail.

- | <b>S.N.</b> | <b>Major Attributes</b>  |
|-------------|--|
| <b>8</b>    | <b>Historical/Religious/Cultural Sites such as temple, mosque, community hall, etc.</b>  |
|             | If yes, describe in detail   |
|             | If Potential Impacts are expected, describe in detail.   |
| <b>9</b>    | <b>Open Public Spaces/Places</b>   |
|             | If yes, describe in detail   |
|             | If Potential Impacts are expected, describe in detail.   |
| <b>10</b>   | <b>Significant Development Potential (Home stay, horticulture, livestock, floriculture, wind power, Micro hydro, Biogas, etc.)</b> |
|             | If yes, describe in detail   |
|             | If Potential Impacts are expected, describe in detail.   |
| <b>11</b>   | <b>Land use type and pattern</b>   |
|             | If yes, describe in detail   |
|             | If Potential Impacts are expected, describe in detail.   |
| <b>12</b>   | <b>Quarry sites</b>  |
|             | If yes, describe in detail   |
|             | If Potential Impacts are expected, describe in detail.   |
| <b>13</b>   | <b>Tipping sites (Spoil disposal sites)</b>  |
|             | If yes, describe in detail   |
|             | If Potential Impacts are expected, describe in detail.   |
| <b>14</b>   | <b>Existing Situation and availability of labors</b>   |

**S.N.**

**Major Attributes**

If yes, describe in detail

If Potential Impacts are expected, describe in detail.

**15 Locations for establishing labor camps if required.**

If yes, describe in detail

If Potential Impacts are expected, describe in detail.

**16 Existing situation of waste management and probable locations**

If yes, describe in detail

If Potential Impacts are expected, describe in detail.

**17 Pollution Status (Air/Water/Soil and Noise)**

If yes, describe in detail

If Potential Impacts are expected, describe in detail.

**18 Community Health and Sanitation Status**

If yes, describe in detail

If Potential Impacts are expected, describe in detail.

**19 Community setting, homogenous, heterogeneous**

**20 Community acceptance, willingness and mindset for changes/development**

**21 Experience of community in similar subproject activity in the past.**

S.N.

Major Attributes

Conclusion of the Screening:

**Name of Proposed Project:**

**A. Environmental and Social Screening Outcome**

Select from the following:

**Eligibility.** Eligible or ineligible (Annex 1(a): Exclusion List of Project Activities). Beyond the Scope of the Project and excluded.

- o Eligible:
- o Not-eligible:

**Eligible, Type I.** Subproject with relatively higher risk/ impact due to ..... Main issues/ risks and impacts are.....Require following assessments/ studies and plans: .....

**Eligible, Type II.** Subproject with risks and impacts lower than the Type I. Main likely issues / risks/ impacts likely are..... This subproject require following assessment and/or plan.....

**Eligible, Type III.** Subproject that may not require assessment beyond Social and Environmental Screening. Main recommendations are.....

**B. Environmental and Social Issues** (for projects requiring further environmental and social review and need to prepare Environment & Social Management Plan (ESMP).

*In this section, list out briefly the key potential environmental and social issues related with the subproject implementation. This includes both environmental and social opportunities that will be seized to strengthen the project, as well as risks that need to be managed. The above table shall be used to highlight the issues and candid opinion shall be provided for further actions.*

Screened by:

Signature

Date:

1.....

.....

.....

2.....

.....

.....

## Annex 3 (b) - Environmental Issues and Mitigation Measures during Subproject Planning, Design, and Construction &amp; Operation Stage

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
1	Development of new <b>Integrated Tourism Development Plans (ITDPs)</b> in line with the spirit of <i>“Sustainable Tourism Enhancement in Nepal's Protected Areas”</i>	Impacts due to wrong planning includes changes to biophysical environments and ecosystems, biodiversity, and natural resources caused directly or indirectly including global warming, environmental degradation (such as mass extinction and biodiversity loss, ecological crisis, and ecological collapse, overexploitation of resources, pollution, and deforestation, etc.).	<p>Exclusion list in <b>Annex 1</b> shall be considered while preparing ITDPs. The eligible subprojects activities shall be planned duly considering mitigation hierarchy (avoid, minimize, mitigation and compensation). Failing to formulate pragmatic ITDPs will have both direct and indirect impacts with high likelihood of occurrences and severity. Hence ITDs shall be formulated considering the points mentioned hereunder but not limited to:</p> <ul style="list-style-type: none"> <li>○ Respect land form, natural processes and systems;</li> <li>○ Protect and use soils in a sustainable way;</li> <li>○ Protect and enhance the water resources including natural springs, small rivulets and river systems of surrounding area (such as Water, biodiversity, population, human health, fauna, flora, climatic factors, material assets, cultural heritage and landscape, etc.);</li> <li>○ Protect, enhance and where necessary restore (specified) species and habitats;</li> <li>○ Protect, enhance and where necessary restore landscape character, local distinctiveness and scenic values;</li> <li>○ Protect, enhance and create green spaces important for recreation, biodiversity and grazing lands;</li> </ul>	<ul style="list-style-type: none"> <li>• Activities at field shall be carried out as per the environment and social assessment and mitigation measures prescribed in the ESMP or SS-EMP.</li> <li>• Periodic Monitoring involving warden, CFUGs, community, NGOs or other entity at local level as per ESMP or SS-EMP provisions.</li> </ul>

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
			<ul style="list-style-type: none"> <li>○ Provisions to regenerate degraded environments and respect rural form, settlement pattern and identity;</li> <li>○ Protect, enhance and where necessary restore the historic environment, restore building character and townscape at local level;</li> <li>○ Improve design quality in new development, reducing energy consumption and provisions for reducing waste production to further protect the area from pollution. Facilitate recycling and re-use of material in waste tips and construction wastes in an environmentally acceptable manner.</li> <li>○ Identify supporting actions for environmental improvement that can assist the delivery of economic development;</li> <li>○ Promote waste to energy program (household or commercial level) as appropriate;</li> <li>○ Define broad areas suitable for wind and other renewable energy developments or, where appropriate, specific sites;</li> <li>○ Provide guidance on appropriate locations for differing waste management facilities including special and clinical wastes and wastewater treatment plants;</li> <li>○ Set out criteria against new ski and associated developments opportunities considering environmental criterion;</li> </ul>	

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
			<ul style="list-style-type: none"> <li>○ Set standards for foot trail construction including definition of areas where particular sensitivity is required to ensure that foot trail standards reflect the existing character and amenity of the area.</li> </ul> <p>Prior of executing any plans that will be subjected to include in STENPA, an E&amp;S overview need to be carried out for mainstreaming E&amp;S issues. The detailed information on process and procedures for carrying out E&amp;S overview of such plans will be provided in Annex 9 (a) including the ToR in Annex 9 (b) for consultancy services for carrying out the assignment</p>	
2	<b>Foot Trail Improvement and construction and village road construction inside buffer zones or any infrastructure construction or development</b>	The types of activities carried out will be small scale widening as per the requirements and dealing with the improvement of existing infrastructures, not involving large scale cutting or excavation and no blasting shall be involved. Hence it is envisaged that impacts shall be minimum, site specific and reversible, if activities shall be managed duly respecting the environmental setting of the subproject area (Hilly and Plain area) and their neighborhood. Nonetheless, following impacts	<ul style="list-style-type: none"> <li>• While carrying out planning for trail enhancement or new construction works, the mitigation measures adopted are of preventive in nature with two basic objectives: (1) avoiding costly mitigation and (2) awareness among the stakeholders for the environmental protection while constructing and operating infrastructure services.</li> <li>• Select routes appropriately to avoid or minimize the environmental degradation primarily in terms of loss of flora and fauna, minimum or no slope instability or soil erosion, disruption of water bodies, minimum loss of fertile and cultivable lands and no loss of valuable personal properties;</li> <li>• Conduct census survey and assess the potential</li> </ul>	<ul style="list-style-type: none"> <li>• Establish outfall location in close coordination with local community;</li> <li>• Carryout drainage improvement works as per design;</li> <li>• Apply proper Turfing (small scale bioengineering works, vegetation or grass plantation, etc. on a freshly filled or cut embankments or slopes for preventing scouring and erosions giving priority to plant species useful for the community (endemic grasses, Broom grass (<i>Amriso in Nepali</i>), fruit saplings, fodder trees, etc.)</li> <li>• All provisions mentioned in the Environment Management Action Plan (EMAP) or Environment and Social Management Plan (ESMP) shall be reflected in the Bill of Quantity (BoQ) explicitly while issuing Tender Document for the bidding.</li> </ul>

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
		<p>shall be envisioned will have induced impacts, if these aspects shall be overlooked during execution of subprojects:</p> <p>i. Scouring/erosion on embankment due to increased surface runoff</p>	<p>impacts and losses of property and lands and establish the baseline data for compensation;</p> <ul style="list-style-type: none"> <li>• The design shall adopt the labor-intensive approach as far as practical and plan for using local resources and manpower;</li> <li>• Assessment shall be carried out based on the forest road audit techniques;</li> <li>• Include adequate drainage improvement works for surface runoff as well as outfall location shall be planned carefully and located at existing rivulets or streams.</li> <li>• The following additional points need to be taken into consideration while rehabilitating the trails: <ul style="list-style-type: none"> <li>○Alignment shall follow ridgeline and away from cliff edge to ensure safety; avoid wet and poorly drained soils;</li> <li>○Alignment shall pass through interesting points as practical such as cascade, waterfalls, historic and cultural features and through avenues of large canopy trees;</li> <li>○Farm land, construction problematic area that include cliffs or steep slopes, wetlands/swampy areas shall be avoided.</li> </ul> </li> <li>• In addition, following mitigations shall also be prescribed: <ul style="list-style-type: none"> <li>○Trails slope shall be gentle as far as possible;</li> <li>○Provision of natural vegetable buffer and</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• If ESMP activities shall be carried out involving community, a written performance-based agreement shall be made. Effective monitoring mechanism shall be in place ensuring judicious utilization of resources at community level.</li> </ul>

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
			vistas and safety handrails to ensure safety along naked trails.	
		<p>i. Borrow Pit: Loss of top soil, land and productivity, Water congestion, vector proliferation, spread of water borne diseases, physical injury, accident and even death</p>	<ul style="list-style-type: none"> <li>• Burrow pits shall be avoided in lands close to embankment toe line and settlement;</li> <li>• Burrow pits shall be avoided in lands close to embankment toe line (in no cases less than 1.5 m) and in irrigated agricultural lands;</li> <li>• In case borrow pit is in agricultural land, the depth shall not exceed 45 cm and may be dug out to a depth of not more than 30 cm after stripping the 15 cm top soil aside;</li> <li>• In case of riverside, borrow pit should be located not less than 15 m from the toe of the bank, distance depending on the magnitude and duration of flood to be withstood;</li> <li>• Provide lead distance of more than 50m as per need.</li> <li>• Avoid following areas: <ul style="list-style-type: none"> <li>○ Grazing lands;</li> <li>○ Lands within 0.5 km of settlement;</li> <li>○ Environmentally sensitive areas;</li> <li>○ Core protected areas / forests</li> <li>○ Unstable site-hills</li> <li>○ Water bodies;</li> <li>○ Streams, swamps, water logging and seepage areas;</li> <li>○ Areas supporting rare plant / animal species/habitat;</li> </ul> </li> <li>• Prepare, approve and verify burrow pit restoration plan before starting of construction work as a part of</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid formation of burrow pits as far as possible;</li> <li>• Operate suitable size of borrow pits as per required volume of materials and based on plan;</li> <li>• Balance earthwork quantity of embankment and side drains to minimize additional borrow pits;</li> <li>• Monitor burrow pit restoration activities, as per proposed restoration plan.</li> </ul>

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
			restoration/rehabilitation plan	
		<p>i. Spoil Disposal</p> <ul style="list-style-type: none"> <li>Impacts on agricultural land, forests and grazing land due to spoil disposal of excavated materials, and other construction waste;</li> <li>Loss of productive land, forest land and grazing area.</li> </ul>	<ul style="list-style-type: none"> <li>Provide provision of lead distance of more than 50m (as per site condition) and as per need to make effective and practical for spoil management;</li> <li>Prepare verify and approve tipping plan (Spoil Disposal Plan) as a part of restoration/rehabilitation plan;</li> <li>Maintain cut and fill balance as far as possible in the design;</li> <li>Make provision of adequate walls, slope grading and plantation to manage disposed spoil with proper drainage arrangements;</li> <li>Identify and approve site for material storage in close consultation with local people;</li> <li>Consult with local people to finalize the alignment especially to avoid landslide area, to decide location for culverts and other drainage structures and take prior approval from the concerned stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>Comply with spoil tipping site plan;</li> <li>Explore opportunities of managing spoil and waste;</li> <li>Reclaim degraded lands using spoil and waste in coordination with local communities;</li> <li>Restore cultivated land damaged through spoil;</li> <li>Follow safe and careful tipping practices without mixing spoil and waste with cultivated land/soil;</li> <li>Rehabilitate and reinstate decommissioned material storage yard</li> </ul>
		<p>v. Protection and reinstatement of public and private utilities, cultural, historical and religious issues refers to protection reinstatement of community private infrastructures such as water supply and irrigation and</p>	<ul style="list-style-type: none"> <li>Maintain inventory of likely damage to public and private utilities, cultural, historical and religious sites and their temporary arrangement;</li> <li>Provide provision of adjustment of alignment to protect cultural and religious assets;</li> <li>Include cost for relocation, reinstatement and improvement including enhancement measures for public and private utilities, and</li> </ul>	<ul style="list-style-type: none"> <li>Consult properly with project beneficiaries before relocation and reinstatement of social and cultural resources;</li> <li>Consult owner of the buried sites and graveyards prior to carry out construction activities at such sites;</li> <li>Provide awareness program on environmental &amp; social protection to foot trail/road users/</li> </ul>

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
		graveyards, buried sites, monuments and temples.	religious and cultural sites in BoQ.	neighbors throughout the alignment.
		v. Dust and noise pollution-Health problems, anxiety, etc.	<ul style="list-style-type: none"> <li>• Address issues related to dust and noise pollution in the design phase;</li> <li>• Provision of Personal Protective Equipment (PPE) for construction workers;</li> <li>• Provision to plant close canopy trees and shield earthen trails/roads to abate dust pollution in public places and school area;</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor the provisions prescribed in design document.</li> <li>• Provide environmental awareness on environmental protection and safety to trail and road users.</li> </ul>
		i. Labor camp management including labor safety, child labor or forced labor and Gender Based Violence (GBV), Impacts encountered through construction workers camp include disposal of solid waste (i.e. organic waste, plastic and metal scraps, and domestic effluent) Pressure on the existing public utilities such as (drinking water sources, health post) and poor sanitation, transmission of communicable diseases, use of alcohol, poaching & hunting, gambling and	<ul style="list-style-type: none"> <li>• Provide clause of arrangement for all Personal Protective Equipment (PPEs) for workers, including first aid facilities at construction sites at contract document;</li> <li>• Follow best practices on labor camp management guidelines related to construction industry;</li> <li>• Follow labor safety guidelines prepared as per IFC sustainability guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide first-aid training to construction workers for safety of workers for all types of construction related injuries;</li> <li>• Orient about labor camp management guidelines to community and contractor's representative for effective implementation;</li> <li>• Provide adequate attention for labor camp management and labor safety;</li> <li>• Provide PPEs (helmets, boots, masks, safety vest, etc.) to construction workers and also monitor their use;</li> <li>• Maintain proper sanitation at camps with provision of potable water and regular health checkups of construction crew.</li> </ul>

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
		conflict with local communities leading to fatal accidents and on site/work accidents.		
		i. Extraction of quarry material for construction materials such as stones, gravels, sand, aggregates, and soils, etc. are usually extracted from quarry. Extraction of these materials is restricted from environmentally and socially sensitive areas.	<ul style="list-style-type: none"> <li>Identify a quarry in close consultation with the community and prepare quarry site plan based on the requirements involving geologist;</li> <li>Quarry Restoration Plan shall be developed to reinstate the quarry after completion of works.</li> </ul>	<ul style="list-style-type: none"> <li>Follow recommendation of quarry site management plan;</li> <li>Reinstate the quarry site as per the recommendation and monitor it.</li> </ul>
		i. Vegetation and Wild life: habitat destruction, loss of biodiversity and protected species.	<ul style="list-style-type: none"> <li>Avoid sections of trail alignment that passes through core sensitive forest land/high biodiversity area;</li> <li>Avoid disposal of spoil in forested area;</li> <li>Prepare compensatory plantation plan as per need, ensuring reinstatement of the condition at least to that of pre-project implementation stage;</li> <li>Avoid areas with major landslides and stability problems</li> </ul>	<ul style="list-style-type: none"> <li>Organize environmental awareness raising programs for all stakeholders in subproject implemented community area and neighborhood;</li> <li>Restrict clearance of trees and bushes to the required width;</li> <li>Maintain an inventory of cleared tree species with their numbers and girth;</li> <li>Involve CFUGs, in plantation and protection of saplings along with Community Based Organizations (CBOs)/communities/other stakeholders;</li> <li>Make arrangement to monitor the performance of plantation and protection of saplings and bioengineering works for at least five years</li> </ul>

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
				<p>involving CFUGs on performance-based modality;</p> <ul style="list-style-type: none"> <li>• Use wood (form work) for construction in minimum amount and efficiently;</li> <li>• Regulate movement of labor force, their dependency on forest and poaching/hunting;</li> <li>• Provide alternative fuel (like kerosene, LPG, etc.) to the workforce to control encroachment in the forest;</li> <li>• Restrict construction activities to day time to prevent disturbance to wildlife.</li> </ul>
3	<b>Tourism Enterprise Development</b>	<p>Business increase may lead to additional land needs and potential damage to the environment to meet the added demand by tourism growth in agriculture, forests and other natural resources.</p> <p>Unplanned enterprise development may cause risk of poor work place health and safety and waste management.</p> <p>Resulting new facilities construction due to growing tourism enterprise may have direct and indirect adverse impacts to the environment.</p> <p>Development of new infrastructure to reciprocate growth in tourism enterprise facilities</p>	<p>Environmental awareness to be included in relevant enhancement training, including relevant aspects of EHS Guidelines, including the business sector guidelines for tourism and hospitality development.</p>	<ul style="list-style-type: none"> <li>• Organize environmental awareness raising programs for all stakeholders in subproject implemented community area and neighborhood.</li> <li>• Use wood and hazardous materials for construction in minimum amount and efficiently.</li> <li>• Incorporate planning in development of enterprise related structures to minimize pressure to existing public facilities, conversion of cultivated land, etc.</li> <li>• Incorporate EHS Guidelines</li> <li>• Provide Environmental Code of Practice.</li> <li>• Ensure waste management practices.</li> </ul>

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
		may have severe impacts on existing facilities such as sewerage system, solid waste management system, exponentially high demand of water requirements, electricity demands, etc.		
4	<b>Product Diversification</b>	<p>Business increase from product diversification may impact agricultural, livestock and other local production base leading to unsustainable production to meet added demands.</p> <p>New tourism facilities construction may have direct and indirect adverse impacts on the physical environment.</p>	<ul style="list-style-type: none"> <li>• Sustainable production and harvesting plans to be incorporated in product development.</li> <li>• Recommend minimum environmental standards for facilities construction during product diversification planning stage.</li> </ul>	<ul style="list-style-type: none"> <li>• Organize awareness raising for all stakeholders in relation to sustainable production and harvesting; and environmental standards in construction.</li> <li>• Provide EHS guidelines.</li> <li>• Provide Environmental Code of Practice.</li> </ul>
5	<b>Development and Conservation of wildlife rescue centers</b>	<p>Risks common to the construction activities:</p> <ul style="list-style-type: none"> <li>• Loss of vegetation and topsoil from land clearing</li> <li>• Soil erosion and stream sedimentation</li> <li>• Dust</li> <li>• Noise and air emissions from heavy equipment;</li> <li>• Improper disposal of construction waste;</li> </ul>	<ul style="list-style-type: none"> <li>• Exclusion list in Annex 1 shall be considered.</li> <li>• The site should be less ecologically sensitive and should be far from wetland and forests area.</li> </ul>	<ul style="list-style-type: none"> <li>• Unnecessary human interference strictly checked. Proper disposal of wastes at construction site.</li> <li>• Close monitoring of workers assigned for the job</li> <li>• Close monitoring will be done of the vehicles and materials brought from outside, as well as the site and the surroundings for possible contaminations.</li> </ul>

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
		<ul style="list-style-type: none"> <li>• Damage to other infrastructure or physical cultural resources;</li> <li>• Risks from construction and operation of water supply weirs and stream channel stabilization;</li> <li>• Workplace and health and safety risks;</li> <li>• Injuries and falls from not using proper personal protective equipment (PPE) protection while carrying out construction activities;</li> <li>• Risk to surrounding communities for not providing enough barricades or hazards signage to inform the boundary project area risks during on-going construction activities;</li> <li>• Improper disposal of construction wastes and waste from worker's camp as some contractors do not provide</li> </ul>		

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
		proper portable toilets and good housekeeping practices.		
6	<b>Wilderness Enhancement</b>	<p>Wilderness enhancement will involve improving the natural state of various wildlife habitat such as grasslands and waterholes. Therefore, negative impacts to the environment are not anticipated. However, the following risks are anticipated during enhancement stage.</p> <p>Risk of wildlife attacks during field investigations</p> <p>Improper siting causing negative impacts on biodiversity and habitats</p> <p>Improper disposal of debris (removed vegetation including invasive species) including burning of uprooted vegetation and spread of forest fires</p> <p>Improper de-silting, excavation and expansion activities</p> <p>Use of equipment and vehicles that disturbs the habitats and biodiversity</p> <p>Removal of plants of conservation value</p>	<p>Site selection for management will be based on expert opinion in order to ensure the ecological impact is low.</p> <ul style="list-style-type: none"> <li>• A study plots will be established to monitor the changes to the ecology of the site</li> <li>• Further technical assessment will also be carried out to ensure its effectiveness and to avoid/minimize the negative impacts on ecology.</li> <li>• A separate work manual will be developed based on the technical assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Safety precautions will be adopted to minimize attracting or aggravating wildlife</li> <li>• The invasive plants will be removed from the NP and disposed in a suitable site in a scientific way</li> <li>• Good housekeeping practices will be practiced including use of designated paths, speed limits, parking of vehicles, timing of activities, etc.;</li> <li>• All equipment that generates noise including heavy vehicles will be well maintained and serviced to reduce the level of noise pollution; Appropriate and non-invasive noise barriers will be set up at the site if needed</li> <li>• Close monitoring of workers assigned for the job</li> <li>• Arrangements will be done to clean up immediately if invasive species gets established</li> <li>• All soil that are excavated will be disposed outside the NP, unless to be used immediately for another purpose</li> </ul>

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risks	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
		Spread of invasive species from vehicles and equipment brought into the park from outside		
7	<b>Waste Collection and Management</b>	<p>Groundwater pollution by leachate wastes because of location on unsuitable soils, malfunction, or poor maintenance</p> <p>Odors and health hazards caused by inadequate waste management</p> <p>Surface water pollution from contaminated runoff or uncollected or inadequately treated leachate</p>	<ul style="list-style-type: none"> <li>Survey of all areas and processes to identify types and sources of on-site waste generation;</li> <li>Promotion of waste to energy program (household level or community level depending on the situation);</li> <li>Plan to reduce GHG emissions attributable to the prevention and recycling, respectively, of various waste fractions. Each kg of organic waste sent to anaerobic digestion with energy recovery avoids 0.35 kg CO<sub>2</sub> eq. from waste management and displaced energy generation<sup>1</sup>.</li> </ul>	These risks can be mitigated by: a) environmental analysis of alternatives in FSS; b) preparation of good Environmental and Social Management Plans (ESMPs); c) implementation EHS Guidelines; and d) providing Environmental Code of Practice (ECOP) or Standard Operation Procedures
8	<b>Park Facility Development</b>	<p><b>Risks common to the construction activities:</b></p> <ul style="list-style-type: none"> <li>Loss of vegetation and topsoil from land clearing;</li> <li>Soil erosion and stream sedimentation;</li> <li>Dust generation;</li> <li>Noise and air emissions from heavy equipment;</li> <li>Improper disposal of</li> </ul>	<ul style="list-style-type: none"> <li>Exclusion list in Annex 1 shall be considered.</li> <li>The site should be less ecologically sensitive and should be far from wetland and forests area.</li> </ul>	<ul style="list-style-type: none"> <li>Unnecessary human interference strictly checked. Proper disposal of wastes at construction site.</li> <li>Close monitoring of workers assigned for the job</li> <li>Close monitoring will be done of the vehicles and materials brought from outside, as well as the site and the surroundings for possible contaminations.</li> </ul>

<sup>1</sup> Waste and Resource Action Program U.K. 2011

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
		<p>construction waste;</p> <ul style="list-style-type: none"> <li>• Damage to other infrastructure or physical cultural resources;</li> <li>• Risks from construction and operation of water supply weirs and stream channel stabilization;</li> <li>• Workplace and health and safety risks;</li> <li>• Injuries and falls from not using proper personal protective equipment (PPE) protection while carrying out construction activities;</li> <li>• Risk to surrounding communities for not providing enough barricades or hazards signage to inform the boundary project area risks during on-going construction activities;</li> <li>• Improper disposal of construction wastes and waste from worker's camp</li> </ul>		

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
		as some contractors do not provide proper portable toilets and good housekeeping practices.		
9	<b>Hotel &amp; Lodge Standardization and Accreditation</b>	<ul style="list-style-type: none"> <li>High value tourist and tourism may be not be attracted if Non-standardization and non-accreditation prevailed.</li> </ul>	<ul style="list-style-type: none"> <li>Collate data on environmental management for benchmarking; Establishment of Environment Management System (EMS) such as:               <ul style="list-style-type: none"> <li>ISO 14001 - Basic compliance with applicable legal environmental requirements and monitoring and reporting of key environmental performance indicators;</li> <li>EMAS (EC, 2009) - Basic compliance with applicable legal environmental requirements and monitoring and reporting of key environmental performance indicators. Latest version (EMAS 3) requires organizations to report sector-specific indicators and consider best environmental management practice outlined in sectoral reference documents.</li> <li>Viabono (Viabono, 2012) - A German ecolabel for accommodation that includes customer service and environmental criteria, relating to the conservation of resources, waste generation, energy efficiency, water</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Organize training, awareness program and facilitation to implement the EMS system to enhance business;</li> <li>Organize training to representatives from LG, local hotel association on anaerobic digesters, slurry storage facilities and farm building diversification with respect to the protected landscape and ensure that this is embedded within the Local Development Framework;</li> <li>Provision of Environment Award based on excellence during execution and implementation and renewed annually after carrying out performance audit.</li> <li>Development of practical guidelines for accommodation providers to improve environmental performance</li> </ul>

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
			<p>efficiency, GHG emissions and biodiversity conservation.</p> <ul style="list-style-type: none"> <li>• Travelife Sustainability System for Hotels (Travelife, 2011) - An international tour operator (supply chain) driven sustainability certification that is awarded as Bronze, Silver or Gold depending on performance across a range of environmental and social criteria such as water, energy and effluent management, housekeeping, usage of organic products; gender and equality in the management process etc.</li> <li>• Green Key (Green Key, 2010)- An international sustainability standard with a global baseline for certification based on a set of 100 criteria, some of which are optional. These include specific environmental measures and, in some cases, quantified benchmarks (e.g. labelled foods must represent at least 5 % by value after one year of certification, and increase annually);</li> <li>• Green Globe (Green Globe, 2011)- Primarily legal compliance and sustainability monitoring criteria, but also qualitative requirements to implement better environmental practices, e.g. 'Local and fair-trade services and goods are purchased by the business, where available'.</li> </ul>	
10	<b>Landscape Zonation and Planning</b>	<ul style="list-style-type: none"> <li>• Rampant grazing by</li> </ul>	<ul style="list-style-type: none"> <li>• Undertake audit and research on the perceptions and</li> </ul>	<ul style="list-style-type: none"> <li>• Support the development and adoption of the Biodiversity and Geo-</li> </ul>

S.N.	Investment Typology/Sub-projects	Potential Impacts/Issues/Risk	Potential Mitigation Measures	
			Planning & Design Phase	Sub-project Execution & Operation Phase
		<p>domesticated animals;</p> <ul style="list-style-type: none"> <li>• Impacts on sensitive landscape in the absence of proper planning;</li> <li>• Haphazard felling of trees of firewood degrade the existing environment as well as escalate the GHG emission.</li> </ul>	<p>attitudes of communities and visitors on grazing animals and the issue of grazing within habitat management, applying the knowledge to demonstration sites;</p> <ul style="list-style-type: none"> <li>• Produce a robust and defensible Green Infrastructure Strategy that specifies and defines semi natural habitat corridors to ensure that this supplement the Local Development Framework, in conjunction with the Biodiversity and Geo-diversity Best Practice Guide;</li> <li>• Carryout Landscape Character Assessment of the area for detail understating of character under consideration including 'Ecosystem Goods and Services' provided by the landscapes;</li> <li>• Carryout landscape sensitivity and capacity studies for renewable energy and housing development; specifically, a sensitivity study on wind and solar PV, including guidance on the siting and design of smaller scale wind turbines and PV panels within the protected landscape to further support and embed within the emerging Renewable and Low Carbon Energy Supplementary Planning Document.</li> <li>• Identify opportunities for new woodland creation including commercial plantations in appropriate locations;</li> </ul>	<p>diversity Best Practice Guide within the emerging Local Development Framework;</p> <ul style="list-style-type: none"> <li>• Audit and monitor to support the work of clean initiatives to reduce litter in the area, especially river banks, zone dedicated for recreational or amusement activities;</li> <li>• Undertake an audit of the technical and financial skills of rural businesses in project area neighborhood and provide appropriate training to fill gaps, utilizing funds available from this project.</li> <li>• Organize training to LG representatives on anaerobic digesters, slurry storage facilities and farm building diversification with respect to the protected landscape and ensure that this is embedded within the Local Development Framework.</li> </ul>

Annex 3 (c): An Indicative Checklist on OHS, CHS, Hygiene & Sanitation, Diseases Safety to safeguard against COVID-19 or similar infectious disease during executing small civil works

This checklist is prepared based on World Bank’s ESF/SAFEGUARDS INTERIM NOTE: COVID-19 CONSIDERATIONS IN CONSTRUCTION/CIVIL WORKS PROJECTS as well as government’s guidelines available at the time of drafting. This should be used as a reference materials and adapted, site specific checklist and procedures tailored to the specific context and situation should be prepared.

S.N	List of Activities	Yes	No	N/A	Remarks
<b>Ergonomics and Working Environment</b>					
1	Completion of a self-assessment checklist (Self Declaration Form) to ensure workers comply with good ergonomic practices.				
2	Appointment or designation of a contact person at the workplace so that workers can talk to about any concerns.				
3	Set up ways of communication with workers to connect with them daily (ex. morning meetings, group SMS, etc.).				
4	Provide information to workers about the support available to them (ex. through group SMS, meetings, or morning meetings, etc.).				
5	Ensure automatic alerts set up on computer systems to remind workers about washing hands and not touching eyes, nose, and face.				
6	If possible, accept only cashless transactions.				
7	Increase access to closed bins in your workplace.				
<b>Planning Ahead</b>					
8	Pre-approval for the deployment of new workmen from Project Director /Project Manager.				
9	Avoiding entry of new workmen from known hotspots of COVID 19.				
10	Allocating separate rooms for the new workmen in the workmen habitat.				
11	A medical checkup by a doctor and contactless thermal scanning.				
12	Ensure the signing of MoU with the COVID -19 designated hospital/ Primary Health Care Unit and availability of medical practitioner with COVID-19 know-how in the locality or near vicinity of the workplace.				
13	Assess if the proposed project require additional health services.				
14	Develop a plan (Emergency Preparedness Plan) to ensure business continuity if there is a suspected or confirmed outbreak of COVID-19 in the workplace.				
15	Planning and procedure in place if any worker is suspected or confirmed to have COVID-19, including how to support that workman and what needs to be done to ensure the workplace remains safe for other workers.				
16	Ensure appropriate cleaning products and personal protective equipment available to disinfect the workplace following an outbreak.				

S.N	List of Activities	Yes	No	N/A	Remarks
17	Put a protocol in place for reopening your workplace after an outbreak or quarantine period.				
18	Medical Insurance of all workers before resuming a worksite.				
19	Detailed profile of the project workforce, key work activities, schedule for carrying out such activities, different durations of contract, and rotations (e.g. 4 weeks on, 4 weeks off, or instructed by the Project Director/Project Manager).				
<b>Symptoms Monitoring</b>					
20	Put up signs about the symptoms of COVID-19 in the workplace.				
21	Instruct workers to stay home if they are sick, and if they are displaying symptoms of COVID-19.				
22	Instruct workers to inform if they are displaying symptoms of COVID-19 have been in close contact with a person who has COVID-19 or has been tested for COVID-19.				
23	Remind and ensure the staff of their leave entitlements if they are sick or required to self-quarantine.				
24	Treat personal information about the individual worker's health carefully and confidentially.				
<b>Physical Distancing at Workplace and Office</b>					
25	Put up posters around the workplace on keeping at least 1.5 meters distance between everyone at the workplace.				
26	Erect signs at the entrances to meeting rooms to ensure the maximum safe capacity is not exceeded.				
27	Move work stations, desks, and tables in staffrooms further apart to comply with social distancing.				
28	If possible, bring in shift arrangements so less staff are in the workplace at once.				
29	Instruct workers to organize meetings by phone (if required) instead of in person. If not possible, require they meet in a large space and keep meetings short complying with physical distancing.				
<b>Hand Washing and Hygiene</b>					
30	Ensure hand sanitizer stations at entry and exit points and around the workplace.				
31	Ensure bathrooms are well stocked with hand wash, cleaned frequently, and well ventilated with toilet paper (as applicable).				
32	Ensure separate sanitary facilities for male and female workers.				
33	Put up posters with instructions on how to hand wash/hand rub.				
34	Instruct workers on other ways to limit the spread of germs, including by not touching their face, sneezing into their elbow, and staying home if feeling sick.				
35	Instruct workers to limit contact with others– no shaking hands or touching objects unless necessary.				
36	Put up signs to request workers only touch tools & equipment they require and use during execution of works.				
<b>Cleaning</b>					
37	Ensure any areas frequented by workers or others (e.g. visitors to the premises) are cleaned at least daily with detergent or disinfectant.				

S.N	List of Activities	Yes	No	N/A	Remarks
38	Instruct workers to wear gloves when cleaning; wash their hands thoroughly with soap or use an alcohol-based hand sanitizer before and after wearing gloves.				
39	Clean frequently touched areas and surfaces several times a day with a detergent or disinfectant solution or wipe. This includes equipment, switches, levers, handrails, tables, countertops, doorknobs, sinks, and keyboards.				
40	Instruct workers to clean personal property that comes to work, such as sunglasses, mobile phones, laptops with disinfectants.				
41	Ensure waste management plan is in place.				
<b>Workmen Camp</b>					
42	Daily thermal screening and symptom checking of cooks.				
43	Cleaning and disinfection daily once the cooking is over.				
44	Staggered Timings for dining to be adopted to limit the number of workmen using the hall or dining table to maintain social distance or Increase the Space of dining facility where possible.				
<b>Quarantine and Isolation Rooms</b>					
45	An adequate number of rooms or beds complying with social distancing with cross ventilation shall be identified and reserved to accommodate symptomatic workmen.				
<b>New Worker Dwelling</b>					
46	Provisions should be made to provide OHS orientation training to all new employees to ensure they are apprised of the basic site rules of work at / on the site and of personal protection				
47	New workers shall not be accommodated in the same rooms as the existing workmen.				
48	Dwelling units/rooms shall be suitably organized to ensure the avoidance of proximity of the worker groups, limiting the number of workmen in dwelling units maintaining social distancing.				
<b>Resources at the Workplace</b>					
49	As far as possible, grocery shops, saloons, and other items shall be made available within the workplace to avoid the movement of workmen outside the camp.				
<b>Restriction of a worker from Camp</b>					
50	Worker exit access shall be restricted to avoid infection from outside the community.				
51	Any worker going out of the habitat shall get a gate pass from the camp supervisor or authority.				
<b>Consultation and Grievance Mechanisms</b>					
52	Ensure mechanisms for worker's consultation designed and in place.				
53	Ensure fair conflict resolution mechanisms in place.				
54	Ensure an efficient process for dealing with community grievances,				
55	Ensure community representatives provided with easy means to voice their opinions and lodge complaints.				
<b>Community Health and Safety</b>					
56	Ensure project information board is available.				
57	Ensure safety sinages are posted around the sites.				
58	Ensure security guards are deputed.				

<b>S.N</b>	<b>List of Activities</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Remarks</b>
59	Ensure protection of construction (excavated sites) with barricades to prevent accidental fall.				
60	Ensures that the project does not result in potential increased health risks for the community through increased demands on existing health facilities and other communicable diseases.				

## Annex 4: Steps in ES Assessment (GoN requirement IEE &amp;EIA) and (WB requirement on ESIA)

S.N.	Steps	GoN Requirement		WB Requirement	Steps to satisfy both GoN and WB
		IEE	EIA		
1	Screening/Planning/Designing	Schedule 1 of EPR, 1997 (Based on threshold limit)	Schedule 2 of EPR 1997 (Based on threshold limit)	Based on Risk category and investment ceiling.	<ul style="list-style-type: none"> <li>Detailed screening of subprojects including consultations/FPIC with affected people and IPs as relevant</li> <li>Preparation of detailed plans (ESMP, RAP, VCDP, GAP) considering AP's concerns</li> <li>Disclosure of ESMF and other plans</li> </ul>
2	Project Implementation	Limited options as prescribed in EPR, 1997		<ul style="list-style-type: none"> <li>Implementation of ESMF requirements</li> <li>Exploration of detailed alternative design to suit E&amp;S requirement through active consultation</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of ESMF (ESMP and SS-EMPs, social plans)</li> <li>EHS compliance</li> <li>Public consultation and capacity building</li> </ul>
3	Monitoring and Reporting	Provision of project audit at the end of the project		Stringent monitoring of ESMF's requirements compliance	<ul style="list-style-type: none"> <li>Close supervision and monitoring of safeguard/EHS compliance</li> <li>Use of adequate indicators during monitoring</li> <li>Periodic and third-party monitoring (independent)</li> </ul>

## Annex 5: Indicative Outline of ESMP

## Outline of the ESMP

### 1. Introduction

- 1.1. Background of Project Area
- 1.2. Description of Project and its Activities
- 1.3. Scope of ESMP
- 1.4. Objectives of ESMP

### 2. Project Principles and Procedures

- 2.1. Sub-Project Implementation Modality;
- 2.2. Desk Review;
- 2.3. Consultation Meeting and Field Visit;
- 2.4. Documentation and Approval Process;
- 2.5. Dissemination and Disclosure.

### 3. Description of Baseline Situation in Project Area (Physical, Biological and Socio-Economic and Cultural Environment)

#### 3.1 *Physical Environment*

- a. Climatic and weather conditions in Project Area;
- b. Accessibility to the Project Area;
- c. Information on natural resources such as stream, river, rivulets, availability of drinking water sources, flood, landslide, etc.;
- d. Availability of construction materials, quarry sites, etc.;
- e. Debris/Solid Waste/Effluent Management practices in Project Area;
- f. Existing Infrastructure and current trend of infrastructure Development.
- g. Health, Sanitation & Safety and Drainage System;
- h. Existing trails and their characteristics;
- i. Use of Chemical fertilizers and pesticides
- j. Any other specific issues.

#### 3.2 *Biological Environment*

- a. Flora and Fauna in Project Area;
- b. Natural Habitat and Community;
- c. Forest and NTFP resources;
- d. Ecologically Sensitive Areas (Wetland, Breeding Centers, hot spots Core areas, etc.)
- e. Any other specific issues

#### 3.3 *Socio-Economic and Cultural Environment*

- a. Social, economic cultural setting;
- b. Commercialization and cropping patterns;
- c. Beneficiary Household Information;
- d. Vulnerable HHs/Community;
- e. Resettlement and Relocation;
- f. Diseases or health hazards;

- 4. Environmental and Social (E&S) Impact Assessment and Mitigation Management Plan**
- 5. E&S Monitoring and Reporting Mechanism and Plan**
- 6. Capacity Development and Training for Subproject Implementation**
- 7. E&S Mitigation and Monitoring Cost**
- 8. Grievance Redress Mechanism**
- 9. Conclusions and Recommendation**
- 10. Appendices**

## Annex 6: Indicative Outline of RAP

### ABBREVIATIONS

### EXECUTIVE SUMMARY

#### 1. Introduction

- 1.1 Project Description
- 1.2 Objectives of Plan
- 1.3 Scope of Resettlement Action Plan
- 1.4 Survey of Affected People (Methodology used for census survey of HHs, FGDs, Key Informant Survey, etc.)
- 1.5 Survey of Affected Properties (Measurement, assets valuation, data verification, etc.)
- 1.6 Efforts to Avoid and Minimize Impacts

#### 2. Resettlement Policy Framework

- 2.1 Resettlement Principles
- 2.2 GoN Policies and Regulatory Framework
- 2.3 World Bank Policies
- 2.4 Policy Gaps and Fulfillment

#### 3. Socio-economic Profiles of the Affected People (To be based on Census Survey)

- 3.1 Project Area and Locations
- 3.2 Social Profiles of Affected Population (Directly and indirectly affected population by social groups, gender, occupations/income, etc.)
- 3.3 Economic Profiles of Affected Population (Income sources/ levels, livelihood sources including land, livestock and other assets covering both farm and off-farm sources)
- 3.4 Social Facilities Available (Education, health, market, transportation, water, etc.)

#### 4. Impact Assessment and Mitigation (To be based on Census Survey of Affected HHs)

- 4.1 Identification of Impacts (loss of land and income including physical and economic displacement)
- 4.2 Beneficial Impacts and Enhancement Measures
- 4.3 Adverse Impacts and Management (loss of land, business or other income sources, loss of employment, loss of access to physical/natural resources etc. Detailed loss of land, structures and other assets of each household to be documented and put in the annex based on the survey and measurement of losses)
- 4.4 Mitigation Options of Lost Assets
- 4.5 Resettlement Impacts (Loss of different assets owned by title holders and nontitle holders and legal status)
- 4.6 Detailed Entitlements

#### 5. Public Consultations and Information Dissemination

#### 6. Resettlement Budget

- 6.1 Compensation for Lost Assets and Basis
- 6.2 Resettlement and Rehabilitation (R&R) Assistance
- 6.3 Supports for Livelihoods Improvement and Other Assistances

#### 7. Implementation Plan

- 7.1 Implementing Agencies
- 7.2 Implementation Schedule

#### 8. Grievance Management

#### 9. Monitoring and Evaluation

## Annex 7: Indicative Outline of Social Assessment

The social assessment will be done at the destination level. It includes the following elements, as needed:

- A review, on a scale appropriate to the project, of the legal and institutional framework applicable to Indigenous Peoples.
- Gathering of baseline information on the demographic, social, cultural, and political characteristics of the affected Indigenous Peoples' communities, the land and territories that they have traditionally owned or customarily used or occupied, and the natural resources on which they depend.
- Taking the review and baseline information into account, the identification of key project stakeholders and the elaboration of a culturally appropriate process for consulting with the Indigenous Peoples at each stage of project preparation and implementation (see paragraph 9 of this policy).
- An assessment, based on free, prior, and informed consultation, with the affected Indigenous Peoples' communities, of the potential adverse and positive effects of the project. Critical to the determination of potential adverse impacts is an analysis of the relative vulnerability of, and risks to, the affected Indigenous Peoples' communities given their distinct circumstances and close ties to land and natural resources, as well as their lack of access to opportunities relative to other social groups in the communities, regions, or national societies in which they live.
- The identification and evaluation, based on free, prior, and informed consultation with the affected Indigenous Peoples' communities, of measures necessary to avoid adverse effects, or if such measures are not feasible, the identification of measures to minimize, mitigate, or compensate for such effects, and to ensure that the Indigenous Peoples receive culturally appropriate benefits under the project.

## Annex 8: Indicative Outline of VCDP

A typical VCDP will have generally the following contents:

- i. Project background and a summary of the Social Assessment
- ii. A summary of results of the free, prior, and informed consultation with the affected Indigenous People's communities that was carried out during project and that led to broad community support for the project
- iii. A framework for ensuring free, prior, and informed consultation with the affected Indigenous Peoples and other vulnerable communities during project implementation.
- iv. An action plan of measures to ensure that the Indigenous Peoples and other vulnerable community receive social and economic benefits that are culturally appropriate, including, if necessary, measures to enhance the capacity of the project implementing agencies.
- v. When potential adverse effects on Indigenous Peoples and other vulnerable community are identified, an appropriate action plan of measures to avoid, minimize, mitigate, or compensate for these adverse effects.
- vi. The cost estimates and financing plan for the VCDP.
- vii. Accessible procedures appropriate to the project to address grievances by the affected Indigenous Peoples' and other vulnerable communities arising from project implementation. When designing the grievance procedures, the borrower takes into account the availability of judicial recourse and customary dispute settlement mechanisms among the affected Peoples.
- viii. Mechanisms and benchmarks appropriate to the project for monitoring, evaluating, and reporting on the implementation of the IPP. The monitoring and evaluation mechanisms should include arrangements for the free, prior, and informed consultation with the affected Indigenous Peoples' communities.
- ix. Implementation arrangement which includes respective roles and responsibilities of the implementing agency for VCDP implementation, other government agencies involved, their traditional institutions and organizations, and where appropriate other civil society organization.

## Annex 9 (a): Environmental and Social (E&S) Overview for Policy, Plan, and Program

### Introduction

STENPA, in addition to investing in tourism related physical infrastructure, aims to improve Nature Based Tourism (NBT) through Technical Assistance (TA) leading to or contributing to Policies, Programs, Plans and Capacity & Institutional Strengthening (see Chapter 4.4 - *Approach to Technical Assistance to Policy, Regulation, Plan and Program* of the ESMF). These for example includes tourism policies; sustainable tourism development strategy, upgrading the design and enforcement of key regulations, Protected Area Management Plan, Destination Vision & Investment Plan (ITDP), IPs and gender inclusive plans; land zoning plans, park & conservation area management plan, tourism investment plans at the project destinations, community-level infrastructure/ settlement plan, as well as variety of trainings and strengthening the capacity of stakeholder and institutions .

Several environmental and social impacts and issues, and risks arise from or are linked to Policies and Plan that may be prepared through Technical Assistance (TA). Since TA can take many forms, there are a range of safeguard instruments which could be appropriate. In virtually all cases it will be possible to prepare some level of analysis of potential environmental and social issues related to a proposed TA or product of a TA. Such an analysis or brief should be based on an issue scoping exercise involving stakeholder participation.

In STENPA, the policies and plans will also be subjected to Environmental and Social Assessment in the form of Environmental and Social Overview<sup>1</sup> for their potential environmental and social implications, risks and impacts. Objective of such Overview type review/analysis is to mainstreaming E&S issues into the policies and plan, to inform ensure that the polices and plans are informed of the broad/ relevant environmental and social aspects, and hence contribute to a socially and environmentally better policy and plan. The following guiding principles or concepts become relevant while applying E&S Overview in a TA: Integrate environmental and social objectives into the TA process; Promote transparency through stakeholder participation; Promote innovative environmental and social assessments; Promote analysis of alternatives; and promote environmental and social capacity building and institutional strengthening.

### Process and Procedures for Environmental and Social (E&S) Overview

The E and S Overview should be operated as a creative and iterative process which help shaping and improving the policy/program/ plan. The value is in the process of conducting

---

<sup>1</sup> The E&S Overview is a rapid E&S Assessment tool for use during the formulation stages of polices, plans and programs. It is a simple but effective tool to apply frequently and to a wide range of drafting polices, programs, plans, strategies, etc. to assist with mainstreaming cross-cutting concern of environment and social safeguards into policy/program and plan formulation stages. It is undertaken interactively in a group situation (around the table and with a flip chart or using a computer and projector) with a group drawn from a range of line agencies or will be limited to small group of stakeholders associated with the STENPA as appropriate and is conducted in a structured format. The structure requires the group addressing a series of questions in a particular sequence that focus the group on the E&S issues and opportunities associated with the proposals (Plans, program, policies, etc.) and how these can be incorporated in the proposal if it is seen to be necessary.

the Environmental Overview and getting right inputs. Policy/program documents pass through many drafts in their progress. It is during this drafting and redrafting - preferably as early as possible in the process - that the Environmental and Social Overview can prove most effective, allowing the policy/ strategy/ plan to be revised / modified, if necessary, to reduce the potential social and environmental risks and impacts and to enhance benefits. The E and S Overview should not be just a one-off activity, but part of the iterative process providing creative inputs into several different iterations of the policy/ plan preparation.

### **Step-1: Preparation of Initial idea of a policy, plan, strategy, etc.**

The policies and plans supported under the STENPA Project may fall in one of the following groups:

- Group 1: TA to Policy, Regulation, Strategy, Plan and Programs
- Group 2: Strengthening capacity and institutions
- Group 3 : Investment in Physical Infrastructure

### **Step 2: Initial Discussion with environmental and social stakeholders on the initial idea**

The stakeholders may vary depending on the type of policy and plan. The discussion will be structured, and participatory. The discussion will be guided by the following questions:

Questions relating to the baseline conditions for the policy/program/ plan:

- *What are the social and environmental conditions of the areas where the policy/program will apply?*
- *What are the major environmental and social issues which currently exist in the areas?*
- *What are the economic forces which are currently operating in the areas?*
- *What are the current management practices and capabilities in the areas?*

Questions relating to impacts and opportunities of the policy/program, followed by how the policy/program/ plan may be improved from social and environmental consideration:

- *What are the major natural and socio-economic impacts/ risks and opportunities that might be associated with proposed policy/ program/ plan?*
- *How the policy/ program/ plan may be improved from social and environmental considerations? What modifications/alternatives are there for policy/program/plan that results better social and environmental output/outcomes?*
- *What may be the operational strategy to enhance the social and environmental benefits, and to address the impacts or improve baseline conditions?*

### **Step 3: Preparation of draft Policy, Strategy, Plan, Program**

Considering the inputs from step 2, draft policy, strategy/ plan/ program will be formulated.

#### **Step 4: E and S Overview Workshop**

The draft stage Policy/ Plan/ Program/ Strategy will be subjected to more rigorous review through an E and S Overview Works. The questions in Step 2 will provide overall guidance for the review. The E and S team will prepare a desk review of the draft policy/plan/program/ strategy guided by the questions – these will be presented in the Overview Workshop. Choosing right stakeholders for the workshop and sharing information (draft paper, and E7S desk review findings) with them in time is important.

## Annex 9 (b): Terms of Reference to Carryout Environmental and Social Overview

**OBJECTIVES OF CONSULTANCY**

The overall objectives of the proposed consultancy are to:

- Carry out E&S overview of plans under Component 1 of STENPA: Improving NBT management, planning and coordination envisioned to improve Nature Based Tourism (NBT) management plans (such as ITDPs, IPs and gender inclusive plans land zoning plans, park & conservation area management plan, tourism investment plans at the project destinations, DCF establishment and stakeholder capacity building plans, etc.)

**SCOPE OF CONSULTANCY**

- To carry out E&S Screening, identify and assess potential positive and adverse E&S impacts as well as environmental and socio cultural settings for detail investigations, and recommend further action required including direct, indirect, and induced impacts in terms of magnitude, extent and duration that may be expected to occur due to formulation of plan, program, strategy, etc.
- To review all available relevant secondary data to establish a comprehensive E&S baseline (including physical, biological, social, cultural and economic environments) for the Project Area of influence; analyze and include the issues and recommendation identified from E&S screening. The following guiding question concerns the baseline conditions for the plan/policy and program:
  - What are the biophysical and social environments of the areas where the plan/policy/program will apply?
  - What are the major E&S issues which currently exists in the area?
  - What are the economic forces which are currently operating in the area?
  - What are the current management practices and capabilities in the area?

The next guiding questions concerning the plan/policy/program impacts and opportunities followed by how draft plan/policy/program can be redrafted to take baseline conditions into account:

- What are the major natural and socio-economic impacts and opportunities associated with the implementation of the plan/policy/program?
- What modification/alternatives to be required in the plan/policy/program design?
- What are the operational strategy to address these and the base line conditions?
- To develop proposed measures to avoid, reduce, mitigate, manage and/or compensate for such impacts, including the institutional arrangements and required capacity for the implementation of all such measures and monitor their effectiveness and suggest changes to the arrangements (as per new federal structures) as well as capacity strengthening measures, if necessary;

- To conduct a public consultation process/Participatory Rural Appraisal as appropriate (with the consent of client) that ensures that project affected people and other stakeholders are informed about the project and its possible impacts, as well as offered the opportunity to share their opinions and feedback so as to input into the E&S overview and their implementation; and
- To document all of the above mitigation and development interventions in appropriate forms and formats to be further discussed and agreed upon with STENPA and in line with World Bank standards;

The Consultant shall ensure that the E&S overview outputs will comply with and meet the legal and technical requirements of the Government of Nepal (GoN) and World Bank Safeguard Policies.

***KEY EXPECTED DELIVERABLES***

1. E &S screening/assessment and categorization Report;
2. Detailed E&S overview and Planning Report.

## Annex 10: Grievance Filing Format

**Grievance/Complaint Format for Local Unit Level Office  
of Conservation Areas or National Parks  
Sustainable Tourism Enhancement in Nepal's Protected Areas Project,**

To,

The Coordinator,

Field Unit Office

ACA/MCA/Banke/Bardia/Sukla Phanta NP/Rara NP

**Subject: Regarding Grievance/Complaint**

With regard to ..... under the **Sustainable Tourism Enhancement in Nepal's Protected Areas Project**, located at .....District.....Rural Municipality/Municipality, Ward No..... I/we do hereby submit the complaint as follows:

Details of complaint

Attached Documents.....

1.

Yours' Sincerely

2.

Signature:.....

Name:.....

Address:.....

Mobile No:.....

Date:.....

## Annex 11: Specimen ToR for E&amp;S Capacity Building Expert

**Terms of Reference (ToR)**  
For  
**Environmental/Social Safeguard Capacity Development Expert**

**SCOPE OF THE CONSULTANCY SERVICE:**

The Consultant shall work under the management of the PIE. The Consultant shall however ensure that the services carried out are fully adequate to attain the objectives set out in the ESMF of STENPA project. The Consultant's duties shall include but not necessarily be limited to:

**Support and Guidance:**

- Ensure the compliance of Environmental and Social Management Framework (ESMF) prepared for the implementation of the STENPA, World bank safeguard policy and other project documents and support in preparing Environmental safeguards implementation action plan on behalf of the PIE and in close coordination with FIUs;
- Support and guide the Environmental Specialist based at PIE and FIUs for effective compliance of Environmental and Social Management Framework (ESMF) of the project during planning, implementation, monitoring and supervision of the safeguard works;
- Support and guide the Environmental safeguard specialist at PIE and FIUs to understand their responsibilities for environmental safeguard friendly implementation of sub-projects in accordance with project's plan and design, budget, specifications, estimated cost, bid documents and contract agreement clause;
- Support and guide PIE and FIUs to prepare Environmental Screening and Environmental management plan (EMP/EMAP) of the proposed subproject activities;
- Support and guide to record and resolve grievances regarding social/environmental/technical in the subproject areas;
- Support and guide to PIE and FIUs for resolving site specific environmental issues during the implementation of the sub-projects;
- Support and guide for the preparation of plan of action regarding conduction of user committee meeting, collecting information and organize sub projects related information dissemination/awareness raising program to stakeholders as well as general users on sub projects improvement, construction and maintenance procedures and provision of the ESMF;

- Support PIE and FIUs to carry out the operational safety and health required for labors and workers at the construction site;
- Support and guidance for undertaking Community Based Performance Monitoring (CBPM), as per the procedure presented in the ESMF; and
- All kind of support and guidance related with environmental safeguard to PIEs and FIUs as requested.

#### **Orientation, training and workshop:**

- Provide orientation to safeguard specialists at PIE and FIUs on implementation plan of Environmental safeguard and provisions of ESMF under STENPA;
- Assist and facilitate to conduct orientation to local level stakeholders along with contractors on the provision of ESMF and environmental safeguards issues;
- Assist to conduct orientation to contractors and workers on issues of child labor, mode of payment, participation of women and local labor, application of labor camp management and Occupational Health and Safety Guidelines; and
- Assist to design and implement the programs such as; awareness on environmental safeguard issues, and different trainings as required during project implementation.

#### **Monitoring and Supervision:**

- Capacitate in monitoring and supervision of performance of Environmental specialists and safeguard consultant based at PIE and FIUs, respectively on undertaking the safeguard activities. Monitoring of compliance of safeguard measures including implementation of Resettlement Action Plan (RAP), Gender Action Plan (GAP), and Vulnerable Community Development Plan (VCDP); and
- Capacitate in monitoring and supervision of compliance of recommendations made by central and field level.

#### **MINIMUM QUALIFICATION REQUIRED FOR ELIGIBILITY**

The applicants must satisfy the following three eligible criteria.

- The applicant must have Master degree in Environmental Engineering/ Environmental Management /Environmental science /Social science or equivalent from a recognized University/Institution.
- Minimum seven (5) years of general experience in related with Environmental and Social safeguard works.
- Minimum Five (3) years of specific experience in tourism related Environmental/Social safeguard works.

Annex 12: Land Donation Agreement Form

The following agreement has been made between the resident of ..... zone ..... district .....VDC/Municipality ward no ..... grandson/daughter/daughter in law of ..... the sun/daughter/wife of ..... aged Mr./Mrs/ Miss ..... (hereafter called second party) and the Project Executing Agency....., ..... (hereafter called first party).

1. The second party has accepted (or not accepted) the request of the first party to donate ..... area of land out of ..... area of land registered in her/his name situated in ..... district, .....VDC/Municipality ward no..... recorded in sheet/map no..... and parcel no.....
2. The second party hereby grants/not grants donation of the area land mentioned in article 1 for the construction/ improvement of ..... free of cost for the benefit of the community and tourism development of the area.
3. The value land/of buildings/structures, others ... in the donated land mentioned in article 1 is agreed as follows:

Land	: Rs.....
Building/hut/shop	: Rs. ....
Cattle shed/other structures	: Rs. ....
Others	Rs,.....

Other than the land, the first party will provide compensation for other losses within ..... days to second party.

4. The second party will vacant the land/ remove the compensated building/ structures, trees and crops within ..... days of signing. If the second party won't vacant the land till the mentioned date then the first party will have full right to enter into the donated land.
5. The second party will not claim any compensation against the donation of this land asset, nor obstruct the construction process on the land after this date.
6. The EA ..... shall construct and improve the school facilities and take all possible precautions to avoid damage to adjacent land/structure/other assets.
7. Both parties agree that the sub project so constructed shall be come publicly owned.
8. The provision of this agreement will come into action from the date of signing of this deed.

Signature of first party	Signature of second party
Name:	Name:
Designation:	Address:
Office:	Right      Left

Witness (Third Party)

We certify that there is no pressure upon him to donate land voluntarily

- 1)
- 2)
- 3).....

1. Witnesses

## Annex 13: IPs and Vulnerable Groups Impact Screening &amp; Categorization Form

**A. Project Data**

Sub-project Title:

**B. Identification of Impact on IPs/ Vulnerable Group in Sub-project Area**

<b>Impact on Indigenous Peoples (IPs)/ Ethnic Minority (EM)/ Vulnerable Group</b>	<b>Not known</b>	<b>Yes</b>	<b>No</b>	<b>Remarks or identified problems, if any</b>
Are there <i>Dalits</i> , <i>Janajatis</i> , or ethnic minorities present in project locations?				
Do they maintain distinctive customs and traditions and economic activities in their locality?				
Will the project in any way affect their economic and social activity and make them more vulnerable?				
Will the project affect their socioeconomic and cultural integrity?				
Will the project disrupt their community life?				
Will the project positively affect their health, education, livelihood or social security status?				
Will the project negatively affect their health, education, livelihood or social security status?				
Will the project alter or undermine their local knowledge, customary behaviors or institutions?				
Are IP and VC households likely to lose customary rights over, access to land?				
Are IPs and VCs likely to lose shelter/business and be displaced?				

In case no disruption of indigenous community life as a whole, will there be loss of housing, strip of land, crops, trees and other fixed assets owned or controlled by individual indigenous households?									
<b>C. Specific Impacts on IPs and VCs</b>									
No of IP families losing land	No VC families losing land	No of IP HHs losing house over 10% of their residence	Govt land required in Sq. mts.	Forest land required in Sq mts	No of IP/VC houses affected	No of IP/VC shops affected	No of other IP/VC structures affected	No of IP/VC Squatters affected	Public utilities affected

**D. Anticipated project impacts on indigenous peoples**

Project activity and output	Anticipated positive effect	Anticipated negative effect
1.		
2.		
3.		
4.		
5.		

**E. Decision on Categorization**

After reviewing the above, it is determined that the sub-project is:

- Categorized as an A project, an Indigenous Peoples Development Plan (IPDP) is required
- Categorized as a B project, a specific action favorable to indigenous peoples is required and addressed through a specific provision in related plans such as a Resettlement Plan, or a general Social Action Plan
- Categorized as a 'C' project, no IPDP or specific action required

\_\_\_\_\_

**Prepared by:**  
Date:

\_\_\_\_\_

\_\_\_\_\_

**Reviewed by:**  
Date:

\_\_\_\_\_

**Approved by:**  
Date:

**Endorsed by:**  
Date:

## Annex 14: Draft ToR for Third Party Monitoring

Draft Terms of Reference<sup>1</sup>Sustainable Tourism Enhancement in Nepal's Protected Areas (STENPA)  
ToR for Environmental & Social Safeguard Consultant to conduct Third Party Monitoring

<b>Position: Third Party/</b> Independent Environmental & Social Safeguard Consultant	
<b>Base Station:</b> Flexible/Project Management Office.	
<b>Project: Sustainable Tourism Enhancement in Nepal's Protected Areas</b>	
<b>Expected Date to Start the Assignment:</b>	<b>Duration:</b>
<b>Reports to:</b>	<b>Title:</b>
<b>BACKGROUND</b>	
Brief project description and rationale for hiring third party consultant.	
<b>OBJECTIVES TO BE ACHIEVED</b>	
Objective of the work is to prepare the report on overall safeguard performance / compliance in line with the project's Environmental and social management framework (ESMF)	
<b>SCOPE OF THE WORK (Roles and Responsibilities)</b>	
<ul style="list-style-type: none"> <li>• Under close guidance of Project Director and co-operation with project team, the consultant will carry out his/her duties to prepare the Independent Safeguards Compliance Report for Tourism Project.</li> <li>• Review project's safeguard objectives and implementation modalities and other documents of the project in in Protected Areas.</li> <li>• Review periodic monitoring reports and assess environmental and social safeguards planning process adopted at subproject levels including consultations and documentations.</li> <li>• Undertake field visit in sample sites covering environmental and social safeguards considerations and assess safeguard compliance and best practices adopted (i.e environmental and social screening, preparation of ESMPs, RAP and other tools including land donations for minor infrastructures as relevant) during planning and implementation.</li> <li>• Review and assesses Grievance Redress Mechanism (GRM) followed at different levels/hierarchies of the project and its effectiveness.</li> <li>• Review project's internal monitoring and reporting system on safeguards compliance.</li> <li>• Draw inferences and provide recommendations on safeguards compliance of the project.</li> </ul>	
<b>SPECIFIC TASKS</b>	
<ul style="list-style-type: none"> <li>• Consultant should be fully committed to finish the task in given time frame.</li> <li>• Review and analyze the project activities (sub-project screening, ESMP, ECoPs and E&amp;S monitoring and reporting as per the Environmental and Social Management Framework) and other plans, if any.</li> <li>• Assess safeguards compliance at planning and implementation including compensation, livelihood /income restoration of people including vulnerable groups, skills and training provided to the people; land donations and documentations, transfers/lease (donation forms, signed MOUs, land purchase, legal transfer/lease documents etc.</li> <li>• Project activities disclosure (communication and co-ordination)</li> <li>• Good practices adopted in safeguards compliance during the implementation of subproject activities under the project</li> <li>• GESI and women involving in safeguards compliance including their involvement in livelihood improvement, skills enhancement, income generation, management and decision makings.</li> </ul>	

- Monitoring of Community Development Programs/Activities /infrastructures developed with the project's supports.
- Assess project's grievance redress mechanism including their documentation and management. Assess safeguards monitoring and reporting practices.

**KEY OUTPUTS/DELIVERABLES****REQUIRED COMPETENCIES**

---

<sup>1</sup> To be updated as required during consultant recruitment process.

## Annex 15: Major Highlights of Labor Rules, 2018 (2075) related with the E&S Safeguard

The Government of Nepal (“GoN”) has framed the Labor Rules, 2075 (2018) (“**Labor Rules**”) by exercising the power conferred to it under Section 184 of the Labor Act, 2074 (2017) (“**Labor Act**”) which was passed by the Council of Ministers on May 28, 2018 (Jestha 14, 2075). The Labor Rule has been published in Nepal Gazette on June 22, 2018 (Asar 08, 2075) with immediate effect and has repealed the then Labor Rules, 1994 (2050) (“**Previous Labor Rules**”). Major highlights of the Labor Rules related with the environment and Social Safeguard have been briefly described in the following paragraphs.

### **Occupational safety and health policy**

**Formulation of Health and Safety Policy:** Employers are required to maintain an occupational health and safety policy. The policy should cover different measures in accordance with the entity’s nature of business. The policy should be drafted in a way which includes provisions related to arrangements Employee’s safety and security, Employee’s health, probable accident in workplace, precautions to be taken while operating devices and machines in workplace and precautions to be taken while using chemical substances.

**Additional duty of the Employer on workplace safety:** The Employer is required to (a) make necessary arrangements to take the Employee to the hospital or health center in case of sickness or accident while working (b) inform the Labor Office regarding the fulfillment of obligations towards the Employees regarding occupational safety and health.

**Duties of manufacturer, importer and supplier:** Pursuant to the Labor Rules, it shall be the duty of manufacturer, importer and supplier to provide sufficient information to the Employer regarding management and precautions to be taken for chemical substance that may not come into use and regarding safe use and storage of chemical products used in workplace.

**Formation of Safety and Health Committee:** The Labor Rules requires that a safety and health committee should be formed in every entity where 20 or more workers are engaged in work. The Labor Rules has laid down the works, duties and rights of the safety and health committee. It is further required for the safety and health committee to convene meetings at a time and place decided by the Coordinator at least 4 times a year. Please also refer to the committee to this brief for the formation and health and safety policy.

**Specific provisions relating to the safety of the works having health hazards:** The Labor Rules has provided the detail safety measures to be followed by Employer such as for the safety of eyes, for the operation of pressure plants, prevention from fire, chemical substance, testing pressure plant and boilers, safety from hazardous machine and equipment, etc. The Labor Act has also prescribed the limits for weight lifting which is (a) 55 kg for adult male, and (b) 45 kg for adult woman. This weight lifting limit is not applicable for lifting of sacks jointly.

**General Environment of Work Place:** The Labor Rules has also specified certain requirements for work place in terms and health and safety.

The requirement include, among others (a) proper cleanliness, (b) passage of fresh air, proper light and temperature, (c) solid waste management, (d) sound control measures, (e) 15 cubic meter space to Employees to the extent possible as per the nature of work, (f) healthy drinking water, (g) bathroom or modern toilet, (h) tobacco free zone, (g) mandatory medical checkup for the entities undertaking health hazardous activities, and (i) provide appropriate time for the lunch/tiffin to the Employees.

**Special provision relating to the Employees performing intellectual work:** Labor Rules requires Employers to arrange suitable environment in workplace in order to prevent fatigue or tiredness of the Employees continuously working on computers for a long time or Employees engaged in mental or intellectual work.

#### Other Health and Safety Arrangements

S.N.	Arrangement	Details	Remarks
1	Child Care Center	Triggers where 50 or more female Employees are engaged at work.	Can be arranged by individual Employer or in the association with other Employers
2	Rest Room	Triggers where 50 or more Employees are engaged at work.	
3	Canteen	Triggers where 50 or more Employees are at the same time at same workplace	
4	First Aid	For the primary treatment of Employees in case of any accident at workplace.  Also triggers in case the Employee meets accident.	Employer shall bear all the cost incurred for such treatment.

**Notice of Accident:** Employer or the representative of Employer should provide notice, within 7 days, to the Labor Office in case any Employee meets accident which results injury or death of such Employee. Such notice should include the details including the date, time, reason and place of accident, and the name, address of the Employee including the name of hospital where treatment takes place.

**List of occupational disease and compensation:** The Labor Rules authorizes the Government to publish list of the occupational diseases in Nepal Gazette. Any dispute relating to whether or not a disease is an occupational disease can be settled by the committee formed by the Government comprising of specialized medical practitioner as per the criteria set out by International Labor Organization. The Ministry of Labor has the

authority to specify the amount of medical costs and compensation to be paid to the Employee by the Employer in the case of occupational diseases.

### **Labor Audit**

The Employer is required to conduct a labor audit by the end of the month of *Poush as per Nepali Calendar* every year (Mid-January). The Labor Audit should be conducted as per the criteria defined by the Ministry of Labor.

The audit may be conducted by the managerial level Employee of the entity or any other individual or entity associated in the field of labor. If any false details are found in the labor audit report, Department of Labor can impose up to twenty thousand rupees fine on the person providing false details or the management of the entity.

A copy of the report of labor audit should be provided to the Labor Relation Committee. The report should also be submitted to the following regulatory authorities such as (a) to Nepal Rastra Bank by the bank and financial institutions, (b) to Insurance Board by the insurance companies, (c) to District Administration Office by Non-government organizations, (d) to the authority establishing or issuing license for approval by other entities.

**Maintenance of personal records and retention of such record:** As per the Labor Rules the Employer should maintain personal and attendance record of the Employees. The record should include name, address, family details, citizenship certificate copy, contact number, email address and other important details of the Employee working with the Employer. The Employer is required to retain the records of Employee's remuneration and attendance for at least five (5) years.

**Public Holiday and Weekly Off of Domestic Workers:** The Labor Rules provides that domestic workers are entitled to twelve (12) day paid public holiday and one (1) day paid weekly off every week. If the worker is engaged in work on weekly off or public holiday, the Employer should provide replacing holiday within 21 days or overtime payment for such work.

## Annex 16: GoN prescribed National Standards on Air/Noise/Water/Effluent

**A. Air**

Nepal does not have any specific law on air pollution control. *Environment Protection Act (Official Gazette, June 24/1997)* and *Environment Protection Rules (Official Gazette, June 26/1997)* are umbrella legislation.

Emission standards for in-use and new diesel generators (DG) sets, industrial boilers, cement industries, crusher industries and diesel generators were introduced in 2012. The government has also introduced brick kiln stack emission standard in 2008.

According to EPR, 1997, all industries as referred to in Schedule-7 has to obtain the **provisional pollution control certificate**. This certificate is issued by concerned body for one year of operation of such industry shall cause no Substantial adverse impact on environment or there is possibility of reducing or controlling such effect. Whereas if industry specific standards are available, the industry has to obtain the **permanent pollution control certificate** valid for three years to those industries after having their examination from the designated laboratory or as mentioned. Ministry of Forests and Environment (Previously named as Ministry of Population and Environment) and/or Department of Environment decides on what, when and how pollution abatement measures/equipment shall the plant implement (Rule 15, Sub Rule 5, EPR, 1997).

**B. Noise**

Nepal does not have a specific law to address noise pollution. *Environment Protection Act (Official Gazette, June 24/1997)* and *Environment Protection Rules (Official Gazette, June 26/1997)* are umbrella legislation. Sound Quality National Standard, 2012 are put in place for noise. According to *Environment Protection Rules (Official Gazette, June 26/1997)*, Ministry of Forests and Environment (Previously named as Ministry of Population and Environment) is the in charge of implementing the proper measures for noise reduction.

According to Sound Quality National Standard, 2012 noise limits differs based on the type of location. There are two types of noise limit- day and night limits. The noise limit for night are stricter then day.

Zone	Noise limit in Decibel	
	Day time	Night time
Industrial	75	70
Commercial	65	55
Rural Residential	45	40
Urban Residential	55	50
Mixed Residential	63	55
Silent	50	40

### C. Drinking Water<sup>1</sup>

Government of Nepal issued notice to implement National Drinking Water Quality Standards, 2062 (2006) under the provision of Water Resources Act, 2049 (1993), Clause 18 and Sub Clause 1. The Standard are as follows:

#### I. National Drinking Water Quality Standard

S.N	Category	Parameters	Units	Concentration Limits	Remark
1	Physical	Turbidity	NTU	5 (10)	
2		pH		6.5-8.5*	
3		Color	TCU	5 (15)	
4		Taste and Odor		Non-objectionable	
5		TDS	mg/L	1000	
6		Electrical conductivity (EC)	μs/cm	1500	
7	Chemical	Iron	mg/L	0.3 (3)	
8		Manganese	mg/L	0.2	
9		Arsenic	mg/L	0.05	
10		Cadmium	mg/L	0.003	
11		Chromium	mg/L	0.05	
12		Cyanide	mg/L	0.07	
13		Fluoride	mg/L	0.5 -1.5*	
14		Lead	mg/L	0.01	
15		Ammonia	mg/L	1.5	
16		Chloride	mg/L	250	
17		Sulphate	mg/L	250	
18		Nitrate	mg/L	50	
19		Copper	mg/L	1	
20		Total Hardness	mg/L as CaCO <sub>3</sub>	500	
21		Calcium	mg/l	200	
22		Zinc	mg/L	3	
23		Mercury	mg/L	0.001	
24		Aluminum	mg/L	0.2	
25		Residual Chlorine	mg/L	0.1-0.2*	in systems using chlorination

<sup>1</sup> National Drinking Water Quality Standards, 2005 Implementation Directives for National Drinking Water Quality Standards, 2005

26	Microbiological	E. Coli	MPN/100 ml	0	
27		Total Coliform	MPN/100 ml	0 in 95% samples	

\* These values show lower and upper limits

() Values in parenthesis refers the acceptable values only when alternative is not available.

## II. Rural Ground Water Supply Systems

Category	Parameter	Unit	Maximum Concentration Limits	Remarks
Physical	Turbidity	NTU	5(10)	
	pH		6.5-8.5*	
	Color	TCU	5(15)	
	Taste & Odor		Non objectionable	
	Electrical Conductivity	µS/cm	1500	
Chemical	Iron	mg/l	0.3(3)	
	Manganese	mg/l	0.2	
	Arsenic	mg/l	0.05	
	Fluoride	mg/l	0.5-1.5*	
	Ammonia	mg/l	1.5	
	Nitrate	mg/l	50	
	Total Hardness	mg/l	500	
	Calcium	mg/l	200	
	Residual Chlorine	mg/l	0.1-0.2*	In systems using chlorination
Microbiological	E-Coli	MPN /100 ml	0	
	Total Coliform	MPN /100 ml	0 (95% sample)	

\* These values show lower and upper limits

() Values in parenthesis refers the acceptable values only when alternative is not available.

### III. Rural Surface Water Supply Systems

Category	Parameter	Unit	Maximum Concentration Limits	Remarks
Physical	Turbidity_	NTU	5(10)	
	pH		6.5-8.5*	
	Color	TCU	5(15)	
	Taste & Odor		Non objectionable	
	Electrical Conductivity	$\frac{\mu S}{cm}$	1500	
Chemical	Iron	mg/l	0.3(3)	
	Manganese	mg/l	0.2	
	Chromium	mg/l	0.05	
	Fluoride	mg/l	0.5-1.5*	
	Ammonia	mg/l	1.5	
	Nitrate	mg/l	50	
	Total Hardness	mg/l	500	
	Calcium	mg/l	200	
	Residual Chlorine	mg/l	0.1-0.2*	In systems using chlorination
Microbiological	E-Coli	MPN /100 ml	0	
	Total Coliform	MPN /100 ml	0 ( 95% sample)	

\* These values show lower and upper limits

( ) Values in parenthesis refers the acceptable values only when alternative is not available.

#### D. Waste Water (Effluent or Sewage)

EPR 1997 requires for industrial unit which generate effluents to meet the pollution standards specified in Schedule 7 of EPR. According to EPR 1997, no one shall emit or cause to emit the noise, heat and waste from any mechanical means, industrial establishment or any other place in contravention of the standards prescribed.

Government of Nepal has generic and specific standards for specific industries. The specific standards are as tolerance level for industrial effluents to be discharged into inland surface waters for tanning industries, wool processing industries, fermentation industries, vegetable ghee and oil industries, paper and pulp industries, dairy industries, sugar industries, cotton textile industries, shop industries, galvanizing and electroplating industries, paint industries, non-alcoholic beverage industries and pharmaceutical industries. Similarly, generic standards are also in place for industrial effluents to be discharged into inland surface waters, into public sewers, and into inland surface waters from combined wastewater treatment plant. There are also sampling and analyzing methods for same.

Accordinging EPR, 1997, all industries as referred to in Schedule-7 has to obtain the **provisional pollution control certificate**. This certificate is issued by concerned body for one year of operation of such industry shall cause no Substantial adverse impact on environment or there is possibility of reducing or controlling such effect. Whereas if industry specific standards are available, the industry has to obtain the **permanent pollution control certificate** valid for three years to those industries after having their examination from the designated laboratory or as mentioned. While issuing provisional or permanent pollution control certificate, the concerned body may, as required, prescribe terms and conditions to be complied by industry (Rule 15, Sub Rule 5, EPR, 1997).

#### GENERAL STANDARDS AND CRITERIA FOR THE DISCHARGE OF INDUSTRIAL EFFLUENTS INTO INLAND SURFACE WATERS<sup>1</sup>

Characteristics	Tolerance Limit
Total Suspended solids, mg/L, Max	50
Particle size of total suspended particles	Shall pass 850-micron Sieve.
pH	5.5 to 9.0
Temperature	Shall not exceed 40 degree C in any section of the stream within 15 meters down-stream from the effluent outlet.
Biochemical oxygen demand (BOD) for 5 days at 20 degree C, mg/L, Max	50
Oils and grease, mg/L, Max	10
Phenolic compounds, mg/L, Max	1
Cyanides (as CN), mg/L, Max	0.2
Sulphides (as S), mg/L, Max	2
Radioactive materials:	
a. Alpha emitters, c/ml, Max	7-Oct

<sup>1</sup> GoN, Urban Environment Management Framework 2068 (2011).

b. Beta emitters, c/ml, Max	8-Oct
Insecticides	Absent
Total residual chlorine, mg/L	1
Fluorides (as F), mg/L, Max	2
Arsenic (as As), mg/L, Max	0.2
Cadmium (as, Cd), mg/L, Max	2
Hexavalent chromium (as Cr), mg/L, Max	0.1
Copper (as Cu), mg/L, Max	3
Lead (as Pb), mg/L, Max	0.1
Mercury (as Hg), mg/L, Max	0.01
Nickel (as Ni), mg/L, Max	3
Selenium (as Se), mg/L, Max	0.05
Zinc (as Zn), mg/L, Max	5
Ammonia nitrogen, mg/L, Max	50
Chemical Oxygen Demand, mg/L, Max	250
Silver, mg/L, Max	0.1

### E. Waste Management in Nepal

EPR 1997 requires for industrial unit which generate waste to meet the pollution standards specified in Schedule 7 of EPR. According to EPR 1997, no one shall emit or cause to emit the noise, heat and waste from any mechanical means, industrial establishment or any other place in contravention of the standards prescribed.

According EPR, 1997, all industries as referred to in Schedule-7 has to obtain the **provisional pollution control certificate**. This certificate is issued by concerned body for one year of operation of such industry shall cause no Substantial adverse impact on environment or there is possibility of reducing or controlling such effect. Whereas if industry specific standards are available, the industry has to obtain the **permanent pollution control certificate** valid for three years to those industries after having their examination from the designated laboratory or as mentioned. While issuing provisional or permanent pollution control certificate, the concerned body may, as required, prescribe terms and conditions to be complied by industry (Rule 15, Sub Rule 5, EPR, 1997). The EPA 1997 also made provision for appointing Environment Inspector in order to effectively carry out a control measures to be made by businesses to mitigate, avoid or control the pollution they generate or activities required to be carried out in accordance with the IEE or EIA.

The first policy on waste management “National Policy on Solid Waste Management” was formulated in 1996 to tackle the growing problem of solid waste management problems due

to urbanization and industrialization. The policy emphasized on waste management in municipal and urban areas. The key objectives of this policy are to make management work of the solid wastes simple and effective and minimize environmental pollution caused by the solid wastes and adverse effect thereof to the public health.

According to Local Self Governance Act, 1999, the local government authorities are responsible for solid waste management activities within its jurisdiction. Solid Waste Management Act 2011 came into existence with the objective of management of the solid waste in a systematic and effective way by reducing at its source, re-use, processing or discharge and for maintaining a clean and healthy environment through the reduction of adverse effects that may be caused to the public health and environment. This act made local body shall be responsible for the management of solid waste by construction and operation of infrastructure like transfer station, landfill site, processing plant, compost plant, biogas-plant and also collection of waste, final disposal and processing. As of this act, littering everywhere, placing, discharging or causing to discharge harmful waste by industrial enterprise or health institutions, emanating from industry or health institution shall be considered to have committed an offense.

## Annex 17: Guidelines for protecting Physical Cultural Resources Avoiding Impacts on Cultural and Historical Properties

Cultural heritage are sites, structures, and remains of archeological, historical, religious, cultural, and aesthetic value. It is important to assess site to understand the significance of a site and to provide due protection according the aesthetic, historical, scientific, and social value.

- **Preventive Measures**

- Specify in the works contracts/agreements all required steps, notifications and preservative actions in case new/undiscovered archeological or other culturally interesting terms and encountered during excavation works. The clauses will specify whom to inform and how to proceed with works after the respective approval;
- Align the trail or any other developmental activities in such a way that sites known for cultural heritage is at reasonably fair distance (to prevent possible impacts by development activity induced impacts such as air pollution, vibrations, damage aesthetics and noise, etc.

- **Mitigation Measures**

- The contractors (if involved) or community workers are responsible for strictly instructing workers to stay away from respected local cultural assets, to avoid any direct harm to those items or to hurt the traditional feelings of local people;
- Avoid any actions that bear the risk to destroy the sites or alter their scientific or aesthetic character;
- In case of accidental damages, the responsible agency will be obliged to inform immediately the archaeological department who will then decide further actions;
- In case of accidental damages, the Contractor will be obliged to carry out immediate corrective and repair measures to satisfy the local population and, as applicable, the representative of the archaeological department.

- **Chance Find Procedures**

As subprojects will be located across the nation's National Parks, Wildlife Reserves and Conservation Areas, possibility of encountering cultural sites during construction may be inevitable.

If such physical cultural resources defined as “movable or immovable objects, sites, structures or groups of structures having archaeological, pale-ontological, historical, architectural, religious, aesthetic, or other cultural significance is found during construction, this has to be immediately informed to the local authority as per the law of the land.

All findings belong to the Government of Nepal. The department of Archeology will determine the final destination of any artifact (object) that is salvaged during the construction process. Construction activity will immediately halt and will not resume until authorized by the competent authority (Representative Local Government or Department of Archeology or Chief District Officer, etc.).

All the workers need to be trained or aware by responsible agency, especially those working on earth movements and excavations, on recognition of artifacts (object) most likely to be found in the area. The Department of Archeology, or any other recognized Historical or Archaeological Institute can be requested to provide this training.

## Annex 18: Species protected under Schedule-1 of NPWC Act

(Source: National Parks and Wildlife Conservation Act, 1973)

**Mammals**

Assamese Monkey	-	<i>Macaca assamensis</i>
Pangolin	-	<i>Manis crassicaudata and M. pentadactyla</i>
Hispid Hare	-	<i>Caprolagus hispidus Gangetica</i>
Dolphin	-	<i>Platanista gangetica</i>
Grey Wolf	-	<i>Canis lupus</i>
Himalayan Brown Bear	-	<i>Ursus arctos</i>
Red Panda	-	<i>Ailurus fulgens</i>
Lingsang	-	<i>Prionodon pardicolor</i>
Striped Hyena	-	<i>Hyaena hyaena</i>
Leopard Cat	-	<i>Felis (Prionailurus) bengalensis</i>
Lynx	-	<i>Lynx lynx</i>
Clouded Leopard	-	<i>Neofelis nebulosa</i>
Tiger	-	<i>Panthera tigris tigris</i>
Snow Leopard	-	<i>Panthera uncia</i>
Wild Elephant	-	<i>Elephas maximus</i>
One-horned rhinoceros	-	<i>Rhinoceros unicornis</i>
Pygmy Hog	-	<i>Sus salvanius</i>
Musk Deer	-	<i>Moschus chrysogaster</i>
Swamp Deer	-	<i>Cervus duvaucelii</i>
Gaur	-	<i>Bos gaurus</i>
Wild Yak	-	<i>Bos grunniens (mutus)</i>
Wild Buffalo	-	<i>Bubalus arnee</i>
Great Tibetan Sheep	-	<i>Ammon hodgsonil</i>
Tibetan Antelope	-	<i>Pantholops hodgsoni</i>
Black buck	-	<i>Antilope cervicapra</i>
Four-horned Antelope	-	<i>Tetracerus quadricornis</i>

**Birds**

Black Stork	-	<i>Ciconia nigra</i>
White Stork	-	<i>Ciconia ciconia</i>
Sarus Crane	-	<i>Grus antigone</i>
Cheer Pheasant	-	<i>Catreus wallichii</i>
Impeyon pheasant	-	<i>Lophophorus impejanus</i>
Crimson-horned Pheasant	-	<i>Tragopan satyra</i>
Bengal Florican	-	<i>Houbaropsis bengalensis</i>
Lesser Florican	-	<i>Eupodotis indica</i>
Giant Hornbill	-	<i>Buceros bicomis</i>

**Reptiles**

Python	-	<i>Python molurus Gharial</i>
Crocodile	-	<i>Gavialis gangeticus</i>
Golden Monitor Lizard	-	<i>Varanus flavescens</i>

## Annex 19: Plant Species and Forest products protected under the Forest Regulations, 1995 (amended 2001)

S.N.	Botanical Name or Forest Resources	Vernacular Name	IUCN Status	CITIS Code
<b>Species Banned for Collection and Export</b>				
1	<i>Dactylorhiza hatagirea</i>	Panch Aule		II
2	<i>Picrorhiza scrophulariiflora</i>	Kutki		
3	<i>Juglans regia (bark)</i>	Okhar		
<b>Species Banned for Export without Processing</b>				
1	<i>Abies spectabilis</i>	Talis patra		
2	<i>Cinnamomum glaucescens</i>	Sugandhakokila		
3	<i>Cordyceps sinensis</i>	Yarsa Gomba		
4	<i>Lichen species</i>	Jhyau		
5	<i>Nardostachys grandiflora</i>	Jatamansi		
6	<i>Rauvolfia serpentine</i>	Sarpagandha	V	II
7	<i>Taxus buccata sub-sp. Wallichiana</i>	Loth Salla		
8	<i>Valerina jatamansii</i>	Sugandabala		
<b>Tiber Tree Banned for Felling, Transportation and Export</b>				
1	<i>Acacia catechu</i>	Khayer		
2	<i>Bombax ceiba</i>	Simal	T	
3	<i>Dalbergia latifolia</i>	Satisal		
4	<i>Juglans regia</i>	Okhar		
5	<i>Michelia champaca</i>	Champ		
6	<i>Petrocarpus marsupium</i>	Bijay Sal	E	
7	<i>Shorea robusta</i>	Sal, Sakhuwa		

**Note:** IUCN Threat Categories: E= endangered; T=threatened; V= vulnerable

## Annex 20: Some Good Practices in Conservation and PA Management

### Biogas technology in buffer zone communities

Deforestation, degradation and conversion of forest lands into agriculture and settlement puts tremendous pressure on the forests. Communities residing in the buffer zones around the protected areas are dependent on forest for timber, fuelwood, thatch grasses and non-timber products to meet their basic needs. Majority of the households practice traditional methods in their everyday activities such as using fuelwood for cooking and heating, harvesting timber and grasses as building materials and depend on local plants for medicinal, commercial and cultural/religious use. A large bulk of demand for forest products are for energy needs and about 77 percent of the total energy demand of the country is fulfilled by fuelwood (WCES 2010). While harvesting of forest products for energy demands exert pressure on forest resources, the associated health hazards from using fuelwood indoors are also high that result in poor respiratory health. Fetching fuelwood from the forest is also time consuming and reduces the work efficiency, especially of women who bear the responsibility of doing household chores.

As an alternative to fuelwood, introduction of biogas technology in the buffer zone households has brought major benefit to the households and contributed to improving living standards. The major conservation benefit of biogas is on the direct reduction of forest deterioration. The use of biogas is most valued by the benefitting households for its significant time saving and increasing work efficiency; reduced work burden; better, renewable, quicker and easier fuel than firewood; and improvement of family health. While the obvious environmental benefits of using biogas is in the reduction of pressure on forest, using biogas also influence positive family relations, positive change of the individual in general cleanliness, indirect savings on health-related expenses, and increased time allocation by women and children in continuing their education. All these positive effects of biogas technology have resulted in the communities to embrace and understand the value of using clean energy into conserving the surrounding environment. NTNC has a long history of engaging the buffer zone local communities in environment protection by adopting biogas technology throughout the Terai Arc Landscape (TAL) region, making this conservation endeavor a model of success. Some of the major sites where biogas has brought positive change in people's lives and enhanced environment conservation are Shivapur, Thakurdwara and Suryapatuwa VDCs of Bardia district; Bacchauli, Khumroj and Padampur VDCs of Chitwan district; and Bhimdutta municipality and Jhalari VDC of Kanchanpur district where in totality, more than 1,800 households have installed biogas through NTNC.



A household with biogas plant

#### Protecting trees through alternatives

Households of ACA Manang follow Buddhist tradition who use trees for *Dharjyo*, which is a pole used to mount prayer cloths. The prayer flags are replaced more than once a year in each household and naturally tend to put undue pressure on forests. In effort to reduce the felling of trees for this purpose, NTNC-ACAP in Manang has introduced iron poles as substitutes to the wooden prayer flags. This initiative has brought success in changing the local behavior of relying on forests for *Dharjyo* and in the process, local communities have internalized the value of using iron poles to protect the forests, and that deforestation is avoidable by using simple but practical solutions. Before the use of iron poles, significant number of trees were cut from the already limited forested areas in Manang. However, this has changed for good because iron poles have replaced wooden poles, saving the forests. This case exemplifies how people are willing to change when suitable alternatives are put in place and the translation of willingness into actions stimulates the protection of the common good.



*A Dharjyo*

#### Cultivating community participation for conservation in ACA

The major objective of conservation area management is to address local issues by accommodating local communities in the process of protected area management. The objective has some good justifications. First, there is a close link between socio-culture and tradition of local communities with the resources of the area. Second, communities have traditional knowledge, skills, and practices required for the management of local resources. Third, the livelihoods of local communities are primarily derived from local resources, which justify their right and responsibility to be involved in the management. Moreover, the involvement of local communities in conservation area management also rationalizes the conservation cost by plowing back the revenue generated from the conservation area. In order to implement the ACA programs, the operational plan 1986 made provision to form a village level non-political Conservation and Development Committee (CDC) that could make decision about local issues including forest resources based on people's consensus as far as possible. This provision of CDC drastically reduced people's burden of going to the distantly located district forest office (DFO) and facing the administrative and bureaucratic procedures to get permission for timber and other materials for construction of houses and livestock shelters. With the time, the CDC gathered more practical experience and developed its own rules and regulations to protect the VDC's forests. They even started to fine the rule breakers (KMTNC-ACAP 1997). Conservation Area Management Regulations 2053 (1996) and Conservation Area Management Directives (1999) empowered the CDC and renamed it as Conservation Area Management Committee (CAMC). The CAMC is a Village Development Committee (VDC) level organization with 15 members represented from all nine wards, one chairman and one secretary, and four nominated members from social workers, women, and disadvantaged groups.

There are 57 CAMCs now operating in all Unit Conservation Areas (UCOs) in ACA who fulfill the responsibility to conserve the natural resources and contribute in the local development through

mobilization of local resources. The committees operate by VDC level conservation and development plans and implement them in collaboration with VDC, District Development Committee (DDC), and local line agencies. Based on local needs, the CAMCs have sub-committees of Forest Management, Tourism Management, Mother Groups, Village Electricity Management, etc., which could exercise the authorities and responsibilities delegated by the CAMC. These committees are authorized to collect users' fee and utilize the revenue for conservation and development of the area. All these grassroot efforts have ensured a lasting harmony between the people and environment while balancing the need of economy and development. The success of CAMC approach to community-based conservation demonstrates how conservation and development can go together through a strong local support gained by entrusting the management of conservation areas to the rightful owners and stewards.



Active participation of Mother's Group



CAMC members in discussion of conservation agenda

### Alternative energy technology

One of the objectives of Integrated Conservation and Development Program (ICDP) is to develop or introduce new technology or improve the existing one to fit local needs and prevent environmental impacts. Biomass energy consumption (e.g., firewood and dung) is one of the prime examples of environmental degradation. Firewood consumption in ACA was the major cause of deforestation. The forest area was shrinking and there was an acute shortage of firewood during 1970s-1980s. This was a real burden particularly for women and children who exhausted their time and energy in search of firewood. There was no alternative source of energy for heating and cooking. ACAP took up this issue urgently for intervention because it was the priority of local people. Various alternative energy sources such as hydropower, solar, biogas, and improved cooking stoves were introduced in order to curtail the use of firewood and other sources of biomass energy. Starting from 1987, ACAP introduced 2,183 improved cooking stoves, 906 biogas plants, 254 solar units, and 20 hydropower projects by 2006. Introduction of energy technology was accompanied by awareness program, community forest program, tree plantation in degraded areas, and so on. These alternative energy sources together with other relevant programs effectively substituted the use of firewood, which generated multiple positive impacts in ACA: a) regeneration and increase of forest area, b) reduction of environmental pollution, c) better health and sanitation, and d) availability of extra time of women and children for productive work like income generation and schooling.



Community managed micro hydro

### Safe Drinking Water

Unavailability of safe drinking water in destination areas is one of the major problems that contributes to environmental pollution because of plastic water bottles brought along by the visitors. Purchasing plastic water bottles along the trekking routes is also not a good idea as it contributes to plastic waste generation. The bottles are not recycled and end up in refuse pits. Boiled drinking water are available through hotels but can be costly, raising the daily spending just for maintaining the bare minimum for health care. In order to reduce this problem, ACA has been providing safe drinking water for visitors through "Clean Water Stations" spread across various points in the trekking trails. So far, there are 26 station in ACA. The water stations use ozone generator machines to purify water of harmful pathogens through the process of ozonation. As a result, visitors have easy access to clean drinking water and replaced the need to bring or purchase bottled water. As a successful example of this initiative, now a days, the Ghandruk village of ACA has significantly reduced the use of plastic bottles that has contributed to the reduction of nonbiodegradable wastes.

### Tourism as driver of local development

Poverty alleviation is the focus of economic development program. In ACA, it focused primarily on: a) income generation activities based on local opportunities, b) promotion of skill development for quality improvements of existing products and services, and c) manufacturing and marketing new products (e.g., products of nettle fiber and carpets from sheep wool). Promotion of tourism was considered as a viable option to achieve these objectives of economic development in the Annapurna

region. Tourism was linked to commercialization of agriculture such as cultivation of tea, fruits, vegetables, and production of vegetable seeds in the area.

Tourism is a mainstay of ACA. It can fetch ample benefits to local communities and generate resources and enthusiasm for nature conservation as well. The number of tourists visiting ACA increased steadily from the 1980s and reaching more than 37,000 by the early 1990s and more than 76,000 by the year 2000 after which it declined drastically due to insurgency in the country. Although tourism has inflicted some adverse social and environmental impacts, it has been the focal program for ICDP and sustainable development of ACA for several reasons. First, revenue collected from tourism (e.g., trekking permits) provided financial sustainability for its conservation and development activities. For example, trekking revenue covered more than 85% during the period of 1996-2001. Second, in addition to supporting local entrepreneurs (e.g., local hotel and teashop owners) for income generation, tourism has also significantly contributed to motivating the entrepreneurs for environmental conservation. Third, it has introduced new skills and technology and updated relevant information through volunteer and self-help programs. Tourists/visitors have donated and established funds for some activities such as scholarships for school children. Finally, besides many other contributions, tourism has also helped diversify conservation programs and change the attitude of local people towards conservation and development.

Both the Operational plan and Management plan of ACA considered these negative and positive aspects of tourism in developing tourism management activities. For example, local hotel and teashop owners were lacking ideas and skills in hotel management, food preparation, guest relation, sanitation, and communication and information according to the taste of visitors. The ACAP program provided such skills through a number of formal and informal training, which significantly helped in improving the services. Now, there are more than 700 such teashops and hotels with skilled manpower, alternative energy sources, and environment friendly products from local resources. Economic indicators such as lifestyle (e.g., housing and consumption pattern), purchasing capacity, possession of household appliances (e.g., television), schools, health posts, etc. suggested that the economic status of local people has been rising. Tourism is largely responsible for such positive changes in the economic status of ACA. In order to enhance the economic development and also maintain the balance between economy and environment, ACA should go for quality tourism in future by attracting quality tourists who are ready to pay more entrance fees and spend more days. This demands that ACA be developed as a special destination with improved facilities, diversified products and programs (e.g., new routes and sites), and new style of marketing and promotion of tourism.



## Annex 21: Description of Existing Environment of Destination Areas

### 1. Bardia National Park

#### 1.1 Physical environment

##### Location

The Bardia National Park is primarily located in Bardia district and spreading towards Surkhet and Banke districts. It is the largest protected area in the Tarai region of Nepal which covers an area of 968 sq. km. The total area of the park's buffer zone (BZ) is of 507 sq. km. In addition to Bardia district, the buffer zone is extended to Banke and Surkhet districts. The BZ includes 110 Wards of 20 Village Development Committees (VDCs) with the population of 1,14,201 and 17,146 households.

##### Topography

The park's landscape consists of two broad physiographic zones; Siwalik/Churia and Flat Tarai land. The large northern part, Siwalik is comprised of steep to moderately steep undulating terrain and southern part is almost flat. Important landscapes are Karnali flood plain, the Babai river valley and Siwaliks. Most of the park and buffer zone area is covered by forests (76%) and followed by cultivated lands (13%), shrub land (3.64%), grass lands (1.47%), and water bodies (1.63%).

##### Climate

Two bio-climatic zones exist in the BNP including lower tropical zone (below 500m) and upper tropical zone (501-1000m). The upper tropical zone is comparatively cool which experience like sub-tropical monsoon whereas lower tropical zone is too dry and hot. Recorded mean annual temperature of the park is 21<sup>o</sup> C with lowest temperature of 3<sup>o</sup> C during January and maximum temperature over 40<sup>o</sup> C during May-June. Three distinct seasons can be observed in a year, they are: hot and dry season (February to mid-June), hot and wet (mid-June to late September), and cool and dry (late September to February). Annual recorded rainfall ranges from 2000 mm (at Chisapani area/Churia) to 1400 mm (at Gulriya/Southern lowland). Monsoon rain is prevalent in the area, about 90% of the total precipitation occurs during three months (July, August and September). Winter rains are scanty but have significant role in maintaining the hydrology of the park.

##### Geology/Soils

The Siwalik Hills are composed of unconsolidated rock materials mainly made-up of sedimentary rocks (mostly limestone and quartz) and big boulders which are very weak, and therefore, vulnerable to rapid erosion. The Bhabar belt is formed through the accumulation of gravel, boulders, stones and sand which are washed down from the foot hills. The flat plain is made-up of alluvium, layers of unconsolidated materials deposited by the rivers. River flood plains are sandy whereas other land consists of

Silty to clay soil type. Mass movements such as landslides and mud flows are common in the Siwaliks during the rainy season accelerating flood and removal of vegetation. The Siwalik degradation caused by encroachment, illegal collection of forest product, grazing and fire has detrimental effects on ground water and river water pollution.

#### Hydrology/Drainage

The park is located along the Karnali river basin, the biggest river basin of the country. Karnali, Babai and Orahi rivers are the major tributaries that drain the park. Karnali River, the largest tributary of the basin passes through the park from north to south. The south-western Karnali flood plain of an area of about 100 sq. km is regarded as "biodiversity hot-spot". The Babai River, originated from the ridges of the Siwaliks, flows from east to west at the middle of the park stretch about 40 km within the park. Other rivers of Siwalik origin such as Orahi, Ambasa, Karelia Nala and Maan Khola drain the eastern sector of the park. Only few ox-bow lakes are found inside the park.

## **1.2 Biological resource and land use**

#### Fauna

Fifty-six species of mammals, 438 birds, 52 herpetofauna, and 121 fishes have been recorded from the park area. The park is prime habitat for Royal Bengal Tiger (*Panthera tigris tigris*). Other symbolic mammalian species includes: Asian Elephant (*Elephas maximus*), One-horned Rhinoceros (*Rhinoceros unicornis*), Dolphin (*Platanista gangetica*), Swamp deer (*Cervus duvaucelli*), Black buck (*Antelope cervicarpa*), Hispid hare (*Caprologus hispidus*) and Common leopard (*Panthera pardus*). The park is also rich in ungulate diversity. Out of total 6 species of deer, 5 species such as Sambar deer (*Cervious unicolor*), Spotted deer (*Axis axis*), Hog deer (*Axis porcinus*), Swamp deer (*Cervus duvaucelli*) and Barking deer (*Muntiacus muntjak*) are found in the park. Endangered Gharial crocodile (*Gavialis gangeticus*), Marsh Mugger (*Crocodylus palustris*), and Burmese Python (*Python molurus*) are symbolic reptiles of the park. Bird species symbolic to the park include the Endangered Bengal florican (*Houbaripsis bengalensis*) and lesser florican (*Sypheotides indica*), Critically Endangered White-rumped vulture (*Gyps bengalensis*), Peacock (*Pavo cristatus*) and Bar-headed gees (*Anser indicus*), Giant Horn Bill (*Buceros bicornis*), Eurasian Eagle Owl (*Bubo bubo*).

#### Flora

A total of 839 species of flora have been estimated in the park. Among these, 170 are estimated to be vascular plants. Eight pteridophytes, 1 gymnosperm, 140 dicotyledons and 26 monocotyledons have been recorded so far. The park consists of mainly three major vegetation types viz. (i) Chirpine forest, (ii) hill Sal forest and (iii) lower tropical Sal and mixed broad-leaved forest. Chirpine and hill Sal forest are found in the Siwaliks and the latter in the foothills. Chirpine (*Pinus roxburghii*) is

found above 500 meter in the northern Siwalik region. Sal is the dominant tree species (71%) of the park. Other major associates of the Sal forest includes; Karma (*Adina cardifolia*), Bot-Dhangero (*Lagerestromia parviflora*), Asna (*Terminalia tomentosa*), Barro (*Terminalia belerica*), Jamun (*Syzgium cumini*), Tantari (*Dillenia pentagyna*), Sindure/Rohini (*Malotus philipinenansis*), Mahuwa (*Madhuca indica*), Bhalayo (*Semicarpus anacardium*), Rajbriksha (*Cassia fistula*), Siris (*Albiziasp*), Bel (*Aegle marmelos*), etc. Major dominant riverine species includes: Khair (*Acacia catechu*), Sisoo (*Dalbergia sisoo*), Simal (*Bombax ceiba*), and Vellor (*Trewia nudiflora*). Dhangero (*Woodfordia fruticosa*), Lwangful (*Lantana camara*), Besarma/Bihaya (*Ipomea fistulosa*), Titepati (*Artemissia dubia*), Asare/Kadipatta (*Murraya koenigii*), Kurilo (*Asparagus recemosus*), Tapre (*Cassia tora*) are the major shrubs found in the park. The major grassland species of the park includes: Elephant grass (*Themeda villosa*), Kans (*Saccharum spontaneum*), Siru (*Imperata cyllindrica*), Dubo (*Cynodon dactylon*), Babiyo (*Eulaliopsis binata*), and Khar (*Vetivaria zizanoides*).

### Ecosystem

Altogether seven forest ecosystem types have been identified in BNP; Upper Siwalik Chirpine-Oak forest, Siwalik Chirpine-Oak forest, Tropical hill Sal forest in inner valleys, Tarai Tropical Sal forest, Khair-Sisoo scrub and riverine forest, Bhabar light forest and Tarai cultivated land (NBRB, 2007). Of the 200 global eco-regions identified by World Wildlife Fund (WWF), the park holds two eco-regions, the Tarai-duar savannas and grasslands, and the Sub-tropical Broad-leaf Forests.

### Land use

The park can be distinguished into five distinct land use types, viz. (i) the Siwalik, (ii) the Bhabar, (iii) the river valley, (iv) the alluvial lowland, and (v) the riverine floodplains. Important landscapes are Karnali flood plain, the Babai river valley and Siwaliks. Most of the park and buffer zone area is covered by forests (76%) and followed by cultivated lands (13%), shrub land (3.64%), grass lands (1.47%), and water bodies (1.63%). About 33% of the buffer zone area is under good forest cover, 17% under grassland and degraded forest, over 43% under agricultural land and 7% other land use.

## **1.3 Socio-economy and human settlement**

Located in province five of the country, Bardia district is situated in the Terai region of the country with elevation starting from below 300 m and going up to 1,564 masl and hot tropical climate. With an area of 2,025 km<sup>2</sup> and population of 426,576 living in 83,147 households, about 56% of the total population are Indigenous People (IPs) with Tharu as the most populous ethnic group. Bardia district has been divided into six municipalities and two rural municipalities. Madhesi community with many castes and sects are the dominant population in the district with Tharu being the most

common language spoken. The average household size of the district is 5.23 and predominant occupation of the district is agriculture, but the production system is traditional and mostly subsistence. Integrated crop-livestock farming is the predominant production system. Rice and wheat are the predominant crops cultivated in 50,000 ha and 17,800 ha respectively, producing about 202,800 MT of rice and 66,300 MT of wheat in 2015/16. The average annual household income is \$1,086 with 28.7% of the population in poverty. Household statistics show that 96.3% own their own home but homes are mostly mud bonded in foundation and wall, and roofed by galvanized iron. Wood is the used as the main fuel for cooking at 87.6% and 62.6% have access to electricity. The human development indices of the district are not very encouraging as the literacy rate is only at 65% where 58% of women are literate and 74% of males are literate; and 50.6% children under age five are malnourished. Wildlife tourism in Bardia National Park is growing steadily over the past few years where tourists visit to experience the pristine wilderness of the park. The fast-flowing water of the Rapti river and wildness of the park provide excellent jungle safari and rafting expeditions. Since the past few years, more tourists are drawn to the park by the high prospect of sighting tigers in the wild. In 2017/18 the park received 17,959 visitors, although an increase compared to the previous years, it is much lower than other parks such as Chitwan National Park.

#### **1.4 Physical cultural resources**

Besides the national park, Bardia district is known for its Tharu culture. The district is mainly inhabited by Danguara Tharu people who have their own language, customs and traditions. Small villages like Dalla and Kailashi in the countryside are some of the cultural attractions with rich Tharu culture. Different cultural experience includes folk dance, handicraft sale and exhibits, museum displays, traditional customs, religious rituals and festivals. Homestay facilities operated by local communities provide various cultural and traditional programs. The Thakur baba temple of Thakurwara municipality is a major religious attraction to Hindu pilgrims.

#### **1.5 Krishnar Conservation Area**

Situated in Khairapur of Bardia district, Krishnasar Conservation Area was established in an area of 16.95 km<sup>2</sup> by the GoN to protect and conserve the last remaining herd of blackbucks in *in-situ* state. The total area of core blackbuck habitat is 5.27 km<sup>2</sup> and the surrounding area of influence is 11.68 km<sup>2</sup>. In Nepal, blackbucks were almost extinct until a small herd of nine blackbucks were discovered in Khairapur of Bardia district in 1975 which initiated their conservation efforts. Today, conservation efforts have helped the blackbuck population to rebound, growing to 293 and standing as the northernmost surviving herd of blackbucks in the world. In order to ensure sustainable management of the conservation area, a protection fence of 10.25 km<sup>2</sup> encloses the core blackbuck habitat to deter livestock grazing and avoid

unwanted contacts with potential disease vectors and predators such as domestic dogs and hyaenas. In addition, to minimize the risk to the blackbucks from flooding, five hillocks have been constructed for their refuge. Other wildlife such as hyaena (*Hyaena hyaena*), Asiatic Rock Python (*Python molurus*) and Golden Monitor Lizard (*Varanus flavescens*) are also recorded in the area. The first reintroduction of 28 captive blackbucks in Shukla Phanta NP have resulted in a population of 70 individuals in the wild. It stands as a potential tourism product which can attract tourists visiting the Bardia NP. The conservation area received 17,697 foreign visitors in 2017.

## 2. Banke National Park

### 2.1 Physical environment

#### Location

Banke National Park extends over 550 km<sup>2</sup> in Banke district and its buffer zone, 343 km<sup>2</sup>, encompasses parts of Banke, Dang and Salyan districts. It is connected with Bardia National Park towards the west which further links with Katarniaghat Wildlife Sanctuary in India via national and community forests of Khata corridor. Similarly, it also adjoins with Kamdi corridor, through national and community forests, and connects Suhelwa Wildlife Sanctuary (SWS) of India. It is an important component of Terai Arc Landscape (TAL) which provides additional habitat for tigers.

#### Topography

**Plains:** This is a narrow strip which stretches east to west parallel to the National Highway in the southern part of the Park with elevation ranging from 153 m to 250 masl. This region contains various forest types: Sal forest, Riverine forest, Floodplain forest, and Khair-Sissoo forest along the streams.

**Bhabar/foothills:** This is the region north of the plains and at the foothills of the Churia hills. The altitudinal variation ranges from 250 m to about 600 m. The main forest types found in this region are: Hill Sal forest, Mixed hardwood forest, and Riverine forest.

**Churia ridge:** This is the Churia hill region with altitudinal range from 600 m up to 1247 masl. Mixed Churia hill forest is the main forest type found in the area with hill Sal forests found scattered in places.

#### Climate

The park has sub-tropical monsoonal climate with summer monsoon from mid-June to early October followed by relatively long, cold dry winter. There are three distinct seasons: hot-dry (February to mid-June), monsoon (mid-June to early October), and cold dry (early October to February). The area is located in the far-western climatic zone and has a tropical monsoon climate with high humidity throughout the year.

Summer is characterized by hot, dry and westerly windy weather where temperature can reach as high as 39°C. The hot humid days give way to the monsoon season that typically lasts from late June until September when rivers become flooded and most of the roads are virtually impassable. Spring refers to a pleasant climate with slightly post monsoon rain and not extreme temperature. The weather in winter is also pleasant with cold morning and nights with occasional cold waves during two months of December and January. The average annual rainfall of the park is 1,474 mm and about 80% of rainfall occurs within four months of rainy season i.e. June to September. Rains are scanty in winter season although few intermittent showers take place during the period.

### Geology/Soils

The geological formation of the Churia range is the determining factor for the soil types of the park. Exposed rocks consist of fine-grained sand stone with pockets of clay, shale, conglomerate and freshwater limestone. The Bhabar zone receives boulder, cobbles, gravel, and coarse sand interceded with silt and clay from the Churia.

### Hydrology/Drainage

Two major rivers, Rapti and Babai enclose the buffer zone. Rapti River forms the southern boundary, whereas the Babai River has demarcated the northern boundary of BZ. The Churia ridge forms the catchment boundary and divides the basin. All the rivers of the Park originate from the Churia hills. Main streams in the Rapti catchment (southern aspect) of the Park are Kathauti, Jethi, Syalmare, Ranighat, Jhijhari, Baghsal, Paruwa, Muguwa, Khairi, Sukhar, Lumba/Rolpali, Sauri, Bairiya, Oz Khola and Tilkanya and Malai Khola lies within Babai catchment (northern aspect). Water discharge of these rivers/streams is very high during rainy season. Much of the small streams remain dry during summer season.

## **2.2 Biological resources and land use**

### Fauna

Mammals: The Park is home to 34 species of mammals. Among them, seven species are protected under National Parks and Wildlife Conservation (NPWC) Act 2029. These protected species are: Tiger (*Panthera tigris*), Leopard Cat (*Felis bengalensis*), Spotted Lingsang (*Prionodon pardicolor*), Asian Wild Elephant (*Elephas maximus*), Striped Hyaena (*Hyaena hyaena*), Four-horned Antelope (*Tetracerus quadricornis*) and Indian Pangolin (*Manis crassicaudata*). Similarly, the common species recorded in the Park are Common Leopard (*Panthera pardus*), Jackal (*Canis aureus*), Fox (*Vulpus bengalensis*), Jungle cat (*Felis chaus*), Bluebull (*Boselaphus tragocamelus*), Hog deer (*Axis porcinus*), Wild Boar (*Sus scrofa*), Sloth bear (*Melursus ursinus*), Spotted deer (*Axis axis*), Barking deer (*Muntiacus muntjak*), Sambar (*Cervus unicolor*), Common Ghoral (*Naemorhaedus goral*), Rhesus monkey (*Macaca mulata*) and Porcupine (*Hystrix indica*).

Birds: To date, 236 species of bird have been reported from the park out of which one protected bird species is reported under NPWC Act, 2029 *i.e.* Great Hornbill. Great Slaty Woodpecker (*Mulleripicus pulverulentus*), Egyptian Vulture (*Neophron percnopterus*), Whiterumped Vulture (*Gyps bengalensis*), Steppe Eagle (*Aquila nipalensis*), Woolley-necked Stork (*Ciconia episcopus*) and Hodgson's Bushchat (*Saxicola insignis*) are the six globally threatened species found in the park. Some nationally threatened species found in the Park are Grey Francolin (*Francolinus pondicerianus*), Northern Pintail (*Anas acuta*), Great Hornbill (*Buceros bicornis*), Yellow-wattled Lapwing (*Vanellus malarbaricus*), Himalayan Vulture (*Gyps himalayensis*) and Asian Openbill (*Anastomus oscitans*).

Herpeto-fauna: Twenty-four species of reptiles and nine amphibian species have been reported from the area. Asatic (Rock Python) and Golden monitor lizard (*Varanus flavescens*) is endangered species reported from the area and are therefore protected species in the Herpeto-fauna list of NPWC Act 2029. Other common reptiles reported are Garden lizard (*Calotes versicolor*), Brookes' house gecko (*Hemidactylus brookii*), Agama (*Agama tuberculata*), Krait (*Bungarus caeruleus*), King Cobra (*Naja naja*), and Viper (*Vipera russelli*). The common amphibian species recorded in the Park include Bull frog (*Rana tigerina*), Marbled toad (*Bufo stomaticus*) and Common toad (*Bufo melanstictus*).

Fish diversity: Several fish species are found in the major river systems of the Park. To date, 55 species of fish have been reported out of which 35 fish species are reported from Rapti River only.

### Flora

The composition of forests, change from site to site even within similar forest types. Forest composition, structure and status change according to the horizontal as well as vertical gradients of the park. The Bhabar/ foothills of the Churia are more diverse than either of the lowland plains and the Churia forests. Likewise, the western and middle part of the Park are more diverse than the eastern sector. Of the several floras recorded in the Park, 263 species have been identified. Sal (*Shorea robusta*), Asna (*Terminalia tomentosa*), Chiraunjee (*Buchanania latifolia*), Bajhi (*Anogeisus latifolia*), Sissoo (*Delbergia sisoo*), Khair (*Acacia catechu*), Dumri (*Ficus glomerata*), Sindure (*Mallatous philippinsis*), and Jamun (*Eugenia jambolana*) are the dominant species in terms of density and basal area. About 20 to 30% of the area is dominated by Sal forest and other species include Barro (*Terminalia belerica*), Harro (*Terminalia chebula*), Karma (*Adina cordifolia*), Kusum (*Schleichera trijuga*), Bhalayo (*Semecarpus anacardium*), Tantari (*Dillenia pentagyna*) and Bot Dhaiyanro (*Lagerstroemia parviflora*).

### Ecosystem

The park represents the mid-western Terai ecosystem of Nepal containing an array of eight ecosystem types such as Sal forest, deciduous riverine forest, savannahs and

grasslands, mixed hardwood forest, flood plain community, bhawar and foot hills of Churia range. The plains contain various forest types – Sal forest, riverine forest, flood plain forest, and Khair-Sisso along the streams. The Bharbar zone form the region north of the plains and at the foothills of Churia hills that contain mixed hardwood forest and riverine forest. The Churia hills region fall within the altitudinal range of 600 m to 1,247 masl with mixed Churia hill forest with Sal forests scattered in places.

#### Land use

The core area of the park is predominantly forests contributing to 91% of the area. Other coverage includes bush, grasslands, sand and small water bodies. The major land use types in the buffer zone are forests (74%) and agriculture (11%).

### **2.3 Socio-economy and human settlement**

Banke district is located in province five of the Terai region of the country with elevation starting from 153 m and going up to 1,247 masl and sub-tropical monsoonal climate. With Nepaljung as the headquarter, Banke covers an area of 2,337 km<sup>2</sup> and population of 491,313 living in 94,693 households, about 24% of the total population are Indigenous People (IPs) with Tharu as the most populous ethnic group. Banke district has been divided into one sub-metropolitan city, one municipality and six rural rural municipalities. Madhesi community with are the dominant population in the district with Tharu, Musalman, Yadav and Kurmi bing the main caste groups. Tharu is the most common language spoken. The average household size of the district is 5.19 and predominant occupation of the district is agriculture. Rice and wheat are the predominant crops cultivated in 36,500 ha and 19,050 ha respectively, producing about 85,442 MT of rice and 3,200 MT of wheat in 2015/16. The average annual household income is \$1,133 with 26.4% of the population in poverty. Household statistics show that 88.1% own their own home but homes are mostly mud bonded in foundation and wall, and roofed by galvanized iron. Wood is the used as the main fuel for cooking at 74.4% and 68.8% have access to electricity. The literacy rate is only at 62% where 55% of women are literate and 70% of males are literate; and 44.8% children under age five are malnourished. Banke National Park adjoins Bardia National Park and is equally rich in biodiversity and cultural attractions. Domestic tourists account for most tourists and the park received only four foreign visitors in FY 2017/18.

### **2.4 Physical cultural resources**

Banke district holds similar cultural characteristics with Bardia district. Since a past few years, few homestays are in operation. Some wetlands such as Badhaiya tal, Rani tal and Purainapureni lake and religious sites such as Bageswori temple are attractions to domestic tourists.

### 3. Shukla Phanta National Park

#### 3.1 Physical environment

##### Location

Shukla Phanta National Park (ShuNP) lies in the bordering south-western section of Terai in Kanchanpur district. It covers an area of 305 km<sup>2</sup> of open grassland, forests, riverbeds and tropical wetlands in the core area and the buffer zone area covers 243.5 km<sup>2</sup>. The park has the largest grassland in the far-western Terai. It is also home to Nepal's, and perhaps even Asia's largest population of swamp deer. The park shares a common boundary with the Indian state of Uttar Pradesh in the south and west which is formed by the Mahakali river, a major tributary of the Ganges river. It is bordered on the eastern side by the Chaudhar river and to the north by a forest belt and cultivations. The park was previously a wildlife reserve and upgraded into the national park in 2016.

##### Topography

It lies within the coordinate 28°42'29"E - 29°03'08"E and 80°03'08"N - 80°25'53"N. Altitude gradient varies from 174 m to 1,386 m.

##### Climate

The park has lower sub-tropical and upper-tropical bio-climatic zones that fall in the park's Silwaliks region and lower tropical bio-climatic zone in the Terai part. The park has a tropical monsoon climate with four different seasons: winter, spring, summer and monsoon. The mean monthly temperature varies from 10 °C to 12 °C in winter, gradually rising to 17 °C in the spring and 26 °C in the summer. December and January are fairly cold and misty with occasional frost. The average annual rainfall ranges from 1,300 mm to 2,300 mm, 80% of which falls during monsoon. The relative humidity remains fairly high throughout the year except in the dry months of the pre-monsoon period.

##### Geology/soils

There are five different soils in ShuNP. The soils in the riverine forests of khair and sisso along Mahakali river are loamy-sand with small gravel and stones; in the mixed forests they are sandy loam; in the Sal forests, they are loam to sandy loam with high organic content; and in the Siwaliks the soils consist mainly of sandstone, conglomerate, quartzite, shales, and micaceous sandstone.

##### Hydrology/Drainage

The Mahakali River is the major river system of the area which flows forming the western boundary of the park. However, the park does not benefit much from such

large river. There are few rivers that support this park viz. Bahuni, Chaudhar, Radha and Syali rivers which flows through the NP and mixes with the Mahakali. Also, there are degraded wetlands/ ponds inside park such as Rani Tal, Khairkandra Tal, etc.

### 3.2 Biological resources and land use

#### Fauna

The faunal diversity of the park comprises 43 species of mammals, 349 species of birds 2 species of reptiles, 21 species of fish and 20 species of amphibians. It is the prime habitat for the endangered swamp deer (*Cervus duvauceli*) and currently holds about 2,000 swamp deer. It is also home to threatened species of global importance, including the Bengal tiger (*Panthera tigris*), greater one-horned rhinoceros (*Rhinoceros unicornis*), Asian elephant (*Elephas maximus*), Bengal florican (*Houbaropsis bengalensis*) and Hodgson's bushchat (*Saxicola insignis*).

#### Flora

The park has the highest number of plant species from Terai, Nepal so far for any given protected area, comprising 665 species of plants (109 tree species, 70 shrubs, 432 herbs, 41 climbers, 4 epiphytes and 9 others) belonging to 438 genera and 118 families. Among these species, a total of 8 species fall into different IUCN threat categories.

#### Ecosystem

The park consists of three major ecosystem types viz. Terai tropical Sal forest, Khair-sisso riverine forests and Terai duar-savannah grassland. About 80% of the park is occupied by different stages of Sal forests. Ground vegetation is poor in the mature Sal forests where there is closed canopy while grasses like *Narenga porphyrocoma*, *Themada arundinacea*, *Saccharum bangalense*, etc. are present in immature forests with relatively open canopy. The riverine vegetation present in the Mahakali floodplain comprises khair-sisso forests, and pure stands of sisso on the banks of the Mahakali river. Mixed deciduous forests occupy the lower part of the reserve with major species such as guthali, jamun, simal, sindure, and ficus species. The major grassland '*Shukla Phanta*' covers an area of 54 km<sup>2</sup> south-west of Bauni river and south of the forests. Other grassland includes *Sundari phanta*, *Karaiya phanta*, *Singhpur phanta*, *Mangalsera Phanta*, etc.

#### Land use

The land use type of the park is 52% Sal forests, 10% wetlands, 30% grassland, 16% riverine forests and 2% mixed forests.

### 3.3 Socio-economy and human settlement

Kanchanpur district is located in province seven of the Terai region of the country with elevation starting with Bhimdatta as its district headquarter. With an area of 1,610 km<sup>2</sup>, the district has 7 municipalities and 2 gaunpalikas where 451,248 people (52% males, 56% females) reside in the 82,134 households. The most representative ethnic group in the district are the Chhetris (29%) followed by Tharus (26%) and Brahmins (16%) and mix of other ethnic groups. The Doteli language is the most spoken language (40%) followed by the Tharu language (25%) and Nepali (16%). The average household size of the district is 5.49 and predominant occupation of the district is subsistence agriculture farming. Rice and wheat are the predominant crops cultivated in 45,796 ha and 31,342 ha respectively, producing about 145,207 MT of rice and 75,439 MT of wheat in 2015/16. The average annual household income is \$938 with 31.4% of the population in poverty. Household statistics show that 94.1% own their own home and 82% use fuel cooking for cooking while 75.2% have access to electricity. The literacy rate is at 71% where 61% of women are literate and 81% of males are literate; and 31.7% children under age five are malnourished.

### 3.4 Physical cultural resources

The famous destination here is suspension bridge (1496.5 m), Tanakpur dam, etc. There is a temple inside the park which is worshipped mainly by Tharu community called Singhapal Babathan. Outside the park within few kilometer radiuses there are Banda Lake, Rautela temple, Bishnu temple, Bhamkeni temple, Linga temple, Bedkot Lake temple, Siddhanath temple, etc. Also, the fring area is rich in cultural and ethnic diversity with typical village of Rana Tharu and Dagaura Tharu. Typical culture of Khas Brahman and Chhetri of western hill region can be also be found.

## 4. Rara National Park

### 4.1 Physical environment

#### Location

The Rara National Park (RNP) is located in Karnali Zone (Province 6) of North-west Nepal, between coordinates of 29° 26' - 29° 34' North and 82° 00' - 82°10' East. A larger part of RNP lies in Mugu district while a southern tip of the Park lies in Jumla district. RNP covers an area of 106 km<sup>2</sup>, out of which 10.8 km<sup>2</sup> is occupied by Rara Lake, which is the largest lake of Nepal (HMG 1980, Upreti 1989).

The buffer zone of the park lies in Mugu and Jumla district. The total population of the buffer zone is 13,876 (10,617 in Mugu and 3,259 in Jumla district). The total households in buffer zone is 2,548 (2,028 in Mugu and 520 in Jumla). The buffer zone

has been divided into 10 user committees (7 user committees in Mugu and 3 in Jumla district) based on geographic features. The nearest village from the Rara lake and the park headquarter is Murma. Majority of the people belongs to Hindu religion and major ethnic groups are Chhetri, Thakuri and *Dalits*. The major economic activities of the people are agriculture and animal husbandry.

### Topography

RNP is located at elevations ranging from 1,800 m (Karkibada) to 4,087 m (Chuchemara Lekh). Rara Lake is the main attraction of the park and lies at an elevation of 2,990 m (9,810 ft). It is oval shaped stretching in east-west axis, with a maximum length of 5 km, width of 3 km, and the depth up to 167 m, which drains in to Mugu Karnali River via Nijar Khola (Figure 3). The Chuchemara Lekh is located at the southern side of the lake, whereas, other two peaks Ruma Kand (3731 m) and Malika Kand (3444 m) are located in the northern part (DNPWC 2010). RNP is linked with the Great Himalayan Trail, especially via Phoksumdo Lake (Shey-Phoksumdo National Park) to Sai Pal Himal (Api Nampa Conservation Area) to Khaptad National Park. Furthermore, RNP may serve as the biological corridor linking Great Himalayan Trail with the Mt. Kailash and Mansarovar Lake (Kailash Sacred Landscape).

### Climate

The climate at RNP area is the same as common to the south of high Himalayas: dry winter and wet monsoonal summer. The winter is quite severe with ground frosts occurring from October and snow falling from December through April and the minimum temperature dropping below freezing point during this period. Average annual temperature in the last 10 years is little over 11°C. Monthly maximum and minimum mean temperature is 27°C and 4°C in June and December, respectively. April normally sees the start of the warmer season which steadily increases to a pleasant temperature until September.

### Geology/Soils

Formation of the Rara lake is believed to be the result of river capture. It is thought that the Mugu Karnali River, to the north, once flowed through the lake. The Mugu Karnali was at that time a separate tributary of the Humla Karnali River, further north and having its bed very deeply eroded, captured the Mugu Karnali in the vicinity of Ruga. The Mugu Karnali was thus diverted and continued to erode its bed leaving its old course, the lake and the Nijar Khola, high above it. The gorge of the Nijar Khola today makes it difficult to believe that it could have been cut to such a depth simply by the overflow of the lake (Barber 1990).

People have observed that erosion is taking place at a high rate in the eastern side of the lake. In 2002, people of Gamgadhi feared breaking of the eastern bund of the lake,

which could destroy this market located on the top of a small hillock. This shows the need of geological study of the lake. A cave large enough to 'accommodate thousands of sheep' exists in Taunka in Jogi Lekh in the south-western side of the lake in Kalei VDC.

#### Hydrology/Drainage

There is no natural perennial inflow to Rara Lake except the runoff from the surrounding hills. There is a fairly, symmetrical drainage system from the slopes of the Chuchemara Lekh and some streams to the north side flowing directly into the lake. The only outflow from the lake is the Nijar Khola, which eventually drains into Mugu Karnali. The lakeside pasture in the south gives way to the steep slopes of Gurchi Lekh, its crest culminating at Chuchemara in a horse-shoe shaped opening to the south drained by the Jiun River. On the west, river valleys cut through a ridge which forms the natural boundary to the Park.

## **4.2 Biological resources and land use**

#### Fauna

Out of 210 mammal species recorded in Nepal, 52 species have been recorded in the park. The Park is home for Musk Deer (*Moschus chrysogaster*), Himalayan Black Bear (*Ursus thibetanus*), Red Panda (*Ailurus fulgens*), Leopard Cat (*Prionailurus bengalensis*) Himalayan Goral (*Nemorhaedus goral*), Himalayan Thar (*Hemitragus jemlahicus*), Wild Dog (*Cuon alpinus*) and Wild Boar (*Sus scrofa*).

Three endemic species of Snow Trout viz. *Schizothorax macrophalus*, *Schizothorax nepalensis* and *Schizothorax rarensis* have been recorded in the lake (BPP, 1995). *Schizothorax rarensis* is endemic to this lake.

Out of 778 birds recorded in Nepal, 272 species have been recorded in the park. Rara lake serves as an important transit point for migratory waterfowls across the Himalayas. Common Coots (*Fulica atra*) are plentiful in the lake and several of them stay even for the whole year. Tufted Duck (*Aythya fuligula*), Mallard (*Anas platyrhynchos*), Great-crested grebe (*Podiceps nigricollis*), Red-crested pochard (*Netta ragina*), and Gulls (*Larus spp.*) visit the park during winter. Other common birds of the park are Cheer Pheasant (*Catreus wallichii*), Snow cock (*Teragallus himalayensis*), Chukor partridge (*Alectoris chukor*), Impeyan Pheasant (*Lophophorus impejanus*), Kalij pheasant (*Lophura leucomelana*) and Blood pheasant (*Ithaginis crustus*).

#### Flora

The majority of vegetation in the Park is dominated by blue pine and different species

of rhododendrons. The other major species includes Himalayan spruce (*Picea smithiana*), Oak (*Quercus semicarpifolia*), Himalayan cypress (*Cupressus torulosa*), Birch (*Betula utilis*), Deodar (*Cedrus deodara*), Lauth salla (*Taxus wallichiana*), walnut (*Juglans regia*) and Himalayan poplar (*Populus ciliata*). Rangelands are dominated by herbs and grass species like *Carex atrofusca*, *Juncus himalensis*, *Kobresia duthei*, *Parnsia nubicola*, *Polygonum spp.* *Juniperus indica*, *J.lindleyana* and *Aletris pauciflora*. Major Non-Timber Forest Products (NTFPs) and medicinal plants includes; Kutki (*Neopicrorhiza scrophulariflora*), Panchaunle (*Dactylorhiza hatagirea*), Jatamansi (*Nardostachys grandiflora*), Satuwa (*Paris polyphylla*), Sugandhwal (*Valeliana jatamansi*), Attis (*Aconitum heterophyllum*), Padmchal (*Rheum emodii*) and Guchi Chayau (*Morchella conica*).

### Ecosystem

RNP and its buffer zone is represented by following 11 types of forests: *Quercus semecarpifolia* forest, *Aesculus-Juglans-Acer* forest, Upper temperate mixed broadleaved forest, *Rhododendron* forest, *Betula utilis* forest, *Abies spectabilis* forest, *Tsuga dumosa* forest, *Pinus wallichiana* forest, *Picea smithiana* forest, *Cupressus torulosa* forest, and Moist alpine scrub (Stainton 1972).

#### *Blue Pine Forest*

The Park is dominated by conifers. The area around the lake is dominated by Blue pine (*Pinus wallichiana*) and this dominance continues up to 3,200 m. Rhododendron (*Rhododendron arboreum*), Black juniper (*Juniperus wallichiana*), West Himalayan spruce (*Picea smithiana*), oak (*Quercus semecarpifolia*), and Himalayan cypress (*Cupressus torulosa*) are other associated species. Above this elevation, the vegetation is replaced with mixed coniferous forest of pine, spruce and fir. At about 3,350 m., pine and spruce give way to fir, oak and birch forest. Other deciduous tree species such as Indian horse-chestnut (*Aesculus indica*), walnut (*Juglans regia*) and Himalayan poplar (*Populus ciliata*) are also found.

#### *Fir Forest*

The dominant coniferous forest is between 3,200 m - 3,600 m comprised of Fir (*Abies spectabilis*). Khasru (*Quercus semecarpifolia*) is commonly associated with it and becomes dominant towards the top of the hill-side. Together with Birch (*Betula utilis*), Indian horse-chest-nut (*Aesculus indica*), Walnut (*Juglans regia*) and Himalayan poplar (*Populus ciliata*) are other associates as in the lower altitudinal zone.

#### *Birch – Rhododendron forest*

Above 3600 m fir forest is replaced by birch (*Betula utilis*) forest. Above 3700 m, birch

tends to be dwarf and is mixed with *Rhododendron (Rhododendron campanulatum)* forming a continuous cover. The other associated species are *Prunus rufa* (jungali aru), *Potentilla fructicosa* (bajradanti), *Polygonatum cirrhifolium* (khiraunlo), and dwarf *Rhododendron lepidotum* (bhairungpati) as well as *Juniperus indica* (dhupi).

#### *Alpine Meadows*

The alpine vegetation occurring in this area above the tree line mainly comprises of alpine scrub (3700 m – 4400 m) that consists of *Juniperus indica*, *J. lindleyana* and alpine grasses (4,200 m - 5,000 m) that consists of *Aletris pauciflora*, *Carex atrofusca*, *Juncus himalensis*, *Kobresia duthiei*, *Parnasia nubicola*, and *Polygonum* spp.

#### Land use

*Grassland:* Terraced land used by former residents for cultivation. Only a small part of it has remained fallow now, as forest has regenerated in most of these lands.

*Marshland:* The North side of the lake is marshy and is dominated by reeds.

*Grazing land:* The grazing land of the Park ranges from 3,000 m-4,000 m, which is being invaded by the regeneration of blue pine.

*Rock outcrop:* The alpine zone is formed by rock outcrop, coming out of stratum to the surface.

*Forests:* *Pinus wallichiana* (Blue pine) and *Abies spectabilis* (Silver fir) are dominant species of the park. Other associated species are *Quercus semecarpifolia*, *Picea smithiana* and *Cupressus torulosa*.

Land use pattern comprise of 183.15 km<sup>2</sup> (60.25%) forest, 19.95 km<sup>2</sup> (6.56%) shrubland, 55.44 km<sup>2</sup> (18.24%) grassland, 33.56 km<sup>2</sup> (11.04%) cultivated land, 10.62 km<sup>2</sup> (3.49%) lake, 1.0 km<sup>2</sup> (0.33%) water bodies, and 0.28 km<sup>2</sup> (0.09%) sandy area (DNPWC 2012).

### **4.3 Socio-economy and human settlement**

Both Mugu and Jumla districts are rated as under-developed, remote and poverty-stricken districts. The case of Mugu is particularly severe. Among the 75 districts of the country Mugu occupies one of the lowest positions in terms of overall development index. Mugu ranks the last position in terms of 'poverty and deprivation index' and 'women empowerment index', whereas 72<sup>nd</sup> in terms of 'socio-economic and infrastructural development index'. Jumla is slightly better than Mugu in 'overall development index' ranking 69<sup>th</sup> position. Its position in terms of 'poverty and deprivation index', 'socio-economic and infrastructure index' and 'women empowerment index' is 67<sup>th</sup>, 65<sup>th</sup> and 70<sup>th</sup> respectively (ICIMOD/CBS/SNV 2003).

With an area of 3,535 km<sup>2</sup>, Mugu district has 1 municipality and 3 2 gaunpalikas

where 54,832 (51% males, 49% females) reside in the 9,600 households. The most representative ethnic group in the district are the Chhetris (49%) followed by Thakuri (15%), and mixed minorities of Kami (9%), Tamang (8%), *Dalits* (6%), etc. Nepali language is the most spoken language (92%) followed by the Tamang (7%). The average household size of the district is 5.76 and predominant occupation of the district is agriculture and livestock that have not produced sufficient food for the people. Every household including *Dalits* are also involved in occupation-based work that is tied up with farming. NTFP collection and selling is another source of income. The main crops produced here include dry crops like barley, buckwheat, wheat and *chino* with large production of potato. These are also the staple crops of these areas. Majority of households can produce food for 3 to 6 months. Because of difficulties in transportation of food grains, availability of food is also extremely low. Annually, the settlements in the buffer zone receives 1500 to 2000 metric ton of subsidized food from the government. The transhumance nature of livestock grazing is common but the practice is declining because of emerging community forestry in lower hills and growing crop production in farmland. The average annual household income is \$866 with 47.1% of the population in poverty. Household statistics show that 96.9% own their own home and 98.8% use fuel cooking for cooking while only 13.9% have access to electricity. The literacy rate is at 51% where 37% of women and 65% of males are literate; and 50.02% children under age five are malnourished.

#### 4.4 Physical cultural resources

People living in BZ and lower Mugu region belong to Hindu religion. There are several ancient temples and shrines of local importance in this region. The famous temples in Mugu district include Chhayanath temple, Khesma Malika temple, Tharpa temple, Choti temple and Viyi temple. There are several caves in the hills surrounding the Rara lakes. One of the snowy mountains (Chhayanath Himal) is situated in the east of the lake which is considered very auspicious in Hindu belief. This place is also considered as the final abode of Sati Devi, whose dead body her consort Lord Shiva carried to different places for love. As a result, this region has become very auspicious for religious people.

Jumla being the seat of the ancient civilization has a long tradition and history. This would attract a large number of local (Nepali) visitors. Kanakasundari temple is located near the Park. There is another famous temple of Chandannath in Jumla. There are 14 important temples distributed in various locations in Jumla district. Hot springs are also common here.

There are numerous religious sites within the Park and BZ, but they do not attract most people. Small temples and important historical sites are large in number within the Park. These include: replica of Chhayanath temple, Chapru Mahadev, Rara

Mahadev, Harahara Mahadev, Thakurnath Mahadev, Bhavani, Kuldev, and Jagma Mahadev. A deep tap in the relocated village of Rara used by the locals before their resettlement in Tarai is said to be ancient and unique. People of this area speak a different dialect which is the former or original form of Nepali language. People in the region take pride in visiting Hat Sinja village (Jumla district, south of the Park) for it. Women wear various ornaments on the neck, nose and ear. Deuda is a culture of dancing and singing. People, even though poor, seem to have a sense of art. In the bridges, temples, houses and walls, they make various types of arts especially by carving woods.

## 5. Annapurna Conservation Area

### 5.1 Physical environment

#### Location

The Annapurna Conservation Area (ACA) is the community managed first & largest protected area of Nepal that covers 5.18% of country's surface area but 27% of total protected area coverage of Nepal. The entire massif and surrounding area have an extent of 7,629 km<sup>2</sup> in between 83°34' to 84°25' E longitude and 28°15' to 28°50' N latitude. The constituencies of ACA spread in 91 wards of 15 *Gaunpalika* (Rural Municipality) in 5 districts (Kaski, Lamjung, Manang, Mustand and Myagdi) under Province-4 in the Western Development Region of Nepal.

#### Topography

Altitudes gradient in ACA varies greatly between 950m in Madi valley to 8;091m in Annapurna I from sea level within 115 km of aerial distances. Two distinct ecological regions are found here which are:

1) Trans-Himalayan Region holds two valleys of *Upper Kali Gandaki* and *Upper Marsyangdi*. Topography of this region is steppe with broken terrain cliff; talus; and scree with vast ranges of alpine pastureland.

*Upper Kali Gandaki* lies north to the Himalaya; which constitutes areas north of *Larjung-Ghasa* to the Tibetan border along *Kali-Gandaki Valley*. *Marpha*; *Jomsom*; *Thini*; *Muktinath* and *Damodarkunda* are at far north of the Upper *Mustang*.

*Upper Marsyangdi Valley* is It is surrounded by the Himalaya on all direction such as Annapurna in south; Mukut in west; Damodar in north and Mahalangur in east; and is situated at north of *Marsyangdi River*. This valley occupies areas north of *Chame*; *Pisang*; *Dhikurpokhari*; *Humde*; *Manang*; *Bhraka*; *Tanki Manang* to *Thorang Phedi* with *Nar* and *Phu Valley*.

2) Cis-Himalayan Region covers vast area of *Modi Valley; Bhujung Region; Lower Kali Gandaki Valley; Lower Marsyangdi Valley* and area West of *Modi*.

The *Modi Valley* is the formation of *Modi River* originated from the base of *Annapurna VI & Lamjung Himal* and cuts a deep valley draining south across different vegetation zones.

The *Bhujung Region* is along the eastern bank of the *Midim River* on south slope of *Lamjung Himal*. Watersheds of the *Midim & Khudikhola* has dense forests.

The *Lower Kali Gandaki Valley*: Most of this valley lies within ACA; and is characterized by subtropical and temperate climatic zones.

The *Lower Marsyangdi Valley* is the mix representation of tropical to temperate regions fully occupied by human settlements.

The *West to Modi*: The subtropical climatic zone of this area has dense human settlements; whereas the south slope of it has the temperate climatic zone with pure stands of the rhododendron forests.

### Climate

ACA demonstrates ranges of climatic zones from tropical to nival. Annual mean temperature is 14 °C (maximum 35 °C and minimum -0.3°C). Rainfall type greatly correlates to the aspect, altitude and rain shade area. The southern region has the highest precipitation range in Nepal; whereas the northern aspect receives 25 to 500 mm of precipitation annually with a record of the lowest rainfall in *Dhhee, Upper Mustang*. Microclimate varies with altitude & aspects and annual rainfall ranges in between 193 mm to 2,987 mm from trans-Himalayan region (*Mustang*) to cis-Himalayan region (*Ghandruk*). An average daily temperature decreases from December to February and reaches maximum from May to July. Seasonal climate is dominated by the southerly monsoon from June to September. ACA records both the highest and lowest precipitation in Nepal.

### Geology/Soils

The Cis-Himalayan section of ACA consists of four types of geological structures. They are the *High Himalayan Region* above 4000 masl perpetually snow covered; *Ghanapokhara Group* with weak formation of the Main Central Thrust traversing between 1500-2000masl; *Naudanda Group* at the south of *Ghanapokhara Group* with weak formulation of stone; and *Seti Group* mainly in south of *Lwang* formed from bursting of glacial deposit from *Machhapuchre* Mountain. The *Kali Gandaki River valley* of ACA is the storehouse of Ammonoid fossils from the prehistoric Tethys Sea dating back 60 million years. Besides, some areas are vulnerable to the soil erosion which are *Madi watershed* in *Rabaidandgaun* and *Pakhurikot (ward 8 & 9)*; *Dhartidanda & Purano Bhachok Chaur (ward 10)*; eastern & western part of *Yanjakot (ward 1)*; *Setikhola Chaur & Namarjung (ward 2)*; *Madi River* bank from *Sondha* to

*Sikles* and hill amidst *Chipli* and *Khilang of Madi Gaunpalika* in *Kaski* district. Similarly, *Sardikhola* & *Dhiprangkhola* areas in *Seti watershed*; *Idi Khola* area in *Mardi watershed*; and *Modi River* bank of *Landruk*; head of *Kyumrunghola*; *Uri* & *Kimchegaun* and *Bhurungdi Khola* areas of *Annapurna Gaunpalika/Kaski* in *Modi watershed* are prone areas to landslide & soil erosion.

#### Hydrology/Drainage

The *Kali Gandaki*; *Marsyangdi*; *Seti*; *Madi* and *Modi Rivers* are major river system in ACA. Of this *Kali Gandaki* is the 3rd largest river of Nepal (Length: 630 km; Basin: 46,300 km<sup>2</sup>; Average annual discharge: 176m<sup>3</sup>/s) originated as the *Chhuama Khola* from the *Nhubine Himal Glacier (Mustang; 6,268 m)* then nearing *Lo Manthang* where it is called *Nhichung Khola*. It then flows southwest and meets *Kak Khola* at *Kagbeni* flowing south through a steep *Kali Gandaki Gorge*. It drains to *Trishuli* at *Devighat (Chitwan)*. *Marshyangdi* (Length: 150 km; Basin: 3,850 km<sup>2</sup>; Average annual discharge: 210 m<sup>3</sup>/s) starts from the confluence of *Khangsar Khola* and *Jharsang Khola* from the northwest of the Annapurna massif near *Manang* village.). *Seti River* also called *Seti Gandak* or *Seti Khola* (Length: 223 km) rises from the base of the Annapurna massif (II) and Annapurna slope (III); and flows south and south-east before joining to the *Marsyangdi River*; and drains to *Trishuli River*. The *Madi Khola* (Length: 70 km) is originated from *Kawache-See* glacier lake in the southern flank of Annapurna II; and flows south Annapurna massif. *Modi Khola* runs from the Annapurna Sanctuary down to *Landruk* and *Lumle* and joins to *Kali Gandaki* in *Modi Beni* (Parbat district).

There exist many waterfalls in the Annapurna Trekking Circuit and two major high-altitude fresh water lakes are *Damodar Kunda (Mustang)* and *Tilicho (Manang)*. *Damodar Kunda* lies on *Upper Mustang* as the belief centre of the Hindu and Buddhist pilgrimages. *Tilicho* is the highest freshwater lake for its size in the world (4.8 km<sup>2</sup>; Average depth: 85m) and one of the popular hiking sites and highest ever altitude scuba dive in Annapurna Circuit. Other lakes are *Titi & Dhumba (Mustang)*; *Kang La Tal (Manang)*; *Dudh Pokhari (Lamjung)* and *Kapuche (Kaski)*.

## **5.2 Biological resources and land use**

### Fauna

ACA harbors 105 mammal species; 488 bird species; 41 reptile species; 23 amphibian species; 20 fish species; 347 butterfly species; 7 nematodes species; 1 annelids species; 8 species of arthropod insects; 2 species of mollusks and many species of zooplankton. Such diversity represents over 50% of mammals; >55% of birds; >33% of reptiles; about 20% of amphibians and about 9% species of fishes of Nepal's total. Among invertebrate; butterfly and mollusks account for >53% and 1% of Nepal respectively. Some major wild animals of ACA are the Snow Leopard; Tibetan Wild Ass; Tibetan Gazelle; Tibetan Argali; Brown Bear; Tibetan Fox; Himalayan Black Bear; Red Panda; Lynx; Steppe Pole Cat; Pallas Cat; Himalayan Wolf; Common Leopard and

Musk Deer. The major birds include six species of Pheasant; Himalayan Griffon; Eurasian Griffon and Tibetan Sand Grouse.

### Flora

Plant diversity of ACA represents over 18% of country's flora; with 1,264 species of flowering plants including 41 species of orchid; 15 species of gymnosperm; and 73 species of pteridophytes. Monocot- dicot relationship is almost 1:6. Similarly, gymnosperm and orchid of ACA share their species wealth by >48% and 9% respectively in their national account. Further, ACA is the second largest Rhododendron pocket with nine species in Nepal after *Tinjure-Milke-Jaljale*, the eastern Nepal. Over 430 plant species have been used as plant based NTFPs. Some major NTFPs in ACA include *Neopicrorhiza scrophulariiflora*; *Dactylorhiza hatagirea*; *Daphne spp*; *Cordyceps sinensis* and some minerals like *Silajit*; gemstone, etc. Of NTFPs/plants, more than 200 species are used for the domestic and commercial purposes, and 18 species are considered commercially valuable.

### Ecosystem

ACA is the only protected area in Nepal having 4 physiographic regions and 6 climatic zones, where 9 ecosystems and 22 forests types occur. In a stretch less than 50 km, tropical hardwood trees (such as *Shorea robusta*, *Terminalia tomentosa*, *Bombax ceilba* and *Eugenia jambolana*), pine-clad hills and oak forests at medium altitudes, the rhododendrons and firs that give way to birches and junipers before the vegetation changes to alpine scrublands, grasslands, meadows, and finally, a treeless zone can all be found.

### Land use

The land use pattern in ACA is dominated by barren land (>3789 km<sup>2</sup>; about 50%) followed by grassland (1622.3 km<sup>2</sup>; >21%). Of barren land; *Lo-Manthang* Unit Conservation Area (UCO) takes lion share of about >43% followed by *Manang* (over 34%). In total; forestland covers >15% followed by grassland (21.3%); glaciers (4.4%) and shrubland (4%). Snow cover is limited to *Manang* (34.8 km<sup>2</sup>; 0.46%). Freshwater rivers & lakes cover a nominal area of 0.2%) mainly in *Manang* and *Lo-Manthang*. Of total forests, over 22% is in *Sikles*; *Bhujung* (over 22%) and *Ghandruk* (about 20%). *Lo-Manthang* does not have forest cover. In *Manang*, forests are observed up to *Khangsar* in the north slope only. Shrubland is very noticeable in *Manang* and *Jomsom*. Only 3.1% of land is under sparse agriculture which is higher in *Ghandruk* and *Bhujung*. The northern UCOs are food deficit areas and exhibit transhumant features.

## **5.3 Socio-economy and human settlement**

ACA holds the human population of 91,688 with more than 45% of male and over 54% female. There exist more than 28 caste/groups with diverse cultural and linguistic variations. The *Gurung* are the dominating hill community by 30%, and

their clusters much pronounced in *Bhujung; Sikles; Ghandruk* and *Lwang*. The second dominating group is the hill *Brahmin* (>14%) followed by the *Kami* (13%), *Magar* and *Chhetree*. Other minority castes are the *Damai/Dholi; Tamang; Sarki; Thakali; Lhoba; Rai; Gharti/Bhujel; Dalit; Thakuri; Newar; Ghale; Bhoté; Badi; Dashnami; Sherpa; Chhantyal; Musalman; Hyolmo; Tharu; Limbu and Kulung (Rai)*. Most of these have population of less than 1%. The *Gurung; Magar; Sherpa; Thakali; Rai* and so on represent the Tibeto-Burman ethnolinguistic group and the Hill *Brahmin; Chhetree; Damai; Kami* and so on are from the Indo-Aryan ethnolinguistic branch. Both the groups speak Nepali as the common language; and have religious faith on the Hinduism & Buddhism. However, the Tibeto-Burmans have been living with the sacred cultural practices and rituals at the foundation of the Buddhism especially in the *Manang* and *Mustang*. The literacy rate of aged 5 years and above in ACA is 64.67%, which is slightly higher than the national rate of 63.9%. Of this, male and female literacy is 75.3% and 56.7% respectively.

Agriculture, remittance and tourism are the major sources of economy in ACA. UCOs except *Manang & Mustang* are food surplus. The major crops grown are rice, maize, wheat and millet in UCOs of *Kaski* and *Lumjung*, whereas maize; wheat; barley; buckwheat and potatoes in *Manang, Myagdi* and *Mustang*. The commercial cultivation of fruits & vegetables is popular in areas accessible to better market centres. The commercial apple farming in *Mustang* started almost two decades ago, and now introduced in *Manang*. Animal husbandry is the major agro-activity at high altitude with transhumance practice. Recently, remittance has become one of the sources of HHs' income in ACA. ACA is one of the most splendid ecotourism and the largest and the world-class trekking destinations where >126,000 tourists annually visit here.

#### 5.4 Physical cultural resources

The *Gurungs* believed of having their origin from the Tibet now in the cis-Himalayan valleys from centuries are very artful in blending the natural paradise & scenic splendors with the belief of the Buddhism & Hinduism from the long time. The *Bhujung; Ghalegaon; Ghandruk; Landruk; Lwang* and *Sikles* are typical the *Gurung* hamlets with cherished tradition and culture. The *Brahmin; Chhetree; Damai* and *Kami* add essence upon the cultural value of area. Besides, the *Thakali, Manange* and *Loba* in the trans-Himalayan ACA are predominantly extraordinary in their own dialect; unique rituals & traditions; belief; weapon & tools; survival strategies and so on. ACA mingles the taste of the Hindu, Buddhist and pre-Buddhist (Bon-po). Some unique traditions in ACA are *Amchi* (folk medicine practice in *Mustang*); *Ghatu* (folk *Gurung* dance blended with Hindu myth); *Losar* (the Tibetan New Year festive); *Saga Lug Ka* (Ritual for good faith on the climate for superior harvest); *Duk Chu* (Monk's dance for a prosperous year); *Tenji* (annual festive in *Lo-Manthang*); and *Toranla* (Festival in the lower *Mustang*). Table below shows the key ethno-cultural heritage related resources in ACA.

Structures	Name
1. Monasteries	Thumpen Shad Drup Dharkeling Gumba
	Lo Ghekar Monastery
	Luri Gumba
	Thupchen Gumba
	Ghar Gumba
	Chhyoede Gumba
	Nyphu Gumba
	Namgyal Gumba
	Sangba Gumba
	Narshing Gumba
	Cave monastery
2. Cave settlement	
3. Religious schools	Monsatic schools
4. Holy places	Muktinath temple
5. Holy lakes	Damodar Kunda
	Tilicho Lake
	Dudh Kunda
6. Religious deities	Chhorten
	Chhorten Gates
	Mane Wheel
7. Historic remnants	Kagbeni, Tsarang, Lo-Manthang
8. Model areas	SAARC Model Village, Ghalegaun

## 6. Manaslu Conservation Area

### 6.1 Physical environment

#### Location

Manaslu Conservation Area (MCA) lies in the northcentral region of Nepal, on the eastern slopes of the Kali Gangaki river basin. Its northern border is co-incident with Nepal's national border with Tibet Autonomous Region of China. It covers 1,663 sq km and includes seven VDCs of Gorkha District, viz. Samagaon, Lho, Prok, Bihi, Chumchet, Chhekampar and Sirdibas.

#### Topography

MCA lies in the northern section of the Gorkha district and its elevation ranges from 1,239 m in the south to 8,163 m at its highest point, Mt. Manaslu. Other major peaks include Himalchuli (7,893 m) and Shringi (7,187 m). Important high passes include Larke La (5,205 m) and Gya La (5,375 m) passes respectively. Major rivers draining the MCA are Budhi Gandaki and Syar Khola, while Kalchuvan (Kal Tal) and Birendra Tal are important high-altitude lakes in the conservation area.

### Climate

MCA has five climatic zones: viz. sub-tropical, temperate, sub-alpine, alpine and nival. The sub-tropical zone lies between 1,000 m and 2,000 m with average summer and winter temperatures ranging between 31-34°C and 8-13°C, respectively. The temperate zone occurs in the higher hills above 2,000 m and below 3,000 m. In this zone, average summer temperatures range from 22° to 25°C while winter temperatures range from 2° to 6°C. Frost and snowfall are common during winter (January and February). The sub-alpine zone lies between 3,000 m and 4,000 m with snowfall likely for about four to six months (December to May). In this zone, winter is very cold and annual summer temperatures average between 6° and 10°C. The alpine zone, between 4,000 m and 5,000 m, is mostly open meadows. The nival zone occurs at elevations above 4,500 m.

Monsoon rains usually lasts from June to September. Average annual rainfall is around 1,900mm. A significant portion of MCA is surrounded by high mountains, protecting it from direct southern monsoon clouds and creating partial rain-shadow areas. However, because monsoon clouds reach the lower ranges of the Budi Gandaki and Syar Khola valleys, thus, the valley floor is relative wet while comparing with surrounding slopes and side valleys.

### Geology

MCA constitutes the Cis-Himalaya in the south and the arid Trans-Himalayan high pastures in the north. The four types of geological structures of MCA are the *High Himalayan Region* above 4000 masl perpetually snow covered; weak formation of the Main Central Thrust between 1500-2000 masl; weak formation of stone descending southwards; and mainly in south formations from bursting of glacial deposit from Manaslu and associated mountains. The *Budi Gandaki River valley* of MCA is the storehouse of Ammonoid fossils from the prehistoric Tethys Sea. Lower parts of Nurbi valley, upper parts Tsum valley and along the trail to MCA are vulnerable to soil landslide and soil erosion.

### Hydrology

The *Budi Gandaki* is the major river system in MCA that originates from Fukan Glacier and Mount Manaslu flowing northwest to south until it joins with the Syar Khola at Nyakfedi from where the confluence of two rivers become Budi Gandaki and continue to flow southwards draining most of MCA. There are a few important wetlands and lakes on the north and east side of the Manaslu and Himal Chuli mountains. Some of the lakes have potential of becoming popular tourist destination within MCA for their spectacular scenery, but the approach trails have to be developed. Chhonak Tal, at 3,350 m and the source of Deng Khola, is a particularly picturesque lake, covering an area of about half a hectare. Likewise, Kal Tal and Birendra Tal are important wetland of the area. Kal Tal is the largest lake in Manaslu and is situated at an elevation of 3,630 m. The Birendra Tal (3,570 m) near Samagaon and at the foot of the Manaslu glacier; covers an area of about three to four hectares.

## 6.2 Biological resources and land use

### Fauna

MCA harbors 39 species of mammals, 201 bird species 5 reptile species, 4 amphibian species, 1 fish species and 13 butterfly species. Some major wild animals of MCA are the Snow Leopard, Musk deer, grey wolf, blue sheep and Himalayan tahr.

### Flora

The altitudinal variations and complex terrain of the MCA create different types of habitats

and micro-climatic conditions that contribute to the floral diversity. A total of 756 species of plants have been recorded, of these, 696 species belong to 115 angiosperm Families, 13 species to 4 gymnosperm Families, 37 species of pteridophytes, 3 species of lichens and 7 species in the Mycophyta group. Some noteworthy plants in MCA include *Dactylorhiza hatagirea* and *Cordyceps sinensis* which have high commercial value. Several other plants found in the MCA with commercial value but are banned for export in crude form from the country: viz. *Abies spectabilis*, *Nardostachys grandiflora*, *Taxus baccata* subsp. *wallichiana*, *Valeriana jatamansi*. Species of lichen (*Parmelia*, *Ramalina* and *Usnea*) are also noteworthy plant species of commercial interest.

### Ecosystem

MCA contains eight ecosystems which are temperate broadleaf forests, mixed conifer forests, sub-alpine conifer, alpine scrubs, wetlands, glaciers, snow and glacier lakes; and cryosphere. The vegetation ecosystem represented in MCA ranges from the sub-tropical Himalayan forests in the southern areas to the arid Trans-Himalayan high pastures in the north, bordering Tibet.

### Land use

The topographic maps of the Government of Nepal (1996) lists the following land use and land cover categories in MCA: agriculture land; forest; shrub land; grassland; river/river bed; snow/glacier; lake/pond; barren land; rocks; and cutting/cliffs. Area coverage under agriculture is 1.8% %, forest 13.28%, shrub land 2.79%, grassland 23.66%, river/riverbed 1.21%, snow/glacier 6.8%, lake/pond 0.047%, barren land 49.99% and cutting/cliff 0.38%.

## 6.3 Socio-economy and human settlement

The total population in MCA is 6,923 comprising of 3,665 females and 3,258 males. It includes only one rural municipality of Gorkha District, viz. Tsum-Nubri Rural Municipality with seven wards - Samagaon, Lho, Prok, Bihi, Chumchet, Chhekampar and Sirdibas. The average family size is 3.5 persons per households, with 1,949 households. Sirdibas VDC has the highest (572) and Prok VDC has the lowest (187) number of households. The major ethnic group in all VDCs, except Sirdibas, is Bhotia (also known as Lama). Gurung and Karki are the major ethnic groups in Sirdibas VDC

with three households of Ghale. In Namrung village of Prok VDC, there are 7 households of Thakali who migrated from Mustang District a few generations ago. There is one Kami household in Samagaon VDC. In MCA, the majority of the population (67.57%) above 6 years of age are illiterate. Of the total literate population, 44.25% are male and 21.98% are female. Primary sources of income in MCA are agriculture and livestock herding. Around two third 62% of households in the MCA are involved in agriculture and livestock herding followed by wage labour (17%), business (11%), foreign employment (4%), and service (3%). Few proportions of households (1%) are involved in tourism related activities. Trekking is the major tourism form of tourism in MCA. Of the two main trails, one goes west through Nubri valley and crosses Larke Pass links with Annapurna region and the other goes east to Tsum valley. The main tourist season is from September to November. Around 75% of the trekkers visiting MCA trek towards Nubri valley while the remaining trekkers visit the Tsum valley. The number of tourist visitors over the recent years has shown gradual increase with 7,091 visitors in 2017/18, about 19 percent increase from 2016/17 and 68 percent increase form 2015/16 figures.

#### 6.4 Physical cultural resources

Villagers from Prok and Chhekampar claimed to be Gurung, Shah and Neupane, are mostly Buddhists. They celebrate Buddhist festivals, the Lhosar being the major festival celebrated in the month of Falgun (February-March). Many communities also celebrate occasional festivals with *mane nach* (dance), arrow shooting, and offering puja in Gompas. Monasteries locally named as 'Gumbas' are important socio-religious institutions in MCA. There are 92 gumbas in MCA. Important gumbas in MCA are Shringi Gumba in Bihi, and Mu and Rachen Gumbas in Chhekampar. Gumbas are culturally important for the preservation of cultural artifacts such as ancient idols, hand-written sacred books, and *thankas*.

## Annex 22: List of Participants - National Consultation Meeting of ESMF

<b>SN</b>	<b>Participant</b>	<b>Organization</b>
1	Dr. Binod Prasad Devkota	MoFE
2	Dr. Biswa Nath Oli	MoFE
3	Dr. Ram Chandra Kandel	DNPWC
4	Dr. Siddhartha Bajra Bajracharya	NTNC
5	Dr. Sindhu P. Dhungana	MoFE
6	Dr. Sunita Chaudhary	ICIMOD
7	Mr. Amar Bahadur Oli	MoFE
8	Mr. Ambika Prasad Khatiwada	NTNC
9	Mr. Anu K. Lama	ICIMOD
10	Mr. Bidur Prasad Pokharel	NTNC
11	Mr. Bikhyat Sherchan	NTNC
12	Mr. Binod Basnet	NTNC
13	Mr. Buddi Sagar Poudel	FRIC
14	Mr. Chandra Majhi	Aankhijhyal (NEFEJ)
15	Mr. Ishwor Neupane	WB
16	Mr. Krishna Bahadur Katwal	DOLI
17	Mr. Manish Raj Pandey	NTNC
18	Mr. Nabin Gopal Baidya	WCN
19	Mr. Narendra Pradhan	IUCN
20	Mr. Prakash Awasthi	WB
21	Mr. Prakash Sigdel	ZSL-Nepal
22	Mr. Rajendra Suwal	WWF-Nepal
23	Mr. Sujhav Pun	NTNC
24	Mr. Sumit Baral	WB
25	Mr. Suvash K. Sharma	MoFE
26	Mr. Tunga Rai	NEFIN
27	Ms. Shraddha Sigdel	MoFE
28	Ms. Basanti Kumpakha	NTNC
29	Ms. Bindu Mishra	MoFE
30	Ms. Deepa Oli	MoFE
31	Ms. Hasana Shrestha	DOE
32	Ms. Jaya Sharma	WB
33	Ms. Kanti Rakbhandari	HIMAWANTI -Nepal
34	Ms. Nanu Thami	NIWF
35	Ms. Rekha Shreesh	WB
36	Ms. Sabitra Chepang	NIDF
37	Ms. Sangeeta Sumi	DPR
38	Ms. Sarita Lama	HIMAWANTI -Nepal
39	Ms. Sikshya Adhikari	NTNC
40	Ms. Srijana Shrestha	MoFE
41	Ms. Srijana Shrestha	REDD Implementation Center