World Wildlife Fund GEF Project Document

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Executive Summary

The Terai Arc Landscape (TAL) of Nepal (24,710 km^2) is an area of critical importance for globally significant biodiversity and ecosystems and for supporting the local livelihoods of more than 7.5 million people, including numerous ethnic and indigenous groups who depend on natural resources for their livelihoods. Located in the foothills of the Himalayas, the TAL provides forest and grassland habitat for tiger and its prey, rhino, elephant and many other globally threatened species of flora and fauna, and ecosystem services including watershed protection, water supply and carbon storage and sequestration. TAL Nepal has a system of six protected areas (PAs) and associated buffer zones, which together cover 5,538 km^2 connected by seven forest corridors that also link to the Churia forests and Indian PAs. Some 54% of the TAL land area is covered by forests while 35% is occupied by agriculture (TAL Strategy 2015). Yet, just 25% of the forest in the TAL is located inside the six PAs, highlighting the importance of the buffer zones, corridors and other community forest areas that account for the remaining 75% of TAL forest.

Despite its ecosystem and livelihood values, the TAL faces a wide range of threats causing biodiversity loss, deforestation, degradation of forests, grasslands and riparian areas, land degradation, and related carbon emissions. The root causes of these threats are increasing population pressure and economic growth in the TAL, and their impacts are exacerbated by climate change trends. The key threats having the greatest impact across TAL PA buffer zones and corridors are unregulated grazing, forest fires, large infrastructure development, encroachment, unsustainable use of fuelwood and non-timber forest products (NTFPs) and human wildlife conflict. Overall, the forests of the TAL have experienced high rates of deforestation and degradation over the past four decades, though forest loss has been stabilized in the recent years. TAL Nepal has experienced steadily increasing emissions from deforestation and forest degradation over the last decade, driven by a supply-demand deficit for fuel wood and timber. Deforestation and degradation result in fragmented habitats for wildlife, and bring humans into closer contact with wildlife. Over-harvesting of forest products, overgrazing, and cultivation of marginal lands have resulted in soil erosion, and loss of soil nutrients and fertility. Degraded lands then result in a decline in biological and/or economic productivity of agricultural lands, pastures and forests.

Given the increasing threats to the conservation of globally significant forest and biodiversity of the TAL, a long-term strategy for integrated landscape management (ILM) of the TAL is critical to address key barriers to conservation, namely: 1) Inadequate cross-sectoral coordination to enable integrated landscape planning and management, from the federal to local level; 2) Lack of capacity for integrated forest, species and land management in protected areas, buffer zones and corridors; 3) Lack of options for community-based sustainable forest and land management in TAL; and 4) Inadequate sharing of knowledge on sustainable forest resource management and resilient livelihood options to inform integrated landscape management.

These barriers remain, despite significant baseline investment by the government, development partners and civil society. The ten year TAL Strategy, (2004-2014, revised for 2015-2025), has provided a pioneering framework for conservation and sustainable management of the TAL. A variety of coordination mechanisms have been developed, however some are not functioning effectively and others have become redundant as a result of the new constitution and state restructuring over recent years. Previous GEF investments strengthened biodiversity and wetland conservation in the TAL and sustainable land management in the Churia, yet there remains a need for a coherent, systemic ILM approach to fully deliver the current TAL Strategy. Parallel initiatives provide strong inputs towards

TAL Strategy implementation, yet there has been little support for developing capacity for ILM coordination, especially in the context of the new Constitution and recent completion of the state restructuring process (7 states and 753 local bodies) and election of three tiers of government (Federal, State and Local) in 2017.

Community-based governance of corridors has been facilitated by the Division Forest Offices (DFOs), yet capacity for governance remains weak and the DFOs lack resources to support management and control of threats from encroachment, forest fires, uncontrolled grazing etc. The three corridors (Kamdi, Karnali and Brahmadev) that are not under the Protected Forests management regime need a strengthened corridor management practice to common improved standards. The PA and Buffer Zones (BZ) management functions are under federal authority, with a functional system of BZ Council, BZ Management Committee and BZ User Groups (nested within BZ council). Since the BZ management Committee is composed of local leaders elected for periodic intervals, technical capacity for BZ management is limited on the council. It can be strengthened only with support from ongoing programmes. However, as the municipalities, the local government bodies, are acquiring more power, change in BZ governance may arise in future. However, the municipalities also require significant support for successful implementation of conservation programs on the ground.

Most natural habitats in the TAL corridors and PABZs are under community forestry management by Community Forest User Groups (CFUGs) and Buffer Zone User Groups (BZUGs), with support from DFOs and PA Offices. While relatively successful overall, this approach has some limitation to address the wide range of threats impacting ecosystems and species in the TAL. Human-Wildlife Conflict (HWC) is a widespread and increasing problem, with responses from local government, PAs and CSOs (WWF, ZSL, etc). However, the introduction of an effective systematic approach is needed that includes adequate support for affected communities. Ongoing and planned initiatives are making some progress towards addressing these issues but will not address the full scope of the corridors and PA BZs targeted by the current project.

The WWF/GEF project ***Integrated Landscape Management to Secure Nepal's Protected Areas and Critical Corridors Project (PIMS 9437)*** has a geographic scope spanning the whole of the Terai Arc Landscape (TAL) in Nepal. Its strategy is aligned with the GEF 6 Focal Area strategies for Biodiversity - mainstreaming biodiversity conservation and sustainable use into production landscapes (BD-4) and managing the human-biodiversity interface; also reducing threats to globally significant biodiversity (BD-2) and preventing the extinction of known threatened species (Program 3); Land Degradation - generating sustainable flows of ecosystem services from forests (LD-2), specifically through landscape management and restoration (Program 3), and reducing pressures on natural resources by managing competing land uses in broader landscapes (LD-3) by implementing sustainable land management through the Landscape Approach (Program 4); and SFM - the project will deliver benefits across the GEF SFM objectives, including integrated land use planning, cross-sector planning, and integrating SFM in landscape restoration; but will most comprehensively contribute to the goal of capacity development for SFM within local communities (Program 5) under SFM-2.

The project seeks to achieve the following objective: *to promote integrated landscape management to conserve globally significant forests and wildlife*. Over the five year project period, the project objective will be achieved through the implementation of four interconnected components: 1) National capacity and enabling environment for cross-sectoral coordination to promote forest and landscape conservation – a national-level component to develop institutional and coordination capacity at all levels, to benefit planning and conservation of the overall TAL; 2) Integrated Planning

for Protected Area Buffer Zones and Critical Corridors in the Terai Arc Landscape - support for improved planning for all seven corridors of the TAL and assessments to determine priority sites for intervention within a targeted sub-set of the landscape, the Banke-Bardia complex, including Kamdi and Karnali corridors; 3) Forest and human-wildlife conflict management for improved conservation of targeted protected area buffer zones and corridors in the Terai Arc Landscape – training and on-ground implementation of sustainable forest and wildlife management activities in the targeted Banke-Bardia complex, including support for community based natural resource management, mitigation of human wildlife conflict, and reducing the impacts of linear infrastructure on wildlife; and 4) Knowledge Management and Monitoring and Evaluation - to bring practitioners together from across the landscape, help develop a coherent vision of integrated landscape management, share resources and lessons learned across all levels of intervention and prepare the way for replication and upscaling of project results.

Overall, the project will result in a reduction in the threats impacting the corridors and PA buffer zones in the TAL, benefitting the ecological integrity of these largely forested areas, the globally significant wildlife populations that they support, and the resilience of forest dwelling communities. The improved conservation and sustainable management of forest resources will result in increased carbon storage and sequestration and restoration of degraded habitats and continued delivery of ecosystem services that support local populations.

Acronyms and Abbreviations

Note: Many of the government agencies and their units changed as a result of government restructuring during the course of the project preparation. The old agencies/units are indicated by [Former] in front of their names.

AFFON	Association of Family Forest Owners Nepal
AMR	WWF-GEF Annual Monitoring Review
AWPB	Annual Work Plan and Budget
BaNP	Banke National Park
BNP	Bardia National Park
BD	Biodiversity
BZ	Buffer Zone
BZCFUG	Buffer Zone Community Forest User Group
BZMC	Buffer Zone Management Committee
CARE	Cooperative for Assistance and Relief Everywhere
CBAPU	Community Based Anti-Poaching Unit
CBD	Convention on Biological Diversity
CBO	Community Based Organization
CBNRM	Community Based Natural Resource Management
CFCC	Community Forest Coordination Committee
CFM	Collaborative Forest Management
CFMUG	Collaborative Forest Management User Group
CFUG	Community Forest User Group
CITES	Convention on International Trade in Endangered Species
CTA	Chief Technical Advisor
DANAR	Dalit Alliance for Natural Resources
DCC	District Coordination Committee
DDC	District Development Committee
DFID	Department for International Development (UK)
DG	Director General
DFO	[Former District Forest Office] now Division Forest Office
DFRS	Department of Forest Research and Survey
DFSCC	[Former] District Forest Sector Coordination Committee
DLS	Department for Livestock Services
DNPWC	Department of National Parks and Wildlife Conservation (MoEF)
DoA	Department of Agriculture
DoF	[Former] Department of Forests (under former MoFSC)
DoFSC	Department of Forests and Soil Conservation (MoFE)
DSCWM	Department of Soil Conservation and Watershed Management (under former MoFSC)
EA	Executing Agency
EIA	Environment Impact Assessment
ER-PD	Emission Reductions Program Document
FAO	Food and Agriculture Organization of United Nations
FECOFUN	Federation of Community Forestry Users, Nepal
FePFoS	Federation of Private Forest Stakeholders
FIP	Forest Investment Program

FRTC	Forest Research and Training Centre (State MoITFE)
GEF	Global Environment Facility
GESI	Gender Equality and Social Inclusion
GIS	Geographic Information System
GoN	Government of Nepal
Ha	Hectare
HiMAWANTI	Himalayan Grassroots Women's Natural Resource Management Association of Nepal
HWC	Human-Wildlife Conflict
IAS	Invasive alien species
ICIMOD	International Centre for Integrated Mountain Development
IEE	Initial Environmental Examination
IGA	Income Generating Activity
IP	Indigenous People
IUCN	International Union for Conservation of Nature / World Conservation Union
KM	Knowledge Management
LAPA	Local Adaptation Plans for Action
LC	Local Communities
LGOA	Local Government Operation Act, 2017
LoA	Letter of Agreement
LSU	Landscape Support Unit
LULC	Land Use and Land Cover
M&E	Monitoring and Evaluation
MAP	Medicinal and Aromatic Plant
MCC	Municipality Coordination Committee
MoAD	Ministry of Agricultural Development
MoEWRI	Ministry of Energy, Water Resources and Irrigation
MoFAGA	Ministry of Federal Affairs and General Administration
MoFE	Ministry of Forests and Environment
MoFSC	[Former] Ministry of Forests and Soil Conservation (now MoFE)
MoHA	Ministry of Home Affairs
MoITFE	Ministry of Industry, Tourism, Forests and Environment (State Government)
MoLMCPA	Ministry of Land Management, Cooperatives and Poverty Alleviation
MoPIT	Ministry of Physical Infrastructure and Transport
MoUD	Ministry of Urban Development
MPE	Midterm Project Evaluation
NBCC	National Biodiversity Coordination Committee
NBSAP	National Biodiversity Strategy and Action Plan
NFA	Nepal Foresters Association
NGO	Non-Government Organization
NP	National Park
NPR	Nepalese Rupee
NRM	Natural Resource Management
NTFP	Non-Timber Forest Product
NTNC	National Trust for Nature Conservation
PA	Protected Area
PES	Payment for Ecosystem Services
PIF	Project Identification Form
PIR	WWF-GEF Project Implementation Report

PM	Project Manager
PMU	Project Management Unit
PPC	Project Planning Committee (for Project Preparation phase)
PPG	Project Preparation Grant (for GEF)
PPR	Project Progress Report
PSC	Project Steering Committee
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RF	Results Framework
SE	Socio-economic
SDG	Sustainable Development Goals (UN)
SEA	Strategic Environmental Assessment
SFD	State Forest Directorate (under State MoITFE)
SFM	Sustainable Forest Management
SLM	Sustainable Land Management
SMART	Spatial Monitoring and Reporting Tool
TA	Technical Assistance
TAL	Terai Arc Landscape
TALWG	Terai Arc Landscape Working Group
TBD	To Be Determined
TE	Terminal Evaluation
TOR	Terms of Reference
VDC	[Former] Village Development Committee
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	UN Framework Convention on Climate Change
UNDP	United Nations Development Program
UNEP	United Nations Environment Programme (now UN Environment)
USAID	United States Agency for International Development
USD	US Dollar
WCCB	Wildlife Crime Control Bureau
WR	Wildlife Reserve
WS	Wildlife Sanctuary
WTLCP	Western Terai Landscape Complex Project (GEF 5)
WWF	World Wildlife Fund
ZSL	Zoological Society of London

Section 1: Project Background and Situation Analysis

1.1 Background and Context

Project scope and conservation targets

This project aims to promote integrated landscape management (ILM) to conserve globally significant forests and wildlife in Nepal, supporting the Government of Nepal's adoption of the landscape approach to conservation and building on previous GEF support for the Terai Arc Landscape. In institutional capacity development terms, the project has a national scope as it seeks to strengthen the inter-sectoral coordination mechanisms and capacity for implementing ILM in landscapes across the country, supporting the recently restructured Federal, State and Local Government bodies in their new roles for integrated natural resource management (**Figure 1-1**). However, the main focus of the project is in supporting the application of ILM to the biodiversity-rich corridors and protected area (PA) buffer zones of the Terai Arc Landscape (TAL) (**Figure 1-2**) through a combination of multi-level inter-sectoral coordination, improved participatory planning for their conservation and protection, and improved forest management practices and management of the human-wildlife interface. The knowledge and lessons from the project will flow from the local to the federal level through forums, networks and outreach to enable replication and upscaling of ILM experience. The project's integrated landscape management aims to bring together sustainable forest, land and water management and the conservation of globally significant large ranging mammals (tiger, greater one-horned rhinoceros and Asian elephant) as well as benefiting a wide range of other species through application of an integrated ecosystem management approach[1].

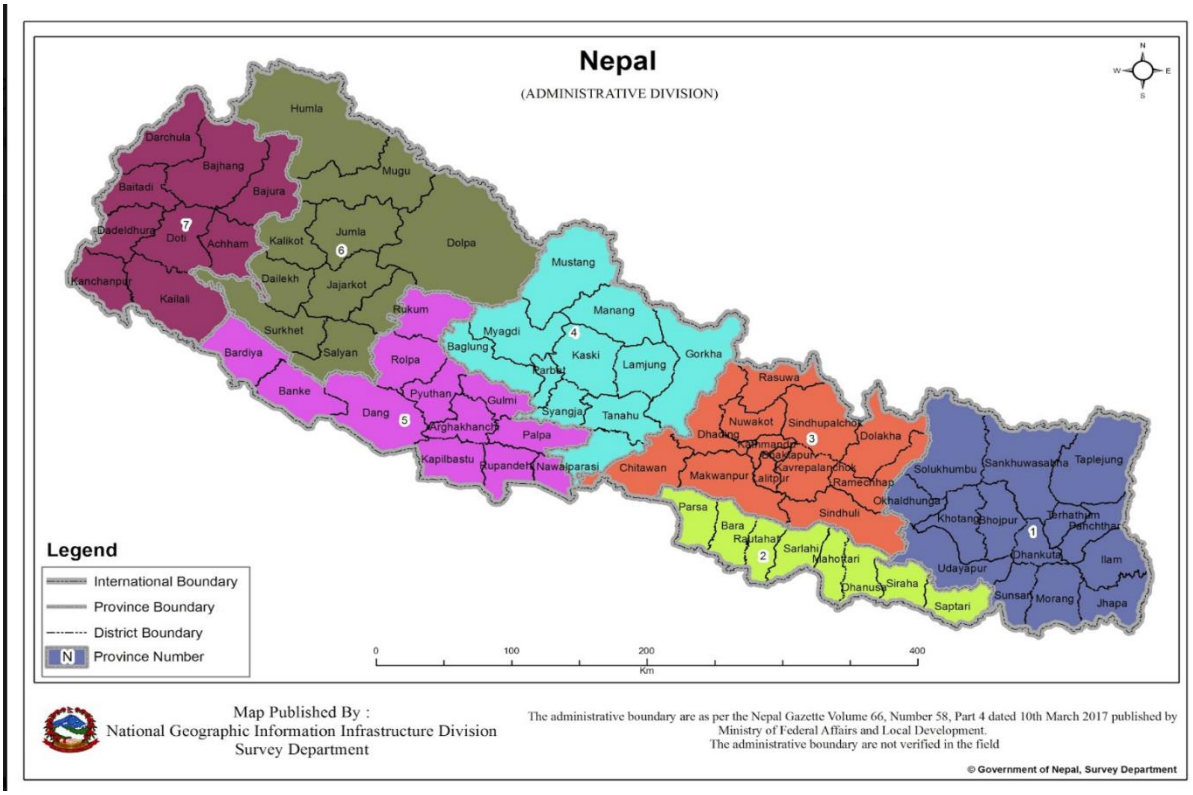


Figure 1-1. Map of Nepal showing 7 States and 77 District boundaries

[1] https://www.cbd.int/ecosystem/

Natural geography of the Terai Arc Landscape

The Terai Arc Landscape of Nepal is a 24,710 km^2 area of critical importance for globally significant biodiversity and ecosystems and for supporting local livelihoods. Located in the foothills of the Himalayas, the TAL provides forest and grassland habitat for tiger, rhino, and elephant as well as a suite of other globally threatened species, and ecosystem services including watershed protection and provision of water, carbon storage and sequestration, soil protection, and provision of fertile agricultural land. The landscape is approximately 17% of the country's total land area and is home to more than 7.5 million people[2] from numerous ethnic and indigenous groups who depend on natural resources for their livelihoods. The TAL has a system of six protected areas and associated buffer zones, which together cover 5,538 km^2, namely Chitwan National Park (CNP), Parsa National Park (PNP), Bardia National Park (BNP), Banke National Park (BaNP) and Shuklaphanta National Park (SuNP). In 2015, the northern boundary of the TAL was extended to the include the north-facing slopes of the Chure, adding more than 1,500 km^2 to the landscape, and further enhancing habitat and forest connectivity. Seven habitat corridors create linkage among the protected areas in Nepal and India in the TAL, and of these, four have been declared as Protected Forest (**Figure 2**). The Terai has a mosaic of land uses and habitat types, with 54% of the TAL land area occupied by forests and 35% occupied by agriculture. Of the 14,581km^2 forest in TAL Nepal, nearly 25% of the forest is located inside the six protected areas, highlighting the importance of the buffer zones, corridors, and other community forest areas which together account for the remaining 75% of TAL forest[3].

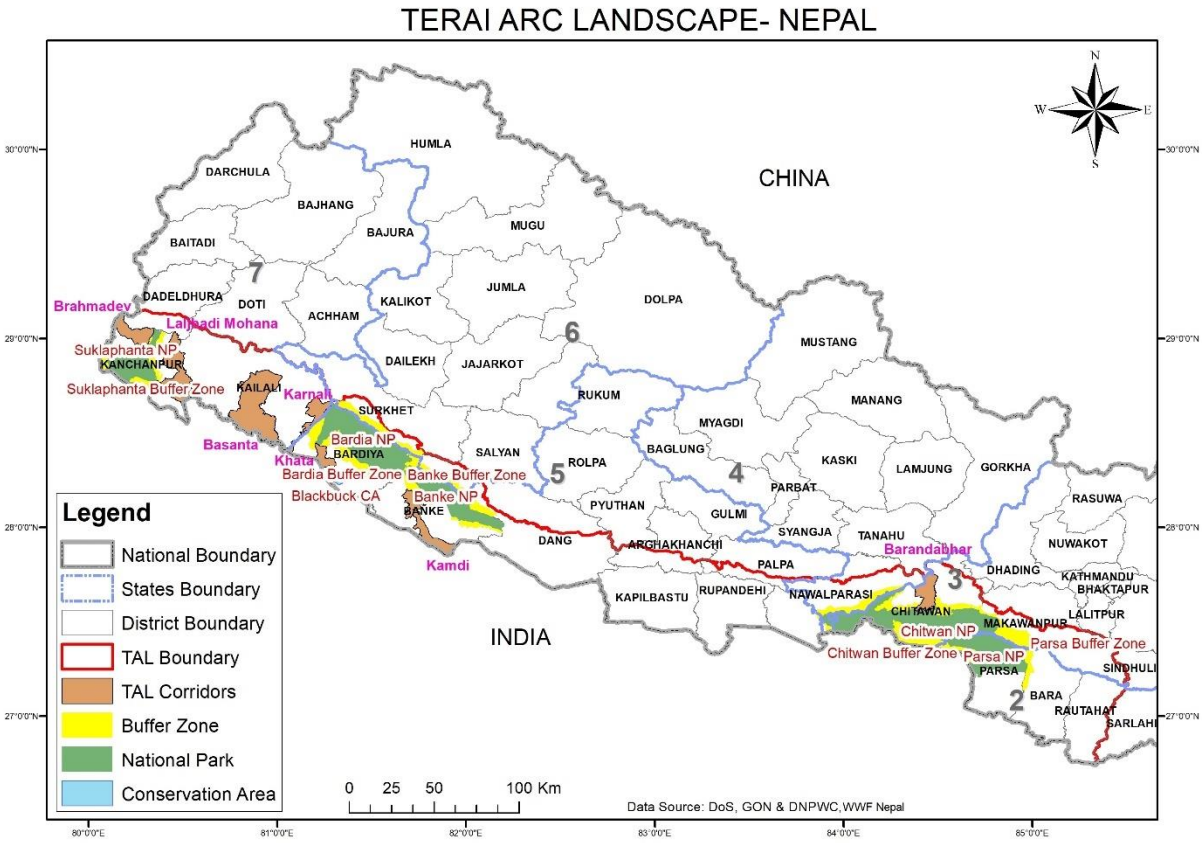


Figure 1-2: Map of Nepal showing the Terai Arc Landscape, protected areas, buffer zones and corridors

[2] CBS 2011. National Population and Housing Census (National Report). National Planning Commission Secretariat, Govt of Nepal, Kathmandu.

[3] TAL Nepal Strategy and Action Plan 2015

Environmental Significance

The TAL's system of protected areas, buffer zones and habitat corridors support extensive forest systems, grasslands, riverine environments, and large mammal populations. Over 12,000 km^2 of the TAL is forested. These forest tracts provide key habitat for globally significant wildlife, corridors among protected areas, and high carbon storage potential.

The TAL supports meta-populations of charismatic megafauna, including the Bengal tiger (*Panthera tigris tigris*), Asian elephant (*Elephas maximus*), and greater one-horned rhinoceros (*Rhinoceros unicornis*) as well as a wide range of other globally threatened species, including hog deer *(Axis porcinus)*, swamp deer *(Cervus duvaucelii*) and sambar deer (*Rusa unicolor*), Chinese pangolin (*Manis pentadactyla*), gaur (*Bos gaurus)*, wild dog (*Cuon alpinus*), vultures, turtles, gharial *(Gavialis gangeticus*), Gangetic dolphin (*Platanista gangetica*), etc. (see corridor and buffer zone profiles in **Appendix 1**).

The TAL primarily represents the habitats of the Terai Duar Savanna and Grasslands and Eastern Himalayan Subtropical Broadleaf Forests ecoregions. The landscape extends along the Churia range and includes the inner Dun valleys and the floodplains at the base of the Churia hill range. It includes three listed Wetlands of International Importance and numerous other wetlands that harbor threatened species of flora and fauna and serve as habitat for migratory and globally threatened birds (NBSAP, 2014). Three large river systems in the TAL (Narayani, Karnali, Mahakali, and their tributaries) create critical habitat and connectivity between the Churia hills watershed and the lowland Terai and provide environmental flows to sustain ecological communities and ecosystem services for people, sustaining Nepal's Terai-based agrarian economy.

The major vegetation types along the riverbanks and floodplains of the TAL are tall grass and sisoo (*Dalbergia sisoo*) dominated forests. The lowlands away from the rivers are sal (*Shorea robusta*) dominated forests, sometimes occurring in monospecific stands. The floodplains and lowland areas experience annual monsoon floods that maintain the grass and woodlands by reversing the successional process; in the absence of floods (and to some extent fire) these grasslands would become woodlands and then forests through the natural successional process. Moist mixed riverine forest is common where floods are less severe, but the soil remains waterlogged during the monsoon, whereas the sal forests grow on the steeper, dry slopes. During the winter, when river flows are low, the dry beds of braided rivers and adjacent floodplains support near-monospecific stands of *Saccharum spontaneum* grasses that sprout soon after the floods recede. Thus, the Terai grasslands and woodlands are maintained by annual disturbance events (Seidensticker *et al.* 2010[4]; Thapa *et al.* 2015[5]). The Terai's climatic conditions and low-lying terrain favour diverse crops, agro-forestry and livestock under traditional farming systems.

Furthermore, TAL has been identified as one of the 13 tiger conservation landscapes with the greatest potential for recovery and long-term conservation of tiger population. The landscape is clustered into three complexes: Chitwan-Parsa Complex, Banke-Bardia Complex, and Shuklaphanta-Laljhadi-Jogbudha Complex. **Chitwan-Parsa Complex** lies in the eastern TAL and comprises of CNP, PNP, and

[4] Seidensticker, J., E. Dinerstein, S.P. Goyal, B. Gurung, A. Harihar, A.J.T. Johnsingh, A. Manandhar, C. McDougal, B. Pandav, M. Shrestha, J.L. D. Smith, M. Sunquist and E. Wikramanayake. 2010. Tiger range collapse and recovery at the base of the Himalayas. In: The Biology and Conservation of Wild Felids. Eds: Macdonald, D. and Loveridge A. Oxford University Press. 305–323.

[5] Thapa, G.J., E. Wikramanayake, and J. Forrest. (2015). Climate-change Impacts on the Biodiversity of the Terai Arc Landscape and the Chitwan-Annapurna Landscape. Hariyo Ban, WWF Nepal, Kathmandu, Nepal.

Bharandabhar protected forests. This complex covers 2,604 km^2 and supports the highest population of tiger in the country. CNP serves as the source site in the complex, whereas PNP has low tiger and prey density, therefore serving as a potential TX2 site[6]. **Banke-Bardia Complex** lies in the western TAL and comprises of BaNP, BNP, and Khata biological corridor and protected forest. The complex covers 2,368 km^2. BNP is the possible source site in the complex. **Shuklaphanta-Laljhadi-Jogbudha** complex lies in far-western TAL and comprises of SuNP, Basanta corridor and protected forest, Laljadi-Mohana corridor and protected forest, and Brahmadev corridor. This project provides support to planning and protection for the whole of TAL, and has specific on-ground interventions for integrated landscape management at the Banke-Bardia Complex. A profile of each corridor and PA buffer zone is given in **Appendix 1**, while the rationale for selection of the project target areas is given in **Appendix 4** including consideration of biodiversity values.

Forest Carbon Sequestration

According to DFRS 2015[7], out of the total forest of the country, 4.93 million ha (82.68%) lies outside Protected Areas and 1.03 million ha (17.32%) inside Protected Areas. The carbon stock for forested land in the Terai totaled 138.42 t/ha, of which Soil Organic Carbon was 33.66 t/ha, Litter and debris 0.29 t/ha and trees of 10 cm DBH or more 104.47 t/ha (all below the national average). The carbon sequestered by the forests in the Terai represents an important ecosystem service, which is the subject of parallel initiatives including Hariyo Ban Sustainable Landscapes support for REDD+ implementation[8], and the World Bank (WB) FCPF REDD Readiness Program and Forest Investment Program (FIP). The Emission Reduction Program (ERP) aims to reduce 34.2 MtCO_2e over the 10 year life of the program improving the management of 336,069 ha of existing CBFM, transferring 200,937 ha forest to Community-based Forest Management (CBFM), developing 30,141 ha private forest, 60,000 units of biogas, 60,000 units of improved cooking stoves, managing 12,056 ha pro-poor leasehold forestry and preventing 9,000 ha forest land from deforestation under integrated land use planning[9]. An estimated 4.9 million metric tons (MT) of carbon dioxide equivalent (CO_2e) of greenhouse gas (GHG) emissions were reduced or sequestered and 3,184 hectares were brought under new plantation through Hariyo Ban Phase I.

Political and social situation

This project comes at a time when significant political, economic and social changes are underway in Nepal. This presents challenges for both project design and implementation in terms of the ongoing institutional restructuring to introduce three levels of government, but also opportunities to participate in the establishment of new mechanisms for a more integrated, inclusive and bottom-up approach towards natural resource governance.

Nepal remains a predominantly agrarian society, with approximately 85% of Nepalese living in rural areas and depending on indigenous knowledge and traditional agricultural technology. The natural resource base is closely linked with traditional agricultural technology, and the populations, especially the poor who have few assets, are heavily dependent on forests for their subsistence livelihoods.

[6] Tx2 is the goal **to** double the number of wild tigers by 2022, by working at the landscape level http://tigers.panda.org/tx2/

[7] DFRS, 2015. State of Nepal's Forests. Forest Resource Assessment (FRA) Nepal, Department of Forest Research and Survey (DFRS). Kathmandu, Nepal.

[8] The National REDD+ Strategy of Nepal (NRSN) was sent for approval by cabinet in early 2018. An earlier version was published in 2015: https://www.forestcarbonpartnership.org/sites/fcp/files/2016/Aug/Annex%201%20-%20Nepal%20draft%20National%20REDD%2B%20Strategy.pdf

[9] ERPD, 2017

Forests fulfill their water, fuel wood, fodder, non-timber forest product and timber needs. However, extensive out-migration from rural areas continues, with a large absentee male population who send home remittances from employment in cities and foreign countries. Rural labor has decreased, with corresponding effects on agriculture, livestock husbandry and forest management. Infrastructure development is advancing fast, often resulting in adverse environmental impacts in the TAL due to inadequate environmental management systems. Human development indicators show improvement, but marked social inequalities continue[10], and discrimination against socially excluded groups and women is common, as is gender-based violence.

After a decade of armed insurgency a peace agreement was signed in 2006; the second Constituent Assembly was successfully elected in 2013 and the Constitution was promulgated in 2015. Border blockades protesting the Constitution in the winter of 2015/16 caused extensive fuel and other shortages. The April 2015 earthquake caused massive loss of life and property, with 8,790 people dead, over 700,000 people pushed into poverty, and the total value of the disaster estimated to be around US$ seven billion (National Planning Commission 2015). The country is now in a long process of recovery and reconstruction, stretching government capacity between regular development and reconstruction work and changing the needs and focus of forest-dependent communities in earthquake-affected areas. The long period of political instability and frequent change of national government had detrimental effects across all sectors, but with a new Constitution on place and successful completion of state restructuring process (7 states and 753 local bodies) and election of three tiers of government (Federal, State and Local), in 2017, there is a new opportunity for reconstruction and development that gives emphasis to more local and state level authority over natural resource management and conservation.

Key stakeholders

This is a multi-level, multi-sector project that will be led by the Ministry of Forests and Environment (MoFE) at Federal level. The Planning, Monitoring and Coordination Division of MoFE will be the coordinating point at Federal level, with inputs from the Department of Forests and Soil Conservation (DoFSC) and Department of National Parks and Wildlife Conservation (DNPWC). In addition, the State Ministry of Industry, Tourism, Forest and Environment and State Forest Directorate are involved in the planning and monitoring process, while coordination with Municipalities at local government level will be maintained by the project field office. Division Forest offices and National Parks will provide technical assistance to CFUG at corridors, buffer zone user groups and buffer zone community forest user groups respectively.

At the Federal level, the DNPWC has been the lead agencies for management of the protected areas and buffer zones. Similarly DoFSC is responsible for the management of corridors. The national parks and wildlife reserves are managed by the Federal government, hence DNPWC performs its responsibility as per the Federal government's policy. However, the role of DoFSC has been changed and corridor forests will be the under the management of state ministry of Industry, Tourism, Forests and Environment (MoITFE) and its agencies. The Ministry of Agriculture and Livestock Development, through its Department of Agriculture (DoA) and Department of Livestock Service (DoLS) will be a key collaborating agency, as well as the Ministry of Land Management Cooperatives and Poverty Alleviation (MoLMCPA)

[10] UNDP 2016. Nepal Human Development Report 2016.
http://www.np.undp.org/content/nepal/en/home/library/human_development/human-development-report-2016.html

At State level, the Ministry of Industry, Tourism, Forests and Environment (MoITFE) will lead implementation for the States represented in the TAL, while the Ministry of Physical Infrastructure and transport (MoPIT), The Ministry of Agriculture and Livestock Development, Ministry of Land Management Cooperatives and Poverty Alleviation (MoLMCPA) will be collaborating agencies.

At local level, the Municipalities and Rural Municipalities will be partners in implementation. Local government will also monitor and supervise the project activities. While the District Coordination Committee has reduced powers under the new government structure, it will continue to play significant coordinating and monitoring functions rather than program and budget planning and implementation, therefore the District Coordination Committees (DCC) and Municipality Coordination Committees (MCC) will be a part of the intersectoral coordination arrangements under the project. Under the State MoITFE, the government has established a State Forest Directorate (SFD) and Forest Research and Training Centre (FRTC). Under SFD, there are Forest Divisions and each Forest Division has sub-divisions for the management of forest, and Soil Conservation and Watershed Management Offices focus on integrated watershed management. Further, the Cottage and Small Industry Offices are also there to support enterprise development in the project area.

The project will engage with and support the development and functioning of local communities (LCs) and Indigenous Peoples (IPs) through community groups operating in the TAL corridors and PA buffer zones, including: Buffer Zone User Committees (BZUCs), Buffer Zone Community Forest User Groups (BZCFUGs), Community Forest User Groups (CFUGs) and Protected Forest Councils, Religious Forest Groups (RFG) as well as private forest land owners and their networks.

A range of civil society organizations and networks with social and environmental interests will be involved with project implementation through support for specific activities and roles on advisory and coordinating committees. These include: Nepal Federation of Indigenous Nationalities (NEFIN), Federation of Community Forest User Groups of Nepal (FECOFUN), Community Forest Coordination Committee (CFCC), Federation of Private Forest Stakeholders (FePFoS) and Association of Family Forest Nepal are also emerging to conduct advocacy for promoting private forests in Nepal. Other National interest groups such as the Himalayan Grassroots Women's Natural Resource Management Association of Nepal (HiMAWANTI) and School Environment Education Network, Nepal (SENSE Nepal) have expertise in social issues of natural resource management and can facilitate project implementation to enhance gender equity, youth engagement and social inclusion. NGOs such as the National Trust for Nature Conservation (NTNC) and Zoological Society of London (ZSL) are involved in significant baseline activities and can provide technical assistance to project implementation. The Nepal Foresters Association (NFA) has been involved in conducting policy dialogue to provide suggestions to the MoFE.

Overview of relevant international conventions

This project will support the strengthening of three pillars of the Convention on Biological Diversity (CBD), namely conservation, sustainable utilization and benefit sharing through national biodiversity strategies and action plans. Nepal's National Biodiversity Strategy and Action Plan (NBSAP), revised in 2014, is an important means of supporting the CBD. In the context of the NBSAP priorities, this proposed project, through improved protection of buffer zones and corridors, will support the meaningful participation of local communities in the management of natural resources, landscape approaches to address multiple drivers of biodiversity loss, and cooperation among relevant agencies to achieve success in biodiversity conservation. The proposed project will support the implementation of priority actions linked to the NBSAP to meet the Aichi Targets. Among the Aichi Targets, this

proposed project will contribute towards progress of the following: Aichi Target 5, loss of natural habitat, including forests; Aichi Target 7 concerning sustainable management of agriculture and forests to ensure conservation of biodiversity; Aichi Target 12, on preventing loss of known threatened species; and Aichi Target 14 related to maintaining ecosystem services to contribute to livelihoods.
The project will contribute towards the Ramsar Convention, through assisting the government in meeting its obligation to undertake the wise use of all wetlands in its territory. In the context of this project, the TAL has a diversity of biodiversity-rich wetlands, including major river floodplains, freshwater marshes, lakes and smaller water bodies. These support abundant aquatic fauna and flora including globally threatened species such as the gharial (CR), Gangetic dolphin (EN), mugger (EN), red-crowned roofed turtle (CR), three-striped roof turtle (EN), sarus crane (V) and swamp deer (V). Three listed Wetlands of International Importance (Ramsar Sites) are located in the TAL – Ghodaghodi Lake (Kailali), Beeshazar and Associated Lakes (Chitwan), and Jagadishpur Reservoir (Kapilvastu).

The proposed project will contribute to the United Nations Convention to Combat Desertification (UNCCD) goals and framework and key land degradation related priorities for Nepal. Through integrated landscape management, the project will help to reverse and prevent desertification and land degradation, and help mitigate the effects of drought to support poverty reduction and environmental sustainability. The proposed project will build on the priorities and lessons from Nepal's National Action Programme for Land Degradation and Desertification (2002) and the subsequent stocktaking and national capacity assessment report on land degradation prepared by MoSTE in 2008. The proposed project will address the threats, drivers, activities and targets to combat land degradation that were identified and analyzed in these reports. Further, it will support the priorities of Nepal within the UNCCD framework, namely integrated ecosystem management programs to rehabilitate areas prone to landslides, integrate watershed management activities for water management and food security, and disaster forecasting and relief in the Churia range.

The proposed project will contribute to the Nationally Determined Contributions (NDC), last submitted by Nepal to the United Nations Framework Convention on Climate Change (UNFCCC) in February 2016, which outline both the mitigation and adaptation strategies to address climate change. This project specifically aligns with and contributes to the NDC goals by utilizing the landscape approach to resource conservation and management in forest areas; reducing dependency on biomass through the use of alternative energy; maintaining forest cover and enhancing carbon sequestration through sustainable forest management and improved governance to control drivers of deforestation and forest degradation; and institutional strengthening.

The project will work toward the Sustainable Development Goals adopted by the UN in 2015 by promoting inclusive, coordinated land management, good governance, and economic development to address the root causes of poverty and the universal need for development that works for all people. It will primarily target terrestrial biodiversity conservation (Goal 15 – Life on Land), but also contribute towards other Goals, including: 1 (No Poverty), 5 (Gender Equality), 13 (Climate Action), 11 (Sustainable Cities and Communities), 14 (Life Below Water) and 16 (Peace, Justice and Strong Institutions). The importance of taking a holistic view of the SDGs was spotlighted by WWF at High-level Political Forum on Sustainable Development (HLPF) 2018, allowing stakeholders to benefit from potential synergies and advance objectives in several areas at once. Goal 15 – Life on Land will play an integral role in achieving all the others – and vice versa[11].

[11] Forests and Sustainable Development. The Role of SDG 15 In Delivering the 2030 Agenda. WWF Forest Practice. July 2018.

1.2 Environmental Problem, Threats, and Root Causes

Environmental Problem

Despite the ecosystem and livelihood values of the TAL, the area faces a wide range of threats that are resulting in biodiversity loss, deforestation, degradation of forests, grasslands and riparian areas, land degradation, and land use related carbon emissions. The overarching root causes of the threats to biodiversity are increasing population pressure and economic growth in the TAL, and the impacts are exacerbated by climate change. In fact, the TAL strategy ranks natural disasters (floods, landslides, droughts) as the highest threat to the socio-economic wellbeing of buffer zone and other communities, with related impacts on corridors through the displacement of affected communities. The key threats that stem from these root causes are detailed in the section below, with those having the greatest impact across all the TAL PA buffer zones and corridors being unregulated grazing, forest fire, large infrastructure development, encroachment and human wildlife conflict.

Threats and Root Causes

During the Project Preparation consultations with stakeholders, it was reported that the corridors and PA buffer zones in the TAL are facing a wide range of threats, which vary in their intensity and extent (see **Tables 1-1 and 1-2 below**). The reported intensity and threat ratings have been combined according to a guiding matrix (**Table 1-3**) in order to determine those threats that are likely to have the greatest impact (**Table 1-4**). This is useful in identifying which threats are of greatest significance at the present time, and in highlighting which corridors and PA buffer zones are under most pressure from critical and high impact threats. While the impact table lists many threats as "negligible" according to the combined assessment, some of these threats may still be present at a low level in these areas.

Table 1-1. Threat intensity

Threats	CORRIDORS							PA BUFFER ZONES					
	Barandabhar	Basanta	Bramhadev	Kamdi	Karnali	Khata	Laljhadi	Krishnasaar CA	Parsa NP	Chitwan NP	Banke NP	Bardia NP	Shuklaphanta NP
Large infrastructure													
Wildlife poaching													
Floods													
Illegal logging													
Unsustainable use of fuelwood and NTFPs													
Forest fire													
Land-use change													
Invasive species													
Encroachment													
Migration													
Grazing													
Grassland degradation													
Drying up of wetlands													
Mining of gravel													
Human wildlife conflict													
Overfishing													
Siltation													
River channelling													
River pollution													
Human disturbance (Local Paths)													

Threat Intensity	KEY TO TABLE 1			
	HIGH	MODERATE	LOW	NEGLIGABLE

Table 1-2. Area Impacted by Threats

Threats	CORRIDORS							PA BUFFER ZONES					
	Barandabhar	Basanta	Bramhadev	Kamdi	Karnali	Khata	Laljhadi	Krishnasaar CA	Parsa NP	Chitwan NP	Banke NP	Bardia NP	Shuklaphanta NP
Large infrastructure													
Wildlife poaching													
Floods													
Illegal logging													
Unsustainable use of fuelwood and NTFPs													
Forest fire													
Land-use change													
Invasive species													
Encroachment													
Migration													
Grazing													
Grassland degradation													
Drying up of wetlands													
Mining of gravel													
Human wildlife conflict													
Overfishing													
Siltation													
River channelling													
River pollution													
Human disturbance (local paths)													

Threat Extent	KEY TO TABLE 2			
	PERVASIVE	WIDESPREAD	LOCALIZED	NEGLIGABLE

Table 1-3. Threat impact matrix (combines the scores from the previous two tables)

		Intensity			
		High	Moderate	Low	Negligible
Extent	Pervasive	Critical	High	Medium	Negligible
	Widespread	High	Medium	Low	Negligible
	Localized	Medium	Low	Low	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

Table 1-4. Threat impacts for target corridors and PA Buffer Zones (combining threat intensity and extent ratings)

Threats	CORRIDORS							PA BUFFER ZONES					
	Barandabhar	Basanta	Bramhadev	Kamdi	Karnali	Khata	Laljhadi	Krishnasaar CA	Parsa NP	Chitwan NP	Banke NP	Bardia NP	Shuklaphanta NP
Large infrastructure													
Wildlife poaching													
Floods													
Illegal logging													
Unsustainable use of fuelwood and NTFPs													
Forest fire													
Land-use change													
Invasive species													
Encroachment													
Migration													
Grazing													
Grassland Degradation													
Drying up of wetlands													
Mining of gravel													
Human wildlife conflict													
Overfishing													
Siltation													
River channelling													
River pollution													
Human disturbance (Local Paths)													

Threat Impact	KEY TO TABLE 4			
	HIGH	MEDIUM	LOW	NEGLIGABLE

The most serious threats that have been identified through this analysis and which the project will seek to address are summarized below. Overall, the forests of the Terai lowlands have experienced high rates of deforestation and degradation over the past four decades, though forest loss is starting to decline with a 0.44% forest loss rate per annum from 2001-2010[12]. The TAL has experienced steadily increasing emissions from deforestation and forest degradation over the last decade, driven by a supply-demand deficit for fuel wood and timber. Deforestation and degradation result in fragmented habitats for wildlife, and bring humans into closer contact with wildlife. Over-harvesting of forests and forest products, overgrazing by livestock, and cultivation of marginal lands to meet resource deficits have resulted in soil erosion, and loss of soil nutrients and fertility. Degraded lands then result in a decline in biological and/or economic productivity of agricultural lands, pastures, and forests.

Unregulated grazing – Grazing is one of the drivers of deforestation and forest degradation in Nepal, which is also recorded by the recent forest inventory as one of the most widespread disturbances[13]. Overgrazing inside the forest is mainly due to the near-absence of the practice of agro-forestry practice in farmers' fields which can supply fodder; information about stall feeding, low productivity of local breeds and abandoned cattle. The abandoned cows along the East-West Highway, mainly from Kamdi Corridor westwards are increasing pressure on forest resources as well as on local governments to manage the issue. The larger issue is that non-productive cattle are abandoned and roam uncontrolled in the forest, damage crops etc. This problem has been exacerbated by a recent Indian government policy not to allow cattle from Nepal to be taken to India for disposal. Some local communities collect up the stray cattle into "kanji houses" – pens where they are cared for until they die, as an act of charity.

Forest fires – the most widespread threat across all corridors and PA buffer zones, and identified as a critical threat in three areas and a high level threat in four. While fires occur naturally, with increased human presence in and around the forests and increased penetration of the road network, the frequency and distribution of fires is increasing, often associated with encroachment and exacerbated by more extreme dry spells under the influence of climate change. Lack of sustainable forest management in many areas means that fire prevention and control methods such as fire breaks are not being systematically applied.

Large infrastructure development – The East-West Highway and Hulaki highway pass through many PAs and corridors in the TAL area. According to DNPWC, in the fiscal year 2016/17, a total of 133 wild animals were killed in road accidents. 66 animals were killed in Bardia National Park and 58 in Banke National Park due to road accidents[14].

Similarly, major irrigation canal projects cut through forested landscapes in the TAL, including the Babair irrigation scheme (Bardia NP and South BZ), the Sitka Irrigation scheme (Banke NP and Kamdi Corridor), and the Rani Jamara Kulariya Irrigation project (Karnali Corridor). Further, there are several small irrigation projects under construction in the TAL area. Injured Python, Wild boar and Blue bull were rehabilitated from Sikta irrigation canal in Banke NP[15]. Similarly, as per discussion with local

[12] MoFSC 2014. NEPAL National Biodiversity Strategy and Action Plan 2014-2020. Ministry of Forests and Soil Conservation, Kathmandu, Nepal
[13] DFRS, 2015b
[14] DNPWC 2017. Annual Report : Wildlife Crime. Department of National Park and Wildlife Conservation (DNPWC), Kathmandu, Nepal.
[15] DNPWC 2017 Ibid.

forest users, several ungulates were reported to be drowned while using irrigation canals for drinking water, such as the Sikta scheme.

Such infrastructure developments are fragmenting forest habitats, obstructing the movements of wildlife and reducing the populations of prey species, which ultimately affects big carnivores. The proposed 945 km Mechi-Mahakali Railway will also pass through several PAs and corridors in the TAL, which is likely to further increase the threats to wildlife and their habitats. A total of 2247 ha forest area will be lost during the construction (Investment Board Nepal), which largely constitutes to be the forest area of TAL. In addition, there are several rural roads under construction or are proposed inside PAs and corridors. These roads will fragment habitats and increase the risks of poaching, road accidents and forest fires.

Encroachment – A total of 94,872 ha of Terai forest land was encroached during the period 1992-2014. All PAs and corridors have been affected by encroachment, which results in habitats being degraded and corridors fragmented. Several bottlenecks have occurred in the major corridors due to encroachment, affecting Karnali, Kamdi, Basanta, Bramhadev and Laljhadi-Mohana corridors. This compromises the functionality of these corridors as viable connections between PAs and other large forested landscapes that allow free movement of wildlife. Local population growth due to migration is exacerbating encroachment, which frequently occurs due to the flooding of marginal settled lands coupled with political support for the settlers (which represent vote banks). In most cases, flood victims shift towards safer places, mainly forested land, initially temporarily and after political support they make permanent settlements. Such a trend has been observed in Kamdi, Basanta and Mohana-Laljhadi corridors, and in the buffer zone of Shuklaphanta NP. As an example, in Khata corridor, the main issue is encroachment of Mahjera Island in the Karnali River, where 150 households have settled (both locals and immigrants). This is an important site for tiger (riparian grasslands) and elephant, and there is significant HWC as a result of this encroachment. The land is fertile, hence the strong pressure to settle despite a significant risk of flooding.

Human-wildlife conflict (HWC) – HWC is increasingly a threat to conservation efforts due to its impacts on local communities. It is increasing in the TAL corridors and PA buffer zones due to the combined effects of increased wildlife populations as a result of more effective protection (eg Bardia NP had three elephants twenty years ago, now more than 100) and increasing human populations, including settlers encroaching on wildlife habitats and movement routes. Crops around the forest edges provide accessible nutritious food for a variety of wildlife, while the presence of livestock grazing in and around the forests inevitably attracts predators such as leopard and tiger.

In the fiscal year 2016/17, a total of 1,332 incidents of HWC were recorded in Chitwan, Bardia and Shuklaphanta National Parks. Of this total, 70% incidents are related to elephant, 13% rhinoceros, 11% leopard, and rest are related to tiger, wild boar, spotted deer and crocodile. 23 people were killed in animal attacks, of which 13 were killed in rhinoceros and elephant attacks in Chitwan National Park, five by elephants in Bardia NP, and one person in a wild boar attack in Shuklaphanta NP. In addition, 43 people were injured in animal attacks, 277 domestic animals were killed and 271 properties (excluding crops) were damaged[16]. Elephant and leopard attacks occurred mostly in human

[16] DNPWC 2017. Annual Report : Wildlife Crime. Department of National Park and Wildlife Conservation (DNPWC), Kathmandu, Nepal.

settlements[17], with evidence that the leopard is being pushed out of the forest and increasingly entering human settlements and land due to an increasing tiger population (e.g. in Bardia NP)[18], resulting in increased conflict. While human encroachment into previously undisturbed wildlife habitat is an issue (see above), the increased movement of elephants into human settlements is considered by local people to be mainly due to the degradation of suitable habitat for them inside PAs and corridors, as PA management authorities are focused on the conservation of big cats, mostly through improving grasslands to increase the population of prey animals. In addition, corridor management tends to follow the habitat management regime inside the PAs, with an emphasis on developing corridors as wildlife habitat rather than simply providing suitable cover as movement routes for megafauna. Due to the increased stay of large wildlife inside the corridors, human-wildlife encounters are increasing.

Unsustainable use of fuelwood and NTFPs – The TAL is one of the most densely populated areas of Nepal, with a predominately rural population practising a subsistence agrarian lifestyle that is labor intensive and heavily dependent on natural resources, including collection of fuel wood, fodder for animals, materials for construction, and a wide variety of products for various local uses (thatch, food, medicine, etc). The unsustainable harvest of forest products is largely driven by the increasing demand for forest products from population growth and a weak supply chain. For example, REDD Cell (2012) estimated demand for fuel wood in the 20 districts under the program was 5.3 million tons / year, more than twice the estimated 2.58 million tons of the sustainable supply. The annual demand for timber was estimated at 1.46 million m^3, compared to estimated supply of 1.1 million m^3. In addition, fuelwood extraction has increased since the April 2015 earthquake, as displaced people settling in the TAL and local people have relied more heavily on wood for cooking and heating.

Wildlife poaching – poaching has declined significantly in influence due to improved anti-poaching enforcement efforts in the last few years. It remains a critical and pertinent threat in Barandabhar corridor and a high threat in Karnali, while it remains at a low level of impact in the buffer zones of Parsa, Chitwan, Banke and Shuklaphanta NPs. However, there is always a risk of poaching considering the historical evidence. As PAs have strong security with the involvement of the Nepalese Army and about 4,000 people are involved in anti-poaching movements under Community Based Anti-Poaching Unit (CBAPU) in TAL PAs and corridors, such positive outcomes are to be expected. In addition, there have been several public awareness events to reduce poaching. In the fiscal year 2016/17, only one animal was found to have been killed by poaching in Chitwan National Park[19]. Similarly, the DNPWC report shows that about 64 cases were filed from the PAs of the TAL, of which 26 were related to the wild animals and rest were about illegal logging and sand mining. This indicates strong law enforcement by PA authorities, which discourages poachers. While this is a positive situation, continued effort is required to monitor and control poaching and related illegal wildlife trade as such trade is infamously dynamic and can rapidly respond to a weakening of management and law enforcement systems. Given the proximity of the project area to the Indian border, there is significant potential for transboundary poaching and illegal wildlife trade, requiring strong cross-border coordination between the relevant authorities. For instance, the demand for tiger products in south and south-east Asia is leading to poaching of tigers in Nepal, and particularly in Bardia National Park.

[17] Acharya, K.P., Paudel, P.K., Neupane, P.R. & Köhl, M. (2016) Human-wildlife conflicts in Nepal: patterns of human fatalities and injuries caused by large mammals. *PLoS one*, 11, e0161717. Public Library of Science.
[18] Odden, M., Wegge, P. & Fredriksen, T. Ecol Res (2010) 25: 875. https://doi.org/10.1007/s11284-010-0723-1
[19] DNPWC 2017 Ibid

There were four cases of tiger poaching in Bardia NP in 2015, linked to professional poachers recruited by networks from neighboring countries.

Root causes / indirect factors

The two main root causes of the threats described above are increasing population pressure on the natural resources of the TAL, and economic development pressure. Unsustainable forest management practices also underlie forest degradation and deforestation, with the impacts of a wide range of threats (such as forest fires, floods, soil erosion and siltation, drying up of water sources, invasive alien species) also exacerbated by climate change trends.

Population growth - the population in the Terai region has been increasing dramatically. In 2001, the Terai population was 48.4% (11,212,453) of the total population in Nepal (23,151,423), which had increased to 50.27% (13,318,705) of the total population (26,494,504) by 2011[20]. The national population growth rate in recent years has been around 1.1% per annum[21]. However, the migration of population from the hills to the Terai in search of economic opportunities is increasing and the in-migration has been very significant in certain parts of the landscape such as Basanta and Karnali corridors. This in-migration has increased pressure on natural resources through encroachment by settlers (including use of fire), increased demand for forest products (firewood, timber), grazing, and has resulted in increased human-wildlife conflict. This may have contributed towards deforestation in the Terai which occurred at an average annual rate of 0.44% between 2001 and 2010[22]. On the other hand, there is some evidence that the forest cover in the mid-hills is increasing as a result of improved community forestry management between the 1990s and 2010[23] [24].

Economic development – the Terai is of strategic importance for development, lying between the population centres of northern India and the mountain ranges that dominate much of the country, with transportation routes leading northwards into China. Its generally flat and relatively fertile land provide suitable areas for both agricultural and industrial development and there are major infrastructure development schemes underway and planned to increase transport connectivity (eg the East-West Highway, proposed Mechi-Mahakali Railway, as well as airport development. The Hulaki Road along the Nepal-India border will traverse a number of critical corridors, and obstruct the movement of wildlife between PAs in Nepal and India. Agricultural development is being supported by major irrigation schemes such as the Sikta and Rani Jamara Irrigation schemes involving major canal networks carved through forest and developed land. The Sikta canal cuts through Banke National Park, preventing wildlife movement and separating wildlife populations within the park. The proposed industrial development zone (Special Economic Zone, SEZ) at Dudejhari lies in the centre of the northern part of the Karnali corridor and will have a massive impact on its integrity. Swathes cleared for electricity transmission lines also fragment forest habitats and impact wildlife movement.

While there is little doubt about the local and national economic benefits of such development, the rapidly expanding infrastructure development and associated activities invariably puts pressure on the natural and human environment, often with serious and irreversible consequences in the absence of

[20] Note – this is for the entire Terai region, of which the TAL is a part

[21] http://worldpopulationreview.com/countries/nepal-population/

[22] DFRS (2014) Terai Forests of Nepal 2010-2012. Department of Forest Research and Survey, Kathmandu.

[23] Niraula, R.R., Gilani, H., Pokharel, B.K. & Qamer, F.M. (2013) Measuring impacts of community forestry program through repeat photography and satellite remote sensing in the Dolakha district of Nepal. Journal of Environmental Management, 126, 20–29.

[24] DFRS (2015) Middle Mountains Forests of Nepal: Forest Resource Assessment(FRA) Nepal. Kathmandu.

integrated land use planning and investment in mitigation measures. Despite national social, environmental and climate change policies, and the legislation and guidelines governing infrastructure development, there exist significant knowledge, capacity and cross-sectoral gaps at the implementation level. The development of inadequately planned infrastructure, including rural roads and illegal settlements in forested areas, is a cause of deforestation and forest degradation.

Such infrastructure development has failed to consider alternative routes in planning that avoided or reduced impacts on environmentally sensitive areas such as PAs, BZs or Corridors. It has also not included mitigation for impacts on wildlife. There are no overpasses and underpasses, which can facilitate the movement of wildlife and reduce mortality. There are many roads that have been developed or are proposed to pass inside PAs and corridors (e.g. East-West Highway, Hulaki Highway). These will fragment habitats, increase road accidents involving wildlife and increase access to forest areas with related risks of fire-setting, encroachment and poaching.

Unsustainable management of forests – most of the forests in the TAL are over-matured and in many cases overstocked. Recent evidence indicates that most of the standing trees are not suitable for timber production as sap wood is decaying due to its excessive maturity[25]. Similarly, it has also compromised the capacity of forest to sequester carbon. This is mainly due to the lack of practice of sustainable forest management, which is considered one of the drivers of deforestation and forest degradation in Nepal[26]. Forest degradation leads towards deforestation, threatens the quality of habitats required to support biodiversity and reduces the supply of locally important forest products such as fuelwood and firewood.

The lack of sustainable and active forest management contributes towards the occurrence of forest fires, invasive alien species, flooding and siltation (all recognized as significant threats during this analysis)[27]. Similarly, due to inadequate local employment, the increasing populations living in and around the forests are reliant on forest products for their daily income to a large extent, thus increasing pressure for forest resource extraction. However, many forest user groups in Terai are starting to develop a timber production based forest management system, which is expected to improve the condition of the forest and reverse the trend of forest resources depletion[28].

Improved, more sustainable forest management should contribute towards enhancing the incomes of forest user groups and would also sequester carbon at a competitive rate[29]. The estimated opportunity cost of carbon in actively managed forest is 1.11 USD/tCO_2, which is almost half[30] compared to other

[25] Poudel, K.C. 2018. Silviculture for forest management in Nepal. Banko Janakari , Special Issue No. 4.
[26] RIC (2013) Assessment of Land use, forest policy and governance in Nepal . Kathmandu, Nepal .
[27] For more on impacts of invasive alien species, see: Rai, R.K. & Scarborough, H. (2015) Understanding the Effects of the Invasive Plants on Rural Forest-dependent Communities. Small-scale forestry;
Chaudhary, R.N. (2015) Status and Impacts of Invasive Alien Plant Species In The Parsa Wildlife Reserve, Central Nepal. Central Department of Botany, Tribhuvan University Kritipur, Kathmandu, Nepal; and
REDD-IC , 2013. Invasion and colonization of alien species: A threat or benefits in Nepal. Policy Brief. REDD-Implementation Center, Ministry of Forest and Soil Conservation, Nepal.
[28] Rai, R.K., Nepal, M., Karky, B.S., Somanathan, E., Timalsina, N., Khadayat, M.S. & Bhattarai, N. (2017) Costs and benefits of reducing deforestation and forest degradation in Nepal. Kathmandu, Nepal.
[29] Rai et al. 2017 Ibid
[30] Here, "almost half" the opportunity cost of carbon means the cost of sequestering carbon in actively managed forest is cheaper. So, if it enters the international market for carbon trading, actively managed forest can offer a more competitive rate.

forest management patches in Nepal. From the biodiversity perspective also, some disturbance of the forest can be beneficial as indicated by the intermediate disturbance hypothesis[31].

Climate change – climate change has several implications in the TAL. First, migration from the hills to the TAL can be influenced by climate change as water sources are drying up[32]. There are many news items in national and local newspapers reporting that many villages are suffering from the drying up of water sources in the mid-hills, forcing people to migrate to other areas. Secondly, intensive rainfall is causing floods in the TAL area, which causes settlers along river margins to set up temporary settlements further inside the forest to escape the floods, followed by permanent encroachment in these areas[33]. In addition, it is estimated that 2017 floods killed about 1,200 animals including spotted deer, barking deer and blue bull in Chitwan National Park alone[34] (Thirdly, focus group participants stated that the vegetation composition in the forest is changing, which may influence habitat suitability for wildlife. The forests in the TAL are mainly lowland sal, hill sal, subtropical broadleaf and chirpine forests, which are vulnerable to climate change[35]. The WWF report projected that under the highest IPCC Green House Gas (GHG) scenario (A2A), lowland sal and chirpine forests in the TAL are likely to have been succeeded by other dominant vegetation types by 2050, while forest vegetation in climatically stable microrefugia, sheltered from regional influences of climate change by the highly dissected terrain of the Himalayan Mountains, could remain unaffected.

The relationships between the threats and root causes / indirect factors are illustrated in the conceptual diagram in **Figure 1-3,** which also indicates the main entry points for the project intervention strategies (component outcomes).

[31] Wilkinson, D.M. (1999) The disturbing history of intermediate disturbance. Oikos, 145–147.

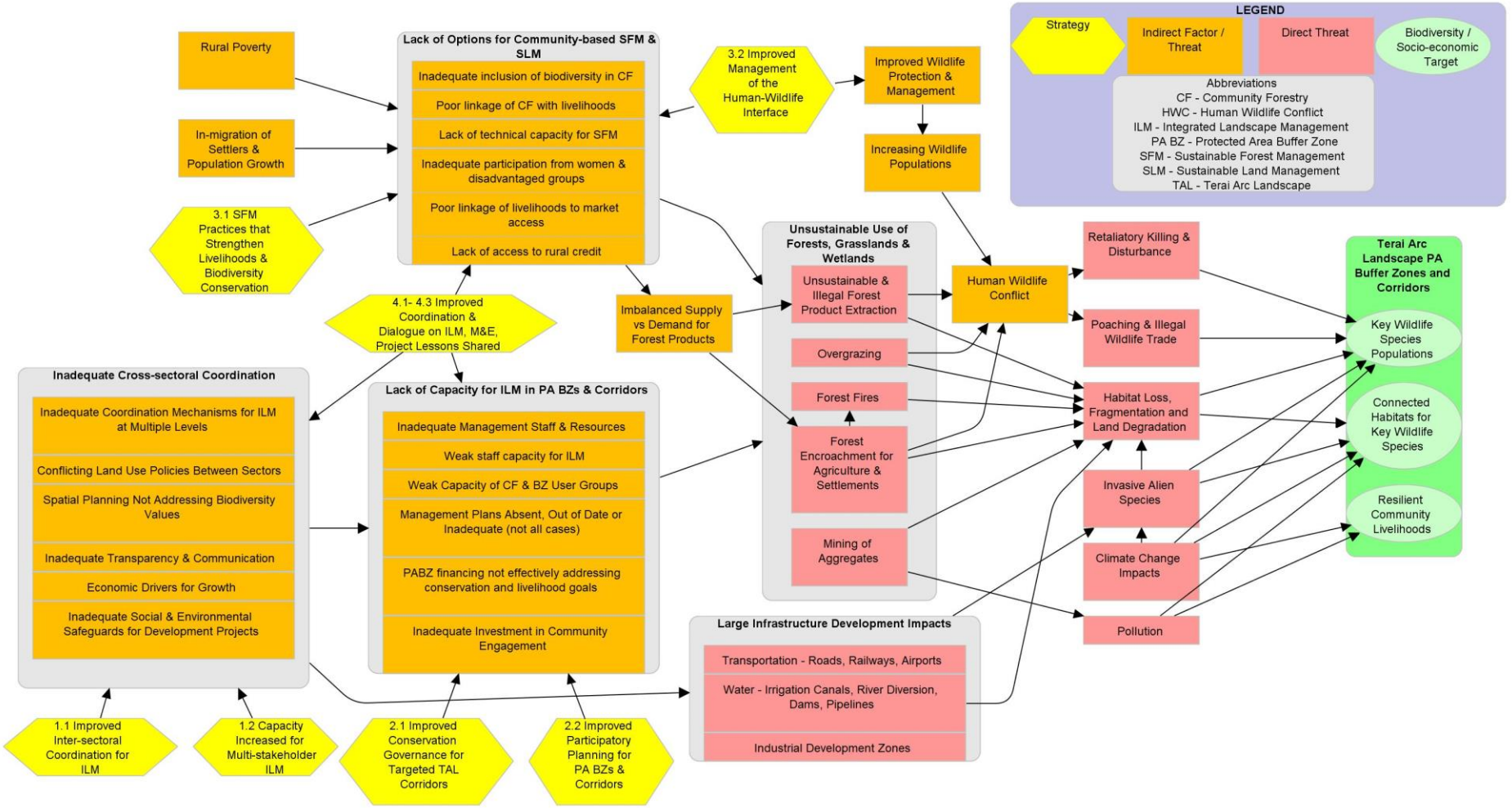
[32] Gentle, P., Thwaites, R., Race, D., Alexander, K. & Maraseni, T. (2018) Household and community responses to impacts of climate change in the rural hills of Nepal. Climatic Change, 1–16. Springer.

[33] Dugar, S., MacClune, K., Venkateswaran, K., Yadav, S. & Szoenyi, M. (2015) The 2014 Karnali River Floods in Western Nepal: Making Community Based Early Warning Systems Work When Data Is Lacking. In American Geophysical Union, Fall Meeting 2015 p. . American Geophysical Union; National Planning Commission (2017) Nepal Flood 2017: Post Flood Recovery Needs Assessment. Kathmadu, Nepal.

[34] Post-flood scenario shows wildlife badly hit in Chitwan National Park. The Himalayan Times, September 13, 2017

[35] Thapa, G.J., E. Wikramanayake, and J. Forrest. (2015). Climate-change Impacts on the Biodiversity of the Terai Arc Landscape and the Chitwan-Annapurna Landscape. Hariyo Ban, WWF Nepal, Kathmandu, Nepal.

Figure 1-3. Conceptual model for the project



1.3 Barriers

Given the globally significant forest, biodiversity and land conservation values of the TAL, and the increasing threats noted above, a long-term strategy for conservation of the landscape is key, and must take into account a number of barriers to conservation. The major barriers to integrated landscape management in the TAL include: 1) Inadequate cross-sectoral coordination to enable integrated landscape planning and management, from the national to the local level; 2) Lack of capacity for integrated forest, species and land management in protected areas, buffer zones and corridors; 3) Lack of options for community-based sustainable forest and land management in TAL; and 4) Inadequate sharing of knowledge on sustainable forest resource management and resilient livelihood options to inform integrated landscape management. These barriers are summarized in **Table 1-5** and elaborated in the text below.

Table 1-5. Summary of barriers to be addressed by the project strategies.

Component	Outcome	Barrier
1. National capacity and enabling environment for cross-sectoral coordination to promote forest and landscape conservation	Outcome 1.1: Improved inter-sectoral coordination from Federal, State to Local level for integrated forest and landscape management to support the 2015-2025 TAL Strategy	1.1 Lack of cross-sectoral coordination against a backdrop of unclear roles, responsibilities and relationships of different layers of governments under the new administrative restructuring including changes in the structure of ministries and other agencies; inadequate transparency; inadequate communication between departments, vertically, and across stakeholders; ambiguities in institutional arrangements; and insufficient representation of stakeholders from different sectors in cross-sectoral coordination committees.
	Outcome 1.2: Capacity increased for multi-stakeholder and cross-sector landscape and forest planning and management	1.2 Lack of understanding among multiple stakeholders regarding the requirements for integrated landscape management, including the valuation and management of biodiversity and ecosystem services and their reflection in spatial planning; conflicting land use policies between sectors; lack of local level capacity for coordinating forest landscape planning and management; lack of capacity for applying social and environmental safeguards to economic development and for implementing environmental management regulations including Environmental Impact Assessment (EIA).
2. Integrated Planning for Protected Area Buffer Zones and Critical Corridors in the Terai Arc Landscape	Outcome 2.1: Improved corridor planning for TAL corridors (Brahmadev, Karnali, and Kamdi)	2.1 Lack of coordination and agreement between stakeholders regarding corridor management - mainly forest user groups, District Forest Offices, FECOFUN, Municipal and state governments. Weak governance arrangements and operational capacity of Protection Forest Councils. Inadequate or out of date management plans for buffer zones and corridors. Inadequate investment and community engagement for corridors affected by multiple threats.

Component	Outcome	Barrier
	Outcome 2.2: Improved participative planning for sustainable management of Banke-Bardia complex	2.2 Under-staffing, inadequate equipment and inadequate technical capacity of DFOs and PAs to manage PAs, buffer zones, corridors, wildlife and habitats effectively. Forest users have inadequate skills for sustainable forest management, biodiversity conservation and management of financial resources.
3. Forest and wildlife management for improved conservation of targeted protected area buffer zones and corridors in the Terai Arc Landscape	Outcome 3.1: Sustainable forest management practices that strengthen livelihoods and biodiversity conservation	3.1 Inadequate attention to management of biodiversity in community forests; poor linkage of community forestry with livelihoods; inadequate participation of women and disadvantaged social groups; and lack of technical capacity for sustainable forest management. Lack of incentives and weak cooperation among relevant agencies for conservation of agrobiodiversity. Lack of incentives for private landholders to sustainably manage and conserve their land.
	Outcome 3.2: Improved management of human-wildlife conflict	3.2 Inadequate systems, institutional capacity and resources for human-wildlife conflict prevention, management and response. Existing HWC response measures focus more on compensatory measures for this widespread problem, which is intensifying with increasing population pressure in forested areas, encroachment into wildlife habitats and routes, and increasing wildlife populations in some areas. This threatens to undermine local support for conservation efforts.
	Outcome 3.3: Enhanced capacities of government and community in curbing wildlife crime	3.1 Lack of resources, training and incentives to participate in wildlife crime prevention and management, which results in on-going wildlife poaching. Such loss of wildlife to poaching is at cross-purposes with the efforts to restore wildlife habitat and connectivity.
4. Knowledge Management and M&E	Outcome 4.1: Improved coordination and dialogue on landscape management from the local to national level	4.1 Unclear rights and responsibilities of different layers of government under the new administrative structure poses challenges for coordination and dialogue (see 1.1 above). Mechanisms for vertical information sharing between different levels of organization are weak.
	Outcome 4.2: Project monitoring system operates, systematically provides information on progress, and informs adaptive management to ensure results	4.2 Adequate project management capacity is required at all levels, including monitoring and evaluation for results based management, and engagement of stakeholders in the project management process.
	Outcome 4.3: Project lessons shared	4.3 Knowledge management mechanisms need to be strengthened, including the wide range of stakeholders at all levels associated with integrated landscape management in the TAL in

Component	Outcome	Barrier
		order to share, replicate and upscale project experiences and learning

Inadequate cross-sectoral coordination – the administrative restructuring of the government, new roles, responsibilities and relationships among different units of government at all levels are still being established (See **Appendix 13** for further information). The continued existence of inter-sectoral coordination mechanisms is being reviewed. Significant changes in the structure of certain ministries – for example the merger of the Ministry of Forests and the Ministry of Environment into a single Ministry of Forests and Environment, as well as the component departments and divisions are part of this major restructuring. This restructuring has added an additional powerful stakeholder level in the form of the "State government[36]", while the Local government has received more authority, power and responsibilities to manage natural resources and biodiversity. The State government is responsible for management of national forest and water resources and ecological security within each state, while local level government is responsible for conservation of watersheds, wetlands and wildlife, alternative energy, farming and livestock, rural roads, irrigation and local development projects, and community-based forest user groups. There is some confusion as to who should be responsible for forest user groups, which spread over more than one municipality's geographical area. As the new policies and legal provisions are under development, no strong linkage among the three levels of government has been firmly established. The restructuring exercise provides both challenges (given its continuing establishment), as well as opportunities for the creation of new inter-sectoral coordination mechanisms among the new structures and levels of government.

The forest and biodiversity sector has the largest number of stakeholders in Nepal, because of its close linkage with agriculture, livelihoods of people and enterprises at local levels. Forest is largely considered as land pool for development activities. There are several social, economic, environmental and political interest groups, each of whom want to manage biodiversity from their own perspective. Forestry sector authorities are seeking support from politically elected bodies, of all levels, to evacuate encroachment areas, minimize the loss of forest area to infrastructure development, and to mitigate the impacts of infrastructure on wildlife. However, development sector authorities see economic growth as their main agenda and generally propose the forested land as the pool for development projects. In addition, political commitment for conservation is determined by virtue of the people in and around the forested areas, as they largely are associated being the voters of one or other parties. Officials settlement scheme are also designed by similar motives and they largely happen in and around the forest areas. Therefore, such conflicting interests make difficult to reconcile and coordinate among stakeholders. There is also a need for strengthened coordination between the various programmes, projects and initiatives in the TAL in order to strengthen synergies, share experiences and lessons learned and to seek ways to upscale them. This includes the need to mainstream climate change mitigation and adaptation measures into the plans and programs of various sectors, which is currently weak. The Planning, Monitoring and Coordination Division of the new MoFE, and the TAL Working Group both offer scope for establishing such improved coordination. While coordination with authorities in India on transboundary conservation issues is taking place at various levels led by MoFE, and with regular informal meetings taking place at local level, there remains a need to strengthen such coordination on environmental crime information sharing and enforcement in particular.

[36] Also known as "State government"

Finally, the application of environmental management regulations to infrastructure development is a major area of weakness. Nepal has a relatively comprehensive set of biodiversity, forest and land management related policies and strategies. However, implementation of the policies, strategies and legislation has been lacking and there is poor integration and harmonization of various environmental laws and policies[37]. The *TAL Strategy and Action Plan 2015-2025* recognizes that there has been poor coordination of plans and programs of different sectoral agencies. A number of large infrastructure developments exist in the TAL, and are causing impacts such as forest loss and prevention of species movement, as described in the threats section above. These infrastructure developments could have taken account of environmentally sensitive areas in route planning, and incorporated environmentally sensitive designs, such as wildlife crossings, to reduce their impacts and make them more compatible with biodiversity policy objectives. Several new, large infrastructure developments are being planned for the TAL, including a major highway, as well as ongoing development of smaller roads. With all of these infrastructure plans, there has not yet been coordination with the conservation and environment sector to assess potential impacts and develop appropriate mitigation measures. Compliance with environmental regulations is key, and the execution of sound Environmental Impact Assessments is essential to address conservation and social concerns in the early stages of planning (typically EIA studies cost less than 1% of the development project). However, to date, there has been weak and delayed communication among infrastructure development agencies, conservation agencies, and the environmental compliance agencies; and low priority in allocating resources for mitigation measures for land uses that may affect conservation and livelihood goals. The *TAL Strategy and Action Plan 2015-2025* identifies a number of key issues that need to be addressed to solve lack of cross-sectoral coordination: inadequate transparency; inadequate communication between departments, between levels of government and across stakeholders; ambiguities in institutional arrangements. The *TAL Strategy and Action Plan 2015-2025* recommended that: "a coordination committee to represent sectoral ministries should be set up under the chair of the Secretary of the Ministry of Forests and Soil Conservation (*sic* – now MoFE); the Landscape Support Unit (LSU) under MoFSC should be strengthened to assess land use allocations and changes and to coordinate donor investments in TAL (it is no longer functional now); and inter-sectoral coordination and collaboration should be built to avoid planning and designing infrastructure that has adverse impacts on landscape level conservation and to promote conservation friendly infrastructure". These recommendations need to be revisited in the light of the recent restructuring of the government. In addition, multi-stakeholder engagement in ILM through appropriate consultative bodies (involving civil society as well as government agencies) is required in order to achieve a unified and effective approach towards landscape management. The stakeholder forums envisaged under this project (Component 4) could help to address this need.

Lack of capacity for integrated forest, species and land management in protected areas, buffer zones and corridors

The Protected Area sub-sector has made substantial progress in achieving forest and wildlife conservation in Nepal. The first protected area was established in 1973, and since then the network has grown to cover more than 23% of Nepal's total land area. Local communities have been linked to benefits from protected areas through the establishment and joint management of PA buffer zones. However, barriers to comprehensive protected area system and species management remain – including effective governance of buffer zones and corridors connecting the PAs with wider landscapes. There are several issues related to the capacity of government agencies and local communities to manage PAs, buffer zones and corridors.

[37] NBSAP, 2014

The optimal national staff capacity for the DNPWC has been estimated to be 2000 staff, however, the Department is currently staffed at half that number. This is apparent at the local level (see the staffing information in the PA BZ and Corridor profiles in **Appendix 1**) - in most of the PAs, the District Forest Offices and their field offices are not fully staffed. This adversely impacts their provision of technical support to forest user groups, the regularity of monitoring and patrolling, and the speed of their response to human-wildlife conflict incidents. The prevalence of threats related to weak law enforcement and HWC reflect this limited capacity.

Secondly, the majority of available staff are not fully trained. The recently advancing practice of sustainable forest management requires in-depth knowledge on silviculture and statistics, as well as physical work. Many forestry staff lack the experience and skills for working in such a professional environment. For instance, protection forests and corridors are managed by the District Forest Offices. Since the core zones of protection forests and corridors are mainly managed as wildlife corridors, the District Forest Office staff lack the necessary training and experience for managing these areas as wildlife habitat. In the context of PA management, most of the staff are oriented to carry out habitat management as grassland management and water source protection with a focus on the needs of charismatic megafauna such as tiger and rhino in line with PA management plans. The capacity development sections of these management plans provide guidance on additional needs for staff training.

A third issue is that the field offices are not fully equipped, particularly in the case of the field offices that support the management of the corridors. While the traditional role of the District Forest Offices was mainly to manage forest resources, now as corridor managers they also have to respond to human-wildlife conflict incidents. Sometimes, these incidents require a quick response but due to lack of vehicles this is not happening.

Forest users are also lacking adequate skills for forest management. Differences in approach between scientific versus more holistic sustainable forest management have created some confusion for forest users[38] [39]. In addition, forest users also have issues regarding fund mobilization as many user groups are not able to effectively utilize the funds generated from selling forest products. This is mainly due to inadequate capacity to mobilize funds, and the forest operational plans do not provide a clear roadmap for the utilization of funds. In addition, there is still confusion in many protection forests about how to manage the core zones of the corridors.

Seven habitat corridors, linking protected areas, have been identified in the *TAL Strategy and Action Plan 2015-2025.* Under the Forest Act 1993, The Ministry of Forest and Soil Conservation designated four of these seven corridors as Protection Forest, during and just after the UNDP-GEF *Western Terai Landscape Conservation Project* (WTLCP) completed in 2013. Three corridors – Kamdi, Karnali and Brahmadev – have not been designated as Protection Forest to date due to lack of resources. These three corridors have individual Community Forest management plans but lack Corridor-level strategic

[38] Federation of Community Forest User Groups Nepal (FECOFUN) opposes a scientific forest management approach as they claimed that this approach focuses on only timber harvesting, which does not consider biodiversity conservation. Instead, they have demanded to initiate a more holistic sustainable forest management approach.

[39] NFA 2011. Consolidating multi-stakeholder process in the forestry policy decision: Scientific forest management opportunities and challenges. A Multi-stakeholder dialogue on forest policy issues 19th July 2011. Nepal Forester's Association (NFA).

plans or management plans and have inadequate staff and poor funding in comparison with the four Protection Forest corridors. An institutional mechanism has been recently established for Protection Forests – the Protected Forest Council, which has a key role to support planning, implementation and monitoring of Protected Forest Management Plans. Protected Forest Councils will consist of the Coordinator from the CFs, and executed by DFO, Chief of the Sector Forest Office as Member Secretary, and members from the District Development Committee, FECOFUN, and Village Development Committees [now Municipalities and Rural Municipalities]. However, the Council structure is a new and emerging institution, lacking an agreed physical location, governance arrangement and capacity to function effectively. There are also differences in opinion between stakeholders – for instance, in Khata corridor, the District FO wants to establish a Protection Forest Council, in which District FO staff will be the member-secretary, but the forest users do not accept this institution, since the users consider that there would be interference of government in their affairs.
Management plans for buffer zones and corridors are of key importance, as they define the regulation and enforcement of activities in these forests and are crucial for conservation interventions. Across the TAL, not all buffer zones and corridors have up to date management plans. The *TAL Strategy and Action Plan 2015-2025* recognizes, as a lesson from the first ten years of TAL conservation, that more investment and greater efforts at effective community engagement is required for corridors that are affected by encroachment, over-extraction of resources, and over-grazing of livestock.

At the CFUG level, the government has developed an approach of sustainable forest management for CFUGs outside the protected area buffer zones (see Section 1.6 and Appendix 13 for the national policy, legal and institutional framework for forest management). Currently, these CFUGs follow their existing forest operational plans but do not follow the new approach involving sustainable forest management. Therefore, the project needs to support the revision of CFUG forest operational plans based on this new SFM approach. Overall, the lack of updated plans and poor implementation of existing management plans of each working unit is a serious barrier to the prevention of threats such as encroachment, poaching, unsustainable harvesting of forest resources, forest fires and uncontrolled grazing.

Lack of options for community-based sustainable forest and land management in TAL
Outside the protected area core zones, a key contributor to forest conservation in Nepal is community based forest management through community forestry, leasehold forestry, and collaborative forestry, across 30% of the national forest lands. Nepal has gained an international reputation for its successful program on community forestry, which started in the wake of the Himalayan crisis in the late 1960s. Over 22,200 Community Forest User Groups are empowered to manage the small patches of forest in Nepal, totaling 2.24 million hectares[40]. However, the NBSAP (2014-2020) identifies continuous loss and degradation of Terai forests due to inadequate attention to management of biodiversity in community forests. Further, there has been poor linkage of community forestry with livelihoods, lack of participation from women and disadvantaged social groups, and lack of technical capacity for forest management. Lack of incentives for conservation of agrobiodiversity and weak cooperation among relevant agencies are gaps in achieving agrobiodiversity conservation. There is also a lack of incentives, for example through subsidies, for private landholders to sustainably manage and conserve their land. Overall, a heavy reliance on the forests and agricultural land in the buffer zones and corridors persists, as communities need wood for cooking stoves, land for subsistence agriculture, and forest and grassland areas for livestock grazing. The *TAL Strategy and Action Plan 2015-2025* states that a key lesson from the first phase of TAL conservation is that when local stakeholders, through community-

[40] Source: Department of Forest and Soil Conservation, 2018. CFUG Database

based organizations, took the lead in planning and implementing activities, there was better ownership of programs, strengthened capacity of community organizations, and effective uptake of initiatives such as alternative energy to reduce firewood consumption.

The devastating earthquake that occurred in April 2015 presents an additional layer of complexity for conservation in Nepal. While the earthquake did not directly impact the proposed project area or wildlife habitat in the Terai, it did disrupt the management and enforcement regime of national parks and wildlife reserves. The earthquake has also contributed to internal migration from the hills and mountains to resource rich lowland areas in TAL (see root causes above), leading to an increase in demand for natural resources, particularly forest products such as timber for rebuilding. This additional dependence on natural resources and forests in critical ecological areas and wildlife habitat is not well regulated, making this a key moment in time to secure, manage and protect the TAL's forests, corridors, and buffer zones to sustain wildlife populations and people's livelihoods.

There is no real alternative to the sustainable use of natural forests in order to provide locally important forest products for communities living in the TAL. This has resulted in accumulated pressure on forest resources, and as a consequence, the quality of the forest stock is being degraded. The promotion of forest planting on private and public lands may help to reduce such pressure on forest resources. In addition, there are many abandoned agricultural lands along river banks, which can be reforested. Providing incentives for agro-forestry may help to enhance agro-biodiversity and reduce the pressure on PAs, buffer zones and corridors. In addition, improved forest management would supply more forest products without compromising its growing stock.

A key issue for integrated landscape management is the increasing level of human-wildlife conflict due to increasing human pressure on TAL forests including encroachment into important wildlife habitats (see root causes above), coupled with increasing wildlife populations due to targeted conservation efforts. While the dynamics of habitat management and species responses are complex and often very specific (see threats above), existing HWC response measures barely control the problem, which threatens to undermine local support for conservation efforts.

Inadequate sharing of knowledge on sustainable forest resource management and resilient livelihood options to inform integrated landscape management

While there is significant expertise and experience in Nepal related to technical forestry, community-based natural resource management, and resilient livelihood development (through numerous aid projects and government programmes), the sharing of such knowledge to support integrated landscape management in the TAL is constrained by the limited horizontal and vertical communication mechanisms available. This now has the added challenge of the restructured government to address, including increased authority to local government for environmental governance. Sharing the experiences and lessons learned through this project and similar initiatives (e.g. Hariyo Ban, TAL programme, WB Forest Investment Program) will be essential in order to identify the most effective approaches and best practices in order to upscale them across the TAL. Such approaches also have potential to inform other landscape conservation efforts in Nepal.

1.4 Baseline Analysis and Gaps

Baseline investments related to the project intervention are described in the following text according to thematic areas corresponding to the project scope, and summarized in **Table 1-6**. See also the

profiles for individual corridors and PA buffer zones for the baseline projects related to each area (**Appendix 1**).

Landscape approach for integrated forest, wildlife and land conservation: The Government of Nepal has demonstrated a commitment to the landscape approach to conservation planning and management. The GoN signed on to the landscape approach in 2000 under a Ministerial Decision. Three landscapes have been identified for Nepal and the transboundary Terai Arc Landscape (TAL) was declared a priority conservation landscape by the Government of Nepal in 2001. The first TAL Strategy covered the years 2004 to 2014 and achieved policy commitments for the landscape conservation approach, declaration of Protection Forest in some of the identified corridors, expansion and strengthening of the protected area network, and an increase in community awareness and capacity with institutional mechanisms. The *TAL Strategy and Action Plan 2015-2025* was released in late 2015 by the Ministry of Forests and Soil Conservation, and includes an expansion of the northern TAL boundary to include the north-facing slopes of the Churia, adding an area of 1,511 km^2 to the TAL. TAL-Nepal covers 24,710 km^2 across 18 districts. The TAL Strategy promotes a landscape level approach to conserve key species, sustain environmental flows, and maintain ecosystem services to support people and development in the Terai and Churia region. However, planning and management for conservation of landscapes in Nepal sits squarely with the Ministry of Forests and Environment, and a gap remains in terms of cross-sectoral coordination to deal with issues of multiple and often conflicting land uses. MoFSC (at that time) recognized this gap, and proposed in their TAL Strategy and Action Plan 2015-2015 a number of mechanisms to improve coordination, from district to national level, and through this project, MoFE will implement those mechanisms that remain viable under the new government administrative structure (as of 2018) and develop new mechanisms in response to changes in governance at different levels of organization.

The TAL Programme (GoN / WWF) has been supporting the implementation of the TAL Strategy. It was conceived as a system of corridors and protected areas for landscape-scale conservation of tigers, rhinos and elephants. In order to attain this goal of connecting the core areas, the TAL program focuses on restoring the corridors and bottlenecks between important protected areas of Nepal and India using the primary strategy of community forestry. Currently, the Corridors and Bottlenecks Restoration Project (CBRP) and Protected Area and Buffer zone (PABZ) projects are being implemented under this program (see Section 1.5 below). The Hariyo Ban Program aims to increase ecological and community resilience in the Chitwan-Annapurna Landscape (CHAL) and the TAL and to improve their conservation and management, reducing climate change vulnerability. Building on Phase I results (5 years, USD 30 million grant from USAID), it works on two interwoven core components – biodiversity conservation including livelihoods and climate change adaptation – with governance and gender equality and social inclusion (GESI) being important cross-cutting themes. This five-year program (July 2016-July 2021) is supported by a grant of USD 18 million from USAID.

Cross-sectoral and federal to state to local level coordination for conservation: Under the new government structure, the Planning, Monitoring and Coordination Division of MoFE will be the main coordination body at Federal level, with the DoFSC and DNPWC included in coordination meetings. At State level, the Ministry of Industry, Tourism, Forest and Environment and its State Forest Directorate are involved in the planning process, while coordination with Municipalities at local government level will be kept intact for conserving Corridors and PA Buffer zones.

A National Biodiversity Conservation Committee (NBCC) has been established as the highest level coordination mechanism for landscape conservation in Nepal. It is a 27-member body chaired by the

Minister of Forests and Environment, with representation from a further seven Ministries as well as academics, private sector, and NGOs. The NBCC is mandated to oversee and provide policy directives at the landscape level and meets on an as-needed basis, and has a number of sub-committees on key topics. With such cross-sectoral convening power, the NBCC could play a stronger role by initiating coordination and collaboration on high level issues. However the NBSAP v2 notes that it has not been effective and a proposed National Trust Fund for Biodiversity, which was supposed to be the main source of funding for the NBCC and National Biodiversity Unit, could not be established. A Landscape Support Unit (LSU) existed under MoFSC to lead the formulation of projects and programs for landscapes in Nepal, but is no longer functional. The LSU was responsible for information collection and maintenance of spatial data, including collection and collation of spatial data from other sectors in the landscapes. A Terai Arc Landscape Working Group (TALWG) currently operates under MoFE as a coordination mechanism for DNPWC and DoF. The TALWG meets regularly and convenes with key conservation NGOs, however, there is no multi-stakeholder or cross-sectoral coordination taking place through the TALWG or any other group in planning and management for this priority landscape, and it has been proposed to expand the TALWG to include other government and non-government TAL partners and to increase coordination of projects implemented in the TAL.

MoFSC (now MoFE) proposed roll out of the District Forestry Sector Coordination Committee (DFSCC) mechanism that was piloted in the UNDP-GEF WTLC Project. However, the role and authority of the District Development Committees (DDC) has been substantially reduced to monitoring of development activities as envisioned in the Local Government Operation Act, 2017. In the TAL region, Division Forest Offices (DFO)[41] have been established as per government decision for Kailali and Pahalmanpur DFO in Kailali district, Surkhet and Bheri DFO in Surkhet district, Dang and Deokhuri DFO in Dang district, Kapilbastu and Gautambudhha DFOs in Kapilbastu district, Nawalparasi DFO and Nawalparasi DFO (east of Susta), Makawanpur DFO and Rapti DFO in Makawanpur district. Hence, the number of DFSCCs will be increased, while the role of the DFSCCs will be replaced by DCCs as per LGOA. Further, the authority of the State governments in governance of National Forests and of the Federal government regarding Protected Area Buffer Zones will be elaborated in the near future.

Overall, the multiple levels of coordination bodies create a baseline for coordination of ILM for the TAL that can be strengthened and expanded upon to include broader inter-sectoral and stakeholder inclusion.

Protected Area Buffer Zone and Corridor Planning and Management: In Nepal, protected areas form the core habitat for wildlife populations, and are the stronghold for forest protection. The Government of Nepal has established a national network of 20 protected areas since 1973, consisting of ten national parks, three wildlife reserves, six conservation areas and a hunting reserve. The DNPWC in the MoFE currently manages the PA System out of Kathmandu; and protected areas are managed by site-based headquarters staffed by federal government. All protected areas in the TAL have up-to-date five-year management plans. DNPWC has a total annual budget of around USD $6.3 million (for operations and salaries, DNPWC 2014/15 Annual Report). The investment to date in protected areas and buffer zones by the Government of Nepal, local communities, and international conservation partners is evident in the recent 94% increase in tiger population bringing the number to 235 individuals from 2009-2018, and 21% increase in rhino population to 645 individuals between 2011-2015. Nepal also celebrated 365 days of zero poaching in April 2018, the fifth time this has been

[41] Note – under the new government structure, there will be no District Forest Offices. One or two Division Forest Offices will cover each District, with Sub-Division Forest Offices under these Divisions.

accomplished since 2011. DNPWC currently has 1,000 staff, with an additional 900 staff planned over the next two years, already approved by the public service commission, to work as game scouts. This provides a strong baseline of government staff during the project period, however, there will be a need for training support. Buffer zones of forest and mixed use land are designated around protected areas, managed by the Department of Forests (DoF, now DoFSC under MoFE) and also by community-forest user groups (CFUG), facilitated by forestry sector staff at District and (now) Divisional levels. The Department of Forests had an approximate annual budget of USD $7.2 million (for operations and salaries, DoF 2014/15 Annual Progress Report) to fund planning and management of national forests outside of the protected areas.

There is a strong baseline for protected area management in TAL. DNPWC has a total annual budget of around US$3.8 million per year for the management of the six protected areas in TAL. The government expenditure, along with donor funding, will implement in the protected areas tiger conservation, comprehensive roll out of SMART, law enforcement by the army, tiger and rhino monitoring, rhino conservation and translocations during the proposed project period. Leonardo DiCaprio Foundation (LDF) funding, tentative through to 2019, will improve protected area infrastructure in key tiger habitat. IUCN/KfW funding for the *Integrated Tiger Habitat Conservation Program* (ITHCP), for 2016 to end of 2018, will focus on doubling the tiger numbers in two population recovery sites (Tx2 sites), including one in India and Parsa National Park in Nepal. ITHCP will be implemented in eastern TAL by DNPWC, DoF, National Trust for Nature Conservation (NTNC), and WWF Nepal.

The baseline for buffer zone planning and management in the TAL is less substantial than the investment in protected areas, but is still significant. The buffer zone communities receive between 30% and 50% of the revenue generated by the six protected areas, providing a source of sustainable finance for community development and conservation initiatives. The Hariyo Ban Phase II (2017-2021) project (funded by USAID) will contribute to community and ecological climate resilience in community forest throughout TAL and Chitwan-Annapurna Landscape (CHAL) during the project period.

Seven habitat corridors have been identified in the TAL, of which four were designated as Protection Forest during and after the UNDP-GEF WTLCP, managed by DFOs under DoF according to PF Management Plans. The dedicated annual budget amounts to USD $75,000 per Protected Forest. Three corridors - Bramhadev, Karnali and Kamdi - have been identified in the TAL Strategy as critical corridors, but have not yet received Protected Forest status. In the meantime, the Forest Policy 2015 has been approved as a policy document after the Masterplan for the Forestry Sector, 1988. Based on the Forest Policy 2015, these corridors can be managed by following a participatory process of surveys, justification of biodiversity values per the related Guidelines, stakeholder agreement, and a administrative process of proposing and adopting necessary governance mechanisms. To date there have not been resources available within MoFE to undertake this multi-step process for Bramhadev, Karnali and Kamdi corridors in the western TAL. Each Protected Forest has a 'Protected Forest Council' as an institutional mechanism to support implementation and monitoring of Protected Forest Management Plans. Such Councils are yet to become fully functional (for instance, Basanta PF lacks the necessary bye-laws to implement all the necessary provisions for effective PF management). Both the TAL Programme and Hariyo Ban Program (see Section 1.5 below) have been supporting efforts to conserve biodiversity in TAL corridors, including restoration of forest and grassland habitats and river corridor restoration (eg for the Rapti river).

Community-based forest, wildlife, and land management in the landscape: A number of projects in the TAL have developed a baseline of natural resource management implemented through communities and community managed forest areas that have been supported by the District Forest Offices. The buffer zones and the seven critical corridors identified in TAL consist of clusters of community forests (CFs). Community forests in buffer zones are organized within a Buffer Zone Management Council (BZMC) for each protected area. Each BZMC is made up of Buffer Zone User Committees (BZUCs). The BZUC has representation by individual households residing inside the buffer zone. Each BZUC is made up of several sub-groups, the most important for natural resource management being the Buffer Zone Community Forest User Group (BZCFUG) and the Community Based Anti-Poaching Unit (CBAPU). Buffer Zone Management Councils and User Committees are legally recognized as community based organizations (CBOs) and are formally recognized by DNPWC for conservation and sustainable livelihoods interventions, and receive funds from the protected areas for their activities. These community forest organizations support monitoring, habitat management, community-based relief mechanisms, patrolling and sustainable forest management in buffer zones. In the recent government restructuring, for the management of BZCFs it is unclear whether management authority will remain under the DNPWC Act or the Local Government Operations Act[42]. The latter would have implications for significant changes in Buffer Zone governance.

Each community forest in the corridors is managed by a Community Forest User Group (CFUG). Members of CFUGs are the local community holding legal rights to use and manage the forest resources in sustainable manner. CFUGs are community-based organizations (CBOs) and so far relatively effective in managing forest resources. However, there is a capacity gap within these forest-based CBOs in terms of technical capacity to manage natural resources, capacity to conduct high level forest patrolling (such as real-time SMART patrolling for illegal activities in forested areas), governance issues, and overall management capacity. Within the seven TAL corridors there are 673 CFUGs[43]. Community participation and involvement in natural resources management is viewed as a critical aspect of managing a large landscape, and the *TAL Strategy and Action Plan 2015-202*5 promotes enhancing community capacities and further institutionalization of the community forest model. This has been supported on the ground through a range of initiatives including the TAL Programme, Hariyo Ban, NTNC, WWF and ZSL projects.

All CFUGs have forest operational plans, as this is a legal requirement. The CFUGs in buffer zones are more protection oriented as they can use forest products only for their household use (not for commercial use). The government has developed an approach of sustainable forest management for CFUGs outside the protected area buffer zones. Currently, these CFUGs follow their existing forest operational plans but do not follow the new approach involving sustainable forest management. Therefore, the project should provide support to revise/update the CFUG forest operational plans based on this new SFM approach. In Kamdi Corridor, only 11 out of 76 CFUGs have forest operational plans based on the SFM approach, while in Karnali corridor, all 54 CFUGs do not have such updated forest operational plans using the SFM approach. The CFUGs themselves are responsible for preparing and revising their forest operational plans, with technical support from the forest offices. In outline, the process of preparing CF forest Operational Plans is - forest inventory, household survey, discussion with forest users, approval by assembly of forest users, and endorsement by DFO.

[42] This is under review by the Supreme Court at present
[43] Quoted in the PIF

School *Eco-Clubs* play an important role in creating environmental awareness amongst the future generation. With a current network of over 575 Eco-Clubs, WWF Nepal supports various activities in Eco-Clubs in schools as groups of committed students that work collectively for nature and environment focused activities. An Eco-Club helps to promote, monitor and operate the environment activities of the school and involve other students and staff in the programs operated and monitored by the club. This way the entire school community understands the true importance and value of the club and the programs they develop and run. The club is seen to be the driving force behind all environmental and sustainable activities in the school facilitating planning, organizing, promoting and monitoring the programs and events. Along with the influencing status of teachers in the schools, an effective learning for changing environment and ways to conserve nature is created. With this intention, WWF Nepal majorly focuses on educators to communicate the importance of sustained change in the context of addressing the drivers of consumptions patterns, choices and beliefs and attitude towards nature. In summary, the main objectives of an Eco-Club are:

- To create awareness of biodiversity conservation and local environmental issues among school children.
- To create a clean and green consciousness among students through various innovative actions and programs.
- To involve eco club students in open-orientation programs in schools and public areas.

While carrying out the above, school students are also capacitated with leadership and team work skills and qualities.

Law enforcement and anti-poaching: In Nepal, the Directorate of the Nepal Army works in close coordination with protected area authorities. In each PA, Nepal Army staff are deputized for the park security in curbing illegal wildlife and forest crimes. They are strategically stationed in series of guard posts in the core zone and buffer zone of PAs. The Nepal Army staff conduct regular patrols and provide security updates to the Chief Warden of the park. The Central Investigation Bureau (CIB) under the Nepal Police works specifically for wildlife and forest crime control outside PAs. With a large network of stations within the national boundary, CIB is one of the most successful law enforcement agencies operating outside PAs to control illegal wildlife and forest crime. These efforts are enhanced by community-based patrol efforts. In buffer zones of the protected areas, Community Based Anti-Poaching Units (CBAPU) have been established as one of the sub-committees under Buffer Zone User Committees (BZUCs). CBAPUs are moderately well trained and equipped to do patrolling, however they have not been capacitated for real-time SMART patrolling and there is no data integration beyond the district level. In the protection forest corridors, community Protection Forest Councils are undertaking traditional community patrols. They do not have the equipment and training that CBAPUs have, and there is a lack of data capture and integration. A wide range of support has been provided for patrolling, anti-poaching and combatting wildlife crime in Nepal, including through WWF tiger conservation projects (see Section 1.5 below), NTNC and ZSL[44] [45] initiatives.

Human wildlife conflict (HWC): HWC is a major issue in the TAL, with significant damage to crops, loss of livestock, damage to houses and human injuries and loss of life caused by a range of wildlife such as wild boar, monkeys, deer, tiger, leopard and elephant[46]. The issue has been intense at sites such as

[44] See: https://www.zsl.org/conservation/regions/asia/strengthening-community-anti-poaching-and-ecotourism-in-the-western-terai

[45] https://www.zsl.org/conservation/news/roaring-success-as-tiger-population-rises-in-nepal

[46] For example, see Acharya KP, Paudel PK, Neupane PR, Köhl M (2016) Human-Wildlife Conflicts in Nepal: Patterns of Human Fatalities and Injuries Caused by Large Mammals. PLoS ONE 11(9): e0161717. doi:10.1371/journal.pone.0161717

Chitwan NP, where successful tiger conservation has been accompanied by regular human fatalities and injuries as well as livestock losses. Consequently, the government has sought to find solutions including the removal of problem tigers from the wild and to compensate victims. At Chitwan, additional measures included channelling back 50% of the park's annual revenue (e.g., $835,509 in the fiscal year 2013/14) to the local communities for conducting conservation, development, awareness, and income-generating activities; the zoning of the national park and its buffer zone to spatially separate human and tigers; installation of a electric solar fence (180 km) to prevent tigers from entering human settlements and farmlands (especially designed against elephants); the disbursement of scholarship grants to the children of tiger victims (US$ 7,547 during 2011-2014); and the establishment of four livestock health centres in the buffer zone[47]. Past compensation efforts starting in 1998/99 and with a new compensation policy in 2009 have been limited by the availability of adequate government financial resources, as well as problems such as difficulties in verification of claims and long delays in making the payments to victims' families[48]. Compensation is currently governed through the Compensation to Wildlife Victim Policy 2013. Recent efforts have included the development of a human wildlife conflict mitigation strategy for the TAL for WWF (2014) and piloting of the SAFE System approach that has been developed by WWF, tested in Bhutan[49] and is being introduced to Bardia NP at present, with a workshop held in June 2017 providing analysis of the issues at local level and action plans for response measures (including Khata Corridor). Hariyo Ban has supported HWC work including human-elephant conflict assessment[50].

[47] Dhungana, R., Savini, T., Karki, J.B. and Bumrungsri, S. 2016. Mitigating human-tiger conflict: an assessment of compensation payments and tiger removals in Chitwan National Park, Nepal. Tropical Conservation Science Vol. 9 (2): 776-787. Available online: www.tropicalconservationscience.org

[48] Ibid; Saroj Upadhyay. 2013. Challenges of Compensation Schemes for Human-Wildlife Conflict Mitigation. ResearchGate. DOI: 10.13140/2.1.2680.7680. https://www.researchgate.net/publication/265300479_Challenges_of_Compensation_Schemes_for_Human-Wildlife_Conflict_Mitigation

[49] https://www.researchgate.net/profile/Sangay_Dorji4/publication/315383535_Human_Wildlife_Conflict_SAFE_Strategy_Nine_Gewogs_of_Bhutan/links/58cf91d24585157b6db0f2e2/Human-Wildlife-Conflict-SAFE-Strategy-Nine-Gewogs-of-Bhutan.pdf?origin=publication_detail

[50] Babu R. Lamichhane, Naresh Subedi, Chiranjibi P. Pokheral, Maheshwar Dhakal, Krishna P. Acharya, Narendra M.B. Pradhan, James L. David Smith, Sabita Malla, Bishnu S. Thakuri & Charles B. Yackulic (2017): Using interviews and biological sign surveys to infer

seasonal use of forested and agricultural portions of a human-dominated landscape by Asian elephants in Nepal, Ethology Ecology & Evolution, DOI: 10.1080/03949370.2017.1405847
https://www.ntnc.org.np/sites/default/files/publicaations/Lamichhane_etal_2017_Elephant_occupancy%20and%20HEC%20Nepal.pdf

Table 1-6. Summary of baseline activities for the current project

Organization	Activities	Budget (USD)	Duration	Location	Barriers Reduced by Baseline Activities	Outcomes of Baseline Activities
DNPWC	PA management	3.8 million	Annually	TAL	Lack of inter-sectoral and multi-stakeholder coordination to enable landscape planning and management, from the national to local level Lack of protection status, planning and management efforts and resources in the buffer zones and corridors that assist to provide to conservation of biodiversity in protected areas and in the wider landscape	Outcome 1.2 Outcome 2.1 Outcome 2.2 Outcome 3.2 Outcome 3.3
TAL	Protection forest management	300,000	Annually	TAL	Lack of capacity and application of best practices for forest management in TAL.	Outcome 1.2 Outcome 2.2 Outcome 3.1
Presidents Churia Terai Madhesh Conservation Foundation Board	Management of Chure and Terai	27,000	Annually	TAL	Lack of inter-sectoral and multi-stakeholder coordination to enable landscape planning and management, from the national to local level Lack of protection status, planning and management efforts and resources in the buffer zones and corridors that assist to provide to conservation of biodiversity in protected areas and in the wider landscape	Outcome 1.1 Outcome 1.2 Outcome 3.1 Outcome 4.1 Outcome 4.2
NTNC	Human-elephant conflict mitigation	150,550	2017-2019	CNP,BNP, Parsa	Lack of protection status, planning and management efforts and resources in the buffer zones and corridors that assist to provide to conservation of biodiversity in protected areas and in the wider landscape	Outcome 3.2
ZSL	Supporting trans-boundary tiger recovery	952,340	2016-2018	TAL	Lack of inter-sectoral and multi-stakeholder coordination to enable landscape planning and management, from the national to local level;	Outcome 1.2 Outcome 3.1
NTNC	Securing ShNP Grassland and	36,674	2015-2018	Shuklaphanta NP	Lack of protection status, planning and management efforts and resources in the buffer	Outcome 3.1

Organization	Activities	Budget (USD)	Duration	Location	Barriers Reduced by Baseline Activities	Outcomes of Baseline Activities
	wellbeing of local communities				zones and corridors that assist to provide to conservation of biodiversity in protected areas and in the wider landscape	
Hariyo Ban Program	Increase ecological and community resilience	19,709,120	2016-2021	Chitwan – Annapurna Landscape (ChAL) - TAL	Lack of inter-sectoral and multi-stakeholder coordination to enable landscape planning and management, from the national to local level	Outcome 1.2 Outcome 2.2
Alternative Energy Promotion Center (AEPC)	Developing and promoting renewable / alternative energy technologies	c.24 million annually[51]	Ongoing	Nepal, including TAL	Forest degradation resulting from unsustainable collection of fuelwood, and rural poverty exacerbated by lack of energy sources	Outcome 3.1

[51] During fiscal year 2012-13, a budget of NPR 2,466 million was allocated to the AEPC, which includes NPR 645 million from the government (26 percent) and NPR 1821 million from the development partners (74 percent). See: https://www.aepc.gov.np/uploads/docs/2018-06-19_Annual%20Report%20FY%202069-070%20(2012-2013).pdf

1.5 Coordination (GEF & non-GEF Interventions)

There have been a number of past GEF interventions on landscape sustainability in Nepal, the lessons from which are summarized in the PIF Annex 2. In addition, one GEF project is ongoing (with IUCN Nepal), and one (with UNDP) is in the project development stage. These are summarized in **Table 1-7** below.

UNDP is developing a GEF full-sized project on Developing Climate Resilient Livelihoods in Vulnerable Watersheds. IUCN Nepal is implementing a project to strengthen capacity of the Nagoya Protocol in Nepal. Though, the project site is not in TAL area, these interventions can exchange ideas particularly to share learnings about access and benefit sharing mechanisms which could help to improve governance in the TAL area. As both of these projects and the current project are executed through MoFE, an appropriate coordination mechanism can be developed within MoFE. The ongoing UNDP/GEF Renewable Energy for Rural Livelihood (RERL) project also offers some opportunities for synergy on alternative energy (in relation to reducing fuelwood demand).

The proposed WWF/GEF 6 Integrated Landscape Management Project is built on lessons from past GEF projects in TAL Nepal[52]. The UNDP/GEF Landscape Level Biodiversity Conservation in Nepal's Western Terai Complex project (2005-2012) (WTLCP) initiated the implementation of a landscape level program. It successfully piloted the District Forest Sector Coordination Committees (DFSCC), which have been scaled up at national level. Considering the current government administrative restructuring, it will be necessary to review and support the program and budgeting role of Municipal Forestry Sector Coordination Committees (MFSCC) and the monitoring and coordination role of the DCCs[53]. Similarly, WTLCP established the first three protection forests, which have now become a national program. In TAL, the management of the three currently unprotected corridors should be strengthened through a process of assessments and consultations, and by networking all the CFUGs as per the Forest Policy 2015.

The WWF/GEF-5 project entitled Sustainable Land Management in the Churia Range, Nepal (2013-2017) developed integrated landscape management from the perspective of land degradation. The project was successful in developing localized land-use policies and plans for sustainable land management, enhancing climate resiliency of small-holders and reducing the risk of erosion. However, this project was not effective in incorporating biodiversity conservation and sustainable forest management into degraded land management, which the current project seeks to address.

The UNDP/GEF Conservation and Sustainable Use of Wetlands in Nepal Project (2007-2013) was successful in terms of integrating wetland biodiversity values into the national policy and planning framework. It formed a national level coordination mechanism, revised the National Wetland Policy that envisions to bring together multiple stakeholders and sectors and established a Multi-stakeholder Forum in Ghodaghodi Lake Area for management, as well as documentation of indigenous knowledge on wetlands. These learnings will be helpful for the management of other wetlands in the TAL area.

Table 1-7. Summary of Related GEF projects in Nepal (in preparation, ongoing and completed)

[52] see PIF Annex 2

[53] To be confirmed as the new government structure continues to be rolled out

Title	Focal Area	Agency	Goal	GEF Grant	Status
Developing Climate Resilient Livelihoods in the Vulnerable Watersheds in Nepal (6989)	Climate change	UNDP	To develop climate resilient community livelihoods through watershed management practices	7,000,000	Concept approved
Strengthening Capacities for Implementation of the Nagoya Protocol in Nepal (9352)	Biodiversity	IUCN Nepal	Build capacity of key stakeholders at national, sub-national and local levels to mainstream and implement ABS in Nepal	1,376,147	2017-2019
Renewable Energy for Rural Livelihood (RERL) (4345)	Climate change	UNDP	Removal of barriers to increased utilization of renewable energy resources in rural Nepal in order to support economic, environmental and social development of people in the rural areas and to reduce GHG emissions	3,000,000	2014-2019
Sustainable land management in the Churia Range (5596)	Land degradation	WWF-US	By 2017, to substantially reduce degradation and maintain or improve conditions in agro-pastoral lands and Churia sal and mixed forest areas in strategic project locations throughout the four pilot Churia Range districts in the Eastern TAL	917,431	2013-2017
Catalysing Ecosystem Restoration for Climate Resilient Natural Capital and Rural Livelihoods in Degraded Forests and Rangelands of Nepal (5203)	Climate change	UNEP	Increased capacity of national and local government institutions in Nepal to adapt to climate change by implementing EbA in degraded forests and rangelands in mid-hill and high mountain areas	5,246,475	2015 - ?
Conservation and Sustainable Use of Wetlands (1217)	Biodiversity	UNDP	The overall project goal is to ensure the maintenance and enhancement of wetland biodiversity and environmental goods and services for improved local livelihoods, while the	1,964,895	Closed 2014

			immediate objective is to strengthen national and local capacity in ecosystem management and sustainable uses of wetland BD in Nepal. The project was implemented in two important Ramsar sites: Koshi Tappu Wildlife Reserve in the east and Ghodaghodi Lake Area in the west.		
Landscape Level Biodiversity Conservation in Nepal's Western Terai Complex (1107)	Biodiversity	UNDP	The project was designed to ensure the conservation and sustainable use of biodiversity in the western part of Nepal's Terai Arc Landscape by establishing effective management systems and building capacity for the conservation and sustainable use of the Western Terai landscape complex (WTLC).	3,312,278	Closed 2013
GEF Small Grants Programme	Multi FA	UNDP	Ongoing programme supporting community level environmental action, now in Operational Phase 6 (2015-18). Since 1996, the Nepal SGP has funded 218 local initiatives for conservation, incl. 70 biodiversity projects, 62 climate change mitigation projects, 43 projects to reverse land degradation, 17 capacity building and awareness raising projects, 11 international waters projects and four projects to phase out chemicals.	2,000,000	2015-2018 (Phase 6)

The main non-GEF related initiatives are as follows:

A. **Nepal Emissions Reduction Program (ERP)** - "*People and Forests - A Sustainable Forest Management-Based Emission Reduction Program in the Terai Arc Landscape, Nepal*" (World Bank). The ERP will support programmatic engagement to explore the untapped potential of Nepal's forests for sustainable economic growth, job creation, social stability and addressing

climate change, consistent with GoN forest policy, National REDD+ Strategy (2018), and the 14th Plan. It will include a menu of financial instruments to address barriers and tap opportunities, which include grants for technical assistance; concession finance for investments; and result-based payments for verified emission reductions. A Strategic Country Diagnostic (SCD) forms the basis of the future Country Partnership Framework (CPF) for FY19-22. The SCD includes "Natural Resources" as one of six priorities for the Bank. The Forest Investment Program (FIP - see below) endorsed Nepal's Investment Plan in Dec. 2017 and allocated $24 million for investments and $4.5 million for the Dedicated Grant Mechanism (DGM). The FIP Project will seek blending of FIP resources with IDA resources. The overall budget for the project is estimated at USD 80-100 million. One of the FIP project components (with the loan portion of FIP) will directly support implementation of the Emission Reduction Program. WB will continue its dialogue with Development Partners to explore opportunities for coordinated support to Nepal's forest agenda, including ER Program implementation.

B. **Forest Investment Program (FIP)**- FIP is a funding window of the Climate Investment Fund (CIF) that empowers countries to address the drivers of deforestation and forest degradation both inside and outside the forest sector. Nepal's FIP Implementation plan was approved in December 2017 for further development of the projects and it will be implemented for 8 years. The total budget of FIP is USD 24 million with five identified projects, of which three are related to the TAL area: (i) Sustainable forest management through CBFM, (2) Forest management for a forest-based economy, and (3) Private land forest development. The total expected funding from CIF for these three projects is USD 18 million. The related MDB for FIP is the World Bank. The Ministry of Forest and Environment (MoFE) is the focal ministry for this program. There are major opportunities for synergy in relation to support for CBFM and forestry development on private land in TAL PA buffer zones and corridors in order to address bottlenecks and strengthen incentives for improved forest management and reafforestation that specifically take biodiversity needs into account (a potential gap in FIP).

C. **Dedicated Grant Mechanism (DGM)** – the DGM is also funded by CIF and comes with FIP (World Bank). The DGM aims to enhance the capacity of indigenous people and local communities including women, Dalit, Madhesis and other forest dependent poor to fully engage with the benefits from the investment projects identified in the FIP. The FIP and DGM are mutually supportive of each other and complementary in outcomes. A total of USD 4.5 million is available to implement the plan for DGM. This may help to enhance the environmental and social safeguards of the project. The DGM is highly relevant to the aims of the current GEF project in strengthening the livelihoods of forest dependent poor and enhancing their inclusion in forest management and governance. Coordination on the selection of specific target areas for joint investment (eg for revolving loan schemes, small grants or incentives) would strengthen the socio-economic outcomes of both projects.

D. **Green Climate Fund (GCF)** - a GCF proposal is being developed through FAO entitled "Building a Resilient Churia Region in Nepal". The project aims to enhance the resilience of local communities by restoring and maintaining key ecological functions and introducing climate-resilient sustainable natural resource management approaches in the Churia Region. It ultimately provides benefits to the TAL area, which lies downstream of the Churia region. The project size is 10-50 million USD over 7 years between 2019 and 2025. MoFE is the national executing entity for this project.

E. **President Chure-Terai Madhesh Conservation Development Board (PCTMCFB) -** the Board was established in 2014 by the Government of Nepal. This is a government funded board, which is working in the Siwaliks (Churia) and Terai region linking upstream and downstream. The Board has been working throughout the TAL since its establishment. The total budget of the Board in the TAL districts having PAs and corridors is around 0.70 million USD annually. This covers activities of the District Forest Officers, PAs, District Agriculture Offices, District Livestock Development Officers, and Department of Water Induced Disaster Preparedness.

F. **Zoological Society of London (ZSL)** - ZSL is working for conservation while supporting the livelihoods of local communities to improve their well-being. It supports veterinary clinics; prepares grassland management guidelines; works with conservation partners in tiger, rhino, vulture and pangolin conservation and wildlife monitoring; aims to reduce human-wildlife conflict and poaching, and conducts environmental education programmes. ZSL is working in four primary areas: Chitwan, Bardia, Shuklaphanta and Parsa National Parks.

G. **National Trust for Nature Conservation (NTNC)** - NTNC is an autonomous non-profit organization established by a law of Nepal in 1982. It is working in all the PAs of the TAL and Barandabhar, Khata and Karnali corridors. In the latter two corridors, its work focuses on monitoring of habitats and wildlife. In Barandabhar Protection Forest, it works for habitat restoration, alternative energy, supporting community based anti-poaching units (CBAPU) and livelihood support. In the four National Parks of the TAL (excluding Parsa NP), it has field offices and supports several activities such as habitat management, natural resource management, tourism promotion, community development, health campaigns, species monitoring, and clean energy.

H. **Nepal Climate Change Support Program (NCCSP)/UNDP –** the NCCSP, implemented by the Ministry of Population and Environment (now MoFE) and financed by DFID, aims to help the poorest and most vulnerable communities in Nepal to adapt to the effects of climate change. Phase I of the program ran from 2013-2017 and Phase II is from 2017-2022. In the TAL area it is working in Kailali, Bardia and Banke Districts. It supports implementation of the Local Adaptation Plan for Action (LAPA), which creates jobs, mitigates disaster risks and increases agricultural productivity through improved infrastructure. It has created District, Village and Municipal level Energy and Environment Committees for LAPA and CAPA related activities. Total budget for Phase I was 17.6 million GBP and for Phase II is 22 million GBP.

I. **PAANI-USAID** - Working in three river basins- Karnali, Mahakali and West Rapti – the PAANI program has five strategic approaches including management of capture fisheries; integrated water management; regulation and management of local road construction and maintenance; climate change adaptation; and managing invasive species. The Karnali and Lower Mahakali watersheds are in the TAL area. It is working through local NGOs to improve local capacity and resource management; strengthen policy and planning for integrated water resource management; and fill knowledge gaps. USD 24.9 million of projects under this Program began in April 2016 for five years.

J. **Hariyo Ban Program Phase II** - **USAID** – The main goal of the program is to increase ecological and community resilience in the GoN-identified biodiverse landscapes- Chitwan-Annapurna Landscape (CHAL) and the Terai Arc Landscape (TAL), and to improve their conservation and management, reducing climate change vulnerability. Building on Phase I results (5 years, USD 30 million grant from USAID), it works on two interwoven core components – biodiversity conservation including

livelihoods and climate change adaptation – with governance and gender equality and social inclusion (GESI) being important cross-cutting themes. This five-year program (July 2016-July 2021) is supported by a grant of USD 18 million from USAID. The program finds its inspiration from the popular saying 'Hariyo Ban Nepal Ko Dhan' (Healthy green forests are the wealth of Nepal) which emphasizes the links between people and forests that underpins the program's approach. The program is led by a consortium of four core partner organizations – WWF, CARE, FECOFUN and NTNC – with WWF serving as the managing partner for the program. Hariyo Ban Program Phase II will work in four Hariyo Ban priority complexes in TAL: i) Shuklaphanta NP – Brahmadev Corridor, ii) Bardia NP - Karnali Corridor, iii) Banke NP – Kamdi Corridor; and iv) Chitwan NP – Barandabhar Corridor. Based on threats and climate vulnerabilities it will put its major focus in all or part of eight districts (Dadheldhura, Kanchanpur, Kailali, Bardia, Banke, Dang, Nawalparasi and Chitwan). Hariyo Ban has also supported the development of smart green infrastructure guidelines for infrastructure projects and is working with the Government of Nepal on providing overpasses for Sitka Canal in Kamdi Corridor, and with the GoN and World Bank on wildlife crossings for the Rana Jamara Kularya scheme. There is a need for such approaches to be applied, tested and monitored in other locations with support from the current project in order to mitigate impacts on wildlife in the project target areas.

K. **TAL Programme** – is WWF Nepal's largest landscape level initiative supporting the government's TAL program and involves a large number of partner organisations, donor agencies, stakeholders, community-based organisations and local people. The TAL programme was initiated in 2001 by the Government of Nepal with the collaboration of WWF Nepal and Department of Forests (DoF) and DNPWC of the (then) Ministry of Forests and Soil Conservation. The TAL program is an exemplary model in conservation marking a shift from site-based conservation to a landscape-based approach. TAL was conceived as a system of corridors and protected areas for landscape-scale conservation of tigers, rhinos and elephants. In order to attain this goal of connecting the core areas, the TAL program focuses on restoring the corridors and bottlenecks between important protected areas of Nepal and India using the primary strategy of community forestry. Currently, the Corridors and Bottlenecks Restoration Project (CBRP) and Protected Area and Buffer zone (PABZ) projects are being implemented under this program.

L. **Other WWF Nepal – led projects** – see Table 1-8 below

M. **Alternative Energy Promotion Center (AEPC)** – established under the former Ministry of Environment and Population with the objective of developing and promoting renewable/alternative energy technologies in Nepal, now under the Ministry of Energy, Water Resources and Irrigation (see: https://www.aepc.gov.np/). The Centre works with local governments in introducing alternative energy sources such as solar, biomass, biogas, different levels of hydro-electric installations and wind turbines. These can work with rural development and ILM programmes to reduce the use of fuelwood and enhance local living conditions as part of sustainable development that maintains natural capital.

Table 1-8. WWF Nepal Related Initiatives

Name of the Project	Project Period	Amount	Geographic Area	Aims and Objective
WWF Finland Partnership Programme / MFA	2018-2021	€ 1,810,000	Shuklaphanta Complex with a specific focus on Laljhadi—Mohana Corridor	The project aims to promote governments and people's awareness and competence to improve natural resource governance and climate resilience. It also aims to improve management and conservations of forests in the western TAL to benefit people and biodiversity. Some of the key strategies include improving management of protect forests (PF) in the corridor, improving community based forest management, and generate employment and economic opportunities through green enterprises/jobs to benefit forest dependent communities.
Conserving Tigers in Nepal- WWF UK	FY 18-20	USD 1,839,584	19 priority tiger conservation sites, including Chitwan National Park, Parsa National Park, Bardia National Park, Banke National Park, Shuklaphanta National Park, and their adjoining buffer zones and corridors such as Khata, Kamdi, Laljhadi-Mohana, Basanta, Karnali, Bramhadev and Barandabhar	The overall goal of the project is to secure tiger and its prey in the wild by 2021. The major focus of the project is to curb poaching and eliminate illegal trade and transit routes of wildlife and its parts. The project also supports to assess the status of tiger, prey, and their habitat, along with strengthening the management of park, its buffer zones, and critical habitat beyond protected areas.
Conserving Tigers in Nepal- WWF Singapore/Whiskas	FY 18-20	USD 750,000	19 priority tiger conservation sites, including Chitwan National Park, Parsa National Park, Bardia National Park, Banke National Park, Shuklaphanta National Park, and their adjoining buffer zones and corridors such as Khata, Kamdi, Laljhadi-Mohana,	The overall goal of the project is to secure tiger and its prey in the wild by 2021. The project in particular aims to manage critical habitats to support TX2 population and its prey base, and to manage human-wildlife conflict to sustain conservation stewardship.

Name of the Project	Project Period	Amount	Geographic Area	Aims and Objective
			Basanta, Karnali, Bramhadev and Barandabhar	
Tigers in Bardiya	FY19- 20	€ 200,000	Bardia National Park	This project aims to control wildlife crime in Bardia National Park by introducing/scaling up state of the art technologies to improve surveillance and real-time reporting.
Transcending Boundaries for Tiger Recovery: The Chitwan-Parsa-Valmiki Complex in Nepal and India	2015-2018	1,500,000	Chitwan-Parsa Complex, including Someshwor hill corridor	Specific outcomes of the project are: 1. Mechanism to achieve zero-poaching of tigers in the complex in place by 2019 2. Tiger and prey base habitat restored and managed in core buffer zone and critical corridors 3. Prevent and decrease human-tiger conflict across the complex

The relationship between the above-mentioned initiatives and the current project is summarized in **Table 1-9** below, indicating the current project outcomes they relate to.

Table 1-9. Intersection of related initiatives with project outputs

Related Initiative	Intersections with Components and Outcomes of the Present Project			
	C1	C2	C3	C4
UNDP-GEF CR Livelihoods 6989			3.1	4.1
IUCN-GEF Nagoya (9352)			3.1	4.1
UNDP-GEF RERL (4345)			3.1	4.1
GEF SGP (UNDP)	1.2		3.1	4.1
A: ERP-WB	1.1, 1.2	2.2	3.1	4.1
B: FIP-WB	1.1, 1.2	2.2	3.1	4.1
C: DGM-WB	1.1, 1.2		3.1	4.1
D: GCF			3.1	4.1
E: PCTMCFB	1.1, 1.2	All Outputs	3.1	4.1
F: ZSL	1.2, 1.2	2.1, 2.2	3.2	4.1
G: NTNC	1.2, 1.2	All Outputs	All Outputs	4.1
H: NCCSP-DFID			3.1	4.1
I: PAANI-USAID			3.1	4.1
J: HARIYO BAN PHII - USAID	All outputs	All outputs	All outputs	4.1
K: TAL PROGRAMME - WWF	All outputs	All outputs	All outputs	4.1
L: WWF Nepal projects		All outputs	All outputs	4.1
M: AEPC			3.1.1	4.1

1.6 Situation analysis: Policy, Legal and Institutional Frameworks

The following text provides a summary of the situation analysis for the policy, legal and institutional frameworks. Please refer to **Appendix 13 f**or details, including lists of related national policies, regulations and international environmental agreements (see **Table A 13-2**).

Policy, legal and institutional context

Nepal's forestry sector has been restructuring and has undergone major political, economic and social change in recent years. Correspondingly, the proposed project in the TAL area has to adjust because it has to cover more than one state of the country as well as trans-boundary issues. This part of the desk study explores the situation analysis of policy, legal and institutional frameworks of the forestry sector pertaining to each of the project's components (i.e. with a focus on integrated landscape management; biodiversity conservation in PAs, PA Buffer Zones and corridors; sustainable forest management; and sustainable land management) which may have implications for the planning, implementation and monitoring and evaluation of the project in TAL area.

Integrated landscape management

The first long term policy document on forestry was the Master Plan for the Forestry Sector (MPFS), 1988. A policy and legal reform program was one of the six supportive programs of the MPFS and has proved to be a highly critical component. Despite the positive efforts, there were many policy-related issues and challenges raised during a review of the Plan[54] (see **Boxes A13-1 and A13-2 in Appendix 13**).

The introduction of the landscape level approach to conservation in Nepal in 2001 has become a game changer – it marked a paradigm shift in conservation programming to evolve from a single species and protected area focus to one that brought together connected landscapes, local communities and integrated conservation approaches to benefit people, nature and wildlife. This led to the birth of the far-reaching Terai Arc Landscape (TAL). The first National Biodiversity Strategy (2002) incorporated the landscape level concept of integrated landscape management in the national scale[55] which was further strengthened through the National Biodiversity Strategy and Action Plan (NBSAP) 2014-2020 in Nepal [56].
The National Conservation Strategy was published in 1988 at almost the same time as the Master Plan for the Forestry Sector. In particular, it urged for environmental assessment prior to starting large-scale infrastructure development. The second version of the strategy was prepared by the National Planning Commission and endorsed by the GoN in 2015, entitled 'Nature Conservation National Strategic Framework for Sustainable Development (NCNSFSD)' for the period 2015-2030 AD[57]. The goal of the framework is to contribute towards achieving sustainable development by integrating nature conservation into all development efforts. It is an umbrella framework, which emphasises nature conservation, sustainable use of natural resources and the equitable distribution of their benefits.

[54] MFSC, 2014. Review of Implementation of the Master Plan for the Forestry Sector: Achievements and Lessons: A Synthesis Report, Ministry of Forests and Soil Conservation.
[55] GoN, 2002. National Biodiversity Strategy 2002, Ministry of Forests and Soil Conservation.
[56] GoN, 2014. National Biodiversity Strategy and Action Plan (NBSAP) 2014-2020, MFSC.
[57] GoN, 2015. 'Nature Conservation National Strategic Framework for Sustainable Development (NCNSFSD) 2015-2030 AD, National Planning Commission.

The Forest Policy 2015 is a step forward for managing landscapes through integrated approaches. One of its policies envisions biodiversity conservation through landscape level conservation and management to achieve sustainable development and environmental balance[58]. The policy is being implemented through the working guidelines as mentioned in the Forestry Sector Strategy (2016-2025)[59]. With the implementation of this Strategy, five major outcomes will be achieved, viz: sustainable production and supply of forest products, improvement of biodiversity conservation, watershed and ecosystem services, increased contribution to national economy, inclusive and accountable forestry sector institutions and organizations, and climate resilient society and ecosystem. Moreover, the Strategy has made a commitment towards strengthening the landscape approach[60].

Protected Areas, Buffer Zones, Corridors and Biodiversity Conservation

The Government of Nepal (GoN) is fully committed to managing the country's rich biological diversity as per the national need, and in the spirit of the Convention on Biological Diversity and other relevant multilateral environmental agreements to which Nepal is a Party. The promulgation of the very first National Parks and Wildlife Conservation Act (1973) and National Parks and Wildlife Conservation Regulations (1974) provided the legal space to establish protected areas and the GoN has established a network of 20 protected areas since 1973, consisting of 12 national parks, one wildlife reserve, one hunting reserve and six conservation areas, 13 with buffer zones (see **Fig. 1-4**). In 2017, Shuklaphanta and Parsa Wildlife Reserves were upgraded to National Parks. Additionally, 10 Ramsar sites were declared between 1988 and 2016. The total area of PAs is 34,419.75 km^2, of which national parks, wildlife reserve and hunting reserve cover 9.04 %, conservation areas cover 10.48% and buffer zones cover 3.86 %.

The NBSAP v2 (2014-2020) provides a guiding framework for the management of Nepal's biodiversity. It provides a long-term vision (35 years) and includes specific short-term (up to 2020) strategies and priorities for action. Species action plans for Tiger (2016-2020), Greater One-horned Rhinoceros (2017-2021), Gharial (2018-2022), Pangolin (2018-2022), Elephant (2009-2018), Snow Leopard (2017-2021) and Vulture (2015-2019) help to direct the protection of the threatened fauna of Nepal in line with the NBSAP.

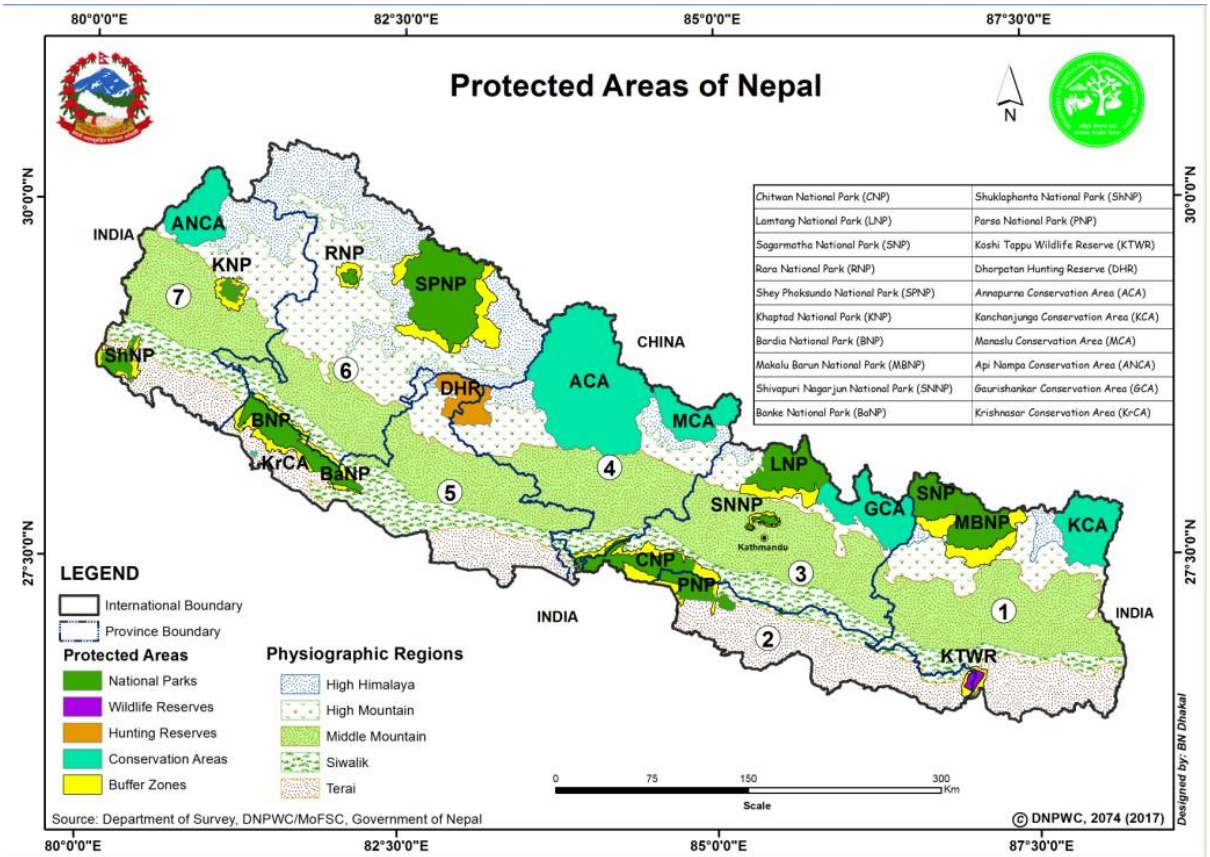
In addition, the Forestry Sector Strategy 2016 has clearly envisioned targets on Ecosystems and Biodiversity (see **Table A13-1** in **Appendix 13**).

[58] GoN, 2015 b. Forest Policy 2015. Ministry of Forests and Soil Conservation.

[59] GoN, 2016. Scientific Forest Management Initiatives in Nepal: MSFP Experiences and Lessons Learned, Multi Stakeholder Forestry Program.

[60] GoN, 2016. Ibid.

Figure 1-4: Map Showing the Protected Areas of Nepal



Source: DNPWC Website, 3 September 2018

Sustainable forest management (SFM)

Forest occupies a total of 5.96 million ha, which is 40.36% of the total area of the country. Other Wooded Land (OWL) covers 0.65 million ha (4.38%). Forest and OWL together represent 44.74% of the total area of the country. A periodic forest inventory is carried out in Nepal which provides forest statistics for the better management of the forests. Forests occupy 40.36% of the total area of the country with a stem volume of 982.33 million m^3 (164.76 m^3/ha)[61]; this is being managed through different regimes based on the various management objectives. For example, protected areas are more focused on biodiversity conservation, while participatory forest management regimes - such as community forests, leasehold forests, and collaborative forests - are focused on supplying forest products and environmental services to improve local livelihoods and development.

The TAL area has a long history of forest management starting in the 1920s, which over the years has culminated in technically sound (for timber production) operational forest management plans (OFMPs) for 19 Terai districts. However, no active silvicultural interventions are practised[62]. This has led to over-

[61] DFRS (2015b) State of Nepal's Forests: Forest Resource Assessment (FRA) Nepal. Kathmandu.

[62]Except in a few small research plots - see Parajuli and Amatya 2001 cited in Bampton JFR, Ebregt A and Banjade MR, 2007. Collaborative Forest Management in Nepal's Terai: Policy, Practice and Contestation, Journal of Forest and Livelihood 6(2) .

mature degraded forests with many deformed trees, inadequate regeneration and stagnation well below potential growth rates.

The revised Forest Policy (2000) argued for and introduced a new forest management modality for 'contiguous large blocks' of productive Terai and Inner Terai national forests, named Collaborative Forest Management (CFM). Community-based forest management (CBFM) has become a major forest management approach in Nepal. CBFM groups operate under various models which have developed in response to different geographical and socio-economic contexts. These groups now manage about 2 million ha or about 34% of Nepal's forest. Almost 20,000 community forest user groups (CFUGs) protect and manage approximately 1.88 million ha of community forest (CF) in all regions of Nepal; twenty-eight Collaborative Forest Management (CFM) groups protect and manage about 70,000 ha of forest in the Terai and about 40,000 ha of forest have been transferred to about 7,000 lease hold forest (LHF) groups mostly in the Middle Hills[63].

CBFM is a longstanding national priority and remains a priority development programme under the 14th National Development Plan, although the pace of handover has been reduced in recent years, partly due to a reduction in externally funded programmes in Nepal's forest sector, but also because in many districts, a large proportion of the accessible forest has already been handed over. Recently, the Forest Act, 1993 has been amended and incorporated the provision for CFM, which opens up opportunities for further strengthening this approach. In the Terai, the handover of forests to various CBFM groups has been limited in recent years due to a lack of clear policy direction and political will, although this has been resolved following Nepal's Forest Policy of 2015 and there is now a backlog of applications by communities awaiting approval for transfer[64]. As per the Forestry Sector Strategy 2016, about 50% of Terai and Inner Terai forests and at least 25% of middle hills and mountain forests will be sustainably/scientifically managed by 2025[65].

Extensive efforts over the past 30 years to decentralise and localise forest management through CBFM approaches have enabled the country to make significant progress in reducing rates of deforestation and forest degradation. Despite this progress significant risks remain and the country has committed to developing an approach to REDD+ with a vision of: optimizing the carbon and non-carbon benefits of forest ecosystems for the prosperity of the people of Nepal. The National REDD+ Strategy of Nepal (NRSN) that was developed over a number of years and sent for approval by cabinet in early 2018 sets out 5 objectives to achieve this vision as well as actions under 12 Policy Areas and 72 strategic actions[66]. These represent Nepal's overarching REDD+ Policies and Measures (PAMs). The actions presented, however, show significant variation between those actions that are directly implementable and those that represent broader policy objectives.

[63] GoN, 2017. Forest Investment Program (FIP), Ministry of Forests and Soil Conservation.
[64] GoN, 2017. Ibid.
[65] GoN, 2016. Scientific Forest Management Initiatives in Nepal: MSFP Experiences and Lessons Learned, Multi Stakeholder Forestry Program.
[66] See Annex 1 of the National REDD+ Strategy of Nepal

Other policies and plans for conserving nature and natural resources

The Compensation to Wildlife Victim Policy 2013 reduces the human wildlife conflicts and making good relations with people in the country. Similarly, the Wetland Policy 2012 also opens avenues for investment in wetland management through the country. Further, the Medicinal and NTFP Development Policy 2004 envisioned the development of a storehouse of medicinal and aromatic plants in Nepal and provides basis for formulating technical and managerial directives on the NTFPs. To stop the unsustainable approach to infrastructure development in the PAs, the government enacted a Construction of Infrastructure Inside the Protected Area Policy in 2003 and revised it recently.

Sustainable Land Management

In Nepal, the development of SLM policy has benefited from lessons learned from a WWF-GEF project entitled "Sustainable Land Management in the Churia Range, Nepal" (2013-2016) (SLMCRNP). The Churia Range of Southern Nepal was identified as an environmental protection zone in 2014 and is home to Asian elephants, one-horned rhinos and Bengal tigers and is an important source of community livelihoods. To protect this area's valuable resources from land degradation, this GEF-funded project brought together five technical ministries for the first time. The project promoted SLM and forest management practices alongside local community groups, working to improve the management of 7,500 ha of agro-pastoral and mixed forest land areas. Mainly focusing on land degradation, the project involved the (then) Ministry of Agricultural Development; Ministry of Forests and Soil Conservation; Ministry of Land Reform and Management; and WWF- Nepal were the GEF implementing agency and partners through the GEF Grant. The SLMCRNP was designed as a pilot project aimed at addressing forest and agricultural land degradation, water shortages and biodiversity loss by incentivizing local communities with different kinds of livelihood opportunities, especially through forest, pasture and agricultural land-based income generating activities[67]. The overall lesson that can be drawn from the SLMCRN project is that SLM projects should be designed using multi-disciplinary knowledge, multi-stakeholder consultation and bottom-up planning processes, while other lessons are described in the TE report such as that fewer and well coordinated and integrated sites can generate better outputs and outcomes[68]. The key recommendation was to reform land use policies and institutional framework for SLM. Moreover, the National Land Use Policy, 2012 (NLUP) was an effort to introduce the concept of scientific land management in Nepal. This policy remains unimplemented, warranting its critical review to transform it into an implementable policy by elevating its ownership to the NPC level. The lessons learned from the Project have clearly shown that this policy first needs to be owned by all the relevant ministries. In the context of the federalization of the country and land management falling under the jurisdiction of the provinces, a multi-scale new Land Use Policy needs to be formulated.

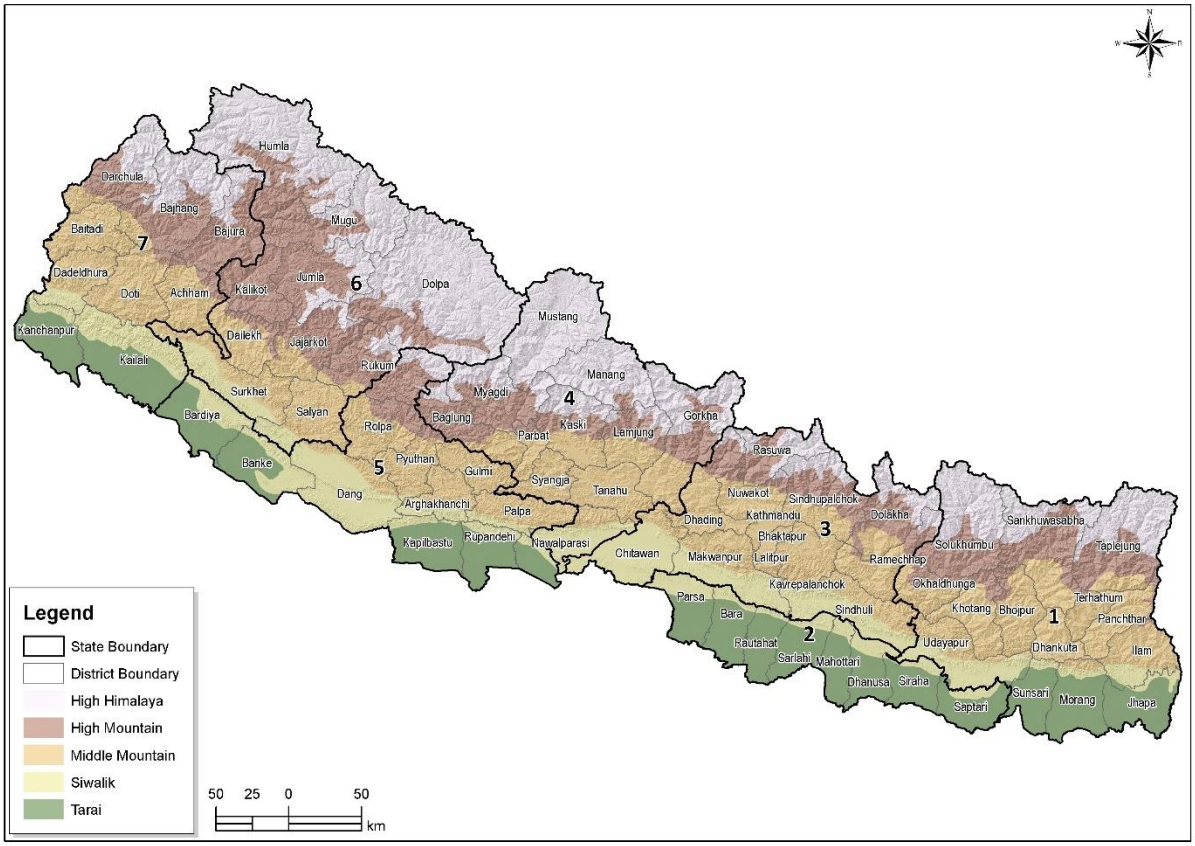
Institutional Arrangements

Article 30 of the Constitution of Nepal ensures the right to a clean environment under fundamental rights. Further, under the Policy of State, Article 51 incorporated policies relating to the protection, promotion and use of natural resources (GoN, 2015). In 2015, the Constitution of the Federal Democratic Republic of Nepal came into effect, structuring the country into three levels: the federation (at the centre), seven states (provinces) and 753 local units (also called municipalities) - see **Figure 1-5.**

[67] Karki M, Wagle MP and Khadka SR, 2017. Sustainable Land Management in Churia Range, Nepal, Evaluator's Report, WWF, Nepal.

[68] Source: SLMCRNP Terminal Evaluation report

Figure 1-5: Nepal's new administrative structure and ecological regions



Local elections were held in 2017. Now all levels of government including Local, State and Federal governments and administrations have already started work. Recently the Government of Nepal decided to establish a Forest and Soil Conservation Department under the Ministry of Forests and Environment at Federal level.

At State level, a number of Ministries have been established including the Industry, Tourism, Forest and Environment Ministry. Under the State governments, the State Forest Directorate (Division Forest Officers and Sub Divisions, and Soil Conservation Watershed Management Offices), Forest Research and Training Centers have been proposed. At the local level, there is a provision for nature conservation including forest and wildlife protection. During project preparation there were huge exercises to set up forest divisions at local level.

In forestry, there are number of stakeholders involved in the sustainable management of forests. This represents a fundamental change for Nepal with huge implications for the functions and responsibilities of government at all levels. **Table A13-3 in Appendix 13** explores some of the major areas of interest which need to be considered during program implementation.

Stakeholder Analysis

A stakeholder analysis was conducted based on the following categories: civil society, government, private sector (see **Table A13-4 in Appendix 13**).

Civil society stakeholders: Rural communities and their networks in the TAL area are interested in secure supplies of ecosystem services, particularly forest and grassland products (e.g. fuel wood, timber), disaster mitigation, and improved local microclimate and water supply. There is a range of national NGOs alliances and researchers relevant to the project involved in subjects such as climate change, watershed management, gender equality and NRM.

Private sector stakeholders: The proposed project for the TAL area should build capacity of the private sector and engage with local financial institutions and cooperatives on both farm and non-farm enterprises and the market value chain through a 5Ps (pro-poor public private partnership) approach. In the TAL, resilient livelihoods should be promoted through a range of economic activities based on ecosystem services including cultural services (eco-tourism), and provisioning services (dairy, vegetables/agriculture, and NTFPs and forestry). Through improving the enabling environment and incentive structures to engage with the private sector, the project should pave the way for scale up and replication in the future. Further, the project should collaborate with private firms and institutions to encourage the adoption of climate smart technologies in farm and non-farm enterprises.

Government stakeholders: A wide range of individuals were consulted from the government agencies. Consultations have already been undertaken at sub-national level and there is strong engagement of especially the Dept of Forest, Dept. of Soil Conservation and Watershed Management and Dept. of National Parks and Wildlife Conservation under the MoFE.

Section 2: GEF Intervention Strategy

2.1 Theory of Change

The Project Objective is: ***to promote integrated landscape management to conserve globally significant forests and wildlife.*** The integrated landscape management (ILM) approach represents a shift away from the approach of focusing resources solely on isolated protected areas. The landscape approach recognizes protected areas as the foundation of biodiversity conservation and ensures sustainable land use and management of buffer zones around PAs, and biological corridors that connect PAs, to deliver sustainable forest and land management that incorporates climate change adaptation, and conservation of globally significant large ranging mammals (tiger, rhino, elephant) considered as flagship species. The approach adopts ecosystem-based conservation that operates at scales necessary to capture representative biodiversity and conserve major ecological processes and services.

The ILM approach necessitates working across multiple scales and stakeholders in the natural resource management sector, including local communities, local forest user groups, and small-scale agriculture users. This recognizes that a sustainably managed landscape and provision of ecosystem services is critical for local livelihood provision, and likewise, sustainable and biodiversity-friendly community land use options are key to landscape conservation. The ILM approach recognizes emerging threats to the Terai Arc Landscape (TAL), particularly in the form of habitat fragmentation driven by large infrastructure development, and includes coordination with non-conservation sectors, towards reduced threats to biodiversity, increased coordination in landscape planning, and facilitates local to regional to national dialogue.

To achieve this objective, the project will deploy four strategies (Project Components) with activities and interventions described in section 2.2. Indicators and assumptions for the accomplishment of expected Outcomes under the proposed Components are given in the Project Results Framework (**Appendix 10**).

The Project Components (as the GEF Project Alternative) aim to remove the barriers to achieving the project's targeted conservation impacts (see the conceptual diagram in **Figure 1-3,** intervention logic diagram in **Figure 2-1** below and **Section 1.3**), namely: ***to maintain connected habitats for key wildlife species to allow movement and genetic exchange to occur, conserve key globally threatened wildlife populations (tiger, Asian elephant and greater one-horned rhinoceros) while co-benefiting a diversity of other biodiversity, and support resilient community livelihoods for forest dependent communities consistent with sustainable forest and land management***.

In summary, the logic of the project's Theory of Change is depicted in Figure 2-1 below. Comprehensive IF-THEN logic is explained in **Appendix 2**.

Figure 2-1. Intervention logic diagram, showing barriers, project components and outputs, outcomes, objective and conservation impacts

2.2 Project Strategies and Expected Results (GEF Project Components)

The Integrated Landscape Management to Secure Nepal's PAs and Critical Corridors Project has a scope spanning the whole of the Terai Arc Landscape (TAL). The project seeks to achieve the following objective: ***to promote integrated landscape management to conserve globally significant forests and wildlife.***

Over the five-year project period, the project objective will be achieved through the implementation of the following four interconnected components:

1. *National capacity and enabling environment for cross-sectoral coordination to promote forest and landscape conservation* – a national-level component to develop institutional and coordination capacity at all levels (federal, state and local), to benefit planning and conservation of the overall TAL;
2. *Integrated Planning for Protected Area Buffer Zones and Critical Corridors in the Terai Arc Landscape* – support for improved planning for critical corridors of the TAL and assessments to determine priority sites for intervention within a targeted sub-set of the landscape, the Banke-Bardia complex, including Kamdi and Karnali corridors;
3. *Forest and wildlife management for improved conservation of targeted protected area buffer zones and corridors in the Terai Arc Landscape* – training and on-ground implementation of sustainable habitat and wildlife management activities in the targeted Banke-Bardia complex, including support for community based natural resource management, mitigation of human wildlife conflict, reducing the negative impacts of large linear infrastructure on wildlife, and wildlife crime prevention and response;
4. *Knowledge Management and Monitoring and Evaluation* - to bring practitioners together from across the landscape, help develop a coherent vision of integrated landscape management, share resources and lessons learned across all levels of intervention, and facilitate the replication and upscaling of project results.

The project components, barriers and outcome strategies, outputs and summary of activities are presented below, with linkages between components identified. See **Appendix 3** for the detailed annual workplan for all activities, indicating responsibilities, and budget broken down by year.

COMPONENT 1: National capacity and enabling environment for cross-sectoral coordination to promote forest and landscape conservation (GEF: $ 1,014,710; Co-financing: 10,165,413)

Outcome 1.1: Improved inter-sectoral coordination from Federal, State to Local level for sustainable forest management and integrated landscape management

The project aims to support inter-sectoral coordination for integrated landscape management in order to achieve sustainable development and conservation outcomes at different levels of governance in view of the recent restructuring of the government institutional framework. The activities in this outcome will strengthen multi-stakeholder coordination mechanisms, facilitate the planning process between federal-state and state-state, and build capacity for coordination at state and local government levels that will support the corridor assessments in Component 2 and field activities in Component 3.

Output 1.1.1: Cross-sectoral coordination mechanisms established to support integrated landscape management for conservation outcomes at different levels

Output 1.1.1 will establish and strengthen cross-sectoral coordination mechanisms with due attention to GESI requirements, including:

- Improve functioning of the National Biodiversity Conservation Committee (NBCC) at Federal level, to facilitate implementation of the NBSAP, including yearly reports against the NBSAP and final review of the NBSAP (2014-2020);
- Establish an inter-ministerial mechanism for smart green infrastructure development, as a working group under the NBCC, to coordinate across relevant ministries on issues of overlapping land uses and to promote wildlife friendly approaches to infrastructure development. This will link to the SGI pilot demonstrations to be carried out in Output 3.2.1 in order to inform future mitigation approaches;
- Establish State Biodiversity Coordination Committees for States 2,3,5,7 and Karnali and organize inter-state coordination for all six TAL States (2,3,5,7, Karnali and Gandaki) for cohesive implementation of the NBSAP and TAL Strategy;
- Convene cluster meetings for all newly formed Municipalities in the TAL, to ensure harmonized roll out of integrated landscape planning in line with the NBSAP and TAL Strategy;
- Technical support to Wildlife Crime Control Bureaus (WCCBs), which are a network of staff from federal to local level, to ensure consistent roll out of wildlife crime mitigation, per TAL Strategy. The WCCBs includes high-level representatives from the DNPWC, DOFSC, Customs offices, army, police, the National Investigation Department and the Crime Investigation Bureau (CIB). The strong presence of WCCB will ensure coordinated intelligence related to organized wildlife crime and improve collaboration between various enforcement agencies and stakeholders.

To achieve cross sectoral coordination, the project can finance the following to assist the above-mentioned bodies and mechanisms:

- PMU assistance and processing costs for legal/administrative recognition of the coordination bodies;
- PMU assistance for ToR review and improvement;
- PMU assistance to recruit additional members to include relevant stakeholders (including CSOs, LCs and IP representatives);
- PMU assistance to review rules and procedures to be fit for function;
- PMU facilitation of planning and organization of meetings; and
- Travel costs for observation visits to related stakeholder meetings in TAL.

Responsibility: Managed by PMU, with support from: MoFE, DOFSC, DNPWC, State MoITFEs, Municipalities
Related projects and programmes: TAL Programme

Outcome 1.2: Capacity increased for multi-stakeholder and cross-sector landscape and forest planning and management

This outcome aims to strengthen the vision and understanding of integrated landscape management among the key stakeholders in the TAL, building the constituency for effective implementation and

updating of the TAL Strategy 2015-2025. The focus of this outcome is creating human resources and an enabling environment for innovation in ILM.

Output 1.2.1: Conservation Leadership Training provided

This output will improve technical capacity for ILM through strengthening leadership, by providing Conservation Leadership Training for ILM focal points and coordinators at all levels. It will aim to capture international best practice and apply this to the local context.

The activity under 1.2.1 is:

- Intensive leadership training at an international facility on international best practices for integrated landscape management for 5-10 leaders in federal and state government, based on a selection process to identify candidates best placed to contribute to high level decision making on cross-sectoral coordination and landscape planning and management.

Responsibility: Managed by the PMU, and involving MoFE, DNPWC, DoFSC
Related projects and programmes: TAL Programme, Hariyo Ban, Rastrapati Chure Conservation Programme

Output 1.2.2: Training courses provided on key subjects for integrated landscape management for responsible federal and state government staff

Output 1.2.2 will provide training courses on key subjects for ILM for responsible federal, state and national park staff, including training needs workshops, development and delivery of training modules and repeating and refinement of the training courses. This is expected to provide a sustainable institutionalized program of training to support ILM uptake in the long term and the technical capacity of responsible government staff to implement a landscape approach to natural resource management.

Training provision will be subcontracted to technical/educational institutions including government training centers at the appropriate levels (e.g. Dept of Forest Research and Training at Federal Level; and Forest Research and Training Centre at State level) supported by external expert inputs. The training program will take account of the requirements of existing PA, corridor and forest management plans in determining training priorities. This training will target staff from the key sectors concerned with ILM, namely DNPWC and TAL NPs, DoFSC and Ministry of Agriculture and Livestock Development, Ministry of Land Management, Cooperatives and Poverty Alleviation as well as State level Ministry of Industry, Tourism, Forest and Environment, State Forest Directorate and Forest Research and Training Centers (Forest Divisions, Soil Conservation and Watershed Management Offices, and Cottage and Small Industry Offices).

Activities under 1.2.2 will include:

- Training needs workshops conducted during Year 1 to confirm technical capacity needs and key subjects for the targeted institutions, in consultation with WWF TAL Programme and other key stakeholders (conducted by above training centers, with PMU support);
- Develop modules for selected training courses through developing course outlines and technical materials through inputs from contracted technical experts, followed by compilation and editing by training/educational experts. Modules may include: sustainable forest management and silviculture; biodiversity conservation and monitoring; habitat management

for wildlife; responding to human wildlife conflict; CFUG outreach; spatial planning; disaster risk reduction;

- Deliver training courses through collaborative partnership with government training facilities (Years 2-3). The courses will be repeated in two subsequent years (years 4-5) through the target institutions and training partners to reach more participants and to refine the materials for future use;
- In-house trainings for orientation of new divisional staff and new park staff as they enter their new roles.

The above activities will be financed through consultancy and workshop/meeting costs.

Responsibility: Managed by PMU, supported by MOFE, DNPWC, DoFSC, MOITFE
Related projects and programmes: TAL Programme, Hariyo Ban, Rastrapati Chure Conservation Programme

Output 1.2.3 Small grants for innovation in ILM in TAL corridors and PA buffer zones

The project will run a small grants scheme to support innovative proposals for conservation and NRM in TAL corridors and PA buffer zones based on criteria to be developed by the PMU in consultation with key stakeholders during Year 1. It seeks to contribute towards addressing the threats and barriers in line with the overall project objective. This scheme will stimulate engagement of diverse stakeholders across the TAL and provide scope for testing innovative approaches and technologies. Individual grants will be up to USD 5,000 – 10,000 and run for three years (Years 2-4). The total fund will be limited to USD 150,000 of GEF funds. The grant scheme would be open to Community Based Organizations, Civil Society Organization, local NGOs, landscape-based government units and academic institutions. Grants can fund on ground-activities at the regional or local level within the TAL. In addition, academic grants for Bachelors' and Masters' student that are aligned with the project's goal and result areas will be provided. PMU will develop selection criteria in collaboration with MOFE, DNPWC and DFSC. Results of the project supported studies would be shared during the annual stakeholder forums and made available through the project website (Component 4), providing scope for review and further uptake.

Activities under this output include:

- Eligibility and selection criteria developed by PMU (approved by PEC), call for proposals and selection of innovative proposals;
- Sub-granting and implementation support to individuals (Bachelor and Masters students), academic institutions, CBOs/CSOs, and state government agencies.

The technical and administrative management of the small grants for innovation in ILM will be undertaken by the PMU.

Responsibility: Managed by PMU, in coordination with MoFE, DNPWC, DoFSC, MOITFE
Related projects and programmes: TAL Programme, Hariyo Ban, GEF SGP

COMPONENT 2. Integrated Planning for Protected Area Buffer Zones and Critical Corridors in the Terai Arc Landscape (GEF: $505,620; Co-financing: $6,099,249)

Outcome 2.1: Improved corridor planning for TAL corridors (Brahmadev, Karnali and Kamdi)

The project will support biodiversity and socio-economic surveys and stakeholder consultations for **Brahmadev, Karnali and Kamdi corridors** (**see Figure 1-2, Corridor Profiles in Appendix 1**). Based on the surveys and consultations, reports will analyze key biodiversity areas within the corridors, key sites for enhanced habitat connectivity, and propose models for improved governance and management[69]. The activities in this outcome for the three corridors will directly support management planning support in Outcome 2.2 and forest and wildlife management interventions in Component 3.

Output 2.1.1: Biodiversity surveys, socio-economic surveys, and local stakeholder consultations for Brahmadev[70], Karnali and Kamdi corridors to determine feasibility of appropriate models for community-based natural resource management

Under Output 2.1.1 biodiversity and socio-economic surveys will be conducted, and a series of local stakeholder consultation for Brahmadev, Karnali, and Kamdi corridors will be initiated to determine the feasibility of appropriate models and strategic framework development for community-based natural resource management.

Activities to deliver this output include:

- Outsourced TA to conduct biodiversity surveys including presence of endemic and globally significant flora and fauna, identification of High Conservation Value Forest areas, High Carbon Stock Forest, forest inventory and classification for management purposes;
- Outsourced TA to conduct socio-economic surveys and GESI analysis of local populations, areas under customary use by indigenous peoples; and
- Development and dissemination of 3 corridor assessment reports and maps detailing the above surveys and noting priority areas, connectivity gaps, and possible community management modalities under the forthcoming protected area legislation.

Responsibility: Managed by PMU, and implemented with Division Forest Offices, PA offices
Related projects and programmes: TAL, Hariyo Ban

Outcome 2.2: Improved participatory planning for sustainable management of Banke-Bardia complex

During project preparation, two PA buffer zones and two corridors were selected as target areas for project interventions in Components 2 and 3, namely Bardia and Banke NP buffer zones, and Kamdi and Karnali corridors, hereafter referred to as the Banke-Bardia complex (see **Figure 2-2** below). The rationale for the selection of the target areas is given in **Appendix 4**, notably a focus on the Banke-Bardia protected area complex as a key area for biodiversity conservation, sustainable forest management and resilient community livelihoods.

Priority will be given to low input areas such as the northern buffer zones of Bardia and Banke NPs, where communities are more marginalized, inaccessible and facing environmental issues. While

[69] New protected area legislation currently in the process of approval will provide more options than currently available

[70] While Brahmadev Corridor lies outside the project focal areas, it remains one of only three corridors without legal protection status, and has therefore been left in here. This also allows some wider geographic scope of intervention. If project resources are overstretched, it could be removed.

government co-financing is anticipated to cover the development or revision of its plans, the GEF project will provide the TA needed to strengthen the mainstreaming of biodiversity and ecosystem services into these plans (e.g. retention of forest habitat strips along the boundaries of community forests, etc). The activities under this component will directly contribute towards the forest and wildlife management, and creates a coordinated management regime, synchronized across CFUGs and BZUCs.

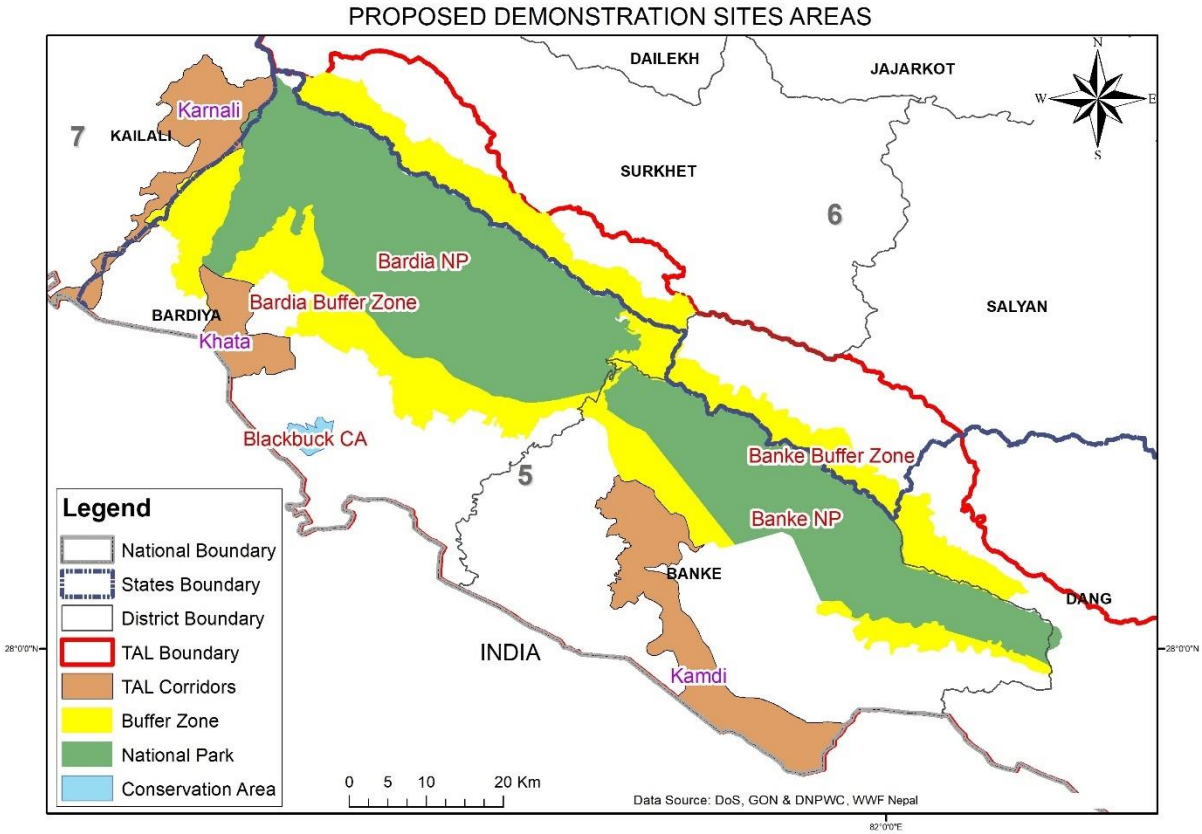


Figure 2-2. Project targeted intervention area – Bardia and Banke NP buffer zones (especially the northern buffer zone areas) and Kamdi and Karnali corridors

Output 2.2.1: Land uses, biodiversity values, forest carbon and key threats assessed, mapped, reported and disseminated to identify priority villages and forest areas in Banke-Bardia complex (*Bardia and Banke buffer zones, and Kamdi and Karnali corridors – with priority given to low input areas*)[71]

Output 2.2.1 will conduct participatory assessments and detailed mapping, overlaying land uses (including CFUG resource mapping), values (biodiversity, carbon, co-benefits) and threats (encroachment, habitat connectivity gaps), to identify priority community and forest sites in which to focus the on-ground management activities supported under Component 3. Based on these assessments, specific sites (CFUGs/villages/communities) will be identified for demonstration of sustainable forest management, restoration, and wildlife management activities under Component 3. For these priority areas in Banke-Bardia complex, participatory processes will be conducted to develop Forest Operational Plans under Output 2.2.2.

Activities supported under the output include:

[71] See GIS maps in Appendix 5

- Consultancy to do participatory assessments in Banke-Bardia complex;
- Consultancy to for resource mapping of CFUGs at corridor level and BZUCs;
- Consultation by PMU staff and partners in communities to assess interest in undertaking activities through Component 3 support.

Responsibility: Managed by PMU, implemented by local government, Division forest offices and PA offices
Related projects and programmes: Rastrapati Chure Program, TAL, FIP, REDD+, Agricultural programmes of related agencies, Karnali River Management Project (Ministry Water Resources, Energy and Irrigation)

Output 2.2.2: Sustainable Forest Operational Plans & State Forest Sector Strategies developed or revised for priority forest areas, incorporating the assessment from 2.2.1

This output will support the preparation of the sustainable forest management plans for state and local government and communities (CFUGs). In addition, the project will support efforts to maintain the quality and connectivity of habitats in the wider context of sustainable forest management for community, private and national forests within the corridors and buffer zones.

Output 2.2.2 will develop State Forest Sector Strategies (including community, protected and leasehold forests); support CFUGs and BZ CFUGs to develop or revise forest operational plans (including GESI aspects) based on the assessment from 2.2.1. The planning will include attention to reduction of key threats to forest and biodiversity, including fire risk, grazing and encroachment.

Activities to deliver Output 2.2.2 include:

- Consultancy to develop State Forest Sector Strategies (including Community Forest, Protected Forest, Leasehold Forest);
- TA to support CFUGs and BZ CFUGs to develop or revise their forest operational plans, including incorporation of gender equality and social inclusion aspects.

Responsibility: Managed by PMU and implemented with State Forest Directorates, Division Forest Offices, PA offices, Municipalities, FECOFUN, Association of Family Forest Owners Nepal (AFFON), FEPFOS, development partners
Related projects and programmes: Regular programmes of the government, REDD+, Rastrapati Chure Program

COMPONENT 3. Forest and wildlife management for improved conservation of targeted protected area buffer zones and corridors in the Terai Arc Landscape (GEF: $3,668,521; co-financing: $18,297,738)

Outcome 3.1: Sustainable forest management practices that strengthen livelihoods and biodiversity conservation

The project will build technical capacity and provide resources for sustainable forest and associated habitat management approach for villages, CFUGs and support staff from the municipal governments in targeted buffer zones and corridors. This outcome will support capacity development and on-ground implementation of community forest operational plans developed in Component 2, focusing on the priority sites identified in Outcome 2.2.

Output 3.1.1 Training and tools for local government on sustainable forest management

Output 3.1.1 will provide tools and technical training incorporating GESI aspects to build the capacity of local government (Division Forest Office and sub-division offices) for management and restoration of forest and associated habitats. Training will include have a strong emphasis on SFM, but also encompassing a wide range of other subjects, including: habitat management and restoration with a community centred safeguard approach towards open grazing free zones, river banks rehabilitation, grasslands and wetland management.

Activities under Output 3.1.1 includes:

- Consultancy to prepare a GESI oriented SFM Training Manual (including silviculture, forest management, restoration, fire management);
- Provision of SFM training to Division Forest Office staff through a "Training of Trainers" (ToT) approach based on the above training manual;
- Consultancy to pilot establishment of a Forest Management Information System (FMIS) in State 5;
- Sub-grants to Division Forest Offices to do fire management through innovative tools, including leaf litter collection, composting, in the target sites identified in 2.2.1;
- Operational supplies to Division Forest Offices to increase their nursery seeding stock (to support communities and land holders under 3.1.2 and 3.1.3).

The expected result is increased expertise among local government to manage forest and associated habitats in a sustainable manner that also benefits biodiversity.

Responsibility: Managed by the PMU, coordinated with MOFE, DNPWC, DoFSC, MOITFE, Division Forest Offices, PA Offices, State Training Centre, FTE Division, State Forest Directorate
Related projects and programmes: TAL Programme, Hariyo Ban, Rastrapati Chure Conservation Programme

Output 3.1.2 Technical support to CFUGs, BZ CFUGs and land holders for forest management

Output 3.1.2 will provide training, travel, and sub-grants to CFUGs in the corridor and BZUCs within the target sites identified under 2.2.1 to build capacity and operations for sustainable forest management and habitat connectivity.

Activities to deliver this output include:

- Training given by the ToTs (see 3.1.1) to CFUGs and BZ CFUGs for forest management (with attention to timing of training, avoiding agricultural busy times);
- Coaching by third party experts on Governance and Financial Management of CFUGs, to improve functioning and increase transparency in resource management of CFUGs;
- Exchange visits for targeted BZ CFUG members (to learn from successful User Committees on fund mobilization and HWC management);
- BZUCs annual meetings for Bardia and Banke NP Buffer Zones to facilitate in-person coordination (e.g. travel support to connect the remote northern buffer zone UCs);
- Subgrants to DFOs to incentivize forest management and restoration on private land (seedling planting, irrigation, fencing, registration support for private forest).

Output 3.1.3 Sub-grants for community SFM

Output 3.1.3 will provide operational support to CFUGs and BZUCs for management and restoration of forest and associated habitats in the priority sites identified under 2.1.1 in the Banke-Bardia complex. This will be wide-ranging support, including for example, post-training TA and equipment support to BZUCs, CFUGs and government in managing and restoring forest, grasslands and wetlands and river corridors, to complement the training and capacity in Output 3.1.2. Revolving funds will be established, learning from previous similar experience in the WWF and Government TAL program.

Financing under Output 3.1.3 will support:

- Revolving funds to facilitate the forest operational plans implementation (developed under 2.2.2);
- Sub-grants for livestock management to reduce open grazing in natural areas (including fencing of vulnerable forest, rotational grazing, artificial insemination, fodder improvement, stall feeding, vet support, stall improvement, with focused support and mitigations to community members reliant on open grazing);
- Sub-grants and seedling provision for grassland, wetland and river bank management and restoration, to improve habitat connectivity for species such as tiger and prey;
- Sub-grants for small-scale green enterprises (e.g. NTFP processing, sustainable timber processing) and business plan development, to incentivize community engagement in forest management and protection.

The expected results are improved delivery of SFM, biodiversity conservation, sustainable land management, and community livelihood development in the targeted areas.

Responsibility: Managed by the PMU, coordinated with MOFE, DOFSC, DNPWC, MOITFE, Division Forest Offices, Municipalities (with outsourced TA). The project field office will work with these authorities to determine priorities, issue subcontracts for local service providers for TA and equipment. Support may be provided to FECOFUN, FEPFOS, AFFON, development partners
Related projects and programmes: TAL Programme, Hariyo Ban, ERP and rural development programmes

Outcome 3.2: Improved management of human-wildlife conflict

The project will support the implementation of strategic, community-based approaches to human wildlife conflict mitigation, building on the significant baseline experience that exists in Nepal (e.g. regarding tiger conflicts at Chitwan, elephant conflicts in various areas, and the SAFE System approach that has been developed by WWF, tested in Bhutan[72] and recently introduced to Bardia NP). This will contribute to reduce negative impacts on local communities as well as incidents of wildlife killings as retaliation to human wildlife conflict.

Output 3.2.1: Pilot methods to reduce infrastructure-related wildlife accidents

72 https://www.researchgate.net/profile/Sangay_Dorji4/publication/315383535_Human_Wildlife_Conflict_SAFE_Strategy_Nine_Gewogs_of_Bhutan/links/58cf91d24585157b6db0f2e2/Human-Wildlife-Conflict-SAFE-Strategy-Nine-Gewogs-of-Bhutan.pdf?origin=publication_detail

The highway that runs through Banke NP has resulted in significant wildlife mortality due to traffic accidents despite extensive signage, and the Sitka irrigation canal in Kamdi Corridor has resulted in numerous loss of wildlife to drowning, especially deer and other prey species. In response, the project will support the following activities:

- A road and wildlife accident study to gather quantitative information on the nature of the wildlife traffic mortality problem for specific road stretches;
- Traffic calming tools, to reduce wildlife traffic accidents (e.g. speed checks, chicanes);
- Monitoring the impacts of the intervention on wildlife mortality rates on the highway;
- Establishment of fencing on both sides of Sikta irrigation canal (in Kamdi corridor), to reduce the incidence of wildlife drowning mortality.

The expected result is a reduction in wildlife mortality in Banke NP, and documentation and sharing of the mitigation methods for upscaling in other wildlife accident hotspots. The project will build on on-going investments and will seek partners, both government and non-government – to bring in larger impact on mitigation on wildlife death due to such large linear infrastructure.

Responsibility: Managed by the PMU, coordinated with MOFE, DOFSC, DNPWC, MOITFE, Division Forest Offices, Municipalities
Related projects and programmes: TAL Programme, Hariyo Ban, ERP and rural development programmes, Karnali River Management Project (Ministry Water Resources, Energy and Irrigation)

Output 3.2.2: Guidelines, training and facilities for human-wildlife conflict response

Output 3.2.2 will provide capacity and resources for participatory management of human wildlife relations. Easy to use pictorial manual on conflict prone species (elephant, rhino, prey base) will be developed to be used in the project site and beyond. Accordingly, the project will support the following indicative activities:

- Preparation of species-specific guidelines for human-wildlife conflict management;
- Preparation of a pictorial manual on wildlife identification in Nepali and local dialects;
- Provision of training to Division Forest Office staff on identification and behavior of wild animals and rescue and management of problematic animals;
- Development and operation of a wildlife rescue center and associated equipment, in order to receive and care for injured and problematic wildlife. The rescue center will be established in the targeted PAs (i.e. BNP or BaNP), which will be managed by the respective PA in the long run.

Responsibility: Managed by the PMU, coordinated with MOFE, DOFSC, DNPWC, NPs, MOITFE, Division Forest Offices, Municipalities.
Related projects and programmes: TAL Programme, Hariyo Ban

Output 3.2.3: Community-based human-wildlife conflict prevention and management

The project will invest in identifying site-specific HWC issues and will explore both preventive and curative measures (e.g. WWF SAFE system approaches). Contributing to the major issue of low level of information flow (reporting back on HWC incidences) in the HWC situation in TAL, the project will support the implementation of a community-based reporting system.

Community-led human-wildlife conflict mitigation and avoidance will be supported through the following activities:

- Workshops at the cluster level for Bardia and Banke NP buffer zone, Kamdi and Karnali corridors will be convened to review the key species involved in HWC at local level and to identify strategic, community-based approaches to human wildlife conflict mitigation, including both preventative and curative measures. Workshops will culminate in cluster-wide HWC plans;
- Sub-grants to BZUCs and CFUGs will support the implementation of the cluster-wide HWC plans (including financing of responses such as mint plantations, biological and virtual fencing, alternative crop trials, crop proofing, alarm systems);
- Development of a community-based reporting system for HWC, including awareness generation;
- Sub-grants to establish a community-based insurance scheme for crops and livestock.

The expected result is the development and implementation of locally-specific HWC action plans for tackling HWC issues, and improved local capacity for HWC management, leading to reduced incidence and impacts of HWC.

Responsibility: Managed by PMU, with Division Forest Offices, PA offices, municipalities and target CFUGs and BZUCs
Related projects and programmes: TAL Programme, Hariyo Ban, ZSL, WWF Nepal projects

Outcome 3.3: Enhanced capacities of government and community in curbing wildlife crime

Outcome 3.3 will build capacity of Community Based Anti-Poaching Units and government bodies (e.g. Protection Forest Councils) for patrolling and reporting on illegal activities. This outcome will connect with the project's efforts to strengthen capacity for coordination at various levels in the landscape in Outcome 1.1, including at District and Municipal levels, and involving the WCCBs, also facilitated by the stakeholder events in Outcome 4.1.

Output 3.3.1: Community-Based Anti-Poaching Units (CBAPUs) functional in priority areas

Output 3.3.1 will provide TA, training, equipment, and incentives to voluntary community-based anti-poaching units in target sites in Banke-Bardia complex.

Activities supported include:

- Field gear and equipment for CBAPU members;
- Skills based training to CBAPU members;
- Revolving fund to initiate green enterprise for CBAPU members, to incentivize voluntary membership in CBAPUs.

The anticipated outcome is increased community interest and capacity to prevent and respond to wildlife crime in the buffer zones and corridors of Banke-Bardia complex.
Responsibility: Managed by the PMU, coordinated with Division Forest Offices, PA offices, municipalities and target CBAPUs
Related projects and programmes: TAL Programme, Hariyo Ban, ZSL, WWF Nepal projects

Output 3.3.2 Training and operational support to NP staff, rangers and WCCBs on wildlife crime management

Output 3.3.2 will provide training and operational support to government staff for wildlife crime management. This will target Banke and Bardia national park staff, DFOs, rangers, WCCBs, and government investigation officers.

Activities supported include:

- Update the training manual on illegal wildlife crime scene management;
- Training for investigation officers on wildlife crime scene management;
- Equipment and travel costs to support operations;
- Transboundary coordination, including travel to India to exchange information on wildlife crime issues.

The expected results are strengthened local capacity and coordination to combat poaching and illegal trade in wildlife and timber.

Responsibility: PMU in coordination with MoFE, DNPWC, DoFSC, MOITFE, PA offices, Division Forest Offices, enforcement agencies
Related projects and programmes: TAL Programme, Hariyo Ban, ZSL, WWF Nepal projects

COMPONENT 4. Knowledge Management and Monitoring and Evaluation (GEF: $1,189,976; $6,099,248 Co-financing)

Outcome 4.1: Improved coordination and dialogue on integrated landscape management from the local to national level

The project will focus on strengthening coordination and dialogue through annual forums among the coordination groups active at various levels. This is a cross-cutting outcome, supporting interventions across all three other components.

Output 4.1.1: Annual forums to share information on ILM among key stakeholders

Output 4.1.1 will support annual forums for coordination and feedback among NBCC and subcommittees, TAL Working Group, Wildlife Crime Coordination Committees and networks related to ILM. The activities will include:

- Monthly dialogue sessions through *Jaibik Chautari* (biodiversity platform) in the field sites;
- Annual technical thematic discussions in Kathmandu;
- Establishment of an online Landscape Knowledge Learning Platform, including a dedicated project website.

These proposed monthly discussions will gather government staff and conservation enthusiasts, including conservation related NGOs and INGOs. The expected results are improved coordination and networking on integrated landscape management from the local to national level.

Responsibility: PMU in coordination with MoFE, DNPWC, DoFSC, MOITFE, PA offices, Division Forest Offices, TAL Working Group, Wildlife Crime Coordination Committees
Related projects and programmes: TAL Programme, Hariyo Ban, ZSL, WWF Nepal projects

Output 4.1.2: Mass awareness on biodiversity conservation and ILM

Output 4.1.2 will generate awareness raising to generate support for the project activities and goals. Activities include:

- Technical and financial support for green/eco-clubs formation and activities, and their annual meetings at district level;
- Special events at local level;
- Mainstream media engagement in ILM, including print, tv, and development of radio segments in local dialects.

The expected results are improved understanding of TAL issues among students and general population at the site level, and overall support to the project goals.

Responsibility: PMU in coordination with MoFE, DNPWC, DoFSC, MOITFE, Eco-clubs
Related projects and programmes: TAL Programme, Hariyo Ban

Outcome 4.2: Project monitoring system operates, systematically provides information on progress, and informs adaptive management to ensure results

The project will build the capacity of project staff for effective project management at all levels of organization through establishment and sharing of clear procedures, orientation and training in line with WWF requirements as a GEF Project Agency.

Output 4.2.1: Participatory planning and monitoring and evaluation system

Output 4.2.1 will ensure adequate capacity for participatory and efficient monitoring and evaluation and adaptive management during project implementation. This will include:

- Training for project staff, clarification of stakeholder roles and planning processes at the Inception Workshops in Kathmandu and field level, including training on WFF network standards, report writing, GESI and safeguards;
- PAC/PEC planning review workshops at central and field levels;
- Detailed planning for implementation including trimester review and planning sessions;
- Periodic and joint monitoring visits to field sites;
- Safeguard monitoring visits;
- Training and technical support for sub-grantees, especially CFUGs, on participatory monitoring and evaluation;
- Annual audits;
- External mid-term and terminal evaluations and associated workshops plus a final project completion workshop for sharing lessons.

The training in participatory monitoring and evaluation will be provided to CFUGs and relevant sub-grantees (for example, see the Event Book System approach that has been successful in parts of Africa[73]).

These activities will ensure that the project monitoring system operates effectively, systematically provides information on progress, and informs adaptive management to ensure results.

Responsibility: PMU, with MoFE, DNPWC, DoFSC
Related projects and programmes: TAL Programme, Hariyo Ban, etc – see Section 1.5 (Coordination)

Outcome 4.3: Project lessons shared

In order to support the replication and upscaling of project outcomes, the project will support knowledge management through online and physical documentation and sharing of results and lessons. This is a cross-cutting outcome, supporting interventions across all three other components.

Output 4.3.1: Project lessons captured and disseminated to project stakeholders and to other projects and partners

Output 4.3.1 aims to capture and disseminate project lessons to project stakeholders and to other projects and partners, through the following activities:

- Documentation and sharing of traditional knowledge associated with natural resource management in TAL;
- Preparation of videos and stories of project success stories;
- Development of case studies and project technical reports, disseminated in electronic and printed formats, to discuss specific issues in greater depth;
- Support for field staff to participate in national/international scientific fora;
- Support for partners to publish journal articles on ILM in TAL;

Overall the results of these activities will contribute towards improved knowledge management for ILM and share lessons with stakeholders and wider audiences.

Responsibility: PMU, with MoFE, DNPWC, DoFSC
Related projects and programmes: TAL Programme, Hariyo Ban, etc – see Section 1.5 (Coordination)

2.3 Consistency with GEF Focal Area/Fund Strategies

The proposed approach is aligned with the GEF 6 Focal Area strategies:

- By working in the community forest and agriculture lands in protected area buffer zones and corridors in the priority landscape of Nepal, the project will mainstream biodiversity conservation and sustainable use into production landscapes (**BD-4**) and specifically support **Program 9**: Managing the human-biodiversity interface. The project recognizes that protected areas in Nepal are embedded in a landscape of mixed uses, including forest-use areas, rural settlements, and agricultural lands. The project recognizes that sustainable management in the landscape

[73] Stuart-Hill et al. 2005. The Event Book System: A Community-based Natural Resource Monitoring System from Namibia. https://link.springer.com/article/10.1007/s10531-005-8391-0

contributes to protected area security, biodiversity conservation outside protected areas, and sustainable local livelihood provision.

- Interventions led by law enforcement agencies, local government and Community Forest User Groups will assist to reduce threats to globally significant biodiversity (**BD-2**) and prevent the extinction of known threatened species (**Program 3**), particularly tiger, Asian elephant, and greater one-horned rhinoceros (also vultures, gharial, two pangolin species and many other globally threatened species). This supports the Aichi Target 12, to prevent extinction of known threatened species and improve their conservation status. Project efforts will focus on securing the connectivity and quality of wildlife habitats, strengthening the capacity of law enforcement agencies, science-based participative wildlife monitoring, and coordination between local anti-poaching and wildlife crime control bodies.
- The project contributes to the goals of generating sustainable flows of ecosystem services from forests (**LD-2**), specifically through landscape management and restoration (**Program 3**), and reducing pressures on natural resources by managing competing land uses in broader landscapes (**LD-3**) by implementing sustainable land management through the Landscape Approach (**Program 4**). Project interventions in priority sites will improve agriculture and livestock productivity while also delivering benefits of reduced land, forest, and grassland degradation. At the national and landscape level, the project will support institutional structures and capacity, policies, and practices for integrated natural resource management.
- The project will deliver benefits across the GEF SFM objectives, including integrated land use planning, cross-sector planning, and integrating SFM in landscape restoration; but will most comprehensively contribute to the goal of capacity development for SFM within local communities (**Program 5**) under **SFM-2**. The project will provide support to communities, government staff and others, in the form of training and equipment for application of sustainable forest management practices in target areas, to deliver SFM with LD and BD co-benefits.

2.4 Global Environmental Benefits

The key global environmental benefits that will result from the GEF Project Alternative include 'maintaining globally significant biodiversity and the ecosystem goods and services that it provides to society' and 'sustainable land management in production systems', which will be achieved by restoring 4,050 hectares of land and bringing 233,500 ha under improved practices – for a total of 237,550 under improved management. The project will also provide 'support to transformational shifts towards a low-emission and resilient development path' by mitigating 1,270,919 metric tons of CO2e. These are also reflected in the GEF 7 Core Indicators in **Appendix 11**. In addition, the project will contribute directly towards the conservation and sustainable management of the globally significant Terai Duar Savanna and Grasslands and Eastern Himalayan Subtropical Broadleaf Forests ecoregions, and more than 30 globally threatened species including important populations of the tiger, Asian elephant and greater one-horned rhinoceros. The effective protection and management of such species, together with other species such as Indian and Chinese pangolins, leopard and turtles that have been significantly targeted by poaching and the illegal wildlife trade, will contribute towards the goals of the GEF-supported Global Wildlife Program[74] in addition to the supporting GEF Biodiversity programs.

[74] GEF Program: Global Partnership on Wildlife Conservation and Crime Prevention for Sustainable Development (GWP) (9071), under the GEF Programmatic Approach to Prevent the Extinction of Known Threatened Species

In terms of carbon sequestration benefits, the current project aims to contributes towards 1,270,919 tCO2eq over the project period through 60,000 ha improved CBFM management, 150 ha degraded land management through CBFM, 500 ha private forest development and protecting 100 ha forest land from deforestation under integrated land use planning.

2.5 Incremental Cost Reasoning

The proposed project builds upon a strong national commitment to landscape planning and conservation led by the Ministry of Forests and Environment and identified in the *Terai Arc Landscape Strategy and Action Plan 2015-2025*. This strategy is the guiding document and key policy priority for development and conservation in TAL over the next ten years. Despite strong commitment and progress made to date in TAL, there is insufficient traction and capacity to remove the institutional barriers to achieving landscape level conservation goals, despite the urgency of deforestation and forest degradation, and associated biodiversity and ecosystem services losses. In the baseline situation, the institutional capacity for forest protection from the landscape level to more localized buffer zones and critical corridors is insufficient, and threats to biodiversity and ecosystem services from the population pressures and the agriculture and infrastructure sectors in TAL will continue to grow, and will lead to further habitat fragmentation and destruction, increased greenhouse gas emissions from forest loss and degradation, further land degradation, and species loss due to a lack of habitat connectivity and direct loss of wildlife to poaching and human wildlife conflict retaliation.

The addition of GEF financing to the baseline scenario described in **Section 1** will help drive the transformational change required to address the challenges to biodiversity and ecosystem services conservation to enable landscape conservation in Nepal and on-ground in the TAL. The GEF funds will incrementally build on and add value to the ongoing investments in the TAL by realizing a more integrated approach for inter-sectoral and multi-stakeholder coordination to enable integrated landscape planning and management, from the national to local level within the landscape. This will involve strong coordination of plans and programs of different sectoral agencies; synergies among different sectors and programs/projects; and promotion of conservation friendly infrastructure development.

The incremental funds from GEF will focus efforts and resources in protected area buffer zones and corridors to build on the government and donor's existing strong baseline for species and forest management and law enforcement in the protected area core zones. Through supporting cross-sector coordination and planning, training and equipping DNPWC, DoFSC and the State and Local government line agencies, and supporting local communities and community forest user groups for on-ground interventions to protect forests and species, GEF finance will facilitate increased protection of protected area buffer zones and corridors. Building on international best practice and lessons from the UNDP-GEF WTLCP, and the GEF finance together with the baseline will develop a consistent and integrated approach to landscape conservation at the national level, and will implement this approach on-ground for the TAL. The baseline, increment and global environmental benefits for the project's three technical components are described in **Table 2-2** below.

Table 2-2. Summary of incremental reasoning for the project intervention

Barriers[78]	Baseline Scenario[79]	GEF Alternative Scenario[80]	Global Environmental Benefits[81]
Component 1 - National capacity and enabling environment for cross-sectoral coordination to promote forest and landscape conservation			
Barrier 1 - Lack of cross-sectoral coordination against a backdrop of unclear roles, responsibilities and relationships of different layers of governments under the new administrative restructuring; lack of understanding among multiple stakeholders regarding the requirements for integrated landscape management; conflicting land use policies between sectors; lack of local level capacity for coordinating forest landscape planning and management; lack of capacity for applying social and environmental safeguards to economic development and for	The first and second TAL Strategies from 2004-2014, and 2015-2015, have provided a government-led framework for conservation and sustainable management of the TAL. Coordination mechanisms have been developed, including the National Biodiversity Coordinating Committee, Landscape Support Unit of MoFSC (now defunct), and TAL Working Group. However, the NBCC is not functioning effectively to facilitate inter-sectoral coordination, thus land use conflicts are not being addressed and impacts of infrastructure development on ecosystems and wildlife are not mitigated effectively. Previous GEF investments strengthened biodiversity conservation, sustainable land management in the Churia and wetland conservation in the TAL, but there remains a need for a coherent, systemic ILM approach to fully deliver the TAL Strategy. Parallel initiatives including the TAL Programme, USAID Hariyo Ban, initiatives in the Churia, and the WB ERP all provide strong inputs towards TAL strategy implementation, yet little support for developing capacity for	**Component 1** aims to provide support at national, state and local levels to develop capacity for the inter-sectoral coordination structures for ILM in line with the TAL Strategy 2015-2025, while also addressing new needs and opportunities created by government re-structuring. Functioning of the NBBC will be strengthened with support from MoFE, and an inter-ministerial mechanism established for wildlife friendly infrastructure. State level coordination will be strengthened through State Biodiversity Coordination Committees for States 2,3,5,7 and Karnali, and inter-state coordination for States 2,3,5,7, Karnali, Gandaki. Coordination and networking of all TAL Municipalities will be facilitated through cluster meetings. ILM focal points and coordinators at all levels will receive Conservation Leadership Training and participate in joint studies to develop a shared vision and learning on adaptive management and planning for ILM for the TAL. The capacity of responsible	Coordination mechanisms in place and functioning for ILM at Federal, State and Local Government levels for the TAL Improved TAL governance reduces intersectoral land use conflicts and adverse impacts of infrastructure development on globally significant ecosystems and species in the TAL, contributing towards their conservation and sustainable management Improved capacity for ILM strengthens understanding, commitment and unified action for delivery of the TAL Strategy 2015-2025 as a key contribution to the NBSAP

[78] See Section 1.3 for details
[79] See Section 1.4 for details
[80] See Sections 2.1 and 2.2 for details
[81] See Section 2.3 for details

Barriers[78]	Baseline Scenario[79]	GEF Alternative Scenario[80]	Global Environmental Benefits[81]
implementing environmental management regulations including EIA.	ILM coordination, especially in the context of the new government structure.	federal and state government staff for implementing ILM will be increased through training courses on key technical subjects. A final review of NBSAP 2014-2020 will be conducted and support provided to WCCB.	
Component 2 - Integrated Planning for Protected Area Buffer Zones and Critical Corridors in the Terai Arc Landscape			
Barrier 2 - Lack of capacity for integrated forest, species and land management in protected areas, buffer zones and corridors; weak governance arrangements and operational capacity of Protection Forest Councils; inadequate or out of date management plans for buffer zones and corridors; inadequate investment and community engagement for corridors affected by multiple threats; inadequate technical capacity of DFOs and PAs to manage PAs, buffer zones, corridors, wildlife and habitats effectively.	Governance of corridors has been led by the District FOs until recent govt restructuring, supporting CFUGs in developing and implementing their FMOPs, and the operations of the Protection Forest Councils in four corridors. However, the DFOs have lacked adequate resources to provide the necessary support, and the DFOs, Protected Forest Council and CFUGs have not provided the governance needed to control threats from encroachment, forest fires, uncontrolled grazing, etc. The three corridors that are not Protected Forests lack recognition in terms of planning safeguards for ecosystems and biodiversity and collective governance that provides clear goals and direction for community management. The TAL Program and Hariyo Ban both provide on the ground support for corridor management (eg addressing bottlenecks), but little towards strengthening governance and management capacity in the context of the new government structures that provide new powers for NRM to the States, Division FOs and Municipalities (and less to District FOs).	**Component 2** - Proposals will be developed through assessment and consultation processes for community-based management regimes for Brahmadev, Karnali, and Kamdi corridors. Priority sites for intervention in the targeted corridors and PA Buffer Zones (Kamdi and Karnali Corridors, and Bardia and Banke NP BZs) will be identified based on criteria relating to biodiversity, corridor integrity, community livelihood dependencies and key threats. SFM Operational Plans will be developed or revised for these priority forest areas. Implementation of the plans will be supported by training for CFUGs and BZUGs, and exchange visits to other areas. These results will contribute towards improved participatory planning for sustainable management of the targeted protected area buffer zones.	Improved community-based NRM governance and KBA assessments completed for three corridors totalling 82,500 ha, and strengthened management of all 7 TAL corridors totalling 229,500 ha based on a common strategic framework that embraces the ecosystem approach and SFM principles SFM benefits through improved community forestry within the 7 corridors, resulting in forest carbon sequestration. Improved conservation of globally significant wildlife species populations using corridors through inclusion of biodiversity

Barriers[78]	Baseline Scenario[79]	GEF Alternative Scenario[80]	Global Environmental Benefits[81]
	The PA Buffer Zones are currently under Federal Government management, with a functional system of BZ Council, BZ Management Committee, BZ User Groups as well as CBAPUs. The PA staff largely focus on Core Zone and wildlife management, and are not well equipped to deal with multi-sector, multi-use landscape management in Buffer Zones. Currently very little support is available for PA BZs from ongoing programmes, and changes in BZ governance may arise in relation to the increased roles of Municipalities that would require significant support to implement successfully		considerations in corridor management plans Improved forest management and conservation of priority forest sites within targeted corridors and buffer zones through updated SFM operational plans and training for CFUGs and BZUGs
Component 3 - Forest and wildlife management for improved conservation of targeted PA buffer zones and corridors in the TAL			
Barrier 3 - Lack of options for community-based sustainable forest and land management in TAL; inadequate attention to management of biodiversity in community forests; poor linkage of community forestry with livelihoods; inadequate participation of women and disadvantaged social groups; and lack of technical capacity for SFM; lack of incentives for private landholders to	Most of the natural habitats in the TAL corridors and PA BZs are under community forestry management by CFUGs and BZUGs, with support from District FOs. While relatively successful overall, this approach has failed to address the wide range of threats impacting ecosystems and species in the TAL, and the integrity of both corridors and BZ areas is being eroded, and in some cases seriously threatened by unsustainable uses. HWC is a widespread and increasing problem, with responses from local government, PAs and CSOs (WWF, ZSL, NBBC, etc). However, the introduction of an effective systemic approach is needed that included adequate support for affected communities. Ongoing and planned	**Component 3** will result in strengthened local capacity for the management and restoration of forest and associated habitats, including government agencies, local communities and private landholders. It will improve the inclusion of livelihoods and biodiversity conservation in SFM practices with attention to GESI concerns. A training manual on SFM with training of trainers provided to state forestry staff and training to CFUGs on management plan implementation will strengthen delivery of SFM in TAL Corridor and BZ forests. Fire management will be strengthened through an improved State fire reporting system and	Improved SFM and biodiversity conservation for targeted corridors and PA Buffer Zones totalling 152,700 ha through enhanced local capacity for habitat management and restoration and implementation support for community-based management and sustainable livelihoods, including sustainable land management in Churia Range areas

Barriers[78]	Baseline Scenario[79]	GEF Alternative Scenario[80]	Global Environmental Benefits[81]
sustainably manage and conserve their land. Inadequate systems, institutional capacity and resources for HWC management, when HWC is intensifying, threatening local support for conservation efforts.	initiatives are making some progress towards addressing these issues – TAL Programme and Hariyo Ban are both strengthening the integrity of certain corridors through community-based NRM approaches. However, both have limited resources remaining and will not address the full scope of the corridors and PA BZs targeted by the current project. Similarly, planned investments by WB/ERP and initiatives in the Churia can be coordinated with the current project in order to achieve increased overall impact and sustainability of outcomes in targeted areas.	the introduction of innovative tools and techniques. Operational support will cover a wide range of issues, including forest fire prevention, riverbank stabilization planting, forest and grassland restoration, improved grazing practices, etc. Support for revolving loan schemes, business planning and green enterprise development is expected to improve local income from SFM practices and provide increased motivation for community engagement in SFM and conservation practices. This component will also develop local capacity for addressing human-wildlife conflict in a strategic manner, supporting implementation of local prevention and response measures, support to affected communities and improved monitoring and information sharing. Finally, it will pilot the deployment of smart green infrastructure in key locations to reduce wildlife mortality due to recent road and irrigation infrastructure.	Reduced HWC in targeted areas resulting in improved conservation of globally significant species, including tiger, Asian elephant, greater one-horned rhinoceros, leopard, Himalayan black bear, etc. Reduced wildlife mortality from existing infrastructure as a result of project supported SGI measures, benefiting a range of wildlife in Banke and Bardia NPs, with potential for upscaling across TAL and other landscapes

2.6 Risk Analysis, Risk Management Measures, and Resilience

The key risks that could threaten the achievement of results though the chosen intervention strategy are shown in **Table 2-3**. The risk rating is based on the probability (P) of a given risk occurring combined with its potential impact (I) on the success of the project. The risk assessment matrix used for scoring is shown in **Table 2-4**.

Table 2-3. Description of Project Risks and Mitigation Measures

Risks	Risk Rating P= Probability I= Impact	Mitigation Measures
The administrative restructuring of the government system results in lingering uncertainties, lack of clarity on institutional roles and conflicts over jurisdiction that adversely affect natural resource governance, creating impasses and challenges for project implementation	Substantial P= 3 I= 4	The project will, in the context of the newly adopted federal structure with the state system, work with the administrative units at different levels to build capacity, address challenges and capitalize on opportunities for coordination and collaboration, including issues related to land and natural resource use. The decentralization of authority for natural resource management will be leveraged as an opportunity to fully integrate landscape level planning and management at the local level by engaging with State, District and Municipal governments.
Regional development priorities for settlements, agricultural and irrigation schemes, transportation infrastructure and industry take precedence over conservation and NRM plans supported by the project	Substantial P= 4 I= 4	This is a systemic problem requiring the mainstreaming of environmental and biodiversity safeguards into development planning. The project will support this through capacity development on ILM and environmental management processes for key sectors; awareness raising and engagement of all sectors in project planning and implementation; build capacity for more effective EIA processes; and pilot smart green infrastructure to demonstrate mitigation of impacts for existing infrastructure in environmentally sensitive areas.
Increasing in-migration rates to certain parts of the TAL will increase localized pressures on land and forest resources with consequent loss of forest cover	Substantial P= 4 I= 4	This is a long term issue that requires a strategic response from all levels of government (including providing incentives for migrants to remain / return to source areas). The project will support all levels of government in terms of ILM for the overall TAL and especially planning and management of the PAs, BZs and Corridors, including the following measures: strengthen boundary demarcation for corridors, buffer zones and community forests; strengthen awareness of the law concerning encroachment of such areas; build capacity for SMART patrolling for corridors and buffer zones as well as PAs to monitor and enforce encroachment; and provide support for

Risks	Risk Rating P= Probability I= Impact	Mitigation Measures
		sustainable livelihoods for legitimate residents to reduce pressures on natural resources.
Increasing human populations combined with increasing wildlife populations in PA, BZ and Corridor areas will increase prevalence of HWC	Substantial P= 4 I= 3	Build capacity of local government to respond to HWC through a strategic approach that: reduces opening of new farmland and settlement in HWC sensitive areas; reduces existing HWC and risks to life through preventive measures and technologies; compensates losses fairly for legitimate claims.
Major natural disasters such as earthquakes and floods	Moderate P = 2 I = 4	This is hard to predict, as the impact will vary substantially with the nature and scale of such a disaster and its location. The ability to mitigate such a disaster will similarly depend on these factors. However, the PMU will develop a natural disaster response strategy, in line with guidance and strategies of MoFE and WWF Nepal.
Low capacity to disburse project funds	Moderate P= 3 I= 3	Support from WWF Nepal to the government can substantially facilitate recruitment, procurement and subcontracting processes if needed.
Government staff turnover may impede project implementation: inexperienced staff may therefore have to lead on some activities.	Moderate P= 3 I= 3	The project generally aims to build capacity within the government agencies involved in ILM issues, and will train staff from each competent authority, as well as other related agencies. This will increase the depth of experience and skills available both for the project and future work.
Institutions governing buffer zones and corridors have inadequate capacity or resources for integrated natural resource planning and management.	Moderate P= 3 I= 3	The project will enhance capacities of villages, CFUGs, and local government staff for sustainable, community-based approaches for integrated landscape management. This will involve building institutional and community capacity to implement interventions to reduce deforestation, and providing technical training and resources for community based approaches to wildlife conservation.
Intended project outcomes for ecosystem management and CBNRM are undermined by climate change and variability, and natural disasters.	Moderate P= 2 I= 3	The integrated landscape management approach of the project will evaluate, where relevant and feasible, potential climate change impacts and incorporate both ecosystem-based adaptation and disaster risk reduction considerations into planning for corridors, PA buffer zones and community forest areas. This will take into account, for example, increased climate variability, increase in frequency and intensity of natural disasters, and potential species range shifts.
Difficulty in establishing collective support for the	Moderate P= 3	The project will, from the outset, perform multi-sectoral and multi-stakeholder engagement by

Risks	Risk Rating P= Probability I= Impact	Mitigation Measures
integrated landscape management approach among government ministries, NGOs, CSOs, and the private sector.	I= 3	providing support for the Planning, Monitoring and Coordination Division of MoFE and NBCC to coordinate with environment, infrastructure, and development ministries, Wildlife Crime Control Coordination Committee (WCCC), and the TAL WG. The collaborative leadership and conservation training will facilitate the engagement of stakeholders across sectors in the integrated landscape management approach. This support will directly contribute to implementation of the Terai Arc Landscape Strategy, which defines development over the next 10 years, and the correlation with the strategy will be clearly defined and communicated to relevant stakeholders.

Table 2-4. Risk assessment matrix

Risk Assessment Matrix						
	Impact					
Probability		5-Critical	4-High	3-Medium	2-Low	1-Negligible
	5- Certain / Imminent	High	High	Substantial	Moderate	Low
	4- Very Likely	High	Substantial	Substantial	Moderate	Low
	3 -Likely	Substantial	Substantial	Moderate	Low	Low
	2 -Moderately Likely	Moderate	Moderate	Low	Low	Low
	1- Unlikely	Low	Low	Low	Low	Low

2.7 Consistency with National Priorities or Plans

The project is fully aligned with, and contributes to, national priorities for biodiversity and forests, and contributes directly towards Nepal's implementation of international conventions, especially the Convention on Biological Diversity. See **Section 1-6** for national policy analysis details.

This project is based on the priorities of the *Terai Arc Landscape Strategy and Action Plan 2015-2025* (MoFSC, 2016) and directly supports the implementation of this strategy. The project will help to address urgent conservation priorities, and tackle persisting and emerging threats to ensure socio-ecological integrity of the Terai Arc Landscape. This project will specifically support the following strategies outlined in the new TAL Strategy: strengthen protected areas, buffer zones and corridors; manage rare and endangered mammals; protect, restore and manage critical habitats; create and revise policies, regulations and action plans; strengthen coordination among law enforcement agencies; mitigate human-

wildlife conflict; strengthen and promote sustainable forest management; reduce loss and degradation of forests; and provide local communities with innovative, sustainable economic incentives linked to forest conservation.

The proposed project will help to achieve the goals of the *Nepal National Tiger Recovery Plan to 2020* (2010) and the *Tiger Conservation Action Plan for Nepal* (2016-2020). The Terai Arc Landscape is the NTRP identified priority landscape for tigers in Nepal. Specifically, the proposed project contributes to the NTRP goal to maintain, restore and conserve at least 6,500 km^2 of additional tiger habitats, and contributes to two of the six NTRP objectives: *Obj.1* create an enabling policy environment for landscape-scale conservation in the TAL; and *Obj.3* manage the TAL as a priority conservation landscape with core areas, buffer zones, and corridors to conserve tigers as a metapopulation with transboundary ecological linkages. This project will support the strengthening of three pillars of the Convention on Biological Diversity (CBD), namely conservation, sustainable utilization and benefit sharing through national biodiversity strategies and action plans. Nepal's *National Biodiversity Strategy and Action Plan* (NBSAP), revised in 2014, is an important means of supporting the CBD. In the context of the NBSAP priorities, this proposed project, through improved protection of buffer zones and corridors, will support the meaningful participation of local communities in the management of natural resources, landscape approaches to address multiple drivers of biodiversity loss, and cooperation among relevant agencies to achieve success in biodiversity conservation. The proposed project will support the implementation of priority actions linked to the NBSAP to meet the Aichi Targets. Among the Aichi Targets, this proposed project will contribute to progress of the following: Aichi Target 5, loss of natural habitat, including forests; Aichi Target 7 concerning sustainable management of agriculture and forests to ensure conservation of biodiversity; Aichi Target 12, on preventing loss of known threatened species; and Aichi Target 14 related to maintaining ecosystem services to contribute to livelihoods.

The project will contribute towards the Ramsar Convention, through assisting the government in meeting its obligation to undertake the wise use of all wetlands in its territory. In the context of this project, the TAL has a diversity of biodiversity-rich wetlands, including major river floodplains, freshwater marshes, lakes and smaller water bodies. These support abundant aquatic fauna and flora including globally threatened species such as the gharial (CR), Gangetic dolphin (EN), mugger (EN), red-crowned roofed turtle (CR), three-striped roof turtle (EN), sarus crane (V) and swamp deer (V). Three listed Wetlands of International Importance (Ramsar Sites) are located in the TAL – Ghodaghodi Lake (Kailali), Beeshazar and Associated Lakes (Chitwan), and Jagadishpur Reservoir (Kapilvastu).

The project is consistent with the *Government of Nepal's Forest Policy* (2015), which identifies community, collaborative, leasehold, protection, buffer zone, religious and private forests as key to provision of social, economic and ecosystems services. The *Forest Policy* outlines forests as critical to reduce the impacts of climate change through adaptation so as to ensure the flow of forest ecosystem services. The *Forest Policy* recognizes forests as a renewable natural resource, which contributes to subsistence livelihoods and recognizes subsistence forest use as a stepping stone to increased application of good forest management practices.

The proposed project will contribute to the United Nations Convention to Combat Desertification (UNCCD) goals and framework and key land degradation related priorities for Nepal. Through integrated landscape

management, the project will help to reverse and prevent desertification and land degradation, and help mitigate the effects of drought to support poverty reduction and environmental sustainability. The proposed project will build on the priorities and lessons from Nepal's *National Action Programme for Land Degradation and Desertification* (2002) and the subsequent stocktaking and national capacity assessment report on land degradation prepared by MoSTE in 2008. The proposed project will address the threats, drivers, activities and targets to combat land degradation that were identified and analyzed in these reports. Further, it will support the priorities of Nepal within the UNCCD framework, namely integrated ecosystem management programs to rehabilitate areas prone to landslides, integrate watershed management activities for water management and food security, and disaster forecasting and relief in the Churia range.

The proposed project will contribute to the Nationally Determined Contributions (NDC), submitted by Nepal to the United Nations Framework Convention on Climate Change (UNFCCC) in February 2016, which outline both the mitigation and adaptation strategies to address climate change. This project specifically aligns with and contributes to the NDC goals by utilizing the landscape approach to resource conservation and management in forest areas; reducing dependency on biomass through the use of alternative energy; maintaining forest cover and enhancing carbon sequestration through sustainable management of forests and improved forest governance to control drivers of deforestation and forest degradation; and institutional strengthening.

The project will also contribute to the *Sustainable Development Agenda for Nepal* (2003) goal of low carbon and green economic growth. The project will work toward the Sustainable Development Goals adopted by the UN in 2015 by promoting inclusive, coordinated land management, good governance, and economic development to address the root causes of poverty and the universal need for development that works for all people. It will primarily target terrestrial biodiversity conservation (Goal 15 – Life on Land), but also contribute towards other Goals, including: 1 (No Poverty), 5 (Gender Equality), 13 (Climate Action), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production), 14 (Life Below Water) and 16 (Peace, Justice and Strong Institutions). The importance of taking a holistic view of the SDGs was spotlighted by WWF at the UN 2030 Agenda High Level Political Forum in July 2018, allowing stakeholders to benefit from potential synergies and advance objectives in several areas at once. Goal 15 – Life on Land will play an integral role in achieving all the others – and vice versa[82].

Other national level priorities and policies this project will work in parallel with and build upon include: *Climate Change Policy 2011*, which seeks to address the adverse impacts of climate change and utilize the opportunities created from it to improve livelihoods and achieve climate-friendly physical, social and economic development; and *National Land Use Policy 2012*, which uses available land and land resource for sustainable communities and to achieve economic and environmental development. The project will support the *Environmental Friendly Local Governance Framework 2013* by helping to mainstream environment and disaster management in the local planning process, which will feed into and inform landscape level planning. This framework is critical to development and conservation initiatives in the country moving forward.

[82] Forests and Sustainable Development. The Role of SDG 15 In Delivering the 2030 Agenda. WWF Forest Practice. July 2018.

2.8 WWF and EA Comparative Advantage

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature. As the first international non-governmental organization to receive GEF Project Agency accreditation and the world's largest independent conservation organization, the comparative advantage of WWF-US rests in its extensive experience of over 50 years of field implementation supported by over 5 million supporters worldwide, working in 80 offices in over 100 countries, supporting around around 1,300 conservation and environmental projects centered around WWF's programmatic Practices of Forests, Oceans, Freshwater, Wildlife, Wildlife, Climate and Energy and Food, supported by cross-cutting issues of Governance, Finance, and Markets. WWF has been particularly successful at building public sector partnerships to bridge science, economic, and policy gaps, and transform markets at the local, country, regional, and global levels.

The association of WWF with conservation in Nepal dates back to 1967 when it supported the government to conserve threatened Greater One-horned Rhinoceros and Bengal Tiger. The WWF Nepal Program Office was officially established in 1993 in order to increase, coordinate and support conservation efforts in Nepal. Since then, WWF Nepal has played an important role in providing technical and financial inputs to the Government of Nepal in biodiversity conservation policy, planning and implementation. WWF Nepal has been at the forefront introducing the latest conservation concepts, approaches and practices in the country. The most recent example is the visioning and realization of the landscape level approach. This approach has guided WWF Nepal's close partnership with the Government of Nepal to conserve all facets of biodiversity and ecological processes and cultural integrity, while improving local livelihoods and governance in the Terai Arc Landscape, the Sacred Himalayan Landscape and the National Conservation Priority Areas and recently successfully implemented GEF 5 project in eastern Terai. The WWF Nepal annual budget is approximately 9 million USD (2017).

WWF Nepal is also providing significant support to the Government of Nepal for policy related work, participating in land use and natural resource management policy formulation and represented in various committees at the national level including the national delegation to the UNFCCC. Participation of WWF in these fora provides an excellent opportunity to engage with the government to strengthen integrated land management policy and intersectoral coordination under this project. WWF Nepal also has the technical and administrative capacity to handle and implement large projects, but also has the advantage of drawing on network expertise and backstopping when necessary.

WWF Nepal's head office is in Kathmandu, with four field offices, two in the Terai (Chitwan and Kohalpur) and two in the mountains (Pokhara and Tinjure Milke Jaljale) through an agreed implementation modality with MoFE. WWF Nepal has always had a strong field presence, and has established itself on the frontline, working with local communities and government. WWF Nepal has a strong GIS/Monitoring and Evaluation unit and an Operation team with dedicated staff capacity to provide technical and administrative support for all programmatic needs.

The Executing Partner for this project is the Ministry of Forests and Environment (MoFE)[83], whose structure and mandate has been recently modified (in 2018) as part of the government restructuring

[83] Formerly the Ministry of Forests and Soil Conservation

exercise. It is responsible for the management of forests and the environment. Its main purposes are to enhance the sustainable management of forests and biodiversity. It aims to promote sustainable development of the country through environmental protection; conserve the natural environment and cultural heritage; create a clean and healthy environment; move towards poverty alleviation through environment related research activities; encourage the involvement of academics, scientists and intellectuals in environmental decision-making; and coordinate adaptation and mitigation programs in order to minimize the negative impacts of climate change.

The DNPWC and DoFSC have been two lead departments under the Ministry until now, with main responsibility for the management of protected areas, wildlife and forest resources. In 2018, the Government of Nepal decided to establish a Department of Forest and Soil Conservation (DoFSC) under the MoFE. There are three divisions: Forest and Wildlife Protection Division with five sections (Armed Forest Protection, Forest Protection, Wildlife Protection, CITES and Certification); Forest Management Division with five sections (Forest Management, Silviculture, Social Forestry, Private and Public Forest, GIS and Mapping); and Watershed and Land Management Division with six sections (Planning and Watershed Information System, Sensitive Watershed Management, Wetland Protection, Landslide Management, Conservation Technology Development, Land Use Development and Disaster Reduction). These are supported by a Personnel Administration Section, Financial Administration Section and Legal Consultation Section. DNPWC and the DoFSC will lead project implementation for the MoFE.

The activities of MoFE (as MoFSC) provide much of the baseline for the project, including leading the GoN's commitment to the landscape approach to conservation and management, which it signed on to through a Ministerial Decision in 2000. Three landscapes were identified for Nepal and the transboundary Terai Arc Landscape (TAL) was declared a priority conservation landscape by the Government of Nepal in 2001. The first TAL Strategy covered the years 2004 to 2014 and achieved policy commitments for the landscape conservation approach, declaration of protection forest in some of the identified corridors, expansion and strengthening of the protected area network, and an increase in community awareness and capacity with institutional mechanisms. The TAL Strategy and Action Plan 2015-2025 was released in late 2015 by the MoFSC including mechanisms to improve coordination, from local to national level, proposed for implementation by MoFE through this proposed project.

In addition, the Minister of Forests and Environment chairs the National Biodiversity Conservation Committee (NBCC), the highest level coordination mechanism for landscape conservation in Nepal. The NBCC is mandated to oversee and provide policy directives at the landscape level and meets on an as-needs basis, and has a number of sub-committees on key topics. A Terai Arc Landscape Working Group (TALWG) currently operates under MoFE as a coordination mechanism for DNPWC and DoF. The TALWG meets regularly and convenes with key conservation NGOs. Provincial and Local level forest governance bodies and coordination committees such as the District Forest Sector Coordination Committee (DFSCC) mechanism that was piloted in the UNDP-GEF WTLC Project also come under MoFE oversight.

The Government of Nepal has established a national network of 20 protected areas since 1973, consisting of twelve national parks, one wildlife reserve, six conservation areas and a hunting reserve. The DNPWC in the MoFE manages the PA System out of Kathmandu; and protected areas are managed by site-based headquarters staffed by federal government. Buffer zones of forest and mixed use are designated around

protected areas and are managed by the DoFSC (under MoFE) and also by community-forest user groups (CFUG), facilitated by staff from Division Forest Offices. Overall, MoFE has a clear mandate and the necessary capacity to lead this integrated landscape management project, through its units engaged in policy and strategy development, intersectoral coordination, protected area, buffer zone and forest corridor management, and biodiversity conservation.

2.9 Innovativeness, Sustainability & Potential for Scaling up

Innovation: The project represents a truly integrated approach for natural resource management at the landscape scale, by combining community-based biodiversity conservation and sustainable forest and land management with national to regional level planning and coordination among multiple sectors that affect the landscape. This proposed project, as the first multi-focal area GEF project for Nepal, is an opportunity to advance conservation in the context of major government restructuring in line with the new constitution, with increased roles of state (provincial) and local (district and municipal) government in natural resource management and conservation. The project will illustrate a new approach to inter-sectoral, multi-stakeholder landscape level planning, with the coordination and capacity of key ministries of government and regional natural resource management and planning bodies improved and in place by project completion.

Sustainability: This project is founded on a strong foundation of more than 15 years of conservation planning and management across the Terai Arc Landscape, and builds on key structures put in place during the UNDP-GEF WTLCP. Policies and institutional mechanisms are in place for protected area and buffer zone management, and community engagement in forestry is a model for community based natural resource management. The project supports the *Terai Arc Landscape Strategy and Action Plan 2015-2025*, which will guide conservation in the region for the next ten years. The project will be implementing approaches and technology to reduce dependency on natural resources that communities will adopt and which will last beyond the end of the project, including integrated livestock management to improve productivity. The secondment of government staff to fill the Project Coordinator position in the PMU will ensure some sustainability within government. The extensive training of government representatives, coordination and collaboration among key technical ministries in integrated landscape management, and support for the National Biodiversity Coordination Committee (NBCC) will help to sustain project interventions in the Terai Arc Landscape and across other conservation landscapes. The participatory mechanisms employed by the project will engage local communities, with priority for women and indigenous peoples, and this capacity will be maintained after the project ends. The advances in national and regional natural resource policy will contribute to national expertise in landscape level conservation initiatives and regional green infrastructure planning and development, and will remain in place after the project ends.

Potential for scaling up: The replication potential of this investment reaches beyond the target areas to other parts of the Terai Arc Landscape, as well as to the two other conservation landscapes in Nepal. The policies and mandate of the NBCC supported under this project are national in scope, allowing other areas and conservation landscapes in Nepal to pursue and adopt similar approaches. The project will test the efficacy of integrated landscape management in Nepal by piloting a planning approach that engages the

State governments, Division Forest Offices and Municipal governments[84], with the intention of establishing the governmental and policy enabling environment to replicate these principles in other landscapes.

The target areas for Component 3 are focused on the Banke-Bardia Complex according to intervention priorities (see **Appendix 4**) and for greater impact, while exchange visits will be facilitated to and from other parts of the TAL to allow for other communities and local government staff to see the outcomes and uptake the same approaches and technologies, such as real-time SMART for anti-poaching patrols, a strategic approach for managing HWC and innovative response methods, application of SFM approaches to community forestry, sustainable/low impact livestock management practices, fire risk reduction involving community engagement on clearing fire-lines, incentives for afforestation on private land, etc. Beneficiary communities and other communities in the landscape will have the opportunity through the project to participate in community-based learning and lesson exchange on interventions. There is great potential for upscaling through additional governmental support from ongoing programs on community and leasehold forest development; national forest development and management; and soil conservation programs. Component 4 of the project aims to provide a strong platform through meetings and published and online resources to share experiences and lessons learned in order to inform the further uptake of the project approaches within and beyond the Terai Arc Landscape.

2.10 Knowledge Management and Communications Strategies

The project will build on important lessons from a number of relevant projects and initiatives (elaborated in **Section 1-5**), including the gaps identified in the *Terai Arc Landscape Strategy and Action Plan* 2015-2025; landscape level projects in TAL, including the Protected Area and Buffer Zone Project and Corridor and Bottleneck Restoration Project, as well as other priority conservation landscapes in Nepal; the WWF-GEF Churia Range project (PMIS #5596); the UNDP-GEF *Western Terai Landscape Conservation Project* (PMIS #1107); and the UNDP-GEF *Conservation and Sustainable Use of Wetlands* (PMIS #1217) project, which was also in the Terai Arc region.

The project will promote learning through national and regional inter-sectoral dialogue and coordination for integrated landscape management. This will include convening an annual multi-stakeholder forum to discuss integrated landscape management in TAL, including the management of critical corridors and buffer zone areas, as well as approaches to mitigate the impacts of large infrastructure projects on biodiversity, forests, and local communities. Sharing the approach and progress of integrated landscape management will be a key part of the multi-stakeholder forum. The annual stakeholder forums will provide a mechanism for engaging with related initiatives in Nepal (see **Section 1-4** for description of such initiatives), and scope is provided for learning from international initiatives (e.g. staff exchanges with successful integrated landscape management examples, inputs on HWC responses, anti-poaching and illegal wildlife trade exchange with India, etc.).

[84] At PIF stage, the focus was on outrolling the District Forest Sector Coordination Committees, but this platform has become redundant following the operationalization of the new structure in the forestry sector, with increased roles for Division Forest Offices and Municipal governments in natural resource management

An online Landscape Knowledge Learning Platform for TAL will be developed and maintained by MoFE as means of sharing information on the biodiversity, ecosystem services and sustainable use of natural resources in the TAL. In addition, a project website will be hosted and regularly updated to communicate the progress of project activities and key outcomes. Important lessons from the project will be documented throughout implementation during regular monitoring and evaluation and reporting. Lessons will be compiled in case studies that can be shared annually or by project close. These case studies will be an important means for the project to promote the exchange of lessons and experiences with other practitioners working on projects in Nepal and other countries. The project will also aim to coordinate with the coordination and knowledge management child project of the *Global Partnership on Wildlife Conservation and Crime Prevention for Sustainable Development*, for sharing lessons and experiences on the wildlife crime prevention sub-component of this proposed project.

In terms of communications strategy, the project will engage and communicate with stakeholders at federal, state and local levels according to the stakeholder engagement plan (see **Section 4**). Stakeholders will be consulted and engaged throughout the project implementation phase to: (i) promote understanding of the project's outcomes; (ii) promote stakeholder ownership of the project through engagement in planning, implementation and monitoring of the project interventions; (iii) communication to the public in a consistent, supportive and effective manner; and (iv) maximization of linkage and synergy with other ongoing projects.

Substantial capacity building and awareness raising activities are incorporated within the project's three technical components, with due attention to gender mainstreaming and social inclusion (see **Sections 5 & 6**).

The principal communications support will come from Component 4, which will enable the strengthening of institutional and individual understanding of the mechanisms and approaches to achieve integrated landscape planning and management, where to source information on biodiversity and natural resource status, and information on these resources. The project will support the enhanced documentation and sharing of best practices and knowledge arising from project activities, including case studies and technical reports to document best practices and traditional (indigenous) knowledge. This will be achieved through sharing these materials on online project-related websites, social media and a range of outreach and communication materials. It provides for communication of project progress, news, events and publications via a project website; and stakeholder forums at landscape level, as well as engagement of national/local media through sensitization on ILM and trips to view project activities in order to foster outreach and increase the visibility of the project.

The project's communication strategy will be further developed during the project inception period and led by the Communications Officer in the Project Management Unit. The strategy will be reviewed and updated annually throughout the project implementation period in order to allow for adaptive management.

Section 3: Project Governance

3.1 Project Execution Arrangement

The project will be executed by the Ministry of Forests and Environment (MOFE), Government of Nepal. Under MOFE, DOFSC and DNPWC are the two major departments responsible for implementing the project's interventions at the federal level. The local community groups (e.g. Community Forest User Groups, Buffer Zone User Committees, Buffer Zone Community Forest User Groups), municipalities and state government agencies (e.g. Ministry of Industry, Tourism, Forests and Environment, Division Forest Offices) will be key partners for the implementation at local and state level. MOFE will be responsible for communicating with the national GEF Operational Focal Point (OFP) regarding the status of project implementation. WWF as the GEF implementing agency will communicate and coordinate with the GEF secretariat as appropriate. The **Project Advisory Committee (PAC**) and **Project Executive Committee (PEC)** and **Project Management Unit (PMU)** will constitute the overall governing bodies for the project. The overall project management arrangements are shown in **Figure 3-1.** The key function of PAC is to provide strategic guidance and to enable and facilitate effective implementation across all levels of the government structure. Likewise, the key function of PEC is to endorse the annual workplan/progress/financial report, and to facilitate coordination at all levels of Government (federal, state and local). Details and key representation of the project governance bodies, PAC and PEC are illustrated in **Figures 3-2 and 3-3.**

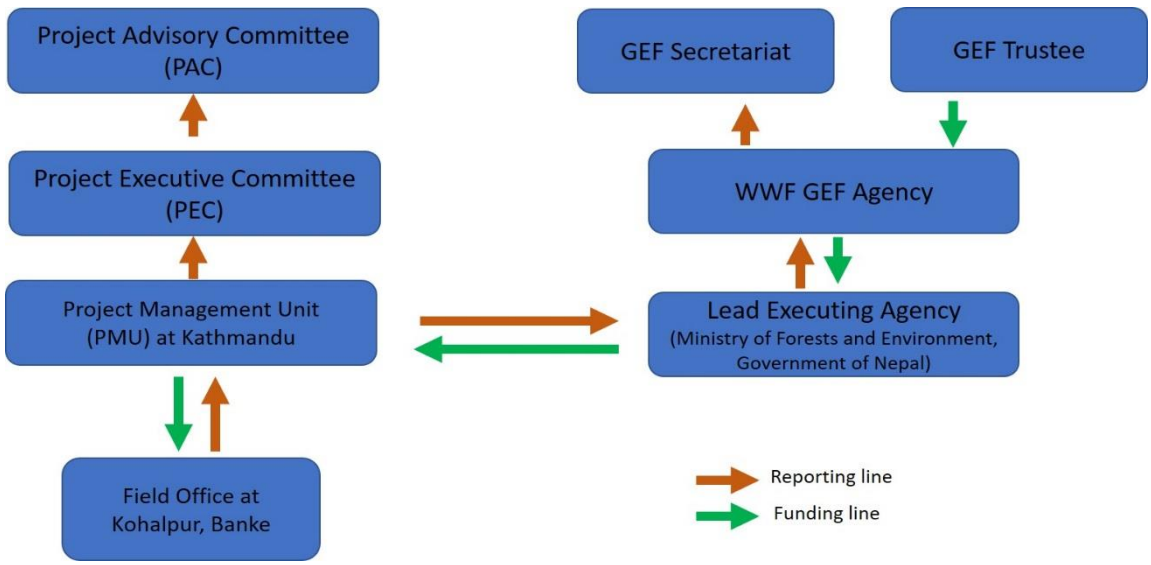


Figure 3-1: Overall implementation arrangement

Project Advisory Committee (PAC)

Chair:
Secretary, MoFE

Member Secretary:
Chief, Planning, Monitoring and Coordination Division, MoFE

Function, Roles and Responsibilities:

1. Strategic guidance and coordination in line with the Project Document/Grant Agreement
2. Enabling and facilitation for effective implementation across all levels of the government

Members:

1. Director General, DoFSC
2. Director General, DNPWC
3. Chief, Planning, Monitoring and Coordination Division, MoFE
4. Chief, Climate Change Management Division, MoFE
5. Chief, Forest and Watershed Division, MoFE
6. Chief, Participatory Forestry Division, MoFE
7. Chief, Environment and Biodiversity Division, MoFE
8. Chief, National REDD Centre
9. Joint Secretary, International Cooperation Coordination Division, Ministry of Finance
10. Joint Secretary, MoAD
11. Joint Secretary, MoEWRI
12. Joint Secretary, MoUD
13. Joint Secretary, MoHA
14. Joint Secretary, MoFAGA
15. Representative of SWC
16. State Secretary of MoITFE, State 2
17. State Secretary of MoITFE, State 3
18. State Secretary of MoITFE, State 5
19. State Secretary of MoITFE, Karnali State
20. State Secretary of MoITFE, Sudur Paschim state
21. Representative, Indigenous People (IP) and Local Communities (LCs)
22. Representative, FECOFUN
23. Invitee only: Representative, WWF Nepal

Figure 3-2: Project Advisory Committee (PAC)

Note: PAC will meet at least once a year

Project Executive Committee (PEC)

Chair:
Joint Secretary, Planning, Monitoring and Coordination Division, MoFE

Key Function, Roles and Responsibilities:

1. Review and endorsement of AWP and Progress and Financial report (Yearly and Half yearly)
2. Support in facilitation of co-financing and annual audit report endorsement
3. Linking the project function with Advisory committee
4. High level monitoring at outcome level
5. Facilitate coordination with three levels of governments (Federal, state and local)

Members:

1. Under Secretary (Technical), Development Cooperation Coordination Section, MoFE
2. Under Secretary (Technical), Climate Change Management Division, MoFE
3. Under Secretary (Technical), Forest and Watershed Division, MoFE
4. Under Secretary (Technical), Participatory Forestry Division, MoFE
5. Under Secretary (Technical), Environment and Biodiversity Division, MoFE
6. Under Secretary (Technical), Department of National Park and Wildlife Conservation
7. Under Secretary (Technical), Department of Forests and Soil Conservation
8. Under Secretary (Technical), National REDD Centre
9. Under Secretary, MOFAGA
10. GESI Focal point, MoFE
11. Under Secretary, Finance section, MoFE

Member Secretary: Project Coordinator, ILM

Invitees:

- Project Manager
- Field Manager(s)
- Representative, WWF

Figure 3-3: Project Executive Committee (PEC)

Note: PEC will meet at least every trimester.

3.2 Project Management Unit

A **Project Management Unit (PMU)** will be created by the project executing agency, the MOFE. The PMU is the functional structure of the project responsible for developing the annual workplan, implementing and monitoring of the activities and reporting. It also functions as secretariat to the governing body (PAC and PEC) and will be hosted by MOFE, Kathmandu. The structure and reporting line of the PMU is given in **Figure 3-4**. The project will establish one field office to be located at Kohalpur, Banke District, within the available government premises. To implement the project, a project operation manual (*hereafter the manual)* will be developed to provide overall guidance on project operation. The manual will provide the policy and procedures for financial and programmatic operation. The role and responsibilities of the field office will be specified in the project operation manual. To ensure better coordination and avoid any duplication, the field office in Kohalpur will maintain regular interaction and sharing with other MOFE supported projects in that area through the formation of the Field Coordination Committee. The existing TAL office at Kohalpur, the newly established forestry directorate at Butwal, the chief warden of Banke National Park and the Division Forest Office at Banke will be the center of such coordination.

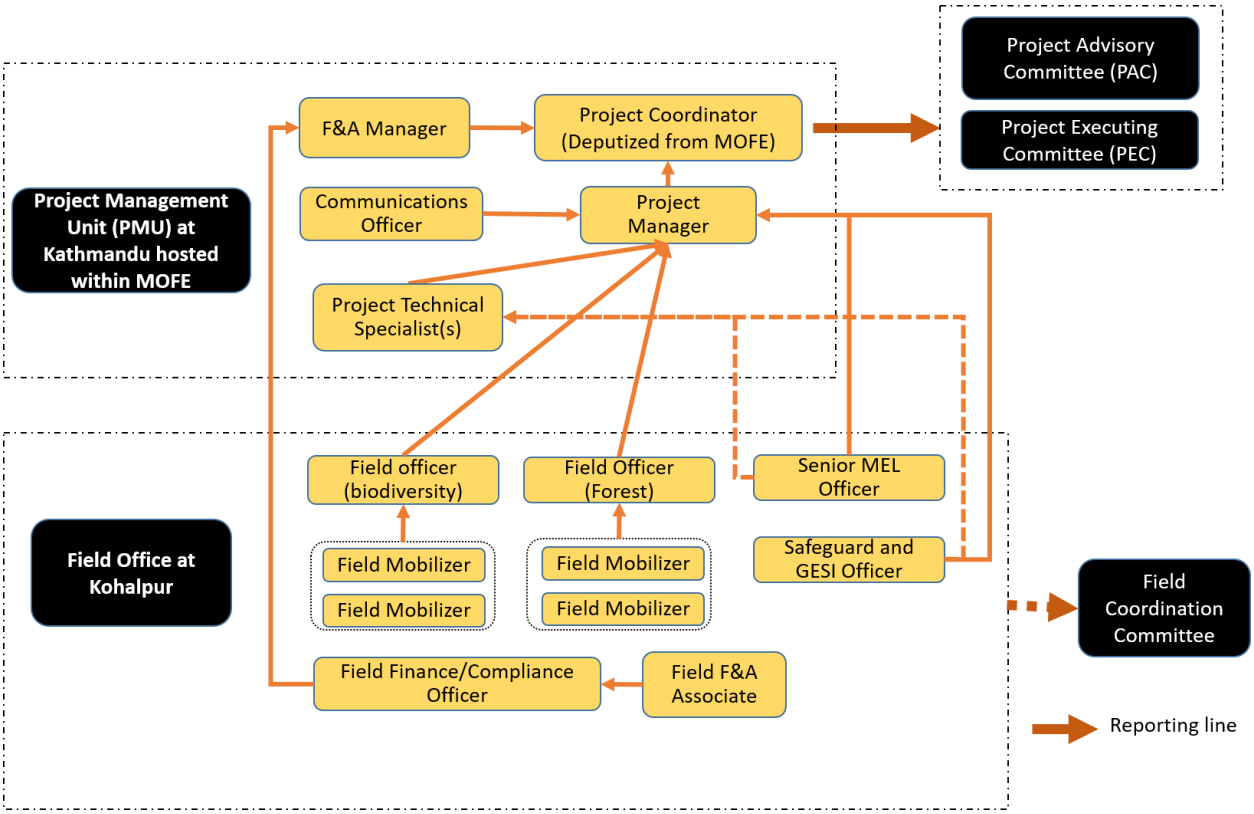


Figure 3-4: Project Management Unit (PMU)

Field Coordination Committee

This is an ad-hoc/as-needed mechanism that will coordinate and cooperate among the agencies at various levels. The Secretary of MOITFE, State 5 will be the coordinator of this committee. The membership, function and roles of the committee is illustrated in **Figure 3-5** below.

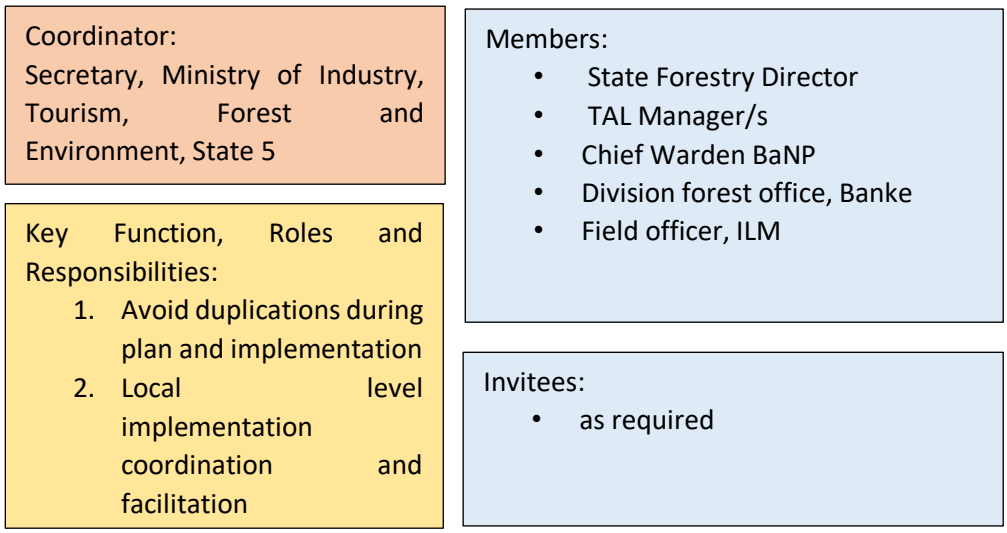


Figure 3-5: Field Coordination Committee (FCC)

The following project staff will be recruited through a competitive process:

Project Management Unit (PMU) at Kathmandu

1. Project Coordinator (Deputized from MoFE, Under-secretary-Technical)
2. Project Manager
3. Project Technical Specialist
4. Finance and Administration Manager
5. Communication Officer (Part time)
6. Outsourced staff (Receptionist, Driver, Messenger)

Field Office at Kohalpur, Banke

1. Field Officer (Biodiversity)
2. Field Officer (Forest Management)
3. Finance/Compliance Officer
4. Finance and Administration Associate
5. Monitoring, Evaluation and Learning (MEL) Officer
6. Safeguard and GESI Officer (70% in field; 30% in center)
7. Field Mobilizers (Outsourced) – 4 (based in BNP northern side, BaNP northern side, Corridor area)
8. Outsourced staff (Receptionist, Driver, Messenger)

Comprehensive "Terms of Reference" (TOR) for all the staffs will be detailed in the operational manual. Below is the brief responsibility matrix (Table 3-1).

Table 3-1: Responsibility matrix

Position Title	Summary of responsibilities
Staff at Project Management Unit, Kathmandu	
Project Coordinator	High-level coordination and collaboration between the project and government partner(s). Sharing of project related information to MOFE and its two department - at center and MOITFE and Division Forest Offices - at state level and municipalities - at local level. Lead the overall operationalization and management of the project and function as the member secretary to the PEC. Under Secretary (Technical) from MoFE
Project Manager	In consultation with Project Coordinator, develop annual workplans for PAC and PEC endorsement. Ensure field implementation is based on approved workplan and "detail implementation plans (DIP)". Monitor project results and supervise and manage staff performance. Consolidate the overall technical and financial reporting to executing partner (MOFE) and to GEF Agency/WWF.
Project Technical Specialist	Ensure project "theory of change" and provide technical support to project manager during annual workplan preparation. Provide required technical support to all program staff, and ensure that results identified in the project document are fully understood by project staff, government and partners. Provide technical input to DIPs in close coordination with other program staff. Contribute to the creation of TORs for consultancies. Review field grants and provide support with technical/programmatic monitoring. Update project's result framework and tracking tools.
Finance and Administration Manager	Responsibilities include overall budget and financial management of the project. Timely submission of budget and financial reports while ensuring compliance to all legal requirements. Supervision of day-to-day operations of the office in Kathmandu and Kohalpur including all administrative and Human Resource role.
Communication Officer (Part time)	Support the development of communication materials. Contribute to the development of content for public outreach activities (radio program, Jaibik platform, etc.). Work in close coordination with project manager, technical specialist and field staff to identify success stories. Capture lesson learned and provide technical backstopping in report publication as well as donor reporting.
Staff at Project Field Unit, Kohalpur	
Field Program Officer (Biodiversity)	Act as liaison with Park authorities (SuNP, BaNP, BARDIA NATIONAL PARK, CNP and PNP), Buffer zone management councils and Buffer zone user committees. Provide technical guidance to sub-grantees and ensure that DIPs are understood by Field Social Mobilizers and sub-grantees. Monitor effectiveness and efficiencies during field implementation of activities/DIPs. Support MEL officer and center staff in conducting output and outcome level monitoring visits. Ensure the flow of information to the center office and coordinate with TAL-CBRP office and other MOFE offices as appropriate. Provide information during annual workplan and DIPs preparation to center office.

Position Title	Summary of responsibilities
Field Program Officer (Forest Management)	Act as liaison with Division Forest offices, Community Forests User groups and other CSOs/CBOs in the corridor area. Provide technical guidance to sub-grantees and make sure that DIPs are understood by Field Social Mobilizers and sub-grantees. Monitor effectiveness and efficiencies during field implementation of activities/DIPs. Support MEL officer and center staff in conducting output and outcome level monitoring visits. Ensure flow of information to the center office and coordinate with TAL-CBRP office and other MOFE offices as appropriate. Provide information during annual workplan and DIPs preparation to center office.
Field Finance/ Compliance Officer	Budget and financial management of the field office. Timely submission of budget and financial reports. Ensure compliance to all legal requirements. Day-to-day operation of the office in Kohalpur, including all administrative and Human Resource role.
Senior Monitoring, Evaluation and Learning (MEL) Officer	Provide support to project team in tracking project results and indicators by using project result framework. Ensure database generation, authentication and management. Provide technical support to project manager and project Technical specialist in maintaining the WWF program standards (PPMS) and contribute in adaptive management practices. Play a major role in developing annual workplan and updating activities considering the field/contemporary issues. Monitoring quality assurance of DIP and its feasibility.
Safeguard and GESI Officer	Ensure the GESI is mainstreamed throughout the project. Implementation of GESI plan. Provide technical support in developing workplan and consultancies (where needed) through GESI lens and during field monitoring. Work in close coordination with Project Manager and Project Technical Specialist to identify entry point and mainstream GESI where and when needed. Ensure Safeguard recommendations are in full compliance. Provide GESI and safeguard related technical support to field staff.
Field Finance and Administration Associate	Assist Field Finance/Compliance Officer to manage overall budget and financial management of the field office and provide support for submission of budget and financial reports, while ensuring compliance to all legal requirements. Supports day-to-day operation of the office in Kohalpur, including all administrative and Human Resource role.
Field Mobilizers (4)	Provision of technical support to sub-grantees to implement activities as detailed in DIPs. Communication to field and center team on on-the-ground realities, major challenges/hurdles during activities implementation. Identify any governance issues, major success and failure at the sub-grantee level. Mobilize and provide technical backstopping to communities.
Front Desk Assistant (2)	Front desk responsibilities including handling of calls, guests, etc. and provide logistic support.

Section 4: Stakeholder Engagement

4.1. Stakeholder Engagement Activities (Project Preparation Phase)

Stakeholder engagement during the project preparation period followed a Stakeholder Engagement Plan that was developed with WWF guidance (see **Appendix 7**). This plan included the stakeholder consultation plan (see **Table 4-1** below for the consultations conducted for each stakeholder) and a description of the stakeholder engagement process (summarized below). See **Appendix 8** for a full record of the consultations conducted during the Project Preparation.

The initial rounds of consultations in January – April, 2018 informed the assessment of biodiversity values and the identification and assessment of the threats facing biodiversity across all seven TAL corridors and all six PA buffer zones, the analysis of barriers towards achieving the project goal, and the description of baseline activities at all levels of governance. These inputs provided the basis for the situation analysis section of the project document (**Part 1**), including the selection of project target areas, and rolling updates on the rapidly evolving changes in government structure throughout the project preparation process that has been captured in the policy, legal and institutional framework (**Section 1.6 and Appendix 13**). The next round of consultations in July focused on the project target sites, providing detailed baseline information for results framework indicators, gender analysis/mainstreaming and social inclusion, and to do consultations with communities and other stakeholders on the design of proposed activities. The baseline analysis, selection of project sites and design of the project strategy and governance arrangements was guided by a series of national stakeholder consultation workshops.

GoN, WWF and GEF requirements for gender equity and social inclusion (GESI) have been addressed during project preparation by an analysis and action plan described in **Section 6**, and mainstreamed into the project strategy (**Section 2**) as well as the present Section.

The following stakeholder engagement activities were conducted during project preparation:

1. Project Planning Committee (PPC) meetings – to guide the Project Preparation process, involving MoFE, WWF, DOF and DNPWC and held every month (17 in total during the project preparation period)
2. Project Preparation Workshops for national level stakeholders and other key stakeholders, including government, NGOs, and CSOs, (including break out discussion groups as necessary):
    a. Project Preparation Kick-off Workshop – orientation on GEF Project Preparation process and requirements (mid Dec 2017, Kathmandu)
    b. Project Preparation Inception Workshop – launch of project development process and feedback on preliminary field visit (early Feb 2018, Kathmandu)
    c. Project Preparation Stakeholder Consultation Workshop – to review baseline assessment results, site selection and preliminary activities (June 2018, TAL)
    d. Project Preparation Stakeholder Consultation Workshop – to review first draft project document materials – project strategy and governance arrangements (early August 2018, TAL)
    e. Project Preparation Project Document Review meeting – to review final draft project document (12 October 2018, Kathmandu)

3. Field level consultations (including meetings with a range of local stakeholders, community groups, site visits, field inspections, and focus group discussions)
    a. Preliminary field trip with international consultant / Project Preparation team leader – to announce start of Project Preparation at local level, update PIF baseline situation on threats and barriers, gather initial baseline information on selected areas (late Jan - early Feb 2018)
    b. First round of YAE (national consultancy team) field consultations – to gather baseline information for situation analysis (April 2018)
    c. Field trip with Project Preparation TL and WWF to inform site selection and design of preliminary activities (June 2018)
    d. Second round of YAE field consultations – to project target sites, to obtain detailed baseline information for results framework indicator and gender/safeguards, conduct consultations with communities and other local stakeholders on design of proposed activities (July 2018)
    e. Safeguards and gender assessments by WWF specialists (July - August 2018)
4. Individual stakeholder consultations
    a. Meetings with individual stakeholders at all levels to discuss specific issues, obtain baseline data, review indicator targets, comments on activities, etc.
    b. Meetings with related projects and initiatives to obtain baseline information on their status of implementation, timing, budget, potential for inclusion as project co-financing, specific areas of collaboration (related to project outputs), mechanisms for collaboration
5. Gender and Social Inclusion (GESI) consultations
    a. Study conducted by GESI specialists to ensure that GESI issues were screened and integrated into the design of project activities, outputs and the M&E framework (see **Section 7**)
    b. Consultations by YAE national consultant team during field trips concerning activities at proposed target sites
    c. Gender analysis information collected by YAE team during field trips and national consultations

Table 4-1. Roles of project stakeholders, potential project impacts and consultation during Project Preparation

Stakeholder	Mandate	Role in the Project; Project Impact	Consultation during Project Preparation
Ministry of Forests and Environment (MoFE) Department of Forest (DoF) Department of National Parks and Wildlife Conservation (DNPWC)	Focal ministry for biodiversity conservation and NRM. MoFE manages forests, protected areas, and other related natural resources. In addition, it is concerned with all environmental issues including EIA approvals for development projects; climate change; carbon financing; climate finance;	MoFE is the project's lead ministry and the Executing Agency for project implementation. MoFE will host and coordinate the Project Management Unit (PMU). The key departments (DoF, DNPWC) have provided technical input during project preparation (PPC,	MoFE as project focal point, has lead the project formulation process as the Project Planning Committee (PPC) and fully participated in the decision-making process during Project formulation

Stakeholder	Mandate	Role in the Project; Project Impact	Consultation during Project Preparation
	renewable energy; low carbon development; adaptation; pollution control.	workshops) and will play a significant technical role during implementation. The project will provide significant support to MoFE's role in implementing the TAL Strategy and NBSAP	
State Governments	State Governments have responsibilities for use of forests, waters and management of enivronment within the state; agriculture and livestock development; state level irrigation and water supply services	The key departments under the new state govts have provide technical input during the latter part of project preparation and will be key partners during implementation. They will monitor and supervise project activities during implementation, and play a role in intersectoral coordination. The project will assist the new state government to develop their capacity for SFM and ILM	During project preparation, the State Ministry of Industry, Tourism Forest and Environment (MoITFE) has provided inputs regularly during field consultations.
Local Governments (Rural Municipality, Municipality, Sub-Metropolitan City)	Under the Constitution of Nepal (2015), local governments have responsibilities for local level development plans and projects, includng environmental protection and biodiversity; agriculture and animal husbandry; disaster management; protection of watersheds and wildife; and water supply, small hydropower projects and alternative energy.	Local government will be major partners for the PMU to execute project activities of the different components within the TAL, including strengthening capacity for coordination, management of corridors and PA Buffer Zones, livelihood support and responding to HWC. The project will provide capacity development support for implementing ILM at the local level, assisting local govts in taking up their new roles in NRM governance	During the field visits of 1st round and 2nd round, local governments were consulted, including safeguard and gender issues

Stakeholder	Mandate	Role in the Project; Project Impact	Consultation during Project Preparation
Division Forest Office DFO	Division Forest Office is the designated authority to manage the forest and conservation of biodiversity outside the protected areas (eg in corridors). The District Forest Offices were previously the lead for such work until late in the Project Preparation.	Division Forest Office is the major implementing partner for building capacity for SFM and corridor and buffer zone management in Components 2 and 3. They will also be engaged in inter-sectoral coordination for ILM in components 1 and 4.	During project formulation, the Project Preparation team frequently consulted during the field visits with DFOs and forest sector offices.
National Parks	National Parks were established to manage and protect forest, wildlife and biodiversity within their Core and Buffer Zone areas	Banke and Bardia National Parks are major implementing partners for components 2 and 3 of this project within the National Park Core Zone (for certain activities, eg anti-poaching, training) and Buffer Zone (the main focus of the project)	Consultations were conducted with the park officials during the 1st and 2nd rounds of field work.
Buffer Zone User Committees (BZUCs) Buffer Zone Community Forest User Groups (BZCFUGs) Community Forest User Groups (CFUGs)	Are mandated to support conservation initiatives in the buffer zones of protected areas and in corridors. They support monitoring, habitat management, community-based relief mechanisms and sustainable forest resource	The project aims to work with local communities and forest user groups in key areas to implement activities of component 2 & 3. These stakeholders will be the main beneficiaries of the project, receiving capacity development and operational support for conducting SFM, sustainable livelihoods and tackling threats such as forest fires, uncontrolled grazing and HWC	As key beneficiaries and project partners, a sample of communities, CFUGs, BZ CFUGs, buffer zone user committees, have been consulted during 1st and 2nd rounds of field consultation, including safeguard and gender assessments
Networks: Federation of Community Forest User Groups of Nepal (FECOFUN)	Networks of community based forest user groups advocate for rights of users, raise awareness and coordinate with line agencies to facilitate	Networks will facilitate the local process for implementation among CFUGs and BZUGs. The project will positively engage these networks	FECOFUN participated in the stakeholders consultation workshop, and was consulted during the 1st round and 2nd round of field work with district chapter.

Stakeholder	Mandate	Role in the Project; Project Impact	Consultation during Project Preparation
Community Forest Coordination Committee (CFCC)	community based forestry program.	and facilitate their engagement in ILM approaches	
Indigenous People Nepal Federation of Indigenous Nationalities (NEFIN) Indigenous peoples in project sites	NEFIN is the representative voice for the indigenous peoples. Its mission is to work in the defense and respect of collective rights, to expose indigenous people's problems and to present alternative proposals for development that correspond to their worldview.	The project aims to work proactively with indigenous communities in key areas to implement project activities, to build capacity for SFM and sustainable livelihoods and resolve HWC issues Enhancing social safeguards in terms of protecting their customary practices will be a key concern of the project	The district chapter of NEFIN was consulted during the 1st round and 2nd round of field consultation, and national chapter of NEFIN participated actively in the stakeholder consultation workshop.
Interest groups : The Himalayan Grassroots Women's Natural Resource Mangaement Association of Nepal (HiMAWANTI), Dalit Alliance for Natural Resources (DANAR)	National organizations are interested in natural resource management with focus on particular stakeholders such as Women, Dalit.	They have expertise in social issues of natural resource management and can facilitate project activities to enhance gender equity and social inclusion. The project would engage them in stakeholder coordination and engagement (components 1 &4) , and in implementing field activities in Components 2 & 4.	HiMAWANTI and DANAR participated during the stakeholder workshop in Kathmandu.
Conservation I/NGOs e.g. National Trust for Nature Conservation (NTNC), Zoological Society of London (ZSL)	International and national non-government organizations dedicated to biodiversity conservation	NTNC and ZSL are working actively in the project area on wildlife conservation, and will be involved in coordination, technical support and co-financing for related activities during project implementation	NTNC and ZSL were both engaged during the project preparation process in the field and national level consultation
Private sector	Private sector contribute towards increase incomes	Private sector forms part of multi-stakeholder	Cooperatives and cottage industries were engaged

Stakeholder	Mandate	Role in the Project; Project Impact	Consultation during Project Preparation
	through accessing the market and generating local employment in the rural areas. These could be forest and agriculture based or industries which demand skilled labor.	forum on income related issues; private landowners will be involved in afforestation work in the project corridors and buffer zones. The project will work with WB/ERP to provide incentives for forestry activities on private land.	during the field consultation process.

4.2. Stakeholder Engagement (Implementation Phase)

The existing roles of stakeholders in conducting baseline governance of natural resource management including protected area, buffer zone and corridor management, wildlife management and forest management are described in **Section 1 (**see the overview in **Section 1-1)**. This includes information the roles of concerned institutions in the forestry sector (**Table 1-12**) and stakeholders' roles, strengths and capacity building needs (**Table 1-13**). The project seeks to strengthen the engagement of all related stakeholders towards unified and coherent understanding and delivery of integrated landscape management in the TAL, with enhanced capacity for SFM, biodiversity conservation and resilient livelihoods. The four project components each have quite different thematic and geographical scope, and the mechanisms and scope of engagement of stakeholders varies between them. Responsibilities for leading and supporting the implementation of project Outputs and individual activities are described in **Section 2** and in the workplan in **Appendix 3**, and the engagement of stakeholders in each component is indicated in **Table 4-2** below.

Overall, this is a multi-level, multi-sector project that will be led by the Ministry of Forests and Environment at Federal level as the national Executing Agency. The project governance arrangements (**Section 3**) describes the project management structure, including the Project Executive Committee (PEC) and Project Advisory Committee (PAC) membership, roles and functions and Project Management Unit (PMU) and Field Support Unit (FSU) staffing. These bodies serve to engage the key stakeholders at federal and state government levels in the decision-making and overall guidance of project implementation (see Section 3: Project Governance).

The principal opportunities for engagement of stakeholders during the implementation of the project is via the activities, as listed in Section 2. Almost all activities will be undertaken by stakeholders, facilitated by the PMU, as denoted in the strategy in Section 2.

Table 4-2. Engagement approach for stakeholders during project implementation

Stakeholder	Component	Engagement Approach
MoFE	PM, 1,2,3,4	• Overall lead for execution and management of the project and coordination of co-financing for implementation • Chair of PAC, Project Coordinator • Host of PMU
Division of Planning, Monitoring & Coordination (MoFE)	PM, 1,2,3,4	• PAC, Chair of PEC • Lead role in supporting intersectoral coordination, especially at Federal Level (e.g. NBBC) • Strengthening of EIA practices for infrastructure development
Environment and Biodiversity Division (MoFE)	PM, 1,2,3,4	• PAC, PEC member • Technical support for project activities on biodiversity conservation • Engagement in training activities
DoFSC (MoFE)	PM,1,2,3,4	• PAC, PEC member • DOFSC plays the important role in formulation of corridors, strategy, SFM and control the land degradation • Provide the technical support for forest management and planning activities • Engagement in training activities
DNPWC (MoFE)	PM,1,2,3,4	• PAC, PEC member • Project team will coordinate with the DNPWC to ensure synergies for project implementation • Provide technical support for PA and wildlife management • Engagement in training activities
Climate Change Management Division (MoFE)	PM,1,2,3,4	• PAC, PEC member • Provide technical support on CC adaptation and mitigation, synergies with related CC projects including ERP/FIP and renewable energy uptake
National REDD Centre (MoFE)	PM,1,2,3,4	• PAC, PEC member • Provide technical support on CC adaptation and mitigation, synergies with related CC projects including ERP/FIP on forest carbon
International Cooperation Coordination Division of the Ministry of Finance	PM,1,4	• PAC, PEC member • Integration of the project with national development planning and other international projects
Forest Research and Training Centre	1,2,3	• Project partner for delivery of training and capacity building activities in C 1, 2 & 3

Stakeholder	Component	Engagement Approach
Ministry of Energy, Water Resources and Irrigation	1,2,3,4	• Coordination and involvement in training and awareness raising on ILM at all levels and strengthening of EIA practices • Coordination and engagement in Output 3.2 on piloting SGI to mitigate impacts of irrigation canals on wildlife
Ministry of Physical Infrastructure and Transport	1,2,3,4	• Coordination and involvement in training and awareness raising on ILM at all levels, and strengthening of EIA practices • Coordination and engagement in Output 3.2 on piloting SGI to mitigate impacts of roads and other types of large infrastructure on wildlife
State MOITFE / Forest Directorate for States 2,3,5,7 and Karnali	PM,1,2,3,4	• State Secretaries on PAC • Project team will coordinate with the MOITFE to ensure synergies for project implementation • Provide technical support during formulation of local policies related to forest management • Provide support for implementation of C 2 and C3 activities on SFM for corridors and buffer zones
Local Governments (District, Municipal levels)	1,2,3,4	• Project will coordinate with the local government's establishment and capacity development during the implementation of C 2 & 3. • Strengthening of District Coordination Committees role in delivering inter-sectoral coordination for ILM at local level and networking (C1) • Strengthening of awareness and capacity of Municipal Governments for ILM, CBNRM and biodiversity conservation (C1, C3) • Strengthening of Wildlife Crime Coordination Bureau networking and functions (C1, C3)
Division Forest Offices	1,2,3,4	• Project team will coordinate and work closely with the Division Forest Offices for the implementation of C 2 & 3, as this is the responsible organization for the management of corridors
Protected Areas	PM,1,2,3,4	• Chief Wardens of Bardia and Banke NPs PSC invitees • Chairs of Bardia and Banke NP Buffer Zone Management Committees PSC invitees
Local Communities and Organizations Buffer Zone User Committees (BZUCs) Buffer Zone Community Forest User Groups (BZCFUGs)	2,3,4	• The project team will coordinate and engage directly with the local communities and CBOPs like BZUCs, BZCFUGs, CFUGs, BZC, CBAPUs during the implementation of C 2 & 3. • The project will deliver awareness raising, training, and technical assistance to targeted communities and CBOs for improved corridor and buffer zone management in C2 and C3

Stakeholder	Component	Engagement Approach
Community Forest User Groups (CFUGs) Buffer Zone Council Community Based Anti-Poaching Units		• The sharing of project experiences and lessons learned in C4 will include outreach to CBOs, including use of mainstream media
Indigenous Peoples Organizations Nepal Federation of Indigenous Nationalities (NEFIN)	PM,1,2,3,4	• The project team will consult and coordinate with NEFIN, district chapter and communities during the implementation of components 2 & 3 throughout the project duration. • Further to the project safeguards assessment, the project team will inform NEFIN regarding planned project activities and receive feedback on potential impacts on local indigenous communities in the project area
WWF	PM,1,2,3,4	• WWF GEF Agency – oversight of implementation, liaison with WWF Nepal, supervisory visits • WWF Nepal – PAC and PEC invitee (as an observer only)
NGOs National Trust for Nature Conservation (NTNC) , Zoological Society of London (ZSL)	1,2,3,4	• NTNC and ZSL are the leading NGOs working on biodiversity in the project area and will be involved during the implementation of components 2 & 3. • NGOs will participate in the stakeholder forums in C4, and have access to project news, reports and lessons learned through online project resources • Technical assistance and advice will be sought from social and environmental NGOs for relevant activities, especially in C3
Academic Institutions	1,4	• Will be considered for support for policy and capacity development • Will be involved in targeted research and technical advice related to project activities • Will be included in participants for stakeholder forums in C4, and have access to the project's online resources
Media	4	• Key role in raising awareness of environmental issues and in disseminating information • Participation in awareness raising events and activities across the project • Supporting outreach for project news and activities
Donors and related initiatives	1,2,3,4	• Coordination and collaboration on related projects to develop synergic benefits • See Coordination Section (1-5) and Table 1-9 for details

Section 5. Environmental and Social Safeguards

The proposed project is a Category "B" given that it is essentially a conservation initiative, expected to generate significant positive and durable social, economic and environmental benefits. Any adverse environmental and social impacts due to project activities to ensure effective management or involvement of indigenous people are minor and site specific and can be mitigated. The WWF Environmental and Social Safeguards Categorization Memorandum was signed on 19 July 2018 (Appendix 9).

Components 1 and 2 of the project seek to increase cross-sectoral coordination for landscape management of the TAL, and improve governance and protection of the TAL corridors and buffer zones. The project under Component 3 will include interventions in Banke National Park's Buffer Zone, Bardia National Park's Buffer Zone, Kamdi Corridor and Karnali Corridor (i.e. 2 PA BZs and 2 corridors), including support for community-based and local government forest management and restoration, protection against open grazing and restoration of degraded and abandoned grazing areas, and support to local-level law enforcement. The specific intervention sites– villages and forest areas – within these target areas will be determined during implementation, through a mapping and community consultation process supported in Component 2.

The project triggered the following safeguards policies as per the WWF's Environment and Social Safeguards Integrated Policies and Procedures (SIPP):

The policy on **Natural Habitat** is triggered as the proposed project directly targets protecting and restoring species and their habitats; strengthening local communities' ability to conserve the natural resources they depend on.

The proposed project is unlikely to cause displacement of people however, the project does intend into carry out activities to reduce the impacts of open grazing on natural habitats, and that may include implementation of no-grazing zones. The WWF policy on Involuntary Resettlement does not apply in situations where restrictions to access of resources are taking place under community-based projects such as community based NRM models however it is reasonable to assume that some decisions taken to restrict access to natural resources could be initiated by the Government, and will not fall solely within the authority of the local communities such as the no grazing zone. Therefore, the WWF policy on **Involuntary Resettlement** has been triggered. As part of project preparation, a Process Framework (PF) was prepared by the Executing Agency and extensively consulted upon to ensure peoples views and concerns were fully taken into consideration in the final project design. The main purpose of the PF was to establish a process by which members of potentially affected communities participate in design of project components, determination of measures necessary to mitigate likely impacts and implementation and monitoring of relevant project activities. The PF has provided guidance to the executing agency (MoFE) to address potential adverse social impacts, particularly, livelihoods as a result of access restriction (grazing ban) due to the project. In order to mitigate any adverse impacts from banning of grazing, during project implementation interventions will include the preparation and subsequent implementation of Livelihood Restoration Plans, which will provide tailored livelihood support and benefit sharing for affected persons, groups and communities. Affected communities and households around the project-supported protected

areas; corridors and BZ area will be provided with opportunities to restore their livelihoods to pre-project levels or better.

The WWF Policy on **Indigenous People** has been triggered as the proposed project activities will involve Indigenous Peoples (IP) as the main inhabitants living around the PAs and in the Buffer Zone and Corridors in the Terai Landscape. Government of Nepal has recognized fifty-nine indigenous communities under the National Foundation for Development of Indigenous Nationalities (NFDIN) Act-2002. The Act defined Indigenous Peoples (*Adibasi Janajati*) as groups of peoples possessing characteristics like distinct collective identity; own language, religion, traditions, and culture; own traditional and relatively egalitarian social structure (as contrasted with the more rigid and hierarchical caste system); traditional homeland and geographical area, and a written and/or oral history that traces their line of descent back to the occupants of territories before they were integrated into Nepalese society within the current frontiers. While there is no single globally-recognized definition of indigenous peoples, WWF adopts the statement of coverage contained in International Labor Organization Convention 169 (ILO), which includes both indigenous and tribal peoples. Characteristics of indigenous and tribal peoples include social, cultural and economic ways of life different from other segments of the national population, traditional forms of social organization, political institutions, customs and laws and long-term historical continuity of residence in a certain area. In some regions, the term indigenous also refers to residence prior to conquest or colonization by others. WWF also, in accordance with ILO 169, recognizes self-identification as indigenous or tribal as a key criterion in identifying indigenous peoples.

Keeping in mind the GoN list of IPs, the proposed project area is currently inhabited by the following groups of indigenous people:

- Hill origin groups like Magar, Gurung, Tamang, Raute, Newar, who migrated to and settled in the area, particularly after 1950 as result of eradication of malaria and government sponsored resettlement schemes.
- Groups of peoples who have been living in the project areas for centuries. These include the Tharus, Danuwar, Majhi, Bote, Darai, Kumal and Raji.
- The Sonahas, Khonahas and Ranas (Tharus) are the groups who are not recognized as IPs by Government of Nepal but are included as IPs under the WWF definition of IPs.

An Indigenous Peoples Planning Framework (IPPF) was prepared to clarify the principles, procedures and organizational arrangements to be applied to indigenous peoples for the proposed project. The IPPF prepared by the Executing Agency has provided guidance on the following:

- to assess and evaluate various options and alternatives and identification of appropriate solutions and mitigation measures in consultation with, or as chosen by the indigenous and local communities, with a view to avoid or minimize adverse impacts;
- to conduct and document in detail, meaningful consultations following FPIC and to understand and address the concerns of indigenous people of project areas, pertaining to the proposed subproject components that may have potential impacts on them;
- to formulate provisions for culturally appropriate benefits and opportunities for participation of indigenous peoples in the subproject, making them beneficiaries and development partners; and
- to design appropriate institutional arrangements to address indigenous people's issues.

The IPPF and PF will be disclosed in country and on the WWF safeguards website (https://www.worldwildlife.org/pages/safeguards-resources) before WWF GEF Agency approval.

The proposed project activities are not expected to trigger the WWF Policy on Pest Management, any agricultural extension activities targeting settlements in the NPAs will not include promoting the use of pesticides.

Section 6: Gender Equality and Women's Empowerment

6.1 Objective, Design, Methodology and Gender and Social Assessment

The Ministry of Forests and Environment (MoFE) and World Wildlife Fund (WWF) are committed to mainstreaming Gender Equality and Social Inclusion (GESI), to ensure that women and men have equal access to, and control over, resources for development, benefits, and decision-making at all stages of development processes, projects, programs or policy. The main objective of the GESI analysis carried out during project formulation was to develop and implement an integrated action plan (see **Appendix 12**) to promote equitable management of benefits such as the use of natural resources among all citizens as described in the Constitution of Nepal, to ensure that GESI is fully mainstreamed in the project design and meets the requirements of the new GEF Policy on Gender Equality[85]. The five domains covered by the GESI assessment are: Access to resources; Roles, responsibilities and utilization of time; Norms, beliefs and perceptions; Laws, policies, institutional practices; and Decision-making processes.

The study followed a mixed (qualitative and quantitative) method approach for data collection and conducted a thorough analysis of policy documents, reports as well as primary and secondary data in order to provide credible, valid and useful information to produce a report and to further inform the GESI integrated action plan. For quantitative information, gender and ethnicity disaggregated data were obtained, and for the qualitative information, checklists and participatory tools like access and control profiles were used. The TAL districts were selected based on suggestions provided by the Project Planning Committee (PPC) and the study areas were selected based on five criteria (ethnicity, poverty, high natural resource dependency area, human wildlife conflict prone area, disaster prone and low accessibility through roads). A total of 11 Focus Group Discussions (FGD) with 147 beneficiaries and four Key Informant Interviews (KII) were carried out. The field visit was conducted from July 3 to 8, 2018 and visited Banke, Surkhet and Kailali.

6.2 Findings of the Gender and Social Assessment

Key findings on the Five Domains of GESI Assessment are as follows.

Access to and control of resources: Overall findings suggest that in terms of the resources (forest based and non-forest based) men have higher access and control over the resources. The reasons behind this are: bias of chairperson of BZUC/Gs and providing more opportunity to their near ones (could be men or women); and women themselves could not carry heavy loads. In addition, pregnant women and lactating mothers, and female heads of households whose husband has migrated for foreign labor have limited access to the resources, and those who have higher access utilize the resources. Access and control to resources are more critical to the Dalits and other marginalized populations (limited access and poor participation; unable to put their voices in the meetings; do not receive equal benefits). The executive members of BZ/CFUGs consisting mainly of the chairperson along with male members make decisions based on male dominated society and practices.

[85] https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.53.04_Gender_Policy.pdf

Decision making process: Men do have the decision-making power concerning most of the valuable matters at household level (eg buying and selling properties like houses, land, animals and ornaments). Similarly, women's decisions to attend the women's groups meetings was also determined by the males. However, this is gradually changing and women are allowed to make their own decisions to go to group meetings more frequently now. As per the rule of the government, groups and committees need to involve both men and women from different caste and ethnic groups. Accordingly, all decision-making bodies of Community Forest Coordination Committee/ Community Forest Users Groups (CFCC/UGs), Buffer Zone Users Committee/Buffer Zone Users Groups (BZUC/Gs) and their committees have engaged women, marginalized and disadvantaged groups for equitable representation. However, their roles are limited as their involvement serves as tokenism, and decisions are influenced and made by the males who exercise more power and are more influential. Similarly, in context of decision making (planning, implementation, benefits sharing) current decision makers, especially male members need to develop a greater understanding of gender and social equity, meaningful participation, and empowerment and related issues.

Roles and responsibilities: Most of the time women are engaged in household chores (fetching water, cutting vegetables, feeding cows) and men are engaged in economic development activities, leadership development and other outdoor activities. This may limit women's economic empowerment, education and leadership opportunities. This creates a vacuum because women are not able to fully participate in group meetings and take leadership roles at community level.

Policy, law and institutional practices: Few men and the majority of the women representing Dalits, Janajati and other groups mentioned that they do not know about legal provisions, law, policy, and functional modality of BZUC/Gs and CFUC/Gs. It is important and necessary to make the committees and groups (duty bearers - which are the institutions) more accountable toward organizing awareness and orientation programs for those groups. A gap has been created whereby such affected people are unaware of the design, strategies and plans that the committees are developing and executing. Such findings produce a strong feeling that the process (design, strategies, planning and decision making) lacking a transparent and participatory working modality, seems to be often misinterpreted by the influential ones, in order to modify the possible results in their own favor.

Norms, values and perspectives: From a social and cultural perspective, the predominant patriarchal mindset still underestimates women. Similarly, marginalized and disadvantaged social groups are not considered capable and normally their presence is not well-thought-of to be valued (during planning, implementing and distribution of the benefits). This typical mindset acts as a barrier for women and other marginalized groups to access and have control over natural resources.

In additional to the above findings on the five domains of the GESI assessment, some additional findings on **Economic Activities of Interest** are evident. Local people in buffer zones and corridor areas are interested to undertake nature-based economic opportunities as well as other possible alternatives to improve their socio-economic aspects. Proposed activities of interest should be related to conservation, resource dependency and distributed in an equitable way to ensure gender inclusion and equality while receiving the benefits. Local people are interested in activities such as: goat rearing; tomato, chilli and

seasonal vegetable farming; grocery shops, tailoring; making plates from leaves; and collection, processing and selling of herbs and other forest products.

6.3 Gender and Social Assessment Conclusions and Integration

Meaningful involvement of both sexes and all ethnicities, and a shared understanding of the policies, rules and norms is necessary to ensure equitable access and benefits from the natural resources. It is important and necessary to make the committees and groups more accountable towards GESI by creating an enabling environment that is more inclusive, responsive and sensitive. It is important that the concerned stakeholders need to consider such aspects and make local people understand the policies and what practices are required in order to manage and utilize natural resources sustainably and equitably. It is important that the selected or proposed activities of interest should be related to conservation, resource dependency and distributed in an equitable way to ensure gender inclusion and equity while receiving benefits.

Due to the fact that the majority of the absentee population (for external work) is male, it has resulted in skewing the gender balance in the buffer zone and corridor areas. This has resulted in an increase in the number of women carrying additional responsibilities above their usual gender role. This adds emphasis to the need for gender mainstreaming elements in the project design, implementation and review. Consequently, the project workplan (**Appendix 3**) is gender responsive and is reflected in gender responsive budgeting to assure that the project is able to deliver on its gender mainstreaming provisions and demonstrates gender equality in terms of progress and results (see the recommended gender mainstreaming actions in **Appendix 12**).

Conservation and sustainable development is an opportunity to transform the traditional roles of women, vulnerable and small farmers from subsistence to productive, community management and leadership roles, but it is necessary to change mindsets through information, training and capacity building programs. Through needs assessments, the project will identify appropriate training, empowerment and knowledge enhancement opportunities for both women and men representing Dalit, Janajati and other caste and ethnic groups and also for the leadership positions and explore the possibilities with the resources available. Needs based training and other opportunities will be made available for women and members of vulnerable minority groups that will ensure their involvement and engagement in community processes, including forest governance and management.

The GoN/MoFSC's forest policy 2017 has ensured that forest governance will be focused explicitly on women, poor, excluded, indigenous and forest dependent marginalized communities. It has also stressed that promotion of GESI will be carried out in all organizations, institutions and programs. Still, these identified social groups do not know about legal provisions, law, policies and programs that are related to them in the forest management of buffer zone and corridor areas. It is important and necessary to make the committees and groups more accountable towards GESI by creating an enabling environment that is more inclusive, responsive and sensitive.

The project includes institutional capacity development for gender mainstreaming (GESI related sessions aligned with existing/revised SFM training manuals/packages, staff training, groups and community management). Gender sensitive activities have been integrated into the project plans to ensure the

participation of women and men from Dalit and other marginalized communities in decision making, and their participation in various activities. Gender experts are included in the project to provide orientation, training, studies and monitoring.

The project will seek to achieve proportionate representation in project-supported coordination bodies and forestry and livelihood-related groups (at least 33% of women as indicated in the constitution of the GoN). Gender and social inclusion disaggregated targets have been included for appropriate indicators in the project Results Framework (**Appendix 10**), including for involvement in field activities, training and receipt of revolving community fund loans. Socio-economic, gender and social inclusion monitoring will track the progress of the project and also its performance in relation to GESI indicators, and progress in gender mainstreaming will be supported by a Participatory Planning M&E Committee.

Section 7. Monitoring and Evaluation

7.1 Project Staff Dedicated to M&E

The Project Management Unit (PMU) is responsible for ensuring the monitoring and evaluation activities are carried out in a timely and comprehensive manner, and for initiating and facilitating key monitoring and evaluation activities, such as the independent external evaluations at the midterm and end of the project. WWF staff within the PMU all serve various roles in project M&E.

Project Management Unit

Project Manager, PMU: The Project Manager is responsible for completing project progress reports and ensuring that the project M&E plan is implemented to WWF and GEF standards, on time to meet reporting deadlines and of the highest possible quality. The PMU lead oversees the collaborative development of annual project work plans (with implementing partners) and their implementation, based on the reflections of the progress reports and M&E plans.

Monitoring, Evaluation and Learning Officer, Field Office: Under the guidance and supervision of the Project Manager, the Monitoring, Evaluation & Learning Officer (MEL Officer) will be responsible for M&E activities including tracking project implementation against the project work plans, which will be implemented by WWF and a diverse group of partner organizations. The MEL Officer will be responsible for consolidating, collecting and analyzing different data in relation to the project activities, outputs, and outcomes; maintaining the M&E plan and results framework of the project; and assisting the Project Manager in preparing semi-annual/annual reports on project progress. Through the collection and analysis of high quality and timely data inputs, the MEL Officer is responsible for ensuring that the project maintains its strategic vision and that its activities result in the achievement of its intended outputs and outcomes in a cost effective and timely manner. In addition, the MEL Officer is responsible for conducting an initial analysis that identifies potential opportunities for adaptive management and will seek feedback from the PMU and partners throughout the analysis.

Financial and Administration Officer, PMU: The Financial and Administration Officer is responsible for tracking the budget; facilitating financial transactions between GEF, WWF, and executing partners; and preparing and delivering the quarterly project-level financial reports included in the M&E plan.

Field staff, Field Office: The project field staff will be directly responsible for collecting data for efficiency and cost savings. For example, when the field staff hold trainings, they will be responsible for circulating a sign-up sheet and gathering disaggregated information, such as sex or indigenous group of participants. This will be delivered to the MEL Officer for data consolidation.

7.2 Commitment and Approach to M&E

Developed in conjunction with major international environmental NGOs and endorsed by the WWF Network, the WWF Program and Project Management Standards lend consistency to planning, implementing, monitoring and reporting effective conservation projects and programs worldwide. Project

monitoring and evaluation (M&E) is a cornerstone of WWF GEF standards and is deeply embedded within the project.

The monitoring and evaluation (M&E) matrix, known as the Results Framework (RF), is designed to help project teams plan, execute, monitor and report progress towards expected results in a consistent and routine manner. Performance indicators have been selected with indicators and methodologies clearly defined to enable uniform data collection and analysis. The RF indicators have been aligned with the relevant GEF 6 Focal Area objectives as far as possible, and include the relevant GEF Core Indicators at Objective level. The frequency and schedule of data collection is defined for the project, as well as the roles and responsibilities of project team members. Please see the Results Framework (**Appendix 10**) for details.

The project team will analyze the data collected to determine whether their strategies are working or whether they need to reevaluate their strategies or theory of change. This is referred to as adaptive management and is core to the project's success. In support of this adaptive management approach, an annual exercise will be held (for instance, during Project Steering Committee meetings), so that the Project Management Unit and relevant stakeholders can reflect on monitoring data and the validity of the project theory of change. See more on this below.

7.3 Summary of Monitoring Activities and Reporting

The PMU and Project Executing Agency is responsible for the following reporting elements:

Project Results Framework: The Results Framework (**Appendix 10**) includes objectives, outcomes, and indicators for each; definitions of indicators; methodology for data collection and analysis; responsible parties; frequency of data collection; baseline information; targets; monitoring cost; and assumptions. The monitoring of these indicators throughout the life of the project will be necessary to assess if the project has successfully achieved its expected results. Yearly reporting on the RF will contribute to the annual project Development Objective rating.

Annual Work Plan Tracking: Towards the end of each project year, the executing agency's PMU will work with project partners to develop a detailed Annual Work Plan and Budget (AWPB) that includes targets for key activities to achieve the outputs. When possible, the development of the annual work plan should take into account suggestions for adaptive management and lessons learned that result from the reflections workshop and which are reported in the biannual Project Progress Reports. The AWPB will be given a no-objection from the WWF GEF Agency, and endorsed by the Project Steering Committee prior to start of the next project year. Tracking against the AWPB targets will be reported on annually, and the end of year tracking will contribute to the project's implementation progress rating.

Quarterly Field Reports: The Project Management Unit will receive quarterly field reports from subgrantees/consultants, using a Project Progress Report template. These reports will track progress on project activities, challenges encountered, expenditures, lessons learned, and adaptive management applied.

Quarterly Financial Reports: The PMU Financial Manager will submit a financial progress report every 3 months using the WWF Network Standard financial reporting template. These reports will be delivered to the WWF-GEF Agency and the WWF-US Program Operations team and will include information on expenditures to date along with expected future expenditures and requests for disbursement to cover expected expenditures from the next quarter.

Semi-annual Project Progress Reports (PPRs): The PMU will deliver a Project Progress Report to the WWF-GEF Agency every 6 months, using the WWF-GEF Project Progress Report (PPR) template. The report will include:

- Self-rating of project Development Objective and Implementation Progress, and Risk using WWF-GEF rating criteria. Action plans for sub-optimal ratings (Annual report only)
- Summary of project outcomes and impacts based on project monitoring and evaluation plan (including RF in **Appendix 10** plus tracking of output-level indicators) (Annual report)
- Challenges and strengths of the project
- Progress of project based on approved annual work plan
- Exchange of lessons learned and opportunities for adaptive management
- Financial progress.

Project Close Report: The Executing Agency and PMU will develop a project closeout report, using the WWF GEF Agency template. The report will outline the same areas as the PPRs, but will be cumulative for the whole project period, and will also include information on project equipment handover, an assessment of WWF GEF performance, an exit and sustainability plan, and will focus on key lessons from the project. This report is due within one month of project close.

Annual Adaptive Management Review: At the end of every year of the project, the PMU and other relevant partners will convene in an exercise that is intended to improve the strategic direction of the project. At each exercise, a review of the M&E data, project progress and challenges will occur, and the project theory of change will be assessed to decide whether or not any assumptions or strategies need modification. This will provide opportunities for adaptive management that will lead to changes in the project design, management or operation. The changes will be largely reflected and incorporated into the new Annual Work Plans. All modifications will be reviewed for no objection by the Project Steering Committee and the WWF GEF Agency.

Midterm Project Evaluation and Report: An independent Midterm Project Evaluation (MPE) will take place before the three-year mark of project implementation (i.e. midterm), providing an external evaluation of the project effectiveness and efficiency to date. This will be organized by the WWF GEF Agency in coordination with the PMU. It will provide recommendations to the project team on adaptive management that can be made to improve effectiveness and efficiency in the second half of the project term. The WWF-GEF Agency in collaboration with the PMU and the Program Steering Committee will provide a formal management answer to the findings and recommendations of the midterm evaluation.

Final Project Evaluation and Report: An independent Terminal Evaluation will take place within six months of project completion providing an external evaluation of the overall project effectiveness and efficiency. This will be organized by the WWF GEF Agency and coordinated with the PMU. It will provide

recommendations for GEF and its agencies on future related projects and recommendations to the project team on achievement of the project impacts after completion of the project. The WWF-GEF Agency in collaboration with the PMU and the Program Steering Committee will provide a formal management answer to the findings and recommendations of the terminal evaluation.

The Terms of Reference for the midterm and terminal evaluations will be drafted by the WWF-GEF Agency in accordance with GEF requirements. The funding for the evaluations will come from the project budget.

The WWF GEF Agency is responsible for the following project reporting elements:

Annual WWF-GEF Project Implementation Report (PIR): In December[86] of each year, the WWF-GEF Agency will deliver to the GEF Secretariat an Annual Project Implementation Report (PIR), building off the semi-annual PPRs delivered by the PMU. The PIR includes general project information, implementation summary, results framework (tracking of high level M&E plan), ratings of GEF rating criteria, and financial status.

Annual WWF-GEF Monitoring Review (AMR): In August[87] of each year, the WWF-GEF Agency will send to the GEF Secretariat a Monitoring Review: an Excel document with ratings for every project in the WWF-GEF Agency's portfolio, including this project. The ratings will be determined by the WWF-GEF Agency in conjunction with the PMU.

Supervision Mission Reports: Annually the WWF-GEF Agency will conduct a support mission to discuss project progress with the PMU, key stakeholders and executing partners. The PMU will assist with organizing logistics for the support mission in communication and coordination with the WWF-GEF Agency, and the mission will serve to assist the WWF-GEF Agency in supervising project implementation and monitoring WWF Safeguard Policies in the project regions. The WWF-GEF Agency will develop a report for each annual mission, to which the PMU will respond and adapt its action plan.

The timing of monitoring activities and reporting requirements is outlined in **Table 7-1.**

[86] May adjust depending on GEF Secretariat calendar.
[87] May adjust depending on GEF Secretariat calendar.

Table 5-1 Calendar of monitoring activities and reporting requirements

Year/ Month	1	2	3	4	5	6	7	8	9	10	11	12
Project Y1	IW	AAWP	QR	PSC		QR/PPR	PSC		QR	PSC	AMR	QR/PPR/ DAWP PIR
Project Y2	PSC/ ATPR/ AAWP		QR	PSC		QR/ PPR	PSC /MTR/CIR	MTE	QR/ MTE	PSC	AMR	QR/PPR/ DAWP/ PIR
Project Y3	PSC/ ATPR/ AAWP		QR	PSC		QR/ PPR	PSC		QR	PSC	AMR	QR/PPR/ DAWP/ PIR
Project Y4	PSC/ ATPR/ AAWP		QR	PSC		QR/ PPR	PSC		QR	PSC	AMR	QR/PPR/ DAWP/ PIR
Project Y5	PCR	PCR	PCR/ CIR	ACPR		TE	TE	TE	TE			

AAWP – Approval of the Annual Work Plan by PSC
AMR –Adaptive Management Review
ATPR – Approval of Annual WWF Project Progress Report by PSC
CIR – Core Indicator Report
IW – Inception Workshop
MTE – Mid-Term Evaluation of the Project
MTR – Mid-Term Report
PCR – Project Completion Report
PIR – Annual WWF-GEF Project Implementation Report to GEF Secretariat
PPR – Six-month and Annual WWF Project Progress Report
PSC – Quarterly Project Steering Committee Meeting
QR – Quarterly Project Report (financial)
TE – Terminal Evaluation of the Project
APCR – Approval of Project Completion Report by PSC

7.4 Knowledge Management and Sharing

In order to enable the development of future replication and scaling-up plans, the PMU will promote a systematic approach in order to: (i) identify knowledge deemed to be relevant and valuable; (ii) capture and retain that knowledge; (iii) share that knowledge with key audiences; (iv) if possible, applying transferred knowledge during the project lifespan or designing guidelines for future replication and up-scaling; and (vi) assess the value or benefits of specific knowledge generated as a consequence of project interventions.

The Adaptive Management Review (reflection exercise) mentioned above will be key to improving the project success. Any lessons that come out of this exercise or otherwise will be categorized into relevant topic areas, such as capacity/performance, coordination among partners/stakeholders, specific technical issues, stakeholder engagement, gender equity, communications, etc., and will be assessed to determine their significance and how they could be addressed or shared.

Based on the most significant lessons learned, the project team will prepare a list of specific topics for future replication/scaling-up; identify key audiences; and finally select and prepare specific tools useful for knowledge sharing, replication and upscaling (e.g., proposals for policy or legal reforms; best practice manuals; workshops; case studies; technical reports; brochures; videos/tutorials; etc.).

7.5 Summary M&E budget

M&E component has been budgeted with USD 311,320 for five years, which includes staff time, office running costs, and project planning, review, monitoring & evaluations and annual audit costs. The total budgeted cost for Monitoring & Evaluation component is 4.6% of the total project cost.

Section 8. Project Financing and Budget

8.1 Project Budget Overview

The 5-year GEF project funding is USD 6,697,248 with an additional USD 36,961,653 as co-financing from the Ministry of Forests and Environment, and USD 5,733,077 from WWF (WWF Nepal and WWF US offices).

The budget planned for the first and fifth year is smaller than other project years - in the first-year, the project will be more focused on laying the groundwork for implementing the project interventions such as establishing office, stakeholder consultation and sensitization; years two, three and four will be more focused on field implementation; and fifth-year will focus on final deliverables and wrap up processes and documentation (**Table 8-1, Table 8-2**).

The project budget and co-finance is highest for Component 3, which includes more budget-heavy, on-ground activities with numerous partners, while Component 1 and 2 are more focused on institutional capacity building and planning activities, and Component 4 on M&E and knowledge sharing and management. The Project Management Costs (PMC) have been capped at 5% of the GEF project budget.

Table 6-1 Summary Project Budget

TOTAL PROJECT						
CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	PROJECT TOTAL
PERSONNEL	$ 264,150	$ 277,358	$ 291,225	$ 305,787	$ 321,076	$ 1,459,595
THIRD PARTY FEES & EXPENSES	$ 28,220	$ 94,070	$ 159,344	$ 102,534	$ 130,698	$ 514,867
GRANTS & AGREEMENTS	$ 376,074	$ 1,020,608	$ 1,022,006	$ 935,549	$ 376,958	$ 3,731,196
TRAVEL, MEETINGS & WORKSHOPS	$ 80,910	$ 98,092	$ 79,153	$ 101,624	$ 86,543	$ 446,322
OTHER DIRECT COSTS	$ 169,598	$ 68,359	$ 70,410	$ 106,453	$ 74,697	$ 489,517
EQUIPMENT	$ 19,500	$ -	$ -	$ -	$ -	$ 19,500
ADMINISTRATIVE COSTS	$ 7,250	$ 7,250	$ 7,250	$ 7,250	$ 7,250	$ 36,250
TOTAL PROJECT COSTS	$ 945,703	$ 1,565,737	$ 1,629,388	$ 1,559,198	$ 997,222	$ 6,697,248

COMPONENT 1: National capacity and enabling environment for cross-sectoral coordination to promote forest and landscape conservation						
CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	COMPONENT TOTAL
PERSONNEL	$ 45,296	$ 47,560	$ 49,938	$ 52,435	$ 55,057	$ 250,286
THIRD PARTY FEES & EXPENSES	$ -	$ 11,625	$ 27,594	$ 5,625	$ 5,625	$ 50,469
GRANTS & AGREEMENTS	$ 37,095	$ 163,168	$ 163,758	$ 164,366	$ 21,451	$ 549,837
TRAVEL, MEETINGS & WORKSHOPS	$ 23,870	$ 24,491	$ 12,731	$ 13,113	$ 13,506	$ 87,710
OTHER DIRECT COSTS	$ 22,741	$ 10,497	$ 10,812	$ 17,638	$ 11,470	$ 73,157
EQUIPMENT	$ 3,250	$ -	$ -	$ -	$ -	$ 3,250
ADMINISTRATIVE COSTS	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL PROJECT COSTS	$ 132,251	$ 257,340	$ 264,833	$ 253,176	$ 107,109	$ 1,014,710

COMPONENT 2: Integrated Planning for Protected Area Buffer Zones and Critical Corridors in the Terai Arc Landscape						
CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	COMPONENT TOTAL
PERSONNEL	$ 33,388	$ 35,057	$ 36,810	$ 38,650	$ 40,583	$ 184,487
THIRD PARTY FEES & EXPENSES	$ -	$ 48,000	$ 53,000	$ 46,000	$ 26,000	$ 173,000
GRANTS & AGREEMENTS	$ 7,500	$ 54,270	$ 12,731	$ 9,835	$ -	$ 84,335
TRAVEL, MEETINGS & WORKSHOPS	$ 3,640	$ 3,749	$ 3,862	$ 3,978	$ 4,097	$ 19,325
OTHER DIRECT COSTS	$ 12,846	$ 5,248	$ 5,406	$ 8,737	$ 5,735	$ 37,972
EQUIPMENT	$ 6,500	$ -	$ -	$ -	$ -	$ 6,500
ADMINISTRATIVE COSTS	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL PROJECT COSTS	$ 63,873	$ 146,324	$ 111,808	$ 107,199	$ 76,415	$ 505,620

COMPONENT 3. Forest and human-wildlife conflict management for improved conservation of targeted protected area buffer zones and corridors in the Terai Arc Landscape						
CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL
PERSONNEL	$ 98,472	$ 103,396	$ 108,565	$ 113,994	$ 119,693	$ 544,120
THIRD PARTY FEES & EXPENSES	$ 14,620	$ 18,620	$ 20,620	$ 20,620	$ 18,620	$ 93,102
GRANTS & AGREEMENTS	$ 273,129	$ 744,060	$ 780,624	$ 695,649	$ 288,975	$ 2,782,437
TRAVEL, MEETINGS & WORKSHOPS	$ 3,640	$ 9,929	$ 17,727	$ 13,812	$ 14,226	$ 59,335
OTHER DIRECT COSTS	$ 55,926	$ 28,866	$ 29,732	$ 36,962	$ 31,542	$ 183,028
EQUIPMENT	$ 6,500	$ -	$ -	$ -	$ -	$ 6,500
ADMINISTRATIVE COSTS	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL PROJECT COSTS	$ 452,288	$ 904,871	$ 957,268	$ 881,037	$ 473,058	$ 3,668,521

COMPONENT 4. Knowledge Management and Monitoring and Evaluation						
CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	COMPONENT TOTAL
PERSONNEL	$ 54,811	$ 57,552	$ 60,429	$ 63,451	$ 66,623	$ 302,865
THIRD PARTY FEES & EXPENSES	$ 13,600	$ 15,825	$ 58,130	$ 30,289	$ 80,453	$ 198,296
GRANTS & AGREEMENTS	$ 58,350	$ 59,111	$ 64,894	$ 65,701	$ 66,532	$ 314,587
TRAVEL, MEETINGS & WORKSHOPS	$ 43,540	$ 53,516	$ 38,234	$ 63,925	$ 47,713	$ 246,929
OTHER DIRECT COSTS	$ 25,941	$ 14,022	$ 14,442	$ 21,323	$ 15,322	$ 91,049
EQUIPMENT	$ -	$ -	$ -	$ -	$ -	$ -
ADMINISTRATIVE COSTS	$ 7,250	$ 7,250	$ 7,250	$ 7,250	$ 7,250	$ 36,250
TOTAL PROJECT COSTS	$ 203,492	$ 207,275	$ 243,379	$ 251,938	$ 283,892	$ 1,189,976

COMPONENT 5: Program Management						
CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	COMPONENT TOTAL
PERSONNEL	$ 32,184	$ 33,793	$ 35,483	$ 37,257	$ 39,120	$ 177,837
THIRD PARTY FEES & EXPENSES	$ -	$ -	$ -	$ -	$ -	$ -
GRANTS & AGREEMENTS	$ -	$ -	$ -	$ -	$ -	$ -
TRAVEL, MEETINGS & WORKSHOPS	$ 6,220	$ 6,407	$ 6,599	$ 6,797	$ 7,001	$ 33,023
OTHER DIRECT COSTS	$ 52,145	$ 9,726	$ 10,018	$ 21,793	$ 10,628	$ 104,311
EQUIPMENT	$ 3,250	$ -	$ -	$ -	$ -	$ 3,250
ADMINISTRATIVE COSTS	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL PROJECT COSTS	$ 93,799	$ 49,926	$ 52,100	$ 65,847	$ 56,749	$ 318,421

Table 6-2: Budget summary by outcome and output

ANNUAL BUDGET SUMMARY by Outcome and Output		
CATEGORY		**PROJECT TOTAL**
COMPONENT 1: National capacity and enabling environment for cross-sectoral coordination to promote forest and landscape conservation	**$**	**1,014,710**
Outcome 1.1. Improved inter-sectoral coordination from Federal, State to Local level for sustainable forest management and integrated landscape management	**$**	**253,347**
1.1.1 Output: Cross-sectoral coordination mechanisms established to support integrated landscape management for conservation outcomes at different levels	$	253,347
Outcome 1.2 Capacity increased for multi-stakeholder and cross-sector landscape and forest planning and management	**$**	**761,363**
1.2.1.Output: Conservation Leadership Training provided	$	35,396
1.2.2 Output: Training courses provided on key subjects for integrated landscape management for responsible federal and state government staff	$	82,202
1.2.3 Output: Small grants for innovation in ILM (conservation, natural resource, and landscape management) in TAL corridors and PA buffer zones	$	643,765
COMPONENT 2: Integrated Planning for Protected Area Buffer Zones and Critical Corridors in the Terai Arc Landscape	**$**	**505,620**
Outcome 2.1. Increased protection status for targeted TAL corridors	**$**	**80,880**
2.1.1 Output: Biodiversity surveys, socio-economic surveys, and local stakeholder consultation for Brahmadev , Karnali, and Kamdi corridors to determine feasibility of appropriate models for community-based natural resource management	$	80,880
Outcome 2.2. Improved participative planning for conservation and protection of targeted protected area buffer zones and corridors in TAL	**$**	**425,037**
2.2.1 Output: Land uses, biodiversity values, forest carbon, and key threats assessed, mapped, reported and disseminated to identify priority villages and forest areas in the targeted PA buffer zones and corridors	$	158,097
Output 2.2.2 Sustainable Forest Management Operational Plans developed or revised for priority forest areas, incorporating the assessment from 2.2.1	$	266,940

COMPONENT 3. Forest and human-wildlife conflict management for improved conservation of targeted protected area buffer zones and corridors in the Terai Arc Landscape	**$**	**3,668,521**
Outcome 3.1. Increased application of good forest management practices	**$**	**2,724,717**
3.1.1 Output: Training and tools to local government on SFM	$	454,470
3.1.2 Output: Technical support to CFUGs, BZCFUGs and land holders for forest management	$	524,097
3.1.3 Output: Forests and associated habitat in priority buffer zones and corridors managed sustainably	$	1,746,150
Outcome 3.2 Improved management of the human-wildlife interface	**$**	**2,349,363**
3.2.1 Output: Pilot method to reduce the wildlide accident in priority sites	$	1,746,150
3.2.2 Output: Training and facilities for human wildlife conflict response	$	230,431
3.2.3 Output: Community based HWC mitigate and preventive action implemented	$	372,782
COMPONENT 4. Knowledge Management and Monitoring and Evaluation	**$**	**1,189,976**
Outcome 4.1 Improved coordination and dialogue on landscape management from the local, regional to national level	**$**	**607,798**
4.1.1 Output: Information on ILM importance shared among key stakeholders	$	203,306
4.1.2 Output: Mass awareness products on biodiversity conservation and integrated landscape management	$	404,492
Outcome 4.2. Project monitoring system operates, systematically provides information on progress, and informs adaptive management to ensure results	**$**	**453,665**
Output 4.2.1 Capacity for participatory and efficient monitoring and evaluation and adaptive management	$	453,665
4.3 Outcome Project lessons shared	**$**	**128,513**
4.3.1 Output: Project lessons captured and disseminated to project stakeholders and to other projects and partners	$	128,513
COMPONENT 5: Program Management	**$**	**318,421**
TOTAL PROJECT COSTS	$	6,697,248

8.2 Project Budget Notes

Staffing

Staff salaries are based on WWF approved salary schedules and reflect the number of days or person-months needed for delivery of the project. The daily rate is calculated at the annual salary divided by 260 days; however, the number of working days for a whole year is calculated at 226 days. A person-month is calculated at the daily rate times 226 days divided by 12. The remaining 34 days are part of Benefits as Compensated Absences. Salaries included in this project (**Table 8-3**) follow WWF standards to ensure competitive recruitment of staff to the PMU.

Personnel costs budgeted with average annual increase at 5% in order to give merit and cost-of-living adjustments, in accordance with WWF's salaries policy.

Table 6-3: Project staff: Total Budget USD 1,459,595

Position Title	Summary of responsibilities	Average Annual % time	Average annual Budget	Total Budget in USD
PROJECT MANAGEMENT COSTS (PMC)				
Project Coordinator	Overall project lead, will do major coordination and collaboration between WWF-GEF ILM project and government partner(s). Ensures overall project operationalization.	15%	4,890	24,451
Project Manager	Develops annual workplan for PAC and PEC endorsement. Ensures project delivery, conduct periodic monitoring and project performance review; oversees staff performance and ensures liaison with executing partner (MOFE) and GEF Agency/WWF.	15%	4,658	23,291
Finance and Administration Manager	Ensures overall project finance and administration; supports project planning with annual budgeting, oversees project fund disbursement, grant administration, financial & compliance monitoring, and reporting.	20%	5,371	26,855
Field Finance/Compliance Officer	Oversees overall field project offices' finance and administration, includes support on annual planning, budgeting, fund disbursement, grant administration, financial & compliance monitoring as well as reporting.	20%	3,461	17,306

Field Finance and Administration Associate	Ensures smooth daily operations of project financial and administration work, payments, inventory update, insurance, sub-grant and consulting services contract processing and settlements	20%	2,467	12,333
Front Desk Assistant (2)	Will be responsible to support office communication, meeting logistics arrangement and administrative supports.	50%	6,962	34,811
Office Messenger (2)	Delivers documents, photocopies, banking, assists in filing and other administrative functions.	50%	5,968	29,838
Driver (2)	Support on project staff mobility, ensures regular vehicle maintenance, fueling and vehicle logbook update.	15%	1,790	8,952
TOTAL PROJECT MANAGEMENT COSTS (PMC)				177,837
Component 4: Knowledge Management, Monitoring and Evaluation				
Project Coordinator	Overall project lead, will do major coordination and collaboration between WWF-GEF 6 project and government partner(s). Ensures overall project operationalization.	5%	1,630	8,150
Project Manager	Develops annual workplan for PAC and PEC endorsement. Ensures project delivery, conduct periodic monitoring and project performance review; oversees staff performance and ensures liaison with executing partner (MOFE) and GEF Agency/WWF.	10%	3,105	15,527
Project Technical Specialist	Ensures project "theory of change", provides technical support on annual workplan preparation, ensures that results identified in the WWF-GEF 6 project document are fully understood by all stakeholders. Responsible for monitoring, updating project's result framework and tracking tools	20%	5,371	26,855
Finance and Administration Manager	Ensures overall project finance and administration; supports project planning with annual budgeting, oversees project fund disbursement, grant administration, financial &	20%	5,371	26,855

	compliance monitoring, and reporting.			
Safeguard and GESI Officer	Ensures the GESI is mainstreamed and implemented throughout the project. S/he will work closely to identify entry point and mainstream GESI where and when needed; ensures Safeguard recommendations are fully complied.	20%	3,461	17,306
Communication Officer (Part time)	Will support in document and developing communication materials for public outreach. Will work in close coordination with all staff to identify success stories and will capture lesson learn. Will provide technical backstopping in report publication as well as donor reporting	10%	1,731	8,653
Field Program Officer (Biodiversity)	S/he will liaison with Park authorities (SuNP, BaNP, BNP, CNP and PNP), Buffer zone management council and Buffer zone user committees. Will provide technical guidance to sub-grantee and make sure that DIPs are understood by Field Social Mobilizers and sub-grantee. Will be responsible for monitoring, reporting and provide required information.	20%	3,461	17,306
Field Program Officer (Forest Management)	S/he will liaison with Division Forest offices, Community Forests User groups and other CSOs/CBOs in the corridor area. Will provide technical guidance to sub-grantee and make sure that DIPs are understood. Supports MEL officer and center staff in conducting output and outcome level monitoring visits. Will provide information during annual workplan and DIPs preparation to center office.	20%	3,461	17,306
Field Finance/Compliance Officer	Field Project Office's finance and administration support, includes support on field level planning, budgeting, fund disbursement, grant administration, financial & compliance monitoring as well as reporting.	20%	3,461	17,306
Senior Field Monitoring,	Supports project team in tracking project results and ensures the	100%	22,677	113,386

Evaluation and Learning (MEL) Officer	database generation, authentication and management. S/he will provide technical support to the project team in maintaining the WWF program standards (PPMS). Quality assurance of DIP and its feasibility will be monitored by MEL officer.			
Field Finance and Administration Associate	Ensures smooth daily operations of project financial and administration work, payments, inventory update, insurance, sub-grant and consulting services contract processing and settlements.	20%	2,467	12,333
Field Social Mobilizers (4)	Provides technical support to sub-grantee to implement activities as mentioned in DIPs. Will play crucial role in getting information back to field and center team. S/he will be catalytical in identifying major success and failure at the sub-grantee level. responsible for mobilizing and providing technical backstopping to communities.	5%	1,194	5,968
Front Desk Assistant (2)	Will be responsible to support office communication, meeting logistics arrangement and administrative supports.	10%	1,392	6,962
Office Messenger (2)	Delivers documents, photocopies, banking, assists in filing and other administrative functions.	10%	1,194	5,968
Driver (2)	Support on project staff mobility, ensures regular vehicle maintenance, fueling and vehicle logbook update.	5%	597	2,984
TOTAL KNOWLEDGE MGMT., MONITORING AND EVALUATION				302,865
COMPONENT 1				
Project Coordinator	Overall project lead, will do major coordination and collaboration between WWF-GEF 6 project and government partner(s). Ensures overall project operationalization.	50%	16,301	81,503
Project Manager	Develops annual workplan for PAC and PEC endorsement. Ensures project delivery, conduct periodic monitoring and project performance review; oversees staff performance and ensures liaison with executing	20%	6,211	31,054

	partner (MOFE) and GEF Agency/WWF.			
Project Technical Specialist	Ensures project "theory of change", provides technical support on annual workplan preparation, ensures that results identified in the WWF-GEF 6 project document are fully understood by all stakeholders. Responsible for monitoring, updating project's result framework and tracking tools	15%	4,028	20,141
Finance and Administration Manager	Ensures overall project finance and administration; supports project planning with annual budgeting, oversees project fund disbursement, grant administration, financial & compliance monitoring, and reporting.	12.5%	3,357	16,784
Safeguard and GESI Officer	Ensures the GESI is mainstreamed and implemented throughout the project. S/he will work closely to identify entry point and mainstream GESI where and when needed; ensures Safeguard recommendations are fully complied.	15%	2,596	12,980
Communication Officer (Part time)	Will support in document and developing communication materials for public outreach. Will work in close coordination with all staff to identify success stories and will capture lesson learn. Will provide technical backstopping in report publication as well as donor reporting	8%	1,298	6,490
Field Program Officer (Biodiversity)	S/he will liaison with Park authorities (SuNP, BaNP, BNP, CNP and PNP), Buffer zone management council and Buffer zone user committees. Will provide technical guidance to sub-grantee and make sure that DIPs are understood by Field Social Mobilizers and sub-grantee. Will be responsible for monitoring, reporting and provide required information.	10%	1,731	8,653
Field Program Officer (Forest Management)	S/he will liaison with Division Forest offices, Community Forests User groups and other CSOs/CBOs in the corridor area. Will provide technical guidance to sub-grantee and make	10%	1,731	8,653

	sure that DIPs are understood. Supports MEL officer and center staff in conducting output and outcome level monitoring visits. Will provide information during annual workplan and DIPs preparation to center office.			
Field Finance/Compliance Officer	Field Project Office's finance and administration support, includes support on field level planning, budgeting, fund disbursement, grant administration, financial & compliance monitoring as well as reporting.	12.5%	2,163	10,816
Field Finance and Administration Associate	Ensures smooth daily operations of project financial and administration work, payments, inventory update, insurance, sub-grant and consulting services contract processing and settlements.	12.5%	1,542	7,708
Field Social Mobilizers (4)	Provides technical support to sub-grantee to implement activities as mentioned in DIPs. Will play crucial role in getting information back to field and center team. S/he will be catalytical in identifying major success and failure at the sub-grantee level. responsible for mobilizing and providing technical backstopping to communities.	5%	1,194	5,968
Front Desk Assistant (2)	Will be responsible to support office communication, meeting logistics arrangement and administrative supports.	8%	1,044	5,222
Office Messenger (2)	Delivers documents, photocopies, banking, assists in filing and other administrative functions.	8%	895	4,476
Driver (2)	Support on project staff mobility, ensures regular vehicle maintenance, fueling and vehicle logbook update.	50%	5,968	29,838
TOTAL COMPONENT 1				250,286
COMPONENT 2				
Project Coordinator	Overall project lead, will do major coordination and collaboration between WWF-GEF 6 project and government partner(s). Ensures overall project operationalization.	10%	3,260	16,301

Project Manager	Develops annual workplan for PAC and PEC endorsement. Ensures project delivery, conduct periodic monitoring and project performance review; oversees staff performance and ensures liaison with executing partner (MOFE) and GEF Agency/WWF.	20%	6,211	31,054
Project Technical Specialist	Ensures project "theory of change", provides technical support on annual workplan preparation, ensures that results identified in the WWF-GEF 6 project document are fully understood by all stakeholders. Responsible for monitoring, updating project's result framework and tracking tools	15%	4,028	20,141
Finance and Administration Manager	Ensures overall project finance and administration; supports project planning with annual budgeting, oversees project fund disbursement, grant administration, financial & compliance monitoring, and reporting.	12.5%	3,357	16,784
Safeguard and GESI Officer	Ensures the GESI is mainstreamed and implemented throughout the project. S/he will work closely to identify entry point and mainstream GESI where and when needed; ensures Safeguard recommendations are fully complied.	15%	2,596	12,980
Communication Officer (Part time)	Will support in document and developing communication materials for public outreach. Will work in close coordination with all staff to identify success stories and will capture lesson learn. Will provide technical backstopping in report publication as well as donor reporting	8%	1,298	6,490
Field Program Officer (Biodiversity)	S/he will liaison with Park authorities (SuNP, BaNP, BNP, CNP and PNP), Buffer zone management council and Buffer zone user committees. Will provide technical guidance to sub-grantee and make sure that DIPs are understood by Field Social Mobilizers and sub-grantee. Will be responsible	20%	3,461	17,306

	for monitoring, reporting and provide required information.			
Field Program Officer (Forest Management)	S/he will liaison with Division Forest offices, Community Forests User groups and other CSOs/CBOs in the corridor area. Will provide technical guidance to sub-grantee and make sure that DIPs are understood. Supports MEL officer and center staff in conducting output and outcome level monitoring visits. Will provide information during annual workplan and DIPs preparation to center office.	20%	3,461	17,306
Field Finance/Compliance Officer	Field Project Office's finance and administration support, includes support on field level planning, budgeting, fund disbursement, grant administration, financial & compliance monitoring as well as reporting.	12.5%	2,163	10,816
Field Finance and Administration Associate	Ensures smooth daily operations of project financial and administration work, payments, inventory update, insurance, sub-grant and consulting services contract processing and settlements.	12.5%	1,542	7,708
Field Social Mobilizers (4)	Provides technical support to sub-grantee to implement activities as mentioned in DIPs. Will play crucial role in getting information back to field and center team. S/he will be catalytical in identifying major success and failure at the sub-grantee level. responsible for mobilizing and providing technical backstopping to communities.	10%	2,387	11,935
Front Desk Assistant (2)	Will be responsible to support office communication, meeting logistics arrangement and administrative supports.	8%	1,044	5,222
Office Messenger (2)	Delivers documents, photocopies, banking, assists in filing and other administrative functions.	8%	895	4,476
Driver (2)	Support on project staff mobility, ensures regular vehicle maintenance, fueling and vehicle logbook update.	10%	1,194	5,968
TOTAL COMPONENT 2				184,487

COMPONENT 3				
Project Coordinator	Overall project lead, will do major coordination and collaboration between WWF-GEF 6 project and government partner(s). Ensures overall project operationalization.	20%	6,520	32,601
Project Manager	Develops annual workplan for PAC and PEC endorsement. Ensures project delivery, conduct periodic monitoring and project performance review; oversees staff performance and ensures liaison with executing partner (MOFE) and GEF Agency/WWF.	35%	10,869	54,345
Project Technical Specialist	Ensures project "theory of change", provides technical support on annual workplan preparation, ensures that results identified in the WWF-GEF 6 project document are fully understood by all stakeholders. Responsible for monitoring, updating project's result framework and tracking tools	50%	13,427	67,136
Finance and Administration Manager	Ensures overall project finance and administration; supports project planning with annual budgeting, oversees project fund disbursement, grant administration, financial & compliance monitoring, and reporting.	35%	9,399	46,995
Safeguard and GESI Officer	Ensures the GESI is mainstreamed and implemented throughout the project. S/he will work closely to identify entry point and mainstream GESI where and when needed; ensures that the Process Framework and Indigenous Peoples Planning Framework are implemented, that safeguard recommendations are implemented, and that the project is in compliance with WWF GEF Safeguards Policy (see SIPP). Undertakes field visits and coordinated with project staff and partners to ensure Safeguards implementation.	50%	8,653	43,266

Communication Officer (Part time)	Will support in document and developing communication materials for public outreach. Will work in close coordination with all staff to identify success stories and will capture lesson learn. Will provide technical backstopping in report publication as well as donor reporting	25%	4,327	21,633
Field Program Officer (Biodiversity)	S/he will liaison with Park authorities (SuNP, BaNP, BNP, CNP and PNP), Buffer zone management council and Buffer zone user committees. Will provide technical guidance to sub-grantee and make sure that DIPs are understood by Field Social Mobilizers and sub-grantee. Will be responsible for monitoring, reporting and provide required information.	50%	8,653	43,266
Field Program Officer (Forest Management)	S/he will liaison with Division Forest offices, Community Forests User groups and other CSOs/CBOs in the corridor area. Will provide technical guidance to sub-grantee and make sure that DIPs are understood. Supports MEL officer and center staff in conducting output and outcome level monitoring visits. Will provide information during annual workplan and DIPs preparation to center office.	50%	8,653	43,266
Field Finance/Compliance Officer	Field Project Office's finance and administration support, includes support on field level planning, budgeting, fund disbursement, grant administration, financial & compliance monitoring as well as reporting.	35%	6,057	30,286
Field Finance and Administration Associate	Ensures smooth daily operations of project financial and administration work, payments, inventory update, insurance, sub-grant and consulting services contract processing and settlements.	35%	4,317	21,583
Field Social Mobilizers (4)	Provides technical support to sub-grantee to implement activities as mentioned in DIPs. Will play crucial role in getting information back to field and center team. S/he will be	80%	19,097	95,483

	catalytical in identifying major success and failure at the sub-grantee level. responsible for mobilizing and providing technical backstopping to communities.			
Front Desk Assistant (2)	Will be responsible to support office communication, meeting logistics arrangement and administrative supports.	25%	3,481	17,406
Office Messenger (2)	Delivers documents, photocopies, banking, assists in filing and other administrative functions.	25%	2,984	14,919
Driver (2)	Support on project staff mobility, ensures regular vehicle maintenance, fueling and vehicle logbook update.	20%	2,387	11,935
TOTAL COMPONENT 3				544,120

Third Party Fees and Expenses

The project has budgeted a total of USD 551,117 for external expertise and technical support to carryout various assessment, prepare management plans, develop Forest Management Information System (FMIS)facilitate training/workshops, success stories documentation, project website development, radio program development and project monitoring and evaluations (**Table 8-4**). Project evaluation includes GEF terminal evaluation and project evaluation by Social Welfare Council (SWC) as mandatory requirement of Government of Nepal. Overall third-party fees and expenses budgeted in the project is 8.22% of the total project costs.

Table 6-4: Third Party Fees and Expenses: Total Budget USD 551,117

Consultant Expertise	Summary of responsibilities	Budget in USD
Knowledge Management, Monitoring & Evaluation		
Develop online KM platform	Establish and maintain online Landscape Knowledge Learning Platform (including project website)	14,500
Develop and air radio programs	Support radio program (local dialects) on ILM	32,400
Project evaluation	Conduct Project Evaluations (Mid-term and terminal evaluation - GEF/SWC)	85,000
Knowledge documentation	Documentation on Traditional Knowledge associated to natural resources	10,000
Capture project success stories	Prepare success stories and videos of the project	35,000
Design and printing report	Print case studies and periodic project reports	21,396
Auditing expertise	Annual Project Audit	36,250
		234,546

COMPONENT 1		
Documents review	Conduct final review of NBSAP (2014-2020)	15,969
Training facilitation	Conduct training on Biodiversity conservation and monitoring	12,000
Training facilitation	Conduct training on Disaster Risk Management	22,500
		50,469
COMPONENT 2		
Biodiversity inventory assessment	Conduct assessment to update biodiversity inventory and socio-economic status in corridors (incorporating GESI aspect)	30,000
Technical assessment	Provide technical support to review existing forest encroachment status and response options considering GESI aspect	7,000
GESI responsive plan development	Prepare corridor/bottleneck assessment report with GESI integration	3,000
Participatory assessment	Conduct participatory assessments in targeted PA buffer zones and corridors to identify priority community and forest areas	24,000
Resource mapping	Conduct resource mapping of CFUGs at corridor level and BZUCs	25,000
Operational plan development	Support CFUGs and BZ CFUGs to develop/revise forest operational plan (GESI aspect is revised/incorporated)	36,000
Corridor management plan development	Support to revise PF / Corridor Management Plans through a participatory process	48,000
		173,000
COMPONENT 3		
Training facilitation	Provide "Training of Trainers" (TOT) to Division Forest Offices staff based on SFM Training Manual	28,102
Training facilitation	Provide coaching on "Governance and Financial management" for CFUGs of corridors and PA Buffer zones	20,000
Safeguard specialist services	Safeguard plan (PF, IPPF) implementation	45,000
TOTAL COMPONENT 3		93,102

Grants and Agreements

Ministry of Forests and Environment and its departments (Department of National Parks and Wildlife Conservation and Department of Forests and Soil Conservation), Divisional Forest Offices, protected area offices (Bardia National Park and Banke National Park) and state Ministry of Industry Trade, Forests and Environment will be the major partners to implement the program activities on the ground. In addition to the government agencies, the Buffer Zone User Committees, Community Forestry User Groups, and other community-based organization, civil society organization and NGOs will be other field level partners for planning & implementation of field programs.

A total of USD 3,771,196 has been budgeted under grants and agreements (**Table 8-5**), and is 55.71 % of the total project budget.

Table 6-5: Sub recipient summary

Partner Name	Budget in USD
MoFE and MITFE / DNPWC / DOFSC and District Division Office: Sub-grants: @ USD 32,250/sub-grants x 50 sub-grants in 5 years	1,612,490
University student	24,000
University, Institutions & Academia	105,000
Various BZUCs/CFUG/CBOs/NGOs	1,989,706
Total Sub Grants	3,731,196

The above listed partners will execute activities under the project components, as described in **Table 8-6** below. The costs included in the Table are fully inclusive of all costs including, staff, travel and workshops.

Table 6-6: Grants: Total Budget USD 3,731,196

Name of Partner	Purpose	Budget in USD
PROJECT MANAGEMENT COSTS (PMC)		
N/A	N/A	0.00
TOTAL PROJECT MANAGEMENT COSTS (PMC)		0.00
Knowledge Management, Monitoring & Evaluation		
MoFE (MITFE/DNPWC/ DOFSC)	Various program as outlined in the attached budget and budget notes (Annex 1 & 2).	134,587
University, Institutions & Academia	Bring in innovation and new concepts in integrated landscape management	15,000
Various BZUCs/CFUG/CBOs/NGOs:	Implement project interventions and activities to support integrated planning for maintaining landscape forest connectivity:	-
	Provide technical and financial support to green/eco-clubs formation and its operation	125,000
	Support annual meetings of green/eco-clubs network at district level	40,000
TOTAL KNOWLEDGE MGMT., MONITORING AND EVALUATION		314,587
COMPONENT 1		
MoFE (MITFE/DNPWC/ DOFSC)	Engage and interaction with state level government actors in enhancing landscape management approaches	435,837
University student	New technologies and ideas to solve issue and threats related to forest and biodiversity management	24,000
University, Institutions & Academia	New technologies and ideas to solve issue and threats related to forest and biodiversity management	90,000
TOTAL COMPONENT 1		549,837
COMPONENT 2		

MoFE (MITFE/DNPWC/ DOFSC)	Support in integrated planning process for critical corridors and build technical capacities of state and local government agencies in relation to integration landscape management.	84,335
TOTAL COMPONENT 2		84,335
COMPONENT 3		
MoFE (MITFE/DNPWC/ DOFSC)	Engage and brining in key stakeholders in implementation of integrated landscape management. Provide technical backstopping, information and liaison with multi-stakeholder	957,731
Various BZUCs/CFUG/CBOs/NGOs:	Following field level programs will be implemented by various Buffer Zone User Committees, Community Forestry User Groups, and other community based/NGOs as identified during annual program planning exercise:	1,824,706
	Support BZUCs annual meetings for Bardia and Banke NP Buffer Zones (northern side)	5,000
	Support to register private forest	50,000
	Create revolving fund to implement forest operational plans in project targeted corridors	100,000
	Provide financial and technical support to improve livestock management (AI, fodder plant support, feeding trough, vet support, stall improvement)	253,606
	Provide financial and technical support for management of grassland and wetland in project targeted area	370,000
	Provide financial and technical support for river bank protection in project targeted area	210,000
	Provide financial and technical support to small scale green enterprises in project targeted area	406,800
	Provide financial and technical support to develop business plan	9,000
	Implement measures for HWC based on prepared plans (mentha plantation, biological/virtual fencing)	145,800
	Support to establish community-based insurance (crop, livestock) scheme	100,000
	Provide support for field gears to CBAPU members	60,000
	Provide technical and financial support for skill-based training to CBAPU members	4,500
	Establish revolving fund to initiate green enterprise for CBAPUs member (link to above activities)	110,000
TOTAL COMPONENT 3		2,782,437

Travel

The following component-wise travel costs has been budgeted to a total of **USD 187,168** for project team in Kathmandu and Field Project Office to participate/facilitate in annual project planning and coordination, review/reflection and technical backstopping during program implementation, and for programmatic and financial monitoring (**Table 8-7**). Total budget allocation on travel is 2.8% of the total project costs.

Table 6-7: Travel: Total Budget USD 187,168

International or Local (state the Destination if known)	Purpose of Travel	# Trips	Budget in USD
PROJECT MANAGEMENT COSTS (PMC)			
Kathmandu-Bharatpur, Nepal	Staff travel for regular landscape level coordination/partners meeting for enabling project environment & integration.	15	8,601
Kathmandu-Bhairahawa, Nepal	Staff travel for regular landscape level coordination/partners meeting for enabling project environment & integration.	10	6,371
Kathmandu-Nepalgunj, Nepal	Staff travel for regular landscape level coordination/partners meeting for enabling project environment & integration.	25	18,051
TOTAL PROJECT MANAGEMENT COSTS (PMC)			33,023
Knowledge Management, Monitoring & Evaluation			
Kathmandu- Kenya	Participate in international scientific forum for learning/sharing	2	7,400
Kathmandu- Indonesia	Participate in regional scientific forum for learning/sharing	2	6,900
Kathmandu-Bharatpur, Nepal	Staff travel for programmatic and financial monitoring/stakeholders review meetings	15	8,600
Kathmandu-Bhairahawa, Nepal	Staff travel for programmatic and financial monitoring/stakeholders review meetings	15	9,557
Kathmandu-Nepalgunj, Nepal	Staff travel for programmatic and financial monitoring/stakeholders review meetings	45	32,492
TOTAL KNOWLEDGE MGMT., MONITORING AND EVALUATION			64,949
COMPONENT 1			
Kathmandu - United Kingdom	Training to ILM coordinators for capturing international best practice and applying this to the local context in developing WWF GEF strategy and projects GESI Action Plan.	6	24,000
Kathmandu-Bharatpur, Nepal	Staff travel for coordination and technical backstopping for program implementation.	10	5,734
Kathmandu-Bhairahawa, Nepal	Staff travel for coordination and technical backstopping for program implementation.	10	6,372
Kathmandu-Nepalgunj, Nepal	Staff travel for coordination and technical backstopping for program implementation.	20	14,440
TOTAL COMPONENT 1			50,546

COMPONENT 2			
Kathmandu-Bharatpur, Nepal	Staff travel for field level annual planning, coordination and support	10	5,733
Kathmandu-Bhairahawa, Nepal	Staff travel for field level annual planning, coordination and support	10	6,372
Kathmandu-Nepalgunj, Nepal	Staff travel for field level annual planning, coordination and support	10	7,220
TOTAL COMPONENT 2			19,325
COMPONENT 3			
Kathmandu-Bharatpur, Nepal	Field program technical, coordination support & follow up	10	5,733
Kathmandu-Bhairahawa, Nepal	Field program technical, coordination support & follow up	10	6,372
Kathmandu-Nepalgunj, Nepal	Field program technical, coordination support & follow up	10	7,220
TOTAL COMPONENT 3			19,325

Workshops and meetings

The following component-wise workshop and meeting costs has been budgeted to a total of Budget **USD 259,154** for inception of the project, sensitization of relevant stakeholders, planning/review reflection, cluster/central meetings and various trainings (**Table 8-8**).

Table 6-8: Workshops and Meetings: Total Budget USD 259,154

Location	Participants	Purpose of workshop/ number of workshops planned	Budget in USD
PROJECT MANAGEMENT COSTS (PMC)			
N/A	N/A	N/A	0
TOTAL PROJECT MANAGEMENT COSTS (PMC)			0
Component 4 Knowledge Management, Monitoring & Evaluation			
All TAL districts	8 participants/event	Sensitize media (print and TV) on integrated landscape management	13,273
Kathmandu and Kohalpur	35 participants/event	Organize project inception workshops at Kathmandu and field level	6,000
Kathmandu and Kohalpur	25 participants/event	PAC/PEC planning review workshop (Central and Field)	21,237
Kathmandu and Kohalpur	15 Participants/event	Conduct periodic (trimester) workplan review and planning sessions	47,782
Western TAL (Banks and Bardia)	6 Participants/event	Conduct periodic and joint monitoring visits	23,891
Western TAL (Banks and Bardia)	4 Participants/event	Conduct Safeguard Monitoring visits	15,927

Western TAL (Banks and Bardia)	25 Participants/event	Conduct training on "participatory monitoring and evaluation" to CFUGs and relevant sub-grantees	41,218
Kathmandu	25 Participants/event	Capacity building/training of PSU staff (on project management - WWF network standards, report writing and GESI and safeguard)	5,000
Kathmandu	30 Participants/event	Organize Project Mid-term review workshops with all key stakeholders	3,713
Kathmandu	45 Participants/event	Organize final project lessons sharing workshop	3,939
TOTAL KNOWLEDGE MGMT., MONITORING AND EVALUATION			181,980
COMPONENT 1			
All TAL	15 Participants/event	Organize inter-state coordination (2, 3, Gandaki, 5, Karnali, 7) for implementation of the NBSAP and TAL Strategy	10,618
Western TAL (Banks and Bardia)	10 Participants/event	Carry out cluster meetings with Municipalities	26,546
TOTAL COMPONENT 1			37,164
COMPONENT 2			
NA	NA	NA	0.00
TOTAL COMPONENT 2			0.00
COMPONENT 3			
Bank and Bardia	25 Participants/event	Provide training to CFUGs and BZ CFUGs for forest management implementation (including applied SFM, restoration technique - lined with 3.1.1	32,510
Chitwan	20 Participants/event	Conduct exchange visits for targeted BZ CFUG members (learning from successful UCs on fund mobilization and HWC management)	7,500
TOTAL COMPONENT 3			40,010

Equipment

A total of **USD 19,500** has been budgeted for 6 units of motorbike to equip Kathmandu and Field Project Offices for regular programmatic and operational support (**Table 8-9**). This will enhance day-to-day mobility for project staff to reach-out partners with technical backstopping support and strengthen coordination with various government civil society partner organizations. The budgeted costs are based on experience.

Table 6-9: Equipment: Total Budget USD 19,500

Equipment Budgeted	Project Justification for equipment	Location	Budget in USD
PROJECT MANAGEMENT COSTS (PMC)			
Motorbike (1)	Mobility for day-to-day project's financial and administrative support for Kathmandu Office.	Kathmandu	3,250
TOTAL PROJECT MANAGEMENT COSTS (PMC)			3,250
Component 4 Knowledge Management, Monitoring and Evaluation			
N/A	N/A		0
TOTAL KNOWLEDGE MGMT., MONITORING AND EVALUATION			0
COMPONENT 1			
Motorbike (1)	Field mobilizer's mobility for project regular planning and coordination support.	Field Office	3,250
TOTAL COMPONENT 1			3,250
COMPONENT 2			
Motorbike (2)	Field mobilizer's mobility for stakeholder mobilization and monitoring support.	Field Office	6,500
TOTAL COMPONENT 2			6,500
COMPONENT 3			
Motorbike (2)	Field mobilizer's mobility for stakeholder consultation, program implementation backstopping support.	Field Office	6,500
TOTAL COMPONENT 3			6,500

Other Direct Costs

Budgeted Other Direct Costs of **USD 489,517** includes office setup and running costs for total 21 Project Staff. The cost includes office space rental, utilities, vehicle leasing, supplies and communication costs, etc. for the project office located in Kathmandu and Field Project site (**Table 8-10**). The budgeted costs are based on experience and is below 7.5 % of the total project costs.

Table 6-10: Other Direct Costs: Total Budget USD 489,517

Description	Project Justification	Budget in USD
PROJECT MANAGEMENT COSTS (PMC)		
Running Cost:	Office running costs of Kathmandu Office includes office rental, utilities, maintenance, postal, supplies and communication expenses.	
Office Rent, Insurance, Maintenance, Utility	Apportioned average office rental, utilities and maintenance costs for offices in Kathmandu - @ USD 191.85/mo. x 60 mos.	11,511
Equipment / Vehicle Lease	Vehicle lease cost for average - @ USD 159.26/day x 12 days/year x 5 years	9,556

Equipment / Vehicle Running Costs	Apportioned average vehicle running costs for - @ USD 165.91/mo. x 60 mos.	9,955
Photocopying	Apportioned average photocopying costs - @ USD 86.27/mo. x 60 mos. x 2 office	5,176
Postage & Shipping	Apportioned average postal and shipping costs - @ USD 19.91/mo. x 60 mos.	1,195
Communications (phone, fax, AV, WP)	Apportioned communications costs - @ USD 86.27/mo. x 60 mos.	5,176
Supplies	Apportioned office supplies costs - @ USD 126.09/mo. x 60 mos.	7,566
Office Setup Cost:	Includes the cost of office setup including furniture fixtures, office equipment, internet/telephone connection charges.	
Furniture and fixtures	3 Set of Furniture and Fixtures in Kathmandu Office - @ USD 1,750/set x 2 sets	3,500
Office setup costs	Carpet, curtains, paintings, lightening, etc. - @ USD 2,750/office x 2 offices (Kathmandu, Field)	5,501
Desktop computer	4 set of Desktop Computers for Kathmandu and Field Office with replacement provision - @ USD 837.5/set x 4 sets	3,350
Printer	6 set printers for Kathmandu and Field Office with replacement provision in year 3/4 - @ USD 463.83/set x 6 sets	2,783
Copier/scanner	4 sets copier/scanner for Kathmandu and Field Office with replacement provision in year 3/4 - @ USD 4,185.5/set x 4 sets	16,742
Telephone	20 sets telephone for Kathmandu and Field Office - @ USD 60/set x 20 sets	1,200
Vacuum cleaner	2 sets vacuum cleaner for Kathmandu and Field Office - @ USD 150/set x 2 sets	300
Power backup system (inverter & battery)	2 sets power backup system including inverter and batteries to ensure uninterrupted power supply in Kathmandu and Field Office - @ USD 6,000/set x 2 sets	12,000
Spiral binding machine	2 sets Spiral binding machine for Kathmandu and Field Office - @ USD 150/set x 2 sets	300
EPABX system setup	2 sets EPABX system for internal communication in Kathmandu and Field Office - @ USD 750/set x 2 sets	1,500
Telephone/Internet connection (with router, networking accessories)	2 sets Telephone/Internet connection subscription and networking wiring/accessories for Kathmandu and Field Office - @ USD 2,000/set x 2 sets	4,000
Air Conditioners	4 sets Air conditioners for Field Office - @ USD 750 /set x 4 sets	3,000
TOTAL PROJECT MANAGEMENT COSTS (PMC)		104,311
Component 4 Knowledge Management, Monitoring and Evaluation		
Research Materials and Publications	Budget includes the publication of annual report, best practices and various project case studies.	14,747

(case studies & project reports)		
Office Rent, Insurance, Maintenance, Utility	Apportioned average monthly office rental, utilities and maintenance costs for offices in Kathmandu - @ USD 255.8/mo. x 60 mos.	15,348
Equipment / Vehicle Running Costs	Apportioned average monthly vehicle running costs for - @ USD 221.21/mo. x 60 mos.	13,273
Photocopying	Apportioned average monthly photocopying costs - @ USD 115.03/mo. x 60 mos.	6,902
Postage & Shipping	Apportioned average monthly postal and shipping costs - @ USD 26.55/mo. x 60 mos.	1,593
Communications (phone, fax, AV, WP)	Apportioned average monthly communications costs - @ USD 115.03/mo. x 60 mos.	6,902
Supplies	Apportioned monthly office supplies costs - @ USD 168.12/mo. x 60 mos.	10,087
Furniture and fixtures	4 sets of Furniture @ USD 1,750/set for program staff in Kathmandu and Field Office.	7,000
Laptop computers (with dock-in set)	5 sets of Laptop @ USD 1,400/set for program staff in Kathmandu and Field Office with replacement provision in year 3/4.	7,000
LCD Projector	LCD projector for Kathmandu and Field Office with replacement provision in year 3/4 - @ USD 889.50/set x 5 sets	3,558
Camera/GPS	Camera/GPS set for staff in Kathmandu and Field Project @ USD 773.16/set x 6 sets with replacement provision.	4,639
TOTAL KNOWLEDGE MGMT, MONITORING AND EVALUATION		91,049
COMPONENT 1		
Office Rent, Insurance, Maintenance, Utility	Apportioned average monthly office rental, utilities and maintenance costs for offices in Kathmandu - @ USD 255.8/mo. x 60 mos.	15,348
Equipment / Vehicle Running Costs	Apportioned average monthly vehicle running costs for - @ USD 221.21/mo. x 60 mos.	13,273
Photocopying	Apportioned average monthly photocopying costs - @ USD 115.03/mo. x 60 mos.	6,902
Postage & Shipping	Apportioned average monthly postal and shipping costs - @ USD 26.55/mo. x 60 mos.	1,593
Communications (phone, fax, AV, WP)	Apportioned average monthly communications costs - @ USD 115.03/mo. x 60 mos.	6,902
Supplies	Apportioned monthly office supplies costs - @ USD 168.12/mo. x 60 mos.	10,087
Furniture and fixtures	3 Set of Furniture and Fixtures in Kathmandu Office - @ USD 1,750/set x 3 sets	5,250
Laptop computers (with dock-in set)	5 sets of Laptop @ USD 1,400/set for program staff in Kathmandu and Field Office with replacement provision in year 4.	7,000
Desktop computer	2 set of Desktop Computers for Field Office with replacement provision - @ USD 837.5/set x 2 sets	1,675

LCD Projector	LCD projector for Kathmandu and Field Office with replacement provision in year 4 - @ USD 889.50/set x 4 sets	3,558
Camera/GPS	Camera/GPS set for staff in Kathmandu and Field Project for field monitoring and reporting @ USD 773.16/set x 2 sets with replacement provision.	1,570
TOTAL COMPONENT 1		73,157
COMPONENT 2		
Office Rent, Insurance, Maintenance, Utility	Apportioned average monthly office rental, utilities and maintenance costs for offices in Kathmandu - @ USD 127.9/mo. x 60 mos.	7,674
Equipment / Vehicle Running Costs	Apportioned average monthly vehicle running costs for - @ USD 110.6/mo. x 60 mos.	6,636
Photocopying	Apportioned average monthly photocopying costs - @ USD 57.52mo. x 60 mos.	3,451
Postage & Shipping	Apportioned average monthly postal and shipping costs - @ USD 13.26/mo. x 60 mos.	796
Communications (phone, fax, AV, WP)	Apportioned average monthly communications costs - @ USD 57.51/mo. x 60 mos.	3,451
Supplies	Apportioned monthly office supplies costs - @ USD 84.06/mo. x 60 mos.	5,044
Furniture and fixtures	Furniture and Fixtures in Kathmandu/Field Office - @ USD 1,750/set x 2 sets	3,500
Laptop computers (with dock-in set)	3 sets of Laptop @ USD 1,391.67/set for program staff in Kathmandu and Field Office with replacement provision in year 4.	4,175
Desktop computer	2 set of Desktop Computers with replacement provision - @ USD 837.5/set x 2 sets	1,675
Camera/GPS	Camera/GPS set for staff in Kathmandu and Field Project @ USD 785/set x 2 sets with replacement provision.	1,570
TOTAL COMPONENT 2		37,972
COMPONENT 3		
Office Rent, Insurance, Maintenance, Utility	Apportioned average monthly office rental, utilities and maintenance costs for offices in Kathmandu - @ USD 703.46/mo. x 60 mos.	42,208
Equipment / Vehicle Running Costs	Apportioned average monthly vehicle running costs for - @ USD 608.34/mo. x 60 mos.	36,500
Photocopying	Apportioned average monthly photocopying costs - @ USD 316.34/mo. x 60 mos.	18,980
Postage & Shipping	Apportioned average monthly postal and shipping costs - @ USD 73/mo. x 60 mos.	4,380
Communications (phone, fax, AV, WP)	Apportioned average monthly communications costs - @ USD 316.34/mo. x 60 mos.	18,980
Supplies	Apportioned monthly office supplies costs - @ USD 462.34/mo. x 60 mos.	27,740
Furniture and fixtures	8 Set of Furniture and Fixtures in Kathmandu Office - @ USD 1,750/set x 9 sets	15,750

Laptop computers (with dock-in set)	7 sets of Laptop @ USD 1,385.71/set for program staff in Kathmandu and Field Office with replacement provision in year 4.	9,700
Desktop computer	5 set of Desktop Computers with replacement provision - @ USD 830/set x 5 sets	4,150
Camera/GPS	Camera/GPS set for staff in Kathmandu and Field Project @ USD 773.16/set x 6 sets with replacement provision.	4,640
TOTAL COMPONENT 3		183,028

8.3 Project Management Costs (PMC)

A total of **USD 318,421** has been budgeted for Project Management Costs, which includes office setup costs in Kathmandu and Field, along-with apportioned staffs time costs, office running costs, travel, and cost of one motorbike for day-to-day administrative mobility (**Table 8-11**). The budgeted PMC cost is below 4.75% of the total project costs.

Table 6-11: Summary Budget

Line items	Budget in USD
Salaries and Benefits	177,837
Travel	33,023
Equipment	3,250
Other Direct Costs	104,311
TOTAL PMC	318,421
PROJECT COMPONENT BUDGET	6,378,827
% PMC OF TOTAL PROJECT BUDGET	5%

8.4 Monitoring and Evaluation (included in Component 4)

M&E component has been budgeted with **USD 311,320** for five years (**Table 8-12**), which includes staff time, office running costs, and project planning, review, monitoring & evaluations and annual audit costs. The total budgeted cost for Monitoring & Evaluation component is 4.6% of the total project cost.

Table 6-12 M&E Summary Budget

Line items	Budget in USD
Salaries and Benefits	113,386
Consultants	121,250
Travel	16,883
Workshops	43,531
Other Direct Costs	16,270
TOTAL M&E	311,320
TOTAL PROJECT BUDGET	6,697,248
% M&E OF TOTAL PROJECT BUDGET	4.6%

8.5 Safeguards

As noted in Section 5, the WWF Policies on Natural Habitat, Involuntary Resettlement, and Indigenous People have been triggered for this project, and a Process Framework and an Indigenous Peoples Planning Framework have been prepared during project preparation. Project budget has been allocated for the following:

- Costs for a part time environmental and social safeguards specialist (consultant or staff) to work with the PMU or field office for the full 5 years of the project period (included in project staff table above);
- Budget for travel costs and workshops and meetings for safeguards monitoring (Included in travel and workshops and meetings tables, above); and
- $45,000 under Component 3 to support the implementation of the Process Framework and the Indigenous Peoples Planning Framework (included in third party fees and services table above).

8.3 Project Co-financing

Co-financing to the project (**Table 8-13**) is primarily from Ministry of Forests and Environment (MoFE) and is comprised of staff and operational costs for coordination and planning for the TAL, and for management of the protected areas, buffer zones and corridors of the Banke-Bardia complex. Such support is detailed in the baseline in Section 1. WWF Nepal co-finance is comprised of various grants that support the on-ground conservation work of the TAL Program and other work in Banke-Bardia, detailed in the baseline. WWF-US co-finance supports overhead, financial and administration costs associated with the project.

Table 6-13 Co-financing

Name of Co-financier	Type	Amount
Ministry of Forests and Environment	In-kind	36,961,653
WWF-US	In-kind	783,077
WWF Nepal	In-kind	4,950,000
TOTAL		42,694,730

Technical Appendices

Appendix 1: TAL CORRIDOR AND BUFFER ZONE PROFILES

See Google Drive Folder
https://drive.google.com/drive/folders/1b4I_zTENuXoecdAD9pD9JK0W8E6rJ8IS?usp=sharing

APPENDIX 2. THEORY OF CHANGE

The Project Components (as the GEF Project Alternative) aim to remove the barriers to achieving the project's targeted conservation impacts (see the conceptual diagram in **Figure 1-3,** intervention logic diagram in **Figure 2-1** below and **Section 1.3**), namely: ***to maintain connected habitats for key wildlife species to allow movement and genetic exchange to occur, conserve key globally threatened wildlife populations (tiger, Asian elephant and greater one-horned rhinoceros) while co-benefiting a diversity of other biodiversity, and support resilient community livelihoods for forest dependent communities consistent with sustainable forest and land management***.

Below is the comprehensive IF-THEN logical or Theory of Change of the project:

IF there is improved inter-sectoral coordination from Federal, State to Local level for sustainable forest management and integrated landscape management to support the NBSAP and 2015-2025 TAL Strategy (Outcome 1.1); **AND** there is increased capacity for multi-stakeholder and cross-sector landscape and forest planning and management (Outcome 1.2); **THEN** the national capacity and enabling environment for cross-sectoral coordination to promote forest and landscape conservation will be established (Component 1), removing the first barrier (inadequate cross sectoral coordination).

IF there is improved participatory planning for sustainable management of the targeted protected area buffer zones and corridors in the TAL using updated information and data on biodiversity and socio-economic engaging communities to state level stakeholders (Outcome 2.1 and 2.2); **THEN** integrated planning for Protected Area Buffer Zones and Critical Corridors in the Terai Arc Landscape will be in place (Component 2), removing the second barrier (lack of capacity for integrated forest, species and land management in PAs, BZs and corridors).

IF SFM practices are introduced that strengthen livelihoods and biodiversity conservation (Outcome 3.1); **AND** there is improved management of the human-wildlife interface in the TAL (Outcome 3.2); **THEN** forest and human-wildlife relations management for improved conservation of targeted protected area buffer zones and corridors in the Terai Arc Landscape will be achieved (Component 3), removing the third barrier (lack of options for community based SFM and SLM in the TAL).

IF there is improved information sharing mechanism, coordination and dialogue on integrated landscape management from the local to state to federal level (Outcome 4.1); **AND** the project monitoring system operates effectively, systematically provides information on progress, and informs adaptive management to ensure results (Outcome 4.2); **AND** there is improved knowledge management for ILM and share lessons with key stakeholders and wider audiences (Outcome 4.3); **THEN** knowledge management and monitoring and evaluation will be established (Component 4), removing the fourth barrier (inadequate knowledge of forest resource management and resilient livelihood options to inform ILM).

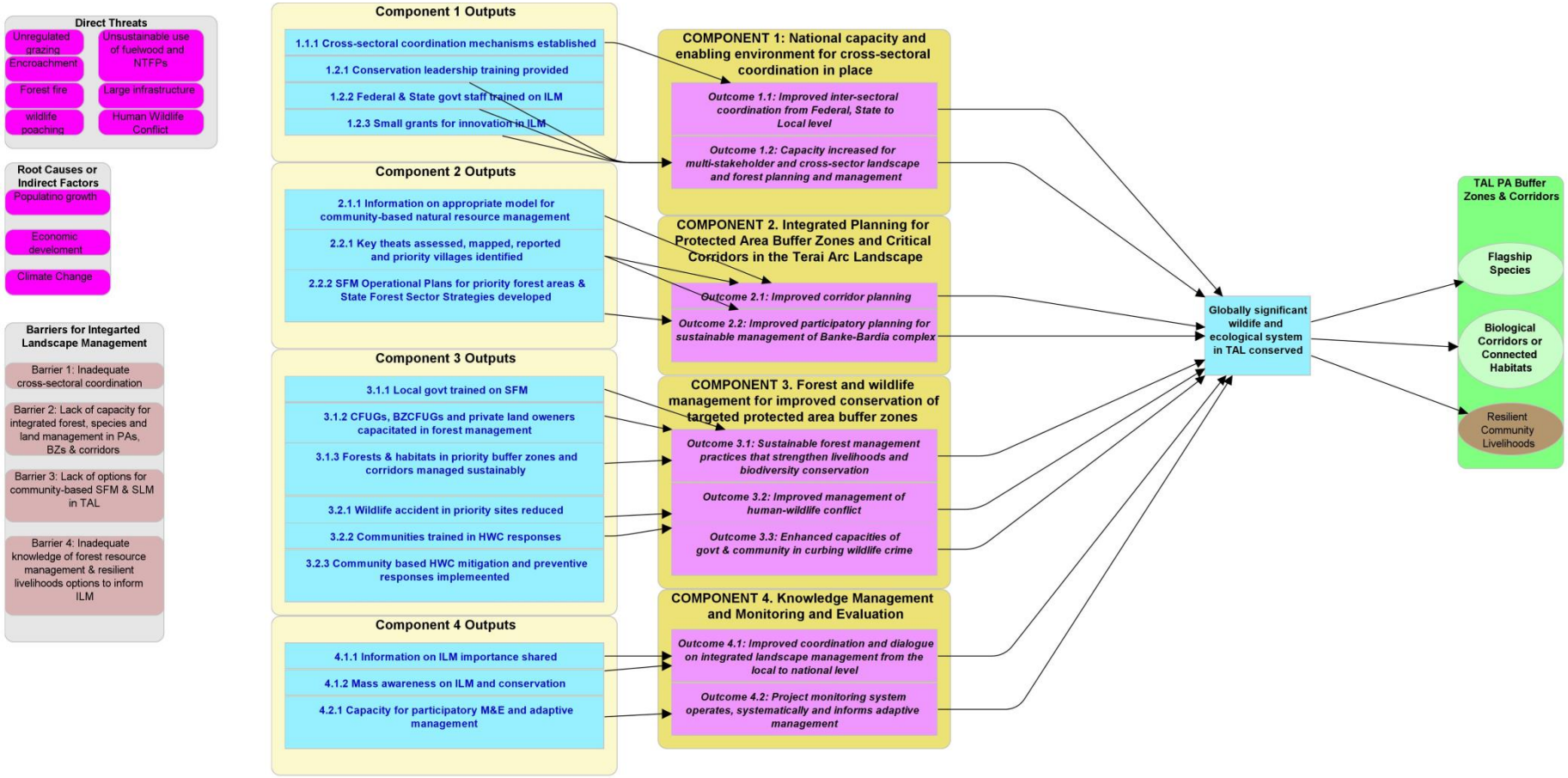
IF all the above Outcomes are accomplished, **THEN** the Project Objective - to promote integrated landscape management to conserve globally significant forests and wildlife – will be achieved.

IF the Project Objective is achieved, **THEN** the strengthening of stakeholder engagement, coordination between sectors, technical capacity for ILM and SFM, and reduction of threats will contribute towards

sustaining and restoring the integrity of the corridors, buffer zones and other natural habitat areas in the TAL, benefiting the globally significant ecosystems of the Terai and Churia Range, wildlife populations including key species (tiger, Asian elephant, greater one-horned rhinoceros and other globally threatened species), securing forest carbon sequestration through SFM and forest protection, reducing land degradation in forested landscapes, and directly benefiting local populations including women, indigenous peoples and other vulnerable groups.

The accomplishment of the project outcomes across the four project components will result in improved capacity, more systematic planning and implementation processes and greater inter-sectoral and vertical coordination in support of ILM and the TAL Strategy 2015-2025. These will result in the reduction of a wide range of threats currently impacting the corridors and protected area buffer zones of the TAL, and provide the mechanisms for sharing and scaling up successful project approaches beyond the target intervention areas. They will also provide direct benefits to engaged communities through improved returns from SFM and sustainable livelihood activities, strengthening motivation for future engagement in conservation and community-based NRM.

Overall, the strengthening of stakeholder engagement, coordination between sectors, technical capacity for ILM and SFM, and reduction of threats will contribute towards sustaining and restoring the integrity of the corridors, buffer zones and other natural habitat areas in the TAL, benefiting the globally significant ecosystems of the Terai and Churia Range, wildlife populations including key species (tiger, Asian elephant, greater one-horned rhinoceros and other globally threatened species), securing forest carbon sequestration through SFM and forest protection, reducing land degradation in forested landscapes, and directly benefiting local populations including women , indigenous peoples and other vulnerable groups.


Direct Threats
Unregulated grazing
Unsustainable use of fuelwood and NTFPs
Encroachment
Forest fire
Large infrastructure
wildlife poaching
Human Wildlife Conflict
Root Causes or Indirect Factors
Populatino growth
Economic develoment
Climate Change
Barriers for Integarted Landscape Management
Barrier 1: Inadequate cross-sectoral coordination
Barrier 2: Lack of capacity for integrated forest, species and land management in PAs, BZs & corridors
Barrier 3: Lack of options for community-based SFM & SLM in TAL
Barrier 4: Inadequate knowledge of forest resource management & resilient livelihoods options to inform ILM
Component 1 Outputs
1.1.1 Cross-sectoral coordination mechanisms established
1.2.1 Conservation leadership training provided
1.2.2 Federal & State govt staff trained on ILM
1.2.3 Small grants for innovation in ILM
Component 2 Outputs
2.1.1 Information on appropriate model for community-based natural resource management
2.2.1 Key theats assessed, mapped, reported and priority villages identified
2.2.2 SFM Operational Plans for priority forest areas & State Forest Sector Strategies developed
Component 3 Outputs
3.1.1 Local govt trained on SFM
3.1.2 CFUGs, BZCFUGs and private land oweners capacitated in forest management
3.1.3 Forests & habitats in priority buffer zones and corridors managed sustainably
3.2.1 Wildlife accident in priority sites reduced
3.2.2 Communities trained in HWC responses
3.2.3 Community based HWC mitigation and preventive responses implemeented
Component 4 Outputs
4.1.1 Information on ILM importance shared
4.1.2 Mass awareness on ILM and conservation
4.2.1 Capacity for participatory M&E and adaptive management
COMPONENT 1: National capacity and enabling environment for cross-sectoral coordination in place
Outcome 1.1: Improved inter-sectoral coordination from Federal, State to Local level
Outcome 1.2: Capacity increased for multi-stakeholder and cross-sector landscape and forest planning and management
COMPONENT 2. Integrated Planning for Protected Area Buffer Zones and Critical Corridors in the Terai Arc Landscape
Outcome 2.1: Improved corridor planning
Outcome 2.2: Improved participatory planning for sustainable management of Banke-Bardia complex
COMPONENT 3. Forest and wildlife management for improved conservation of targeted protected area buffer zones
Outcome 3.1: Sustainable forest management practices that strengthen livelihoods and biodiversity conservation
Outcome 3.2: Improved management of human-wildlife conflict
Outcome 3.3: Enhanced capacities of govt & community in curbing wildlife crime
COMPONENT 4. Knowledge Management and Monitoring and Evaluation
Outcome 4.1: Improved coordination and dialogue on integrated landscape management from the local to national level
Outcome 4.2: Project monitoring system operates, systematically and informs adaptive management
Globally significant wildife and ecological system in TAL conserved
TAL PA Buffer Zones & Corridors
Flagship Species
Biological Corridors or Connected Habitats
Resilient Community Livelihoods

APPENDIX 3: ANNUAL WORKPLAN AND BUDGET

ACTIVITIES	IMPLEMENTING PARTENRS (WHO)	YR.1	YR.2	YR.3	YR.4	YR.5	TOTAL
A. PERSONNEL COST		**264,150**	**277,358**	**291,225**	**305,787**	**321,076**	**1,459,595**
Project Coordinator	PMU	25,830	27,122	28,478	29,901	31,397	**142,727**
Project Manager	PMU	24,120	25,326	26,592	27,922	29,318	**133,278**
Project Technical Specialist	PMU	22,440	23,562	24,740	25,977	27,276	**123,995**
Finance and Administration Manager	PMU	22,440	23,562	24,740	25,977	27,276	**123,995**
Communication Officer (50% Part time)	PMU	7,520	7,896	8,291	8,705	9,141	**41,553**
Field Safeguard and GESI Officer	PMU	16,480	17,304	18,169	19,078	20,032	**91,062**
Field Program Officer (Biodiversity)	PMU	16,480	17,304	18,169	19,078	20,032	**91,062**
Field Program Officer (Forest Management)	PMU	16,480	17,304	18,169	19,078	20,032	**91,062**
Field Finance/Compliance Officer	PMU	16,480	17,304	18,169	19,078	20,032	**91,062**
Senior Field Monitoring, Evaluation and Learning (MEL) Officer	PMU	18,400	19,320	20,286	21,300	22,365	**101,672**
Field Finance and Administration Associate	PMU	11,630	12,212	12,822	13,463	14,136	**64,263**
Field Social Mobilizers (4)	PMU	21,800	22,890	24,035	25,236	26,498	**120,459**
Front Desk Assistant (2)	PMU	16,880	17,724	18,610	19,541	20,518	**93,273**
Office Messenger (2)	PMU	13,590	14,270	14,983	15,732	16,519	**75,093**
Driver (2)	PMU	13,580	14,259	14,972	15,721	16,507	**75,038**
B. ACTIVITY COST		**486,365**	**1,235,483**	**1,261,154**	**1,123,161**	**589,448**	**4,695,612**
COMPONENT 1: National capacity and enabling environment for cross-sectoral coordination to promote forest and landscape conservation		**61,095**	**199,153**	**204,083**	**183,103**	**40,582**	**688,016**
1.1 Outcome: Improved inter-sectoral coordination from Federal, State to Local level for sustainable forest management and integrated landscape management		**39,095**	**27,908**	**44,715**	**29,607**	**30,455**	**171,780**

1.1.1 Output: Cross-sectoral coordination mechanisms established to support integrated landscape management for conservation outcomes at different levels		**39,095**	**27,908**	**44,715**	**29,607**	**30,455**	**171,780**
Provide support to NBCC committee (ensure gender inclusive team)	MOFE/DOFSC/DNPWC/MITFE	1,000	1,030	1,061	1,093	1,126	**5,309**
Organize State level Biodiversity Co-ordination Committee (State 2,3,5,7 and Karnali) meetings	MOFE/DOFSC/DNPWC/MITFE	12,000	0	0	0	0	**12,000**
Provide technical and financial support to State Biodiversity Co-ordination committee	MOFE/DOFSC/DNPWC/MITFE	8,095	8,338	8,588	8,846	9,070	**42,937**
Organize inter-ministerial coordination mechanism for wildlife friendly infrastructure	MOFE/DOFSC/DNPWC/MITFE	3,000	3,090	3,183	3,278	3,377	**15,927**
Organize inter-state coordination (2, 3, Gandaki, 5, Karnali, 7) for implementation of the NBSAP and TAL Strategy	PMU	2,000	2,060	2,122	2,185	2,251	**10,618**
Carry out cluster meetings with Municipalities	PMU	5,000	5,150	5,305	5,464	5,628	**26,546**
Conduct final review of NBSAP (2014-2020)	PMU	0	0	15,969	0	0	**15,969**
Provide technical and financial support to WCCB	MOFE/DOFSC/DNPWC/MITFE	3,000	3,090	3,183	3,278	3,377	**15,927**
Field program implementation support & coordination	PMU	5,000	5,150	5,305	5,464	5,628	**26,546**
1.2 Outcome: Capacity increased for multi-stakeholder and cross-sector landscape and forest planning and management		**22,000**	**171,245**	**159,369**	**153,496**	**10,127**	**516,237**
1.2.1.Output: Conservation Leadership Training provided		**12,000**	**12,000**	**0**	**0**	**0**	**24,000**
Conduct training to ILM coordinators for capturing international best practice and applying this to the local context	PMU	12,000	12,000	0	0	0	**24,000**
1.2.2 Output: Training courses provided on key subjects for integrated landscape management for responsible federal and state government staff		**4,000**	**15,745**	**15,869**	**9,996**	**10,127**	**55,737**
Conduct training on Biodiversity conservation and monitoring	PMU	0	6,000	6,000	0	0	**12,000**
Conduct training on Disaster Risk Management	PMU	0	5,625	5,625	5,625	5,625	**22,500**

Orientation on roles and responsibilities for new park staff (senior/game scouts)	MOFE/DOFSC/DNPWC/MITFE	2,000	2,060	2,122	2,185	2,251	**10,618**
Orientation on roles and responsibilities for new divisional staff	MOFE/DOFSC/DNPWC/MITFE	2,000	2,060	2,122	2,185	2,251	**10,618**
1.2.3 Output: Small grants for innovation in ILM (conservation, natural resource, and landscape management) in TAL corridors and PA buffer zones		**6,000**	**143,500**	**143,500**	**143,500**	**0**	**436,500**
Provide Individual grant (Bachelors and Master's thesis)	PMU	6,000	6,000	6,000	6,000	0	**24,000**
Provide Institutional grant to Academic Institutional and CBOs/CSOs	PMU	0	30,000	30,000	30,000	0	**90,000**
Provide innovation grant to the government agencies (National Park, Forest Division, Research and Training Centre) at state level	MOFE/DOFSC/DNPWC/MITFE	0	107,500	107,500	107,500	0	**322,500**
COMPONENT 2: Integrated Planning for Protected Area Buffer Zones and Critical Corridors in the Terai Arc Landscape		**11,140**	**128,019**	**69,592**	**42,812**	**25,097**	**276,661**
2.1 Outcome: Improved corridor planning for TAL corridors (Brahmadev, Karnali and Kamdi)		**0**	**30,000**	**10,000**	**0**	**0**	**40,000**
2.1.1 Output: Biodiversity surveys, socio-economic surveys, and local stakeholder consultation for Brahmadev , Karnali, and Kamdi corridors to determine feasibility of appropriate models for community-based natural resource management		**0**	**30,000**	**10,000**	**0**	**0**	**40,000**
Conduct assessment to update biodiversity inventory and socio-economic status in corridors (incorporating GESI aspect)	PMU	0	30,000	0	0	0	**30,000**
Provide technical support to review existing forest encroachment status and response options considering GESI aspect	PMU	0	0	7,000	0	0	**7,000**
Prepare corridor/bottleneck assessment report with GESI integration	PMU	0	0	3,000	0	0	**3,000**
2.2 Outcome: Improved participatory planning for sustainable management of in Banke-Bardia complex		**11,140**	**98,019**	**59,592**	**42,812**	**25,097**	**236,661**

2.2.1 Output: Land uses, biodiversity values, forest carbon, and key threats assessed, mapped, reported and disseminated to identify priority villages and forest areas in the targeted PA buffer zones and corridors		**0**	**31,270**	**34,731**	**14,835**	**0**	**80,835**
Conduct participatory assessments in targeted PA buffer zones and corridors to identify priority community and forest areas	PMU	0	12,000	12,000	0	0	**24,000**
Conduct resource mapping of CFUGs at corridor level and BZUCs	PMU	0	10,000	10,000	5,000	0	**25,000**
Carry out consultations at identified communities	MOFE/DOFSC/DNPWC/MITFE	0	9,270	12,731	9,835	0	**31,835**
2.2.2 Output: Sustainable Forest Management Operational Plans developed or revised for priority forest areas, incorporating the assessment from 2.2.1		**0**	**66,749**	**24,862**	**27,978**	**25,097**	**155,825**
Provide financial support to develop State forest sector strategies (including Community Forests, Protected Forests and Leash-hold Forest)	MOFE/DOFSC/DNPWC/MITFE	0	45,000	0	0	0	**45,000**
Support CFUGs and BZ CFUGs to develop/revise forest operational plan (GESI aspect is revised/incorporated)	PMU	0	6,000	9,000	12,000	9,000	**36,000**
COMPONENT 3. Forest and human-wildlife conflict management for improved conservation of targeted protected area buffer zones and corridors in the Terai Arc Landscape		**291,390**	**772,609**	**818,971**	**730,081**	**321,822**	**2,934,874**
3.1 Outcome: Strengthen livelihoods and biodiversity conservation through Sustainable forest management practices		**219,250**	**476,715**	**649,465**	**587,462**	**238,337**	**2,171,228**
3.1.1 Output: Training and tools to local government on SFM		**63,020**	**98,705**	**65,426**	**66,683**	**67,978**	**361,813**
Prepare Sustainable Forest Management Training (SFM) Manual incorporating GESI	MOFE/DOFSC/DNPWC/MITFE	0	5,000	0	0	0	**5,000**
Provide "Training of Trainers" (TOT) to Division Forest Offices staff based on SFM Training Manual	PMU	5,620	5,620	5,620	5,620	5,620	**28,102**

Establish Forest Management Information system (FMIS) including forest fire management	MOFE/DOFSC/DNPWC/MITFE	0	29,500	0	0	0	**29,500**
Support the State Forest Directorate fire reporting system	MOFE/DOFSC/DNPWC/MITFE	5,000	5,000	5,000	5,000	5,000	**25,000**
Support forest fire management through innovative tools and techniques such as leaf litter collection and composting (within targeted sites identified in component 2)	MOFE/DOFSC/DNPWC/MITFE	7,900	7,900	7,900	7,900	7,900	**39,500**
Provide multi-year support for nursery to Division forest offices (within targeted sites identified in component 2)	MOFE/DOFSC/DNPWC/MITFE	44,500	45,685	46,906	48,163	49,458	**234,711**
3.1.2 Output: Technical support to CFUGs, BZCFUGs and land holders for forest management		**1,000**	**21,180**	**135,865**	**131,835**	**125,130**	**415,010**
Provide training to CFUGs and BZ CFUGs for forest management implementation (including applied SFM, restoration technique - lined with 3.1.1	PMU	0	6,180	6,365	9,835	10,130	**32,510**
Conduct exchange visits for targeted BZ CFUG members (learning from successful UCs on fund mobilization and HWC management)	PMU	0	0	7,500	0	0	**7,500**
Support BZUCs annual meetings for Bardia and Banke NP Buffer Zones (northern side)	PMU	1,000	1,000	1,000	1,000	1,000	**5,000**
Provide coaching on "Governance and Financial management" for CFUGs of corridors and PA Buffer zones	PMU	0	4,000	6,000	6,000	4,000	**20,000**
Provide support private forest development (providing seedling, irrigation, fencing)	MOFE/DOFSC/DNPWC/MITFE	0	0	100,000	100,000	100,000	**300,000**
Support to register private forest	PMU	0	10,000	15,000	15,000	10,000	**50,000**
3.1.3 Output: Forests and associated habitat in priority buffer zones and corridors managed sustainably		**155,229**	**356,829**	**448,174**	**388,944**	**45,229**	**1,394,406**
Create revolving fund to implement forest operational plans in project targeted corridors	PMU	0	40,000	40,000	20,000	0	**100,000**

Provide financial and technical support to improve livestock management (AI, fodder plant support, feeding trough, vet support, stall improvement)	PMU	36,229	36,229	90,574	54,344	36,229	**253,606**
Provide financial and technical support for management of grassland and wetland in project targeted area	PMU	70,000	100,000	100,000	100,000	0	**370,000**
Provide financial and technical support for river bank protection in project targeted area	PMU	40,000	30,000	70,000	70,000	0	**210,000**
Safeguard plan implementation	PMU	9,000	9,000	9,000	9,000	9,000	**45,000**
Provide financial and technical support to small scale green enterprises in project targeted area	PMU	0	135,600	135,600	135,600	0	**406,800**
Provide financial and technical support to develop business plan	PMU	0	6,000	3,000	0	0	**9,000**
3.2 Outcome: Improved management of the human-wildlife conflict		**61,500**	**216,345**	**98,536**	**71,215**	**71,510**	**519,105**
3.2.1 Output: Pilot method to reduce wildlife accidents in priority sites		**37,500**	**15,500**	**7,500**	**2,500**	**2,500**	**65,500**
Conduct study on the wildlife traffic accident issue	MOFE/DOFSC/DNPWC/MITFE	0	3,000	0	0	0	**3,000**
Install tools/facilities to pilot measures to reduce accidents	MOFE/DOFSC/DNPWC/MITFE	27,500	0	0	0	0	**27,500**
Support in operation and monitoring of wildlife related traffic accidents in highway	MOFE/DOFSC/DNPWC/MITFE	0	2,500	2,500	2,500	2,500	**10,000**
Support to erect fence on both sides of Sikta irrigation canal	MOFE/DOFSC/DNPWC/MITFE	10,000	10,000	5,000	0	0	**25,000**
3.2.2 Output: Training and facilities for human wildlife conflict response		**4,000**	**148,748**	**9,548**	**9,835**	**10,130**	**182,260**
Prepare species-specific guidelines for HWC management	MOFE/DOFSC/DNPWC/MITFE	0	9,478	0	0	0	**9,478**
Pictorial manual on Wildlife identification and behavior in Nepali and local dialects	MOFE/DOFSC/DNPWC/MITFE	0	10,000	0	0	0	**10,000**

Conduct training on identification and behavior of wild animals to Divisional forest office staff	MOFE/DOFSC/DNPWC/MITFE	4,000	4,120	4,244	4,371	4,502	**21,237**
Support Wildlife Rescue center	MOFE/DOFSC/DNPWC/MITFE	0	120,000	0	0	0	**120,000**
Support wildlife rescue and handling equipment and training	MOFE/DOFSC/DNPWC/MITFE	0	5,150	5,305	5,464	5,628	**21,546**
3.2.3 Output: Community based HWC mitigate and preventive action implemented		**20,000**	**52,098**	**81,488**	**58,880**	**58,880**	**271,345**
Conduct workshop on preventive and curative measures for HWC	MOFE/DOFSC/DNPWC/MITFE	0	7,658	7,888	0	0	**15,545**
Implement measures for HWC based on prepared plans (mentha plantation, biological/virtual fencing)	PMU	0	19,440	48,600	38,880	38,880	**145,800**
Support to establish community-based insurance (crop, livestock) scheme	PMU	20,000	20,000	20,000	20,000	20,000	**100,000**
Implement community-based reporting system of HWC incidents	MOFE/DOFSC/DNPWC/MITFE	0	5,000	5,000	0	0	**10,000**
3.3 Outcome: Enhanced capacities of government agencies and community in curbing illegal wildlife crime		**10,640**	**79,549**	**70,971**	**71,405**	**11,975**	**244,540**
3.3.1 Output: Community Based Anti-poaching Units functional in priority areas		**0**	**61,500**	**56,500**	**56,500**	**0**	**174,500**
Provide support for field gear to CBAPU members	PMU	0	60,000	0	0	0	**60,000**
Provide technical and financial support for skill based training to CBAPU members	PMU	0	1,500	1,500	1,500	0	**4,500**
Establish revolving fund to initiate green enterprise for CBAPUs member (link to above activities)	PMU	0	0	55,000	55,000	0	**110,000**
3.3.2 Output: Training and operation support to Park staff, rangers on wildlife crime management		**10,640**	**18,049**	**14,471**	**14,905**	**11,975**	**70,040**
Update training manual on illegal wildlife crime scene management	MOFE/DOFSC/DNPWC/MITFE	0	4,000	0	0	0	**4,000**

Conduct training to investigation officers level on Illegal wildlife crime scene management	MOFE/DOFSC/DNPWC/MITFE	3,000	6,180	6,365	6,556	3,377	**25,478**
Support Transboundary coordination at local level	MOFE/DOFSC/DNPWC/MITFE	4,000	4,120	4,244	4,371	4,502	**21,237**
Field program implementation support & coordination	PMU	3,640	3,749	3,862	3,978	4,097	**19,325**
COMPONENT 4. Knowledge Management and Monitoring and Evaluation		**122,740**	**135,702**	**168,508**	**167,165**	**201,948**	**796,061**
4.1 Outcome: Improved coordination and dialogue on integrated landscape management from the local to national level		**64,450**	**72,511**	**73,371**	**74,257**	**75,170**	**359,759**
4.1.1 Output: Information on ILM importance shared among key stakeholders		**17,400**	**21,547**	**22,085**	**22,638**	**23,209**	**106,879**
Organize monthly dialogue through "Jaibik Chautari" (Biodiversity Platform) at field level	MOFE/DOFSC/DNPWC/MITFE	14,400	14,832	15,277	15,735	16,207	**76,452**
Organize annual technical thematic discussion session at center	MOFE/DOFSC/DNPWC/MITFE	3,000	3,090	3,183	3,278	3,377	**15,927**
Establish and maintain online Landscape Knowledge Learning Platform (including project website)	PMU		3,625	3,625	3,625	3,625	**14,500**
4.1.2 Output: Mass awareness products on biodiversity conservation and integrated landscape management		**47,050**	**50,964**	**51,286**	**51,619**	**51,962**	**252,880**
Provide technical and financial support to green/eco-clubs formation and its operation	PMU	25,000	25,000	25,000	25,000	25,000	**125,000**
Support annual meetings of green/eco-clubs network at district level	PMU	8,000	8,000	8,000	8,000	8,000	**40,000**
Support special conservation events at local level	MOFE/DOFSC/DNPWC/MITFE	7,950	8,189	8,434	8,687	8,948	**42,208**
Sensitize media (print and TV) on integrated landscape management	PMU	2,500	2,575	2,652	2,732	2,814	**13,273**
Support radio program (local dialects) on ILM	PMU	3,600	7,200	7,200	7,200	7,200	**32,400**

4.2 Outcome: Project monitoring system operates, systematically provides information on progress, and informs adaptive management to ensure results		**38,750**	**48,365**	**67,711**	**50,869**	**80,323**	**286,018**
4.2.1 Participatory planning and M&E system		**38,750**	**48,365**	**67,711**	**50,869**	**80,323**	**286,018**
Organize project inception workshops at Kathmandu and field level	PMU	6,000	0	0	0	0	**6,000**
PAC/PEC planning review workshop (Central and Field)	PMU	4,000	4,120	4,244	4,371	4,502	**21,237**
Conduct periodic (trimester) workplan review and planning sessions	PMU	9,000	9,270	9,548	9,835	10,130	**47,782**
Conduct periodic and joint monitoring visits	PMU	4,500	4,635	4,774	4,917	5,065	**23,891**
Conduct Safeguard Monitoring visits	PMU	3,000	3,090	3,183	3,278	3,377	**15,927**
Conduct training on "participatory monitoring and evaluation" to CFUGs and relevant sub-grantees	PMU	0	20,000	0	21,218	0	**41,218**
Capacity building/training of PSU staff (on project management - WWF network standards, report writing and GESI and safeguard)	PMU	5,000	0	0	0	0	**5,000**
Organize Project Mid-term review workshops with all key stakeholders	PMU	0	0	3,713	0	0	**3,713**
Conduct Project Evaluations (Mid-term and terminal evaluation - GEF/SWC)	PMU	0	0	35,000	0	50,000	**85,000**
Annual Financial Audit	PMU	7,250	7,250	7,250	7,250	7,250	**36,250**
4.3 Outcome: Project lessons shared		**19,540**	**14,826**	**27,425**	**42,038**	**46,454**	**150,284**
4.3.1 Output: Project lessons captured and disseminated to project stakeholders and to other projects and partners		**19,540**	**14,826**	**27,425**	**42,038**	**46,454**	**150,284**
Documentation on Traditional Knowledge associated to natural resources	PMU	10,000	0	0	0	0	**10,000**
Prepare success stories and videos of the project	PMU	0	0	7,000	14,000	14,000	**35,000**
Print case studies and periodic project reports	PMU	0	5,000	5,305	5,464	5,628	**21,396**

Provide financial support to participate in national/international scientific forum for field staff	PMU	0	0	0	7,150	7,150	**14,300**
Provide financial support to publish journal articles	PMU	0	0	5,000	5,000	5,000	**15,000**
Field program implementation support & coordination	PMU	9,540	9,826	10,121	10,425	10,737	**50,649**
Organize final project lessons sharing workshop	PMU	0	0	0	0	3,939	**3,939**
C. OTHER DIRECT COST		**195,318**	**74,765**	**77,008**	**113,250**	**81,698**	**542,040**
Office Running Cost		**69,165**	**74,765**	**77,008**	**79,319**	**81,698**	**381,956**
Research Materials and Publications	PMU	0	3,525	3,631	3,740	3,852	**14,747**
Office Rent, Insurance, Maintenance, Utility	PMU	17,345	17,866	18,402	18,954	19,522	**92,089**
Equipment / Vehicle Lease	PMU	1,800	1,854	1,910	1,967	2,026	**9,556**
Equipment / Vehicle Running Costs	PMU	15,000	15,450	15,914	16,391	16,883	**79,637**
Photocopying	PMU	7,800	8,034	8,275	8,523	8,779	**41,411**
Postage & Shipping	PMU	1,800	1,854	1,910	1,967	2,026	**9,556**
Communications (phone, fax, AV, WP)	PMU	7,800	8,034	8,275	8,523	8,779	**41,411**
Supplies	PMU	11,400	11,742	12,094	12,457	12,831	**60,524**
Field program implementation support & coordination	PMU	6,220	6,407	6,599	6,797	7,001	**33,023**
Office Setup Cost (Kathmandu and Field Office)		**126,153**	**0**	**0**	**33,931**	**0**	**160,084**
Furniture and fixtures	PMU	35,000	0	0	0	0	**35,000**
Office setup costs (carpet, curtains, painting, lighting etc.)	PMU	5,501	0	0	0	0	**5,501**
Laptop computers (with dock-in set)	PMU	17,550	0	0	10,326	0	**27,876**
Desktop computer	PMU	5,602	0	0	5,247	0	**10,849**
Printer	PMU	1,800	0	0	983	0	**2,783**
Copier/scanner	PMU	8,000	0	0	8,742	0	**16,742**
Motorbike	PMU	19,500	0	0	0	0	**19,500**
LCD Projector	PMU	3,400	0	0	3,715	0	**7,115**
Telephone	PMU	1,200	0	0	0	0	**1,200**

Vacuum cleaner	PMU	300	0	0	0	0	**300**
Power backup system (inverter & battery)	PMU	12,000	0	0	0	0	**12,000**
Camera/GPS	PMU	7,500	0	0	4,917	0	**12,417**
Spiral binding machine	PMU	300	0	0	0	0	**300**
EPABX system setup	PMU	1,500	0	0	0	0	**1,500**
Telephone/Internet connection (with router, networking accessories)	PMU	4,000	0	0	0	0	**4,000**
Air Conditioners	PMU	3,000	0	0	0	0	**3,000**
GRAND TOTAL		**945,833**	**1,587,606**	**1,629,388**	**1,542,198**	**992,222**	**6,697,248**

APPENDIX 4. RATIONALE FOR SELECTION OF PROJECT TARGET AREAS

The following attempts to synthesize the main considerations regarding each corridor and buffer zone in the project landscape to inform target site selection. A full set of profiles for all corridors and PA buffer zones is available in **Appendix 1**.

Proposals for Corridor Target Areas

In operational terms, there is a strong rationale to follow the PIF proposals for **Kamdi and Karnali Corridors** as target areas in Outcome 2.2, as there would be added cost-effectiveness and implementation efficiency when these sites are also the focus of participatory planning efforts for increased protection under Outcome 2.1. This would provide the opportunity for more integrated intervention, greater impact and likely increased sustainability of both outcomes. Both of these corridors can be considered to be of the highest level of priority for their combined levels of importance for biodiversity value and threat. **Bramhadev Corridor** will be included in Component 2 for assessment and proposals for strengthened community based NRM governance.

The PIF's proposal for including **Khata Corridor** is logical in that it lies between Kamdi and Karnali and would part of an integrated approach supporting Bardia and Banke NPs as a major block of habitat for key wildlife including a highly significant source tiger population. While Khata is already a PF, it faces a critical level of threat that may seriously damage its integrity without intervention. There is therefore some urgency for engagement here. However, Khata is currently receiving major support from WWF TAL Programme (with Leonardo Di Caprio Foundation support recently completed), and it was considered that the current project would not be able to add much value over these efforts.

Overall, the selection of these two corridors would be highly suitable for an integrated approach supporting the wider connectivity of the Bardia – Banke NP complex to the surrounding landscape including Suhelwa Wildlife Sanctuary in India.

Consideration was given to including **Basanta Corridor,** in view of the significance of Basanta, which supports valuable wildlife populations, Ghodaghodi Ramsar Site and numerous small wetlands, with a largely Tharu population and extends northwards into the Churia Range. However, it was considered that too much input would be needed to cover the large area of Basanta as well as Kamdi, Karnali and two PA buffer zones. Basanta also suffers from intractable encroachment problems that would be difficult to resolve effectively within the project timeframe.

It was considered that a more dispersed selection of corridors might provide greater diversity of experience across the TAL but would result in weaker overall project impact. More dispersed intervention sites would also present logistical and financial challenges for project management, requiring more field bases, greater coordination efforts, and increased travel. However, Components 1 and 4 of the project strategy will still engage participants from across the Terai Arc Landscape in a variety of capacity development, coordination, stakeholder consultation and knowledge exchange activities, including a small grant scheme for innovation towards integrated landscape management and natural resource management.

Proposals for Protected Area Buffer Zone Target Sites

The PIF Outcome 2.2 proposed **the buffer zone extension north of Bardia NP, and the buffer zone around Banke NP**. Both of these would strengthen the linkage between the lowland Terai forest blocks and the Churia Range forests. The significance of this is firstly, that the Churia Range is more sensitive to land degradation and development impacts owing to its gradients and susceptibility to soil erosion, with consequent downstream siltation and flooding impacts; and secondly, the TAL area has recently been extended to include the northern slopes of the Churia Range watershed in recognition of their function as climate change refugia for wildlife. This would represent a major climate change adaptation benefit for Bardia and Banke NPs. As mentioned above for the Corridors, there is also a synergistic effect in selecting sites in the same area, thus the selection of these two PA buffer zones, plus **Kamdi and Karnali Corridors** would provide a very strongly focused intervention.

Summary Information on Corridors

Barandabhar PF

Barandabhar Protection Forest is situated in Chitwan district, connecting the TAL and Chitwan-Annapurna Landscape. It is the only corridor which connects Churiya Siwalik range with the Mahabharat range providing refuge site for wildlife during the monsoon season. The corridor includes Bishazar Lake, a Ramsar site, and other wetlands. Gaur, tiger and one-horned rhinoceros have been recorded in the corridor. The corridor has been bisected by the East-West Highway, and wildlife poaching is a critical threat, with forest fires, floods and invasive species among the major threats.

Basanta PF

Basanta PF was established during the GEF WTLC project, when a corridor management plan was developed and staff put in place. It is a broad corridor that connect Siwaliks in the North with Dudhwa National Park of India in South and includes Ghodaghodi Lake Ramsar Site. Key species include tiger, elephant, sarus crane and important wetland species - the corridor has Elephant Route, Tiger Route, Dolphin Area, Vulture Area, and Sarus Crane area. Encroachment fuelled by a high in-migration rate and grazing are the highest threats followed by floods and forest fires. Poaching and illegal wildlife trade require vigilance in this area.

Bramhadev

Bramhadev Corridor connects Shuklaphanta National Park with Doon Forest in India, which borders the eastern bank of Mahakali River. It was identified in the PIF Outcome 2.1 for participatory planning for protection as PF (or alternative status). The corridor supports tiger, Asian elephant, leopard and other threatened species, supporting populations in Shuklaphanta NP. Encroachment is a critical issue for this corridor, driven by in-migration and with associated threats of forest fires, land use change, illegal logging and HWC. There are a number of bottlenecks.

Kamdi

Identified in the PIF Outcome 2.1 for participatory planning for protection as PF (or alternative status); also in Outcome 2.2 as a potential target site for integrated planning for natural resource management.

In conservation priority terms, Kamdi is a critical corridor for the relatively newly established Banke NP, which together with contiguous Bardia NP hosts a major tiger source population, together with a significant elephant population and other key species.

While Kamdi faces major threats in the form of infrastructure development (especially road and Sikta irrigation scheme), floods and encroachment, the corridor is quite extensive and relatively intact, therefore there are reasonable chances of a sustaining its integrity as a corridor through the project intervention. Some CFUGs are very active in forest rehabilitation and cattle management work.

Karnali

Identified in the PIF Outcome 2.1 for participatory planning for protection as PF (or alternative status); also in Outcome 2.2 as a potential target site for integrated planning for natural resource management.
Karnali is a highly significant corridor for biodiversity conservation, lying along the western edge of Bardia NP, supporting tiger and elephant movements and with the river supporting both highly endangered aquatic species such as the gharial and Gangetic dolphin, and the whole range of riverine habitats of value in their own right.

Unfortunately, Karnali Corridor faces the highest level of threat of any Terai corridor, the most critical of which are the Rani Jamara Irrigation scheme, the new industrial development zone (Special Economic Zone, SEZ) planned in the centre of the northern part of the corridor **at Dudejhari**. The severity of these threats is such that they will seriously impact the integrity of the corridor, so the project's role would have to focus on mitigating the impacts of such developments through Smart Green Infrastructure and limiting further expansion of infrastructure development through more sustainable integrated landscape planning that recognizes biodiversity and ecosystem service values. Much could be done to reduce the impacts of the irrigation canal system and to improve integration of environmental management into development planning. Other very high level threats facing Karnali corridor include poaching, illegal logging, grazing, human-wildlife conflict and over-fishing.

Khata PF

Khata PF was established during the GEF WTLC project, when a corridor management plan was developed and staff put in place. Identified in PIF Outcome 2.2 as a potential target site for integrated planning for natural resource management.

Khata is a highly significant corridor for connectivity between Bardia NP and Katarniaghat Wildlife Sanctuary in India, of great importance for tiger, rhino and elephant movements (and with related significant HWC issues to manage), as well as Gangetic dolphin in the Karnali river channels. It has a very active community based anti-poaching group and strong local community support. However, it faces very serious threat from the Hulaki Road, irrigation canals and river diversion/channeling that could impact its integrity as a wildlife corridor. In addition, a key issue is encroachment on Mahjera Island in the Karnali River, where 150 households have settled and are experiencing HWC from tigers and elephants as a result. Therefore, it requires urgent intervention.

Laljhadi – Mohana PF

Laljhadi-Mohana links the Siwaliks of Nepal with Dudhwa National Park of India in the South and Shuklaphanta National Park in the West. The forest is an important habitat and corridor for tiger, Asian elephant and swamp deer. The Hulaki Road construction and grazing are the two main threats, while encroachment prevails in the forest area, which may create obstructions for the movement of animals in future – although the rate is not increasing. Connectivity with Dudhwa NP is compromised in the Doke bazaar area due to deforestation for agriculture expansion.

Mohana was a pilot site during the GEF WTLC project, when a PF was established, corridor management plan was developed and staff put in place. As such, it is likely that it will be hard to justify its inclusion as a demo site to GEF.

Summary Information on Protected Area Buffer Zones

Banke NP

This is a relatively new NP established in 2010 in support of tiger and four-horned antelope conservation, with limited baseline investment in its buffer zones to date. Forest in the BZ is very important as it is considered as a wildlife corridor and connectivity area between wildlife habitats. The park and its buffer zone can be divided into three ecological regions: a) Plains, b) Bhabar/Churia foothills, and c) the Churia ridge, with corresponding diversity of forest types and other habitats. HWC in the BZ area is an issue, including livestock depredation by tiger and leopard, and agricultural crops damaged by spotted deer, monkey and wild boar. Other key threats are forest fires, drying up of wetlands, floods and infrastructure development (Sikta Irrigation Canal, transmission lines and roads).

Bardia NP

Bardia is a well-established NP that received significant attention during the GEF WTLC project. The Buffer Zone (BZ) covers an area of 327 sq. km. encircling the eastern, southern and western boundaries of the park. Five distinct land types are to be recognized in BNP ad its BZ namely (i) the Churia (Siwalik), (ii) the Bhabar foot-hills, (iii) the alluvial Terai flat lands, (iv) the riverine floodplains, and (v) the Babai Valley where the Siwalik splits into a set of parallel ridges. A Large part of the park is composed of the southern slopes of the Churia hills and the gravelly foot hills called Bhabar belt. The alluvial Terai flatland is largely occupied by the buffer zone and lies outside the park boundary. Natural resource management and especially forest management is in a promising state. Most of the BZ area lies on the downstream side of the park, and thus enjoys ecological safety provided by the park. The park is prime habitat for tiger and also supports Asian elephant, One-horned rhinoceros, Gangetic dolphin, and is rich in ungulate diversity with 6 species of deer. The principal threats are forest fires, overfishing, floods, human wildlife conflict, drying up of water resources and siltation. The underlying causes of human wildlife conflict are encroachment into wildlife habitat, and insufficient fodder availability in the forest. River floods are the driver behind the entry of invasive species and siltation. Siltation in turn is one of the supporting factors for the reduction of water resources in the dry season.

Chitwan NP

Chitwan National Park is perhaps Nepal's best known protected area, listed as a World Heritage Site in 1984. It is important for a wide range of wildlife, especially tiger, Asian elephant one-horned rhinoceros and gharial. CNP has contributed significantly to the establishment of alternative rhino populations at Dudhwa National Park (India), Bardia National Park, Shuklaphanta and in national and international zoos.

The park is situated in a river valley basin or *dun*, along the floodplains of the Rapti, Reu and Narayani rivers. There are 44 recorded lakes/ghols distributed over the park and its buffer zone. For management purposes, the buffer zone has been divided into a conservation zone (139.84 km^2), sustainable use zone (228.3 km^2) and intensive use zone (381.86 km^2). The conservation zone includes forest patches including Barandabhar forest, is equally good as the core area for wildlife and also serves as a biological corridor. Sustainable use zone includes the forest area in buffer zone which is managed by communities for the dual purpose of meeting household needs for forest products, and providing refuge for the dispersing population of wildlife. In addition, the area will be managed for regulated tourism activities. The principal threats found in the buffer zone are human wildlife conflict, poverty, invasion by alien species, poaching activities, habitat loss, forest land encroachment, climate change and river pollution. The root causes of human wildlife conflict are Chure degradation, water resources depletion and drying up and forest encroachment. The major barriers in the conservation and management of CNP and its buffer zone are lack of understanding of buffer zone concept among local people, inappropriate planning process, lack of intersectoral co-ordination and federal system (unclear management jurisdiction).

Krishnasar Conservation Area

Krishnasaar Conservation Area (KrCA) was established in 2009 and covers an area of 16.95 sq. km. The area is mostly marginal agricultural land and grazing land bordered on three sides by the Babai riverbed and on the other side by scrub forest. Krishnasaar CA was established with the main aim of Blackbuck conservation, with the restoration and management of habitat of Blackbuck together with the conservation of other associated flora and fauna under changing climatic conditions. While KrCA looks isolated and devoid of connectivity at present, after the resettlement issue of encroachers is resolved, it can be linked with Bardia NP through the Babai river. The threats identified in the KrCA are invasive species, flooding, encroachment and resettlement issue, forest fires, livestock grazing and human disturbance. The underlying causes of these threats are unclear management jurisdiction, lack of implementation of plans, lack of physical infrastructure and technology, poverty around the surroundings, lack of a conservation awareness program nearby community and weak law enforcement.

Parsa NP

Together with Chitwan NP and the Indian Tiger Reserve Valmiki National Park, Parsa contributes to a coherent protected area of 2,075 km^2 (801 sq. mi) representing the *Tiger Conservation Unit (TCU) Chitwan-Parsa-Valmiki*, which covers a block of 3,549 km^2 (1,370 sq. mi) of alluvial grasslands and subtropical moist deciduous forests. Mammal species symbolic of Parsa NP are the Tiger, Gaur, Asian Elephant, Striped Hyena and Dhole, with tiger present in the surrounding areas. The principal threats found in the PNP and its buffer zone are most critically forest fires and human wildlife conflict, followed by open grazing, forest encroachment, highways, transmission lines, siltation, poaching and drying up of water resources.

Shuklaphanta NP

First established as a hunting reserve in 1971, Shuklaphanta National Park was gazetted in 2017 AD. Shuklaphanta National Park lies in the tropical and sub-tropical zones as it spreads over both the Terai and the Churia range in the north, also connecting with India in the southwest. The priority species conservation in Shuklaphanta National Park includes Rhino, Tiger, Blackbuck, Bengal Florican and Hispid Hare. The buffer zone connects to Laggabagga, India through Krishnasar, Dudhuwa and Pilibhit Tiger

Protected area in the South, Brahmadev Corridor in the North and with Laljhadi-Mohana Corridor to the East. The land use types in the area are forest land, grassland, riverine land, agricultural land and settlement area. It has the largest grassland among the protected areas of Terai. The majority of the population consists of ethnic Tharu communities and other groups such as Brahman, Chhetri, and Dalit - peoples that have in-migrated to the area from the northern hilly region. Community forests fulfil local needs for firewood, fodder, forage and other non-timber forest products. Over-grazing is one of the well-known problems in the area. Encroachment is also a major problem in the park and its buffer zone which has caused increased human wildlife conflict. The wildlife involved in conflict cases are tiger, leopard, elephant, wild boar and gaur. The threats identified in SNP and its buffer zone are encroachment, human wildlife conflict, forest fires, drying up of wetlands, poaching and illegal wildlife trade, illegal logging and timber smuggling, and uncontrolled livestock grazing. The underlying causes of these threats are poverty, in-migration and dependency on forest resources for encroachment and human wildlife conflict, while climate change and siltation are important factors exacerbating the drying up of water resources. These problems represent major challenges for the sustainable conservation and management of the park and its buffer zone.

Shuklaphanta NP received significant support during the earlier GEF WTLC project.

APPENDIX 5: PROJECT MAPS

See Google Drive for Appendix 5:
https://drive.google.com/drive/folders/1b4I_zTENuXoecdAD9pD9JK0W8E6rJ8IS?usp=sharing

APPENDIX 6: ORGANIZATIONAL CHART FOR PROJECT GOVERNANCE

The governance arrangements for project implementation are described in Section 3. Here the main diagrams showing the overall implementation arrangement (Fig 1) and PMU organization (Fig 2) are shown.

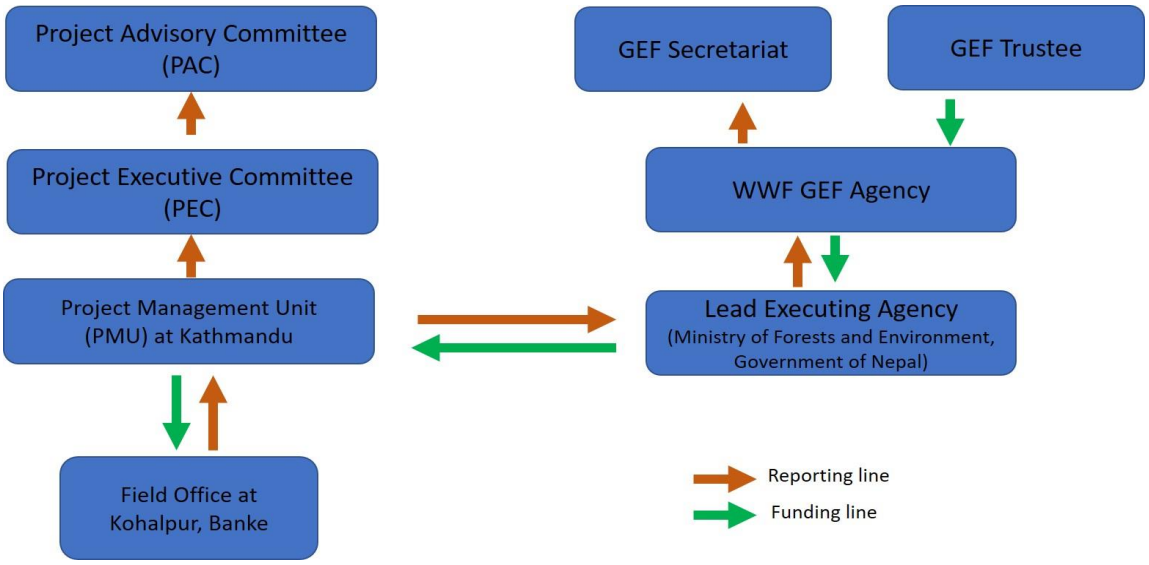


Figure 3: Overall implementation arrangement

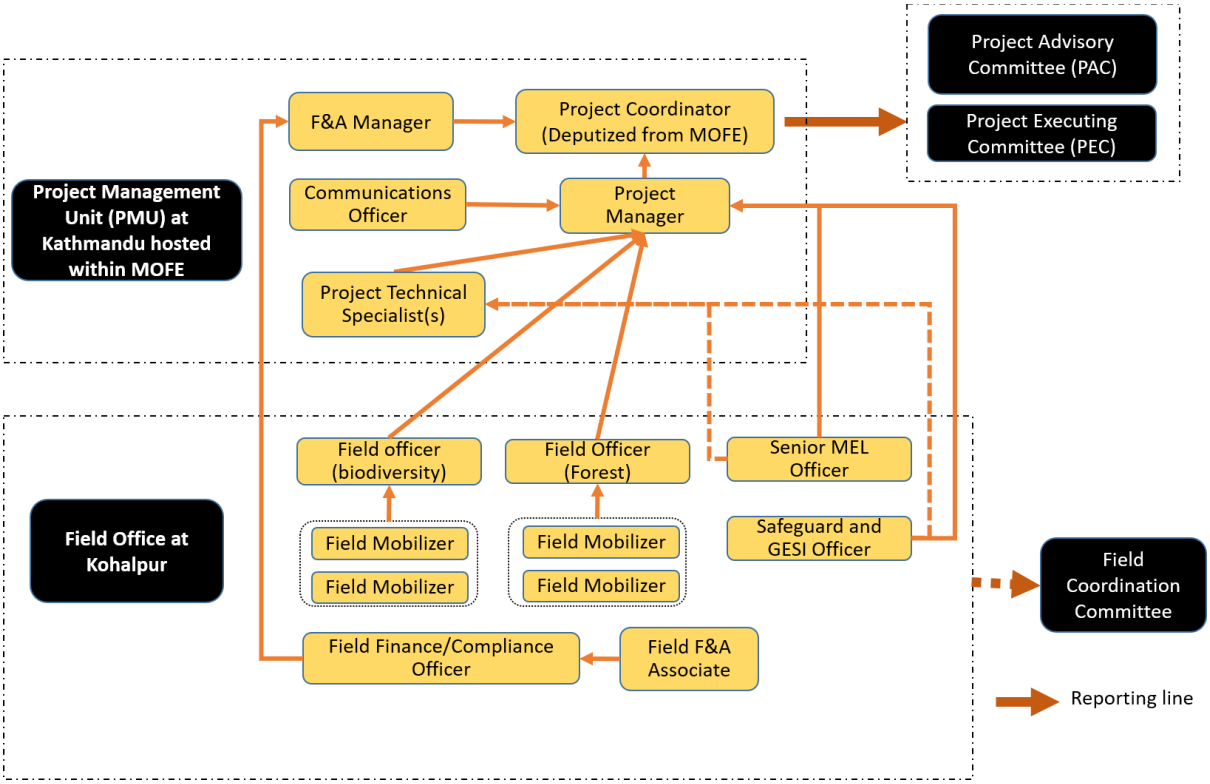


Figure 2: Project Management Unit organization

APPENDIX 7: STAKEHOLDER ENGAGEMENT PLAN FOR THE GEF-6 Project

Development Process On Integrated Landscape Management to Secure Nepal's Protected Areas and Critical Corridors in TAL

Submitted to
WWF Nepal
Baluwatar Kathmandu, Nepal

Submitted by
Youth Alliance for Environment
Baluwatar, Kathmandu
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Introduction

The Terai Arc Landscape (TAL) is of critical importance for globally significant biodiversity and ecosystems and for supporting the local livelihoods. Besides, the landscape provides habitat for Tiger, Rhino and Elephant, and supplies a variety of ecosystem goods and services including timber, soil fertility, water regulation, protection from flood, carbon storage and cultural service. The proposed GEF-6 project focuses on the Western TAL with the objective to *promote integrated landscape management to conserve globally significant forests and wildlife*. The proposed project focuses on three GEF-6 Focal Areas: biodiversity (BD), land degradation (LD), and sustainable forest management (SFM). Under these Focal Areas, the project contributes towards four Programs: (i) managing the human-biodiversity interface (BD 4 Program 9), (ii) landscape management and restoration (LD 2 Program 3), scaling-up sustainable land management through the landscape approach (LD 3 Program 4), and capacity development for SFM within local communities (SFM 2 Program 5).

The proposed project comprises four components of which three are programmatic and remaining one is knowledge management. Component 1 is *National capacity and enabling environment for cross-sectoral coordination to promote forest and landscape conservation*. This component aims to improve inter-sectoral coordination for integrated forest and landscape management to support the TAL strategy at all levels. In addition, it will enhance capacity for multi-stakeholder and cross sector landscape and forest planning and management. Component 2 is *Integrated planning for protected area buffer zones and critical corridors in the TAL*. This component is related to the improvement of TAL corridors and buffer zone areas. The outcomes of this component are increased protection status for targeted TAL corridors and improved participative planning for conservation and protection of targeted protected area buffer zones and corridors in TAL.

Component 3 is *Forest and species management for improved conservation of targeted protected area buffer zones and corridors in the TAL.* This component is related to SFM, and management of poaching and human-wildlife conflicts. The outcomes are increased application of good forest management practices, and improved management of the human-wildlife interface. The fourth Component is *Knowledge management and M&E*. This component concerns the mechanisms for assimilating,

documenting and sharing knowledge gained through project experiences. It also covers the systematic monitoring and evaluation required for effective project management. The outcomes are improved coordination and dialogue on landscape management from local, regional to national level; and the project monitoring system systematically provides information on progress and informs adaptive management to ensure results; and project lessons shared.

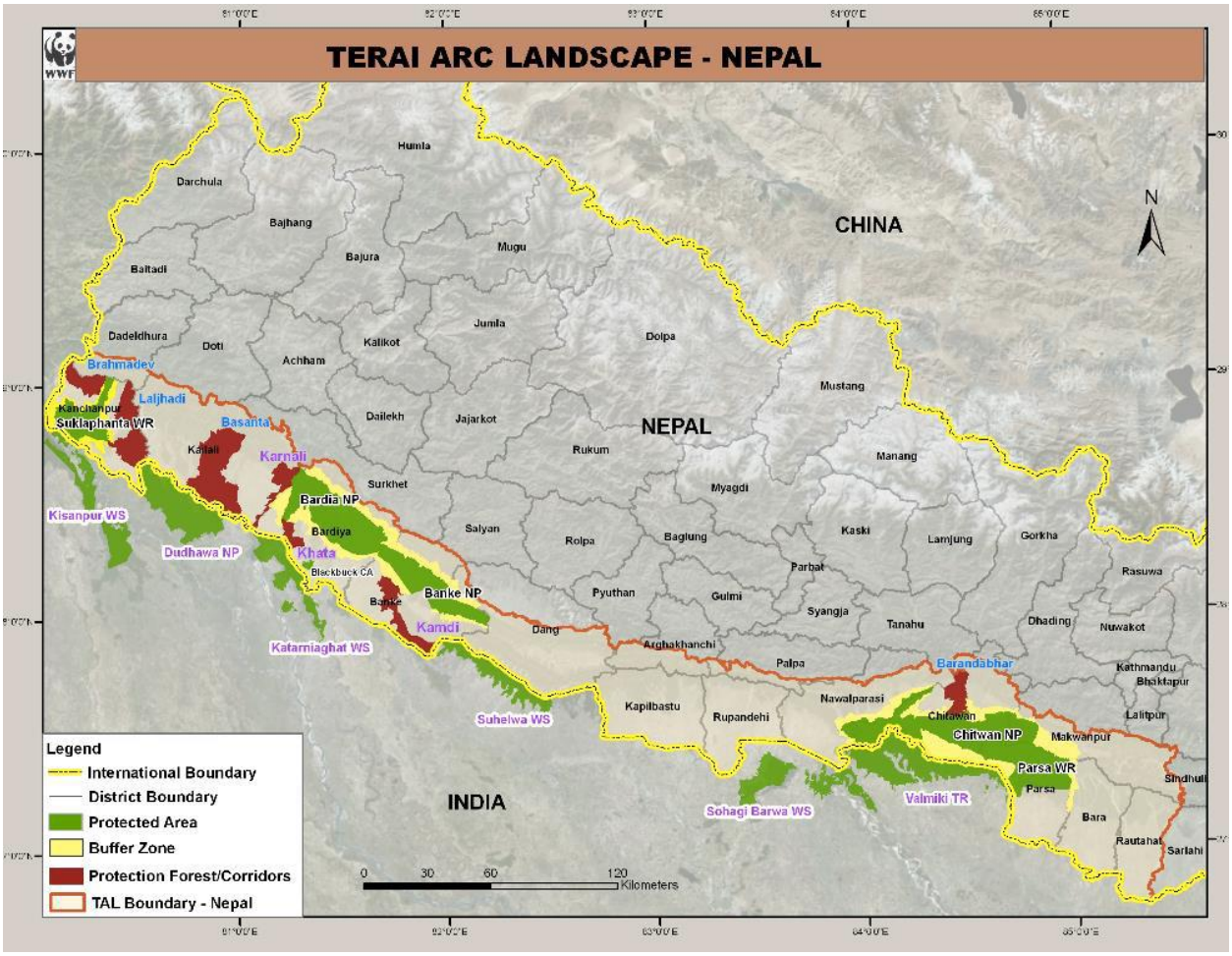


Figure-1 Map showing Project Area – Terai Arc Landscape

Social and Environmental Safeguards Considerations

Potential social and environmental issues have not yet been identified (the safeguards experts will screen for these). Some preliminary considerations for these are:

- Proposed project increases in the protection status of forested lands in corridors and PA buffer zones, strengthened patrolling and law enforcement, and efforts to control forest encroachment have potential to impact the rights, land uses and access to natural resources of local residents and immigrant settlers, therefore the project will require adequate safeguards to ensure that its activities do not have negative social impacts.
- Marginalized, vulnerable and diverse indigenous peoples are resident within the project landscape, and often such people are closest to the human-wildlife interface and most vulnerable

to natural disasters. The project will need to explicitly and proactively seek to engage such people in its livelihood support and HWC response activities

- Gender inequalities exist within society in the project landscape, which the project will need to seek to address through proactive gender mainstreaming activities, and attention to gender equity in its implementation and monitoring procedures
- The project landscape includes critical habitats and environmentally sensitive areas, including protected areas. The implementation of certain project activities such as smart green infrastructure, fencing and livelihood support projects in such areas poses the risk of localized environmental impacts.
- Harvesting of natural forests and reforestation in project areas have potential to result in environmental impacts such as soil erosion, loss of biodiversity and introduction of alien species.
- Promotion of tourism activities may have negative impacts on local cultural practices.
- The proposed activities may enhance inequalities and fuel social conflicts between project beneficiaries and non-beneficiaries

Stakeholder Consultation Plan

The constitution of Nepal envisioned strengthening the national economy through the participation of public and private sectors and cooperatives. Further, there are now three tiers in the government structure: Local, State and Federal levels of government. In the project formulation and development process, a Stakeholder Engagement Plan (SEP) has been prepared to collect information and conduct consultations for the WWF/GEF project. After identifying the stakeholders related to the biodiversity (BD), land degradation (LD), and sustainable forest management (SFM) project mandate, project relevancy and consultation mode during the project development process including timing for all three tiers have been incorporated in the SEP in **Table 1**.

Table: 1 Stakeholders and their mandate, project relevancy and engagement in project preparation

Name	Mandate	Project Relevance	Consultation in Project Preparation
Ministry of Forests and Environment (MoFE) Department of Forest (DoF) Department of National Parks and Wildlife Conservation (DNPWC)	Focal ministry for biodiversity conservation and NRM. MoFSC manages forests, protected areas, and other related natural resources. In addition, it is concern with all environmental issues including EIA approvals for development projects; climate change; carbon financing; climate finance; renewable energy; low carbon development; adaptation; pollution.	MoFE is the project's lead ministry. MoFE will be the lead executing agency for the project in implementation, and will host and coordinate the Project Management Unit (PMU). As such, MoFE will lead the development of the project (technical content, governance structure, budget, M&E) and coordination with the other partner Ministries and key districts. The key departments will provide technical input in project preparation, and implementation.	MoFE will be consulted throughout the project development process and will be involved in key decision points. **Components:** All **Mode:** Through PPC, PPG workshops, individual consultations with DOF and DNPWC **Timing**: All stages of PPG **Gender:** Consult with MoFE to obtain gender-disaggregated baseline information and set targets for capacity development activities
Ministry of Agriculture, Land Management and Cooperatives (MoALMC) Department of Agriculture (DoA) Department of Livestock Service (DoLS)	**MoALMC** is responsible for increasing agricultural productivity, promoting sustainable agriculture development and knowledge based farming, and supports livestock management and development. DoLS is responsible for pasture management, feed	MoALMC currently has district level offices, and, they will be partners in local level implementation.	MOALMC will be consulted throughout the project development process. They will be engaged in the design of activities for community based sustainable agriculture. **Components:** All **Mode:** Through PPG workshops, individual consultations with DOA and DoLS, field consultations at demo sites

	development and livestock breeding at national level.		**Timing**: All stages of PPG (nationally); second round field surveys (local level) **Gender:** Consult with DOA and DoLS to obtain gender-disaggregated baseline information and design field activities for SLM and sustainable livelihoods that include empowerment of women
State Governments	State Governments have responsibilities of use of forests and waters and management of enivronment within the state; agriculture and livestock development; state level irrigation and water supply services.	The key departments will provide technical input in project preparation and implementation. They will monitor and supervise project during implementation.	State governments will be engaged in project design. They will be consulted throughout the project development process. **Components**: All **Mode:** Through consultation workshops, individual consultations with the Ministry of Industry, Tourism, Forest and Environment (MoITFE), Ministry of Physical Infrastructure Planning (MoPIP), Ministry of Agricultural, Land Management and Cooperatives(MoALMC) officials **Timing**: 1st round, 2nd round fieldwork and validation workshop **Gender:** Consult with MoITFE, MoPIP, MoALMC) to obtain gender-disaggregated

			baseline information and set targets for capacity development activities
Local Governments (Rural Municipality, Municipality, Sub-Metropolitan City)	According to the Constitution of Nepal (2015), local governments have responsibilities for local level development plans and projects including environment protection and biodiversity; agriculture and animal husbandry; disaster management; protection of watersheds and wildife; and watersupply, small hydropower projects and alternative energy.	They will be partners in local level implementation. Local government also monitor and supervise the project activities.	Local governments will be engaged in project design. **Component:** 2, 3, 4 **Mode:** Through consultations, validation workshop, individual consultation during the field workshops **Timing:**1st and 2nd round field consultations, workshops, field consultations at demo sites. **Gender:** Consult with the local government/elected body (Mayor, Deputy mayor, ward chairpersons to obtain the gender-disaggregated baseline information and set targets for capacity development activities
Local Communities and Organizations Buffer Zone User Committees (BZUCs), Buffer Zone Community Forest User Groups (BZCFUGs), Community Forest User Groups (CFUGs),	Local communities are represented by community-based organizations with a mandate to support conservation initiatives in the buffer zones of protected areas and community forests and in corridors. They support monitoring, habitat	The project aims to work with local communities and forest user groups in key areas to implement activities.	As key beneficiaries and project partners, a sample of villages and CFUGs will be consulted during project design. **Component:** 2,3 **Mode:** Through field consultation (FDG), individual consultations, consultation workshop and representatives of demo

Protected Forest Councils (PFC)	management, community-based relief mechanisms and sustainable forest resource management.		project sites participate in validation workshop **Timing:** During the 1st and 2nd round of the field visits, consultation workshop and validation workshop **Gender:** Consult with the management committee of BZUCs, BZCFUGs, CFUGs, PFCs to obtain the gender disaggregated baseline information and set targets for capacity development activities
Indigenous People Nepal Federation of Indigenous Nationalities (NEFIN) Indigenous peoples in project sites	NEFIN is the representative voice for the indigenous peoples. Its mission is to work in the defense and respect of collective rights, to expose indigenous people's problems and to present alternative proposals for development that correspond to their worldview.	The project aims to work with indigenous communities in key areas to implement project activities. Enhancing social safeguards in terms of protecting their customary practices will be the key concern of the project.	NEFIN will be consulted to inform activity design and participate throughout the project preparation. **Component: 2,3,4** **Mode:** Through the field consultations, individual consultations, consultation workshop and validation workshop **Timing:** During the 1st and 2nd round of field visits and consultation workshop **Gender:** Consult with the district chapter of NEFIN to obtain the disaggregated baseline information and set the activities for capacity buildings.
Networks	Networks of community based forest user groups advocate for	Networks will facilitate the local process for implementation.	Networks will be engaged in project preparation and they will be invited to

Federation of Community Forest User Groups of Nepal (FECOFUN), Community Forest Coordination Committee (CFCC), Association of Collaborative Forest Users Nepal (ACOFUN)	rights of users, raise awareness and coordinate with line agencies to facilitate community based forestry program.		stakeholders' workshops and consulted individually. **Component: 2,3,4** **Mode:** Through the field consultations, individual consultations, consultation workshop and validation workshop **Timing:** During the 1st and 2nd round of field visits and consultation workshop **Gender:** Consult with the district chapters of FECOFUN, CFCC, and ACOFUN to obtain the disaggregated baseline data information and design field activities for SFM and sustainable livelihoods that include empowerment of women
Interest groups : The Himalayan Grassroots Women's natural Resource Management Association of Nepal (HiMAWANTI), Dalit Alliance for Natural Resources (DANAR)	National organizations are interested in natural resource management, focusing on particular stakeholders such as Women, Dalit groups	They have expertise in social issues of natural resource management and can facilitate project implementation to enhance gender equity and social inclusion.	Key interest groups will be invited to stakeholder workshops during the project preparation. **Component: 2,3,4** **Mode:** Through the field consultations, individual consultations, consultation workshop and validation workshop **Timing:** During the 1st and 2nd round of field visits and consultation workshop

			Gender: Consult with the HiMAWANTI and DANAR to obtain the disaggregated baseline information and design field activities of capacity building and sustainable livelihoods that include empowerment of women
NGOs and Donors e.g. National Trust for Nature Conservation (NTNC) , Zoological Society of London (ZSL)	International and National, non-government organizations dedicated to biodiversity conservation.	Coordination during project implementation and co-financing.	Key NGOs and donors will be invited to stakeholder workshops during project preparation. **Component: 2,3** **Mode:** Through the field consultations, individual consultations, consultation workshop and validation workshop **Timing:** During the 1st and 2nd round of field visits, and consultation workshop at central level and field level **Gender:** Consult with the NTNC and ZSL to obtain the disaggregated baseline information & design field activities of capacity building and sustainable livelihood that empowers the women.
Other GEF Agencies IUCN, UNDP, World Bank, ADB and FAO	These GEF Agencies have strong roles in policy, agriculture and NRM, and infrastructure development; and are implementing GEF projects (e.g.	These agencies are part of a multi-stakeholder forum on common issues. Through that forum, the project will	Other GEF agencies will be invited to stakeholder workshops during project preparation. **Component: 1**

	current UNDP-GEF LDCF project).	coordinate and consult with the GEF Agencies.	**Mode:** Consultation workshop and individual consultations **Timing**: During central level workshop and consultation process **Gender:**Consult with agencies on gender strategy, and environmental and social safeguards policy
Private sector	Private sector contributes to increase income through accessing market and generating local employment in the rural areas. These could be forest and agriculture based or industries which demands skilled labor.	Private sector are a part of multi-stakeholder forum on income related issues.	They will be invited to stakeholder workshops. **Component: 2,3** **Mode:** Through the field consultation, individual consultations **Timing:** During the 1st and 2nd round of field visits **Gender:** Consult with the FNCCI to obtain the disaggregated baseline information & design field activities of capacity building and sustainable livelihood that empowers the women.

Stakeholder Engagement Process

The PPG process will involve the following stakeholder engagement processes:

- PPC meetings – to guide the PPG process, involving MoFE, WWF, DOF and DNPWC held every month
- PPG Workshops for national level stakeholders and other key stakeholders (including break out discussion groups as necessary):
- PPG Kick-off Workshop – orientation on GEF PPG process and requirements (mid Dec 2017, Kathmandu)
- PPG Inception Workshop – launch of project development process and feedback on preliminary field visit (early Feb 2018, Kathmandu)
- PPG Stakeholder Consultation Workshop – to review baseline assessment results, site selection and preliminary activities (June 2018, TAL)
- PPG Stakeholder Consultation Workshop – to review first draft project document materials (early August 2018, TAL)
- PPG Project Document Review Workshop – to review final draft project document (Late September 2018, Kathmandu)
- Field level consultations (including meetings with a range of local stakeholders, community groups, site visits, field inspections, focus group discussions, and FPIC consultations)
- Preliminary field trip with PPG TL – to announce start of PPG at local level, update PIF baseline situation on threats and barriers, gather initial baseline information on selected areas (late Jan - early Feb 2018)
- First round of YAE field consultations – to gather baseline information for situation analysis (April 2018)
- Field trip with PPG TL and WWF to inform site selection and design of activities (June 2018)
- Second round of YAE field consultations – to project target sites, to obtain detailed baseline information for results framework indicators and gender/safeguards, conduct FPIC consultations with communities and other local stakeholders on design of proposed activities (July 2018)
- Safeguards categorization by WWF specialists (July - August 2018)
- Individual stakeholder consultations
- Meetings with individual stakeholders at all levels to discuss specific issues, obtain baseline data, review indicator targets, comments on activities, etc.
- Meetings with related projects and initiatives to obtain baseline information on their status of implementation, timing, budget, potential for inclusion as project cofinancing, specific areas of collaboration (related to project outputs), mechanisms for collaboration
- Safeguards and gender mainstreaming consultations, conducted by safeguards and gender mainstreaming specialists to ensure that social and environmental safeguards and gender are screened and integrated into the design of project activities, outputs and the M&E framework

- Consultations by YAE team during field trips concerning proposed demo sites in particular
- Risk assessment and gender analysis information collected by YAE team during field trips and national consultations.

APPENDIX 8: RECORD OF PPG STAKEHOLDER CONSULTATIONS

Introduction

Based on the Stakeholder Engagement Plan (SEP) which was prepared for the WWF/GEF project preparation (PPG) process, a series of consultations were conducted systematically with the identified stakeholders. Consultations were held with stakeholders related to biodiversity (BD), land degradation (LD), and sustainable forest management (SFM) from central level to the grassroots level including all tiers of government for the different steps of the project preparation process. The consultations were conducted in a participatory and inclusive manner, and a full report is available for each consultation workshop. The many informal consultations that took place on an individual basis and by telephone and email are not listed here.

Consultations

Kickoff workshop

To lead the development of Project Documents (ProDoc) for the "Integrated Landscape Management to Secure Nepal's Protected Areas and Critical Corridors" project, working closely with government partners and with a team of technical staff from WWF Nepal, WWF GEF Agency, other key stakeholders, and a team of International and National Consultants was set up. To mark the beginning of the Project Document (ProDoc) development process and to bring all the stakeholders including MoFSC, MoE, National consultants, WWF Nepal, Project Planning Committee to develop a common understanding on the Project Identification Form of the project, a kick off workshop was organized on 14th – 15th December, 2017.

The main objective of kick off workshop was to mark the beginning of the ProDoc development process, and develop a common understanding on the identified GEF6 project "Integrated Landscape Management to Secure Nepal's Protected Areas and Critical Corridors" and ProDoc development process among all the stakeholders. The specific objectives were:

- To train the participants on the GEF process
- To provide overview of the foundation of a GEF project (barriers, baseline, strategy)
- To develop a common understanding of the project components
- To orient the stakeholders on the ProDoc development process

The kick off workshop began with the introduction of the participants. The technical sessions were conducted by Mrs. Renae Stenhouse director of WWF GEF Agency, US which covered the topics such as overview of GEF and GEF agency, project document development process and responsibilities, barriers, baselines and strategies and GEF project design, stakeholder's engagement, monitoring and evaluation, gender and safeguards, project governance and budgeting. The floor was opened for discussion and all the participants were provided equal opportunity to put their views. The participants represented from different Ministries, Departments, civil society organizations, and team of national and international consultants. The participants list is available from WWF Nepal.

Round 1 Field consultation

Round 1 field consultation was done with different stakeholders in TAL area from Parsa National Park in the east to Shuklaphanta National Park in the West in three cluster (Parsa-Chitwan, Banke- Bardia, and Kailali- Kanchanpur) between 4-12 April 2018. The main objective of the round 1 field consultation was to introduce the project, introduce the PPG process and timing, and focus on issues of local relevance such as Infrastructure development plans, Government restructuring implications, human wildlife conflict issues, poaching / IWT, transboundary issues, and opportunities for the project development.

In this field visit District Forest Officer, National Park officials, and representatives of Soil conservation office, NTNC, ZSL, Rural/municipalities, Community forest coordination committee, NEFIN, FECOFUN, NGOs, Agriculture office, Livestock office Road division, Women Group, CFCC/CFUGs, Dalit group, State government, Private sector (Nepal Forest Products Entrepreneur Association, NTFP entrepreneurs), local people, Chamber of commerce were consulted. Consultation were done through focus group discussions, individual interviews, service user group meetings and public meetings. In round 1 consultation 84 stakeholders had participated in the consultation (**Annex 1**). The participants were 78.6% male and 21.4% female. Out of which 21.4% were Brahmin, 23.8% Chhetri, 44.0% Indigenous and 6.0 Madhesi (**Table 1**).

Table 1. GESI break down of the list of participants

Gender/ Ethnicity	**percentage**
Female	21.4
Male	78.6
Brahmin	21.4
Chettri	23.8
Dalit	4.8
Indigenous	44.0
Madhesi	6.0

Inception Workshop

The Inception Workshop on GEF-6 Project Development Process of 'Integrated Landscape Management to Secure Nepal's Protected Area and Critical Corridors in TAL' was conducted on 4th February, 2018 at Karki Banquet, Babarmahal. The main objective of the Inception Workshop was to provide overview of the GEF project concept, PIF and its components**,** share the issues and possible activities from preliminary field visit and collect suggestions, comments, feedback and recommendations from the stakeholders to begin the project preparation effectively**.** The participants for the workshop were invited in coordination with WWF Nepal and Ministry of Forest and Environment.

In this PPG Inception Workshop 28 people participated (**Annex 2**). The participants were 85.7% male and 14.3% female. Out of which 39.3% were Brahmin, 25.0% Chhetri, 32.1% Indigenous and 3.6% Dalit (**Table 2**). The participants were brought together to discuss and give the views on a particular issue on the project updates.

Table 2. GESI break down of the list of participants

Gender/ Ethnicity	Percent
Female	14.3
Male	85.7
Brahmin	39.3
Chhetri	25.0
Dalit	3.6
Indigenous	32.1

Second Central Level Stakeholder Consultation Workshop

This stakeholder consultation workshop was held by PPC with the technical support of WWF and YAE on 7th June 2018. The main objective of the GEF Project is to promote integrated landscape management to conserve globally significant forests and wildlife. The stakeholders in the workshop participated from the Ministry of Forest and Environment (MoFE), Ministry of Federal Affairs and Local Development (MoFALD), Ministry of Livestock Development (MoLD), Department of National Park and Wildlife Conservation (DNPWC), Department of Soil Conservation and Watershed Management (DSCWM), Department of Irrigation (DoI), Nepal Federation of Indigenous Nationalities (NEFIN), Association of Family Forest Owners Nepal (AFFON), Zoological Society of London (ZSL), Dalit Alliance for Natural Resources (DANAR) and Federation of Private Forest Stakeholders (FEPFOS). The main aim of the workshop was to review baseline assessment results, demonstration site selection and preliminary activities.

In this workshop, sharing on the threat intensity, extent, and impact based on the field consultation was done among the stakeholders. Similarly, the project components and the revised outcomes and outputs, baseline assessment and stakeholder's engagement plan were also shared. The participants raised their concern and provided comments on the presentations. They also participated on the group works to identify the missing project activities which was discussed in the forum.

Altogether 38 people/ stakeholders representing different organization participated in the workshop (**Annex 3**). The participants were 80.0% male and 20% female. Out of which 47.4% were Brahmin, 21.1% Chhetri, and 28.9% Indigenous (**Table 3**).

Table 3. GESI break down of the list of participants

Gender/ Ethnicity	Percent
Female	20.0
Male	80.0
Brahmin	47.4
Chhetri	21.1
Indigenous	28.9
Madhesi	2.6

Round 2 Field Consultation

Round 2 field consultation was done in the Banke- Bardia complex between 28 -31 July 2018 in a parallel way by mobilizing two groups. The main purpose of this stakeholder consultation

exercise was to i) collect information for specific project activities, ii) identify locations for project interventions, iii) collect baseline data for results framework indicators, and iv) crosscheck and validate the data acquired from the GIS. The consultations were done by two teams of experts; one focused on the Banke National park and Buffer Zone and Karnali Corridor and the other in Banke National Park and Buffer Zone and Kamdi Corridor. Consultations were conducted with officials of Banke National Park, Chairperson of Buffer Zone Management Committees, Mahadevpuri Forest Coordination Committee, Harre community in Chinchu, Grabar Valley home stay management committee, CFUGs of Kamdi Corridor, representative of private forest association in Banke National Park complex and with the community forest user groups in Lamkichuwa, Tikapur and Geruwa Patabhar in Bardia complex.

Altogether 111 people were consulted in the first round of field visit (**Annex 4**). The consulted participants were 80.2% male and 19.8% female. Out of which 19.1% were Brahmin, 34.5%, Chhetri, 26.4% Indigenous and 15.4% Dalit (**Table 4**). Focus group discussions, individual interviews, service user group meetings and public meetings were conducted for Round 2 field consultations.

Table 4. GESI break down of the list of participants

Gender/Ethnicity	**Percent**
Female	19.8
Male	80.2
Brahmin	19.1
Chhetri	34.5
Dalit	15.5
Indigenous	26.4
Madhesi	4.5

Third Central Level Stakeholder Workshop

The third central level stakeholders consultation workshop for the WWF/GEF 6 Project on Integrated Landscape Management for Critical Corridors and Landscapes in Nepal was held on 7 August 2018 in Kathmandu, which reviewed the initial phase of baseline assessment work, and discussed the draft project strategy and selection of project target areas, which were agreed as: Bardia NP and Banke Buffer Zones, and Kamdi and Karnali Corridors (noting that Component 1 and 4 activities cover the whole TAL area, and Bramhadev Corridor is also targeted for increased protection under Outcome 2.1).

Following the workshop, the consultant team conducted more detailed baseline assessment for the project target areas, including development of updated (2018) land use and land cover GIS maps, focus group discussions with local stakeholders to collect baseline information for results framework indicator baselines and discuss proposed activities. In addition, further work was conducted to develop the project operational modality / management arrangements and stakeholder engagement plan for the full project. Baseline assessment was initiated for the capacity development scorecard for integrated landscape management. The policy and institutional framework were updated in line with advances in the ongoing

government restructuring. In parallel, WWF recruited GESI and Safeguards consultants to conduct studies on those aspects of the project design. While the GESI report has been completed, the safeguards work is still in progress at this time.

The final stakeholder consultation workshop was organized to share the work progress including following:

- Progress in completing the baseline assessment
- Revised strategy including more detail on activities and responsibilities
- Results framework indicators
- Coordination with other initiatives
- Operational modality
- GESI study results

There were 37 participants who represented relevant ministries, departments, federations, I/NGOs, civil society, forest users' groups and other (**Annex 5**). The participants of the workshop were 83.8% male and 16.2% female. Out of which 45.7% were Brahmin, 31.4% Chhetri, 20.0% Indigenous and 2.9% Madhesi (**Table 5**).

Table 5. GESI break down of the list of participants

Gender/ Ethnicity	**Percent**
Female	16.2
Male	83.8
Brahmin	45.7
Chhetri	31.4
Indigenous	20.0
Madhesi	2.9

The participants for the workshops were invited in coordination with WWF Nepal and Ministry of Forest and Environment. There were presentation sessions by the team of national and international consultants followed by discussion on the issues and comments made by the participants.

Missions for International Consultant and WWF GEF Agency Staff

In addition to the consultations detailed above, missions to Nepal were conducted by the international consultant and WWF US staff from 25th Jan to 7th February 2018, 4-13 June 2018 and 5-10 August, with field trips to observe project field sites and meet with a wide range of local stakeholders from 9-12th June. The schedules for the field consultations conducted during these missions are given in **Annexes 6 and 7**.

Annexes: Lists of Participants for Field Consultations and Workshops

Annex 1. List of participants in Round 1 Field consultation

S. N	Name	Organization/ community	Gender	Ethnicity
1	Rachana Lamichhane	Jal Devi Community Forest	Female	Brahmin
2	Madhav Devkota	Jal Devi Community Forest	Male	Brahmin
3	Keshav Thapa	Jal Devi Community Forest	Male	Chhetri
4	Saroj Gurung	Barndabhar Council	Male	Indigenous
5	Ram Chandra Subedi	Barandabhar Council	Male	Brahmin
6	Basudev Dhungana	Mirgakunja upa. Sa	Male	Brahmin
7	Buddhi Man Bishwokarma	Mirgakunja upa. Sa	Male	Dalit
8	Bed Bahadur Khadka	Chitwan National park	Male	Chhetri
9	Prem Bahadur Malla	Tikauli CFUG	Male	Indigenous
10	Aasik Praja	Tikauli CFUG	Male	Indigenous
11	Mohan Bahadur Praja	Tikauli CFUG	Male	Indigenous
12	Gopal Praja	Tikauli CFUG	Male	Indigenous
13	Manu Praja	Tikauli CFUG	Female	Indigenous
14	Banita Praja	Tikauli CFUG	Female	Indigenous
15	Sunimaya Chepang (Praja)	Tikauli CFUG	Female	Indigenous
16	Prabhu Prasad Mahato	Baghauda Upa. Sa	Male	Madhesi
17	Baliram Chaudhary	Baghauda Upa. Sa	Male	Indigenous
18	Hem Narayan Kaji	Baghauda Madhyawati Sakosh	Male	Chhetri
19	Padam Bahadur Titung	Ma. Che ba. Sa. Parsa National Park Office	Male	Indigenous
20	Hari Bhadra Acharya	Parsa National Park Office	Male	Brahmin
21	Rajendra Magar	Hariyali Ma. Sa	Male	Indigenous
22	Bal Raya Bal	Churiya Mai upa sa.	Male	Indigenous
23	Min Bahadur Ghalan	Churiya Mai upa sa. Chairman	Male	Indigenous
24	Gokul Dongol	Hariyali Ma. Sa	Male	Indigenous
25	Indra Bahadur ThapaMagar	Manahari Upa. Sa. Sa	Male	Indigenous
26	Prem Bahadur Subedi	Ramauli Tole	Male	Brahmin
27	Megh Nath Lamichanne	Parsa National Park	Male	Brahmin
28	Suka Bahadur Rai	Manahari Upa. Sa. Sa	Male	Indigenous
29	Biswash Rai	Manahari Upa. Sa. Sa	Male	Indigenous
30	Indra Bahadur Basnet	Manahari Upa. Sa. Sa	Male	Chhhetri
31	Kamal Rai	Manahari Upa. Sa. Sa	Male	Indigenous
32	Kanchi Maya Bot	Ramauli Tole	Female	Madeshi

33	Ubaraj Itani	Manahari Upa. Sa. Sa	Male	Madeshi
34	Ramji Prasad Bajhgai	FECOFUN ward chairman	Male	Brahmin
35	Aash Bahadur Kumal		Male	Indigenous
36	Purna Bahadur Kumal		Male	Indigenous
37	Guda Bahadur Kumal		Male	Indigenous
38	Indra Pani Dhakal		Male	Brahmin
39	Purna Shyam Kumal		Male	Indigenous
40	Nirmala Dadel	CFCC Kamdi	Female	Chhetri
41	Karna Bahadur B.K	CFCC Kamdi	Male	Dalit
42	Jagbir Khatri	Kamdi	Male	Chhetri
43	Narayan Pandey	Rajha	Male	Chhetri
44	Tek Bahadur Nepali	District Forest Office	Male	Dalit
45	Om Kumari Khadka	CFCC Kamdi	Female	Chhetri
46	Buddhi Ram Khadka	Sita Sa.Ba.u	Male	Chhetri
47	Padam Buda	Sita Sa.Ba.u	Male	Indigenous
48	Aarati Baishya	Samaya Bhawani	Female	Indigenous
49	Kamala K.C	Samaya Bhawani	Female	Chhetri
50	Ram Prasad Rijal		Male	Brahmin
51	Shailendra Kumar Tharu	Samaya Bhawani	Male	Indigenous
52	Vola Tharu	Samaya Bhawani	Male	Indigenous
53	Gagan Raj Mahatara	Sulari E. ba.ka.	Male	Madhesi
54	Susmita Pun	Shree Bhabisya Ujwal Bachat tatha Rid Sahakari Sastha Chairman	Female	Chhetri
55	Bal Bahadur Khatri	Sano Hurayai Samudayek	Male	Chhetri
56	Parshu Ram Khadka	Chinchu u. sa Treasurer	Male	Chhetri
57	Sabitra Pun	Kohalpur Madhyawarti Upavokta Samuwa Chairman	Female	Dalit
58	Chitra Bahadur Malla	Kohalpur Madhyawarti Upavokta Samuwa Treasurer	Male	Indigenous
59	Rim Bahadur Khatri	Kohalpur Madhyawarti Upavokta Samuwa voice Chairman	Male	Chettri
60	Prem Pun	Kohalpur Madhyawarti Upavokta Samuwa sachiv	Male	Chettri
61	Chitra Kala Thapa	Sriram Nagar u. sa Voice Chairman	Female	Chhetri
62	Janardan Yogi	Sriram Nagar u. sa Member	Male	Chhetri
63	Ramchandra Bhandari	Neulapur Madhyawarti Sahakari Member	Male	Brahmin
64	Ganesh Bahadur Thapa	Neulapur Madhyawarti Sahakari Director	Male	Chhetri
65	Bishnu Chaudhary	CFCC Hasauliya	Male	Indigenous
66	Bharat Ram Chaudhary	CFCC Hasauliya	Male	Indigenous
67	Ramu Ram Chaudhary		Male	Indigenous
68	Laxman Prasad Chaudhary	Ratna sa. Ba. U. sa.	Male	Indigenous

69	Kalam Bahadur Chaudhary	CBAPU Sallahakar	Male	Indigenous
70	Sandip Chaudhary	CFCC Hasauliya	Male	Indigenous
71	Bishal Chaudhary	CBAPU Chairman	Male	Indigenous
72	Mina Chaudhary		Female	Indigenous
73	Shiv Datta Panta	CFCC Kanchanpur	Male	Brahmin
74	Naresh Raj Bhatta	CFCC Kanchanpur	Male	Brahmin
75	Basanti Rana	CFCC Kanchanpur	Female	Chhetri
76	Sumitra Rana	CFCC Kanchanpur	Female	Chhetri
77	Arjun Saud	Laljhadi Mohana samrachit Ban Parisad member	Male	Madhesi
78	Basanti Awasti		Female	Brahmin
79	Devi Datta Bista	CFCC member	Female	Brahmin
80	Belmati Awasti	Chure Laljhadi	Female	Brahmin
81	Salikram Chaudhary	Janahit Mahakali	Male	Indigenous
82	Tulashi Ram Chaudhary	CFCC Kanchanpur	Male	Indigenous
83	Nanda Lal Pandey	Chure Laljhadi Sa.Sa. Member	Male	Brahmin
84	Keshav Raj Awasti	Chure Laljhadi Sa.Sa. Treasurer	Male	Brahmin

Annex 2. List of Participants in PPG Inception workshop

S.N.	Name	Organization	Gender	Ethnicity
1	Dhananjaya Paudyal	FACD/MoFSC	Male	Brahmin
2	Sagar K. Rimal	MoFSC	Male	Dalit
3	Mohan Chandra Bishwakarma	REDD IC	Male	Brahmin
4	Prakash Lamsal	DOF/CFD	Male	Brahmin
5	Ram Hari Pantha	MoPE	Male	Chhetri
6	Sujan Rana	MoLD	Male	Brahmin
7	Anupa Ghimire	MoFSC	Male	Chhetri
8	Nirmal Thapa	DSCWM	Male	Chhetri
9	Rabin Kr. Gyalang	MoFSC	Male	Indigenous
10	Keshav Ghimire	DFRS	Male	Brahmin
11	Bishnu Kumar Adhikari	MoFSC	Male	Brahmin
12	Biswa Sherchan	MoFSC	Male	Indigenous
13	Kanti Kandel	MoFSC	Male	Chhetri
14	Dil Raj Khanal	FECOFUN	Male	Brahmin
15	Binod Singh	FACD/MFSC	Male	Chhetri
16	Sirjana Shrestha	FACD/MFSC	Female	Indigenous
17	Maheshwar Niraula	MoFSC	Male	Brahmin
18	Amir Maharjan	DNPWC	Male	Indigenous
19	Rajesh Rai	YAE	Male	Indigenous
20	Bijay Raj Paudyal	YAE	Male	Brahmin
21	Santosh Mani Nepal	WWF Nepal	Male	Brahmin
22	Aarati Gurung	WWF Nepal	Female	Indigenous

23	Dipendra Kr. Chaudhary	MoFALD	Male	Indigenous
24	Gokarna Jung Thapa	WWF Nepal	Male	Chhetri
25	Raju Chauhan	YAE	Male	Chhetri
26	Sanot Adhikari	YAE	Male	Brahmin
27	Selina Nakarmi	YAE	Female	Indigenous
28	Sarita Ghale	YAE	Female	Indigenous

Annex 3. List of participants in Second Central Level Consultation workshop

S.N	**Name**	**Organization**	**Gender**	**Ethnicity**
1	Bijaya Raj Poudyal	YAE	Male	Brahmin
2	Sunil Kr. Pariyar	DANAR	Male	Chhetri
3	Rajendra Dhungana	MFE	Male	Brahmin
4	Jog raj Giri	AFFON	Male	Chhetri
5	Madhu Ghimire	MoFE	Male	Brahmin
6	Sabitra Ghimire		Female	Brahmin
7	Sonam Lama	NEFIN	Male	Indigenous
8	Bibhuti Bista	Freelancer	Male	Chhetri
9	Pradeep Raj Joshi	ZSL-Nepal	Male	Indigenous
10	Sagar Rimal	MoFE	Male	Brahmin
11	Binod Singh	MoFE	Male	Chhetri
12	Nirmal Thapa	DSCWM	Male	Chhetri
13	Bishnu Shrestha	DNPWC	Male	Indigenous
14	Shyam Ramta Khanal	MoFALD	Male	Brahmin
15	Prakash Nepal	MoFE	Male	Brahmin
16	Kanti Kandel	MoFE	Male	Chhetri
17	Santosh Mani Nepal	WWF	Male	Brahmin
18	Bishnu Pd. Gyawali	FepFos	Male	Brahmin
19	Cranford Prentice	WWF	Male	
20	Aarti Gurung	WWF-Nepal	Male	Indigenous
21	Ranae Stenhouse	WWF-US-GEF	Male	
22	Smriti Dahal	WWF Nepal	Female	Brahmin
23	Sunil K.C	MoFE	Male	Chhetri
24	Hari Shankhar Jha	DoI	Male	Madhesi
25	Biswa Sherchan	MoFE	Male	Indigenous
26	Sarita Ghale	YAE	Female	Indigenous
27	Dhananjaya Paudyal	MoFE	Male	Brahmin
28	Dhananjaya Lamichhane	MoFE	Male	Brahmin
29	Sraddha Sigdel	MoFE	Female	Brahmin
30	Amir Maharjan	DNPWC	Male	Indigenous
31	Dr. Sulekha Sharma	MoALMC	Female	Brahmin
32	Ananta Bhandari	WWF	Male	Brahmin
33	Bharat Gotame	WWF	Male	Brahmin
34	Rajesh Rai	YAE	Male	Indigenous
35	Arati Khadgi	WWF	Female	Indigenous
36	Srijana Shrestha	MoFE	Female	Indigenous
37	Prakash Raj Adhikari	MoFE	Male	Brahmin

38	Selina Nakarmi	YAE	Female	Indigenous
39	Sanot Adhikari	YAE	Male	Brahmin
40	Raju Chauhan	YAE	Male	Chhetri

Annex 4. List of participants in Round 2 Field consultation

SN	Name	Organization/Community	Gender	Ethnicity
1	Dil Bdr. Purja Pun	Banke NP	Male	Indigenous
2	Lal Bdr. Bhandari	Banke NP	Male	Brahmin
3	Neelam Karki	Banke NP	Female	Chhetri
4	Biju Poudel	Banke NP	Female	Brahmin
5	Raja Ram Chaudhary	Aishwarya CFUG	Male	Indigenous
6	Ranga Bdr. Rawal	Kopila CFUG	Male	Chhetri
7	Urmila Bangal Magar	Purnima CFUG	Female	Indigenous
8	Janga Bdr. Thapa Magar	Purnima CFUG	Male	Indigenous
9	Khem Bdr. Sunar	Chetana CFUG	Male	Dalit
10	Chhabi Lal Balami Magar	Chetana CFUG	Male	Indigenous
11	Bhadra Sahi	BAFER Nepal	Female	Indigenous
12	Mamta Rawal	BAFER Nepal	Female	Chhetri
13	Ganga Jaisi	Hariyali Mahila CFUG	Female	Brahmin
14	Bhagwati Dhungana	BAFER Nepal	Female	Chhetri
15	Tanka Raj Oli	Laligurans CFUG, Wardagoriya	Male	Brahmin
16	Padam Bdr. Budthapa	Rajkula CFUG, Wardagoriya	Male	Indigenous
17	Ram Sworup Chaudhary	Pathariya CFUG	Male	Indigenous
18	Ujeer Singh Sunar	BAFER Nepal	Male	Dalit
19	Manisha Saud	Saraswati Buffer Zone CF	Female	Madhesi
20	Khem Karki	Malika CFUG	Male	Chhetri
21	Lalsi Bishwakarma	Ranijaruwa CFUG	Female	Dalit
22	Jhankat Bishwakarma	Ranijaruwa CFUG	Male	Dalit
23	Ichhya Bdr. Bista	Namuna Danufaat CFUG	Male	Brahmin
24	Hari Prasad Bhattarai	WWF	Male	Brahmin
25	Bal Bahadur B.K	Khotena Bhurakhani	Male	Dalit
26	Om lal Sunar	Mahendraswor CFUG	Male	Dalit
27	Mangal Pun Magar	Mahendraswor CFUG	Male	Indigenous
28	Bhagawati Dhungana	BAFER Nepal	Female	Chhetri
29	Bhagi Ram Chaudhary		Male	Indigenous
30	Harihar Prasad Giri		Male	Chhetri
31	Arati Shah		Female	Chhetri
32	Sita Rawal	Shree Rani Karnali CFUG	Female	Brahmin
33	Mani Ram Dhungana	Shree Satti Karanli CFUG	Male	Chhetri
34	Dirga Raj Upadhyaya	Journalist	Male	Brahmin
35	Yagya Rah Upadhyaya	Journalist	Male	Brahmin
36	Padam Prasad Sapkota		Male	Brahmin
37	Ashish Shah	Shree Rani Karnali CFUG	Male	Chhetri

38	Dharma Raj Jaisi	Shahipur Karnali CFUG	Male	Chhetri
39	Dhanarsi Saud	Subarna CFUG	Male	Madhesi
40	Dirga Bdr. Tiruwa	Janashakti CFUG	Male	Dalit
41	Hari Pd. Bhattarai	WWF	Male	Chhetri
42	Shambhu Kadapat	B. P Nikunja	Male	Madhesi
43	Nirmala Dadel	Sita CFUG	Female	Chhetri
44	Bishnu Bhandari	Purnima CFUG	Male	Brahmin
45	Om Kumari Khadka	CFCC Kamdi	Female	Chhetri
46	Bina Budhathoki	Purnima CFUG	Female	Chhetri
47	Bhabana Gurung	Purnima CFUG	Female	Indigenous
48	Dhani Kumar Giri	Purnima CFUG	Male	Chhetri
49	Bir Bhahadur Rana Magar	Pashupati Forest Group	Male	Indigenous
50	Ram Kadu	Pashupati Forest Group	Male	Madhesi
51	Jangali Tharu	Bageshwor	Male	Indigenous
52	Bal Ram Kadu	Pashupatinagar CFUG	Male	Madhesi
53	Padam Bahadur Budathoki	Babu Kuwa CFUG	Male	Chhetri
54	Gopal Bhandari	Samaj Ekta Sangh	Male	Brahmin
55	Karna Bdr. B.K.	CFCC Kamdi	Male	Dalit
56	Tulasi Roka Magar	Chauri Danda CFUG	Female	Indigenous
57	Tule Thapa	Jay Saraswati	Male	Chhetri
58	Rekha Bhandari	Purnima CFUG	Female	Brahmin
59	Laxmi Singh Thakuri	Purnima CFUG	Female	Chhetri
60	Bhim Bdr. Sahi	Ranjha Division Forest Office	Male	Chhetri
61	Mahendra Kumar Khadka	Management Committee	Male	Chhetri
62	Krishna Bdr. Chaudhary	Deurali Hariyali BZUG	Male	Indigenous
63	Harka Bdr. Bista		Male	Chhetri
64	Bal Bahadur Gharti Magar	Rapti BZUG	Male	Indigenous
65	Mohan Rijal		Male	Brahmin
66	Ghum Lal Sonaha	Sonaha	Male	Indigenous
67	Khusiram Tharu	Bagauhuwa Bandaiya CFUG	Male	Indigenous
68	TeK Bdr. Sonaha	Sonaha	Male	Indigenous
69	Padam Tharu	Tharu Community	Male	Indigenous
70	Deshu Tharu	Bagauhuwa Bandaiya CFUG	Male	Indigenous
71	Kalu Ram Tharu	Bagauhuwa Bandaiya CFUG	Male	Indigenous
72	Ram Lakhan Chaudhary	Bagauhuwa Bandaiya CFUG	Male	Indigenous
73	Badhu Ram Tharu	Bagauhuwa Bandaiya CFUG	Male	Indigenous
74	Karam Bdr. Tharu	Patabhar Users Group	Male	Indigenous
75	Harsa Bd. Singh	Bardiya National Park	Male	Chhetri
76	Yam Bdr. Thapa	Patabhar Users Group	Male	Chhetri
77	Hari Bhattarai	WWF	Male	Brahmin
78	Sonapati Chaudhary	Patabhar Users Group	Male	Indigenous

79	Narayan Upadhyaya	CFCC Mahadevpuri	Male	Brahmin
80	Indra Bdr. Bali	Harlaphanta CFUG	Male	
81	Yuvaraj Khatri	Harlaphanta CFUG	Male	Chhetri
82	Tularam Khatri	CFCC Mahadevpuri	Male	Chhetri
83	Nanda Kumari Neupane	Jal Dhara CFUG	Female	Brahmin
84	Tila Pariyar	FEECOFUN, Banke	Male	Dalit
85	Ram Bdr. Bhandari	FECOFUN	Male	Brahmin
86	Dilli Giri	Federation of Kapsan Centre	Male	Chhetri
87	Shreedhar Pokharel	FECOFUN	Male	Brahmin
88	Shet Bdr. Bista	Bhagawati CFUG	Male	Chhetri
89	Haribhakta Badi	FECOFUN, Rapti Sonari	Male	Dalit
90	Man Bdr. Kusari	Bhagawati Jadibuti Industry	Male	Dalit
91	Gopi Pd. Badi	Obhari Farmers Group	Male	Dalit
92	Sushil Kumar Chhetri	Mahadevpuri CFUG	Male	Chhetri
93	Bhagi Ram Oli	Mahadevpuri CFUG	Male	Brahmin
94	Mangal Chaudhary	NEFFIN	Male	Indigenous
95	Benju Pariyar	Community Health Post	Female	Dalit
96	Durga Kunwar	Forest and Forest Conservation Coordination Committee	Male	Chhetri
97	Bhim Bdr. K.C.	CFCC FFAA	Male	Chhetri
98	Bhupendra Bdr. Badi	CFCC FFAA	Male	Dalit
99	Mahesh Chaudhary	Rapti Sonari	Male	Indigenous
100	Shanta Bdr. Khatri	Chhinchu Users Group	Male	Chhetri
101	Binod Badi	Bhabishya Ujjwal Samaj	Male	Dalit
102	Him Lal Chaudhary		Male	Indigenous
103	Singh Lal B.K.		Male	Dalit
104	Chakra Bdr. Rokaiya		Male	Chhetri
105	Dhan Prasad Jaisi		Male	Chhetri
106	Karneraj Rokaya	Gabar Valley	Male	Chhetri
107	Nirmala Sunar		Female	Dalit
108	Gorikola Rawal		Male	Chhetri
109	Santosh Adhikari		Male	Brahmin
110	Hari Pd. Bhattarai	WWF	Male	Chhetri
111	Ramesh K. Shah	YAE	Male	Chhetri

Annex 5. List of Participants in Final consultation workshop

SN	Name	Organization	Gender	Ethnicity
1	Bishnu Pd. Shrestha	DNPWC	Male	Indigenous
2	Ananta Bhandari	WWF	Male	Brahmin
3	Binod Singh	MoFE	Male	Chhetri
4	Sindhu P. Dhungana	MoFE	Male	Brahmin
5	Hari Bhattarai	WWF-US	Male	Chhetri
6	Tek Raj Bhatta	ZSL	Male	Brahmin
7	Krishna Raj Tiwari	Instiitute of Forestry	Male	Brahmin
8	Shanta Ram Baral	DoFWC	Male	Brahmin
9	Hari Shankhar Jha	DoWRI	Male	Madhesi
10	Ganga Ram Shrestha	Chure	Male	Indigenous
11	Sunil Basnet	Instiitute of Forestry	Male	Chhetri
12	Ram Chandra Adhikary	MoFE	Male	Brahmin
13	Shristi Kahdka	REDDIC	Female	Chhetri
14	Jog Raj Giri	AFFON	Male	Chhetri
15	Rajendra Dungana	MoFE	Male	Brahmin
16	Srijana Shrestha	MoFE	Female	Indigenous
17	Shree Prasad Baral	CHURE	Male	Brahmin
18	Sagar Kumar Rimal	MoFE	Male	Brahmin
19	Navin Giri	DoFSC	Male	Chhetri
20	Kanti Kandel	MoFE	Male	Chhetri
21	Amir Maharjan	DNPWC	Male	Indigenous
22	Chiranjibi Pd. Pokhrel	NTNC-ZOO	Male	Brahmin
23	Nirmal Thapa	DoFSC	Male	Chhetri
24	Bibhuti Bista	GBI Consultant	Male	Chhetri
25	Crawford Prentice	WWF Consultant	Male	
26	Renae Stenhouse	WWF	Male	
27	Aarati Gurung	WWF Nepal	Female	Indigenous
28	Pratima Sharma	Consultant (GESI)	Female	Brahmin
29	Tilak Jung Khadka	FePFOS	Male	Chhetri
30	Dhananjaya Paudel	MoFE	Male	Brahmin
31	Narendra Pradhan	IUCN	Male	Indigenous
32	Dhananjaya Lamichhane	MoFE	Male	Brahmin
33	Arati Khadgi	WWF	Female	Indigenous
34	Dr. Sulekha Sharma	MoALD	Female	Brahmin
35	Shyam Kanta Khanal	MoFAga	Male	Brahmin
36	Bharat Gotame	WWF	Male	Brahmin
37	Anup Ghimire	MoFE	Male	Chhetri

Annex 6. Field trip schedule for international consultant visit (with local consultant team) 9-12 January 2018

Sunday, 28 January 26, 2018			
	Time	Activities	Remarks
	9:00 - 10:00 Am	Flying to Nepalgunj	Flight delayed due to weather condition
	10:00 - 11:00 Am	Meeting with TAL Project official	
	1:00- 2:00 pm	Lunch	

	2:00 - 4:00 pm	Meeting with Mr Dil Bahadur Purjapun, Chief Warden of Banke National Parks	Check out Sikta irrigation canal
	4:00 Pm	Hotel check in Dinner with, DFO Buddhi Rijal, Project Manager and Gautam Paudyal, Co-Manager TAL/CBRP	Discuss the stakeholders consultations
Monday, 29 January			
	8:00 -9:00	Breakfast	
	9:00- 12:00	Visit to Kamdi Corridor, CFCC, Meeting with the local government representative discuss with communities (members from CFUGs)	with DoF staff
	12:00 -2:30	Launch/Meeting with representatives/officials of Local governmental officials	
	2:30 – 4:300	Moving towards Bardiya/Gulariya	
	4:30	Check in Hotel (Bijaya Guest House)	
30 January			
	8:00- 9:00	Breakfast	Take the postal highway (linear infrastructure)
	9:00 -11:00	Meeting with DFO at Bardiya/ NEFIN District Chapter Khata CFCC	
	11:00- 1:30	Visit to Dalla Home stay (inside Khata corridors) and interaction with management committee and Lunch Purshu Chaudhary- Dalla Home Stay (9800510742) Maya Yogi Khata Corridor: 9801709870 (WWF staff)	To discuss on human wildlife conflict, community based anti-poaching units and Eco-tourism
	12:30 -1:30	Lunch at Dalla Home	
	12:30- 2:00	Visit to Headquarter of Bardiya National Park and meeting with officials/ NTNC	Discuss about the capacity & challenge
	2:00- 4:00	Meeting with buffer zone management committee and SENSE Nepal	Environmental Education, Youth engagement
		Hotel BTR, Thakurdawra Bardia	
31January			
	7:00 – 8:00	Breakfast	
	8:00- 10:00	Field observation at Bardiya National Park	
	10:00 -2:00	Travel to Kailali and Lunch Lamki, Karnali- Ujir Sunuwar: 9849430793 Ward Member, Lamki CFCC Mamta Rawal: 9814663499	
	2:00 – 4:30	Basanta Corridor: 1. Ghodagodi Lake, Deependra Shahi: 9868775596 2. Puskal Bam: 9858426126, 9749007254 CFCC Chair: 3. Pahalmanpur Station Masuriya CFCC: Bhim Sapkota: 9749012036	
	4: 30 – 5:00	Meeting with DFO, Kailai and Regional Director	
		Meeting with FECOFUN/ACOFUN	
	5:00 onwards	Check in to Hotel	
1st February			
	7:00 – 8:00	Breakfast	
	8:00- 10:00	Meeting with local Government Officials	

	10:00 - 1:30	Travel to Kanchanpur and Lunch Mohana Laljhadi Krishnapur CFCC: Mahesh Dutta Joshi: State MP: 980647137 Chure Conservation Network (CCN)/Bramhadev Corridor: Rabindra Kuwar: 9848724000	Sher Badhur Chaudhary 9802546298 Kailali-kanchanpur/WWF Staff
	3:30 – 5:00	Visit to Suklaphanta National Park	
2nd February			
	8:00 to 9:00	Breakfast	
	10:00 onwards	Travel to Dhangadi and return KTM	

Annex 7. Field trip schedule for international consultant visit (with WWF GEF Agency staff and one local consultant) 9-12 June 2018

Day/Date	**Action**
Saturday, 9th June	Fly off from Kathmandu the last flight (15:45 pm) to Dhangadi Meeting DFO, Kailali and Secretary of State Ministry of Industry, Tourism Forest and Envt Visit nursery of DFO kailali Travel to Basanta corridor with DFO Kailali: See encroachment area, meet municipal govt reps Meet CFCC near Ghodaghodi Visit Ghodaghodi Lake Drive through Kailali to Bardia NP
Sunday, 10th June	Morning meeting with Chair of BZMC/BNP (Netra Acharya) Trip into Bardia NP Travel in to N Bardia / Banke buffer zone from Chinchu and meet with BZUC members, teacher, cooperative, CBAPU member
Monday, 11th June	Meeting with Warden, BaNP Meeting with TAL Programme Mgr Visit encroachment area near Rapti river Meeting at Kamdi corridor with CFUGs/CFCC – see floodplain grassland restoration by TAL Prg
Tuesday, 12th June	Depart from Nepaljung (1st flight) WWF meetings; PPC members wrap up in the afternoon/evening

APPENDIX 9: SAFEGUARDS CATEGORIZATION

See Google Drive URL for Appendix 9
https://drive.google.com/drive/folders/1b4I_zTENuXoecdAD9pD9JK0W8E6rJ8IS?usp=sharing

APPENDIX 10: RESULTS FRAMEWORK

						Targets by Year					
Indicator / unit	Definition (note if cumulative)	Method/ source	Who	Disaggregation	Baseline	YR1	YR2	YR3	YR 4	YR 5	**Notes/ Assumptions**
Objective Level Indicators											
Project Objective: To promote integrated landscape management to conserve globally significant forests and wildlife											
GEF Objective Core Indicator 3: Area (ha) of degraded lands restored **# ha Cumulative**	This indicator captures the area of forest and forest land that is undergoing ecological restoration through GEF-funded interventions. The intent is to capture the area in which best practices for ecological restoration are being applied. Measured as hectares undergoing restoration through direct intervention in project intervention areas in targeted TAL buffer zones and corridors	Map/monitor extent of the degraded land being restored and also to indicate the relative state of the area prior to GEF activities.	PMU	GEF Sub-indicator 3.1: Area of degraded agricultural lands restored (ha)	0	0	50	100	150	150	Drought and forest fires do not adversely impact habitat restoration outcomes. Through C3 intervention. Break down figures by target area units: BNP BZ, BaNP BZ, Kamdi and Karnali Corridors May require GIS support
		GIS land cover / habitat classification maps for target areas to calculate baseline and restored areas	PMU	GEF Sub-indicator 3.2: Area of forest and forest land restored (ha)	0	0	200	800	1600	2,900	
		See Above	PMU	GEF Sub-indicator 3.3: Area of natural grass and shrublands restored (ha)	0	0	100	300	600	1,000	
GEF Core Indicator 4: Area of landscapes under improved practices (hectares; excluding protected areas) **# Ha cumulative**	GEF: This sub-indicator (4.1) captures the landscape area being managed to benefit biodiversity, but which is not certified. The project should qualitatively describe the benefit provided to biodiversity through a change in management.	Map/monitor the extent of land under this improved management (outside of protected areas).	PMU	GEF Sub-indicator 4.1. Area of landscapes under improved management to benefit biodiversity (qualitative assessment noncertified)	0	0	0	0	0	229,500	High level of willingness between different agencies to cooperate at national, state and local levels in order to achieve integrated landscape management; The recognized benefits of ILM towards

	Measured as hectares in Kamdi & Karnali Corridors under SFM and SLM										providing ecosystem services, ecological security and biodiversity conservation outweigh the immediate short term economic benefits of sectoral land development practices
	This sub-indicator (4.3) aims to capture improved practices that benefit physical improvements in the environment (e.g., soil and soil carbon, nutrient recycling, diversity and functionality of vegetation cover, micro-climates, and water).	GEF: The project should indicate the details of management practices. Projects should ideally provide GIS files showing the extent of the land under sustainable land management.	PMU	GEF Sub-indicator 4.3: Area of landscapes under sustainable land management in production systems	0	0	500	2,000	3,000	4,000	Through all components. This indicator applies to all corridors in TAL, which will have updated / improved management plans. In this case, could use the Protected Forest areas as the figure for GEF subindicator 4.1
GEF Core Indicator 6: Greenhouse gas emissions mitigated (metric tons of carbon dioxide equivalent) # **tCO2e mitigated** **Cumulative**	Reduced emissions due to avoided deforestation or forest degradation, sustainable forest management, and improved practices on other land uses such as in agriculture (eg reduced grazing, perennial crops, agro-pastoral-silvicultural approaches) through project intervention in TAL, direct and indirect	EX-ACT (see Appendix 15)	PMU	GEF Sub-indicator 6.1: Carbon sequestered or emissions avoided in the sector of Agriculture, Forestry and Other Land Use	0	0	n/a	500,000	n/a	1,270,919 tCO2e	Forest fires do not adversely impact carbon sequestration in project areas
GEF Core Indicator 11:	Total number of direct beneficiaries including the	ILM4TAL field project report and database	M&E Offic	a) Community members in	0	1695	5790	7586	8282	6387	Project will enhance landscape

Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment **# people** **Non-cumulative**	proportion of women beneficiaries; i.e. those who receive targeted support from a given GEF project/activity and/or who use the specific resources that the project maintains or enhances. Support is defined as direct assistance from the project/activity. Direct beneficiaries are all individuals receiving targeted support from a given project. Targeted support is the intentional and direct assistance of a project to individuals or groups of individuals who are aware that they are receiving that support and/or who use the specific resources.		er-ILM4TAL	targeted CFUGs and BZUGs in intervention areas receiving capacity development / training; disaggregated by gender		50% female	50% female	50% female	50% female	50% female	governance by mainstreaming biodiversity and ecosystem service considerations and sustainable natural resource management, thereby providing environmental quality and ecological security benefits to all residents
		ILM4TAL field project report and database	M&E Officer-ILM4TAL	b) Government staff receiving capacity development / training from the project , disaggregated by gender and federal/state/local government	0	298 30% female	388 30% female	405 30% female	305 30% female	220 30% female	
Outcome Indicators											
Component 1: National capacity and enabling environment for cross-sectoral coordination to promote forest and landscape conservation											
Outcome 1.1: Improved inter-sectoral coordination from Federal, State to Local level for sustainable forest management and integrated landscape management											
Number of Cross-sectoral coordination mechanisms strengthened and/or newly established and meeting regularly at Federal, State and Local levels	Mechanisms will include: Federal, State, District and Municipal coordination committees, etc. (see Output 1.1.1) and will only be counted if meeting regularly (minimum quarterly) Strengthened = Legal/administrative recognition of the				4	n/a	n/a	6	n/a	6	Sectoral agencies are willing to cooperate at federal, state and local levels to achieve ILM.
		a) Federal			a)Federal- 2			a) Federal - 2		a) Federal- 2	a) Federal
		b) State			b) State - 0			b) State - 1		b) State - 2	b) State

# mechanisms at each level **Cumulative**	coordination body (where necessary); ToR review and improvement; membership to include relevant stakeholders; rules and procedures reviewed to be fit for function; regular meetings held	c) Local			c)Local - 2			c)Local - 3		c) Local - 3	c) Local
Outcome 1.2: Capacity increased for multi-stakeholder and cross-sector landscape and forest planning and management											
Percentage of agency staff responsible for ILM coordination functions at federal and state levels (including NBCC, NBCC Subcommittees and State Biodiversity Coordination Committees for States 2,3,5,7 and Karnali) that have participated in project supported training on conservation leadership and ILM related subjects **% staff Cumulative**	The target group here is all staff participating in biodiversity coordination committees and subcommittees at federal and state agencies. As some of these committees will only be established during project implementation, training can only start after their establishment. Training will also seek to address staff turnover on these committees.	Reports on project training events	PMU		0		10			20	Biodiversity coordination committees and subcommittees are established at federal and state levels during the course of project implementation and representatives agree to attend training courses
				a) Federal	a) Federal- 0	a) Federal- 20%	a) Federal- 50%	a) Federal - 70%	a) Federal- 90%	a) Federal- 100%	
				b) State	b) State - 0	b)State - 0%	b)State - 0%	b) State - 30%	b) State - 60%	b) State - 80%	
Component 2: Integrated Planning for Protected Area Buffer Zones and Critical Corridors in the Terai Arc Landscape											
Outcome 2.1:Improved corridor planning for TAL corridors (Brahmadev, Karnali, and Kamdi)											
# of TAL corridors assessed for improved	Biodiversity surveys, socio-economic surveys, and local stakeholder consultation for			a) # of surveys completed for each corridor	0		3	9	9		The MoFE, State and local government agencies provide

community-based natural resource governance status that includes biodiversity conservation **# surveys Non-Cumulative**	Brahmadev, Karnali, and Kamdi corridors to determine feasibility of appropriate models for community-based natural resource management and strategic framework development, including KBA assessments										political and financial support for the protection and sustainable management of forest resources in critical corridors
Outcome 2.2: Improved participative planning for sustainable management of Banke-Bardia complex											
No. of CFUGs in Kamdi and Karnali Corridors with updated forest operation plans addressing SFM and biodiversity conservation **# CFUGs Cumulative**				By targeted corridor	Kamdi: 11 out of 76 CFUGs have updated FMOPs; Karnali: 0 out of 54 CFUGs	n/a	Kamdi: 20 out of 76 CFUGs; Karnali 15 out of 54 CFUGs	Kamdi: 30 out of 76 CFUGs; Karnali: 27 out of 54 CFUGs	Kamdi: 50 out of 76 CFUGs; Karnali 40 out of 54 CFUGs	Kamdi: All 76 Karnali all 54	The MoFE, State and local government agencies provide political and financial support for the sustainable management of forest resources in corridors
% change in Area Weighted Mean Patch Area (AREA_AM) to determine connectivity of forest cover in targeted corridors	Area Weighted Mean Patch Area (AREA_AM) is the sum across all patches of the corresponding patch value multiplied by the proportional patch area divided by the sum of patch areas (McGarigal et al., 2012). Increase in patch size indicate merger of patches and thus decrease in fragmentation of particular patch type.	Measured by GIS analysis of satellite imagery of forest cover in targeted corridors and PA buffer zones, for sample areas. Programmes such as FRAGSTATS can be used for analysis: https://www.umass.edu/landeco/research/fragstats/fragstats.html	Project GIS staff	By targeted corridor	Kamdi: 3767.1673; Karnali: 5687.627	n/a	n/a	<5% decrease in mean patch size over baseline	n/a	>5% increase in mean patch size over baseline	Forest fires do not adversely impact forest corridor connectivity
Component 3: Forest and wildlife management for improved conservation of targeted protected area buffer zones and corridors in the Terai Arc Landscape											
Outcome 3.1: Sustainable forest management practices that strengthen livelihoods and biodiversity conservation											
a) No. forest fire incidents in	Number of forest fire occurrences detected by remote sensing. See	ICIMOD forest fire monitoring data		By corridor/buffer zone	a) No. forest fire	As baseline	5% decrease	10% decrease over	15% decrease over	20% decrease	Climate change induced drought

targeted corridor / BZ per year **% Cumulative**	separate sheet for ICIMOD data				events - see separate sheet for 2012-2016 data. 5 yr averages: Kamdi 5.8; Karnali 5.0; BankeBZ 20.4; BardiaBZ 24.2		over baseline	baseline	baseline	over baseline	does not impact the study area
b) **% CFUGs** managing open grazing out of total number in the targeted corridor / buffer zone	Open grazing: unrestricted grazing of cattle on lands covered by Community Forest, Protected Forest, Protected Area and PA Buffer Zone designations	Surveys of CFUGs in targeted areas		By corridor/buffer zone	b) In kamdi, 11 out of 76 CFUGs have imposed bans and 50 allow rotational grazing. In karnali, all 54 CFUGs allow grazing	As baseline	At least 15% of CFUGs control open grazing in forest areas	At least 25% of CFUGs control open grazing in forest areas	At least 40% of CFUGs control open grazing in forest areas	At least 50% of CFUGs control open grazing in forest areas	The management of grazing is supported by relevant agencies to ensure that livestock herders continue to receive benefits under new grazing management regimes
Women, resident indigenous peoples and marginalized groups	Definitions for indigenous peoples and Dalit follows that used in the Safeguards assessment (see Annex X)			Disaggregated by 1) womens'groups; 2) indigenous	0	As baseline	a) 5 womens' groups, 5	a) 10 womens' groups, 10	a) 10 womens' groups, 10	a) 10 womens' groups, 10	Gender mainstreaming and the rights of indigenous peoples

empowered for CBNRM in targeted corridors and buffer zones as indicated by: a) Number of womens', indigenous peoples and Dalit groups established for CBNRM and livelihood activities **# communities Non-cumulative**				peoples groups; 3) Dalit groups			indigenous peoples groups and 2 Dalit groups functioning for CBNRM and livelihood activities	indigenous peoples groups and 5 Dalit groups functioning for CBNRM and livelihood activities	indigenous peoples groups and 5 Dalit groups functioning for CBNRM and livelihood activities	indigenous peoples groups and 5 Dalit groups functioning for CBNRM and livelihood activities	are accepted and supported by federal, state and local government leaders
b) Number of indigenous peoples and Dalit communities engaged in project CBNRM and livelihood interventions **# communities Non-cumulative**				Disaggregated by 1) indigenous peoples and 2) Dalit communities	0	As baseline	5 IP 2 Dalit	10 IP 5 Dalit	10 IP 5 Dalit	10 IP 5 Dalit	
c) Average percentage of female, indigenous and Dalit recipients of project-related loans for community level enterprise and livelihood support **% female, IP and dalit**	The average should be applied across all communities receiving project-supported revolving loan schemes, allowing for variation in percentages in individual communities (for instance, higher percentages of IP loans are expected in Tharu areas)			Disaggregated by community, then summed and averaged	0	As baseline	60% female 25% IP 10% Dalit	60% female 25% IP 10% Dalit	60% female 25% IP 10% Dalit	60% female 25% IP 10% Dalit	

recipients of total recipients **Non-cumulative**											
d) Average percentage of female, indigenous and Dalit participants in project-related training for CBNRM and livelihood activities **% female, IP and dalit recipients of total recipients** **Non-cumulative**	The average should be applied across all communities receiving project training, allowing for variation in percentages in individual communities (for instance, higher percentages of IP loans are expected in Tharu areas)			Disaggregated by community, then summed and averaged	0	As baseline	60% female 25% IP 10% Dalit	60% female 25% IP 10% Dalit	60% female 25% IP 10% Dalit	60% female 25% IP 10% Dalit	
Outcome 3.2: Improved management of human-wildlife conflict											
Reduced incidence of HWC in localities where related project activities occur within targeted corridor and PA buffer zone areas	Human wildlife conflict (HWC): actions by humans or wildlife that have an adverse effect on the other			Targeted locations for HWC related activities in PA BZs and Corridors	Baseline year data on:						HWC records are systematically collected and maintained by the government
a) **No. livestock taken / year** **%** **Cumulative**	Definition to follow local government HWC reporting system	Local Government statistics/ reports; and project location-specific reports	M&E Officer-ILM4TAL	Targeted locations for HWC related activities in PA BZs and Corridors	a) No. livestock taken / year - to be determined for targeted locations - TBC	a) Baseline established for targeted locations	10% reduction over baseline	20% reduction over baseline	30% reduction over baseline	50%reduction over baseline	

b) Damage to houses/year **%** **Cumulative**	Definition to follow local government HWC reporting system	Local Government statistics/ reports; and project location-specific reports	M&E Officer-ILM4TAL	Targeted locations for HWC related activities in PA BZs and Corridors	b) Damage to houses/ year - for targeted locations: 256 Bardia	b) Baseline established for targeted locations	10% reduction over baseline	20% reduction over baseline	30% reduction over baseline	50%reduction over baseline	
c) Human fatalities and injuries / year **%** **Cumulative**	Definition to follow local government HWC reporting system	Local Government statistics/ reports; and project location-specific reports	M&E Officer-ILM4TAL	Targeted locations for HWC related activities in PA BZs and Corridors	c) Human fatalities and injuries / year - for targeted locations: 5 killed and 3 injured in Bardia	c) Baseline established for targeted locations	10% reduction over baseline	20% reduction over baseline	30% reduction over baseline	50%reduction over baseline	
Number of wildlife fatalities on national park roads **%** **Cumulative**	Wildlife fatalities - number of wild animals killed in road accidents along identified road stretches during set time periods	Banke National Park / reports from project supported monitoring	Banke NP	Monitoring of wildlife fatalities by park staff or assigned project staff	No. wild animals killed in road accidents 66 in Bardia and 58 in Banke NPs in FY 2016/17	Baseline established for wildlife fatalities along targeted road sections	10% reduction in wildlife fatalities along targeted road sections	20% reduction in wildlife fatalities along targeted road sections	30% reduction in wildlife fatalities along targeted road sections	50% reduction in wildlife fatalities along targeted road sections	
Outcome 3.3: Enhanced capacities of government and community in curbing wildlife crime											
# reported cases of poaching in targeted PA Buffer Zones and	Poaching: illegal killing of wildlife	CBAPU reports, DFO reports	M&E Officer-	By species and BZ/Corridor	Zero poaching in Banke	Systematic reporting of	Reporting system provid	Zero poaching for targeted	Zero poaching for targeted	Zero poaching for targete	Poaching excludes subsistence take of non-protected species by

Corridors per year by species **# cases** **Non-cumulative**			ILM4 TAL		and Bardiya in Fiscal year 2016/17. No information available for corridors	poaching incidents established for targeted BZs/Corridors	es comprehensive data; zero poaching	BZs/Corridors	BZs/Corridors	d BZs/Corridors	indigenous peoples carrying out customary livelihoods in their home areas
Component 4: Knowledge Management and Monitoring and Evaluation											
Outcome 4.1: Improved coordination and dialogue on integrated landscape management from the local to national level											
Number of stakeholders participating in annual forums (indicates that national, provincial and local stakeholders involved with TAL are informed of progress and participate in discussion of project-related issues) **# stakeholders** **Non-cumulative**	Participate: take part in project related meetings and able to freely provide views, excludes project trainings.	Project reports		Disaggregate stakeholders by gender, level of government, and civil society representation	0	100	100	200	200	300	Project stakeholders are interested in participating and their engagement is sought through an inclusive process
Outcome 4.2: Project monitoring system operates, systematically provides information on progress, and informs adaptive management to ensure results											
Number of annual reflection workshops linked to annual stakeholder forums where project management analyzes project progress and resource allocation, monitoring result and incorporates adaptive management into work planning. **# workshops**		Project reports			0	1	1	1	1	1	Project management staff actively participate in annual reflection workshops and are committed to incorporating M&E data into workplans

Non-cumulative											
Outcome 4.3: Project lessons shared											
a) Number of forums where annual lessons are shared	**# forums** **Non-cumulative**		M&E Officer-ILM4TAL		0	1	2	2	1	2	Involvement in the design and implementation of project interventions and knowledge sharing on the experiences and expected benefits of ILM practices will result in long-term support for the project and adoption of new knowledge, skills and practices.
b) Articles on project-related websites (No/year)	**# articles** **Non-cumulative**		M&E Officer-ILM4TAL		0	15	15	15	15	15	
c) Number of radio programs hosted by the project	**# radio programs** **Non-cumulative**	Project reports	M&E Officer-ILM4TAL		0	1	4	4	4	4	

APPENDIX 11: GEF 7 CORE INDICATOR WORKSHEET

ANNEX B

Core Indicator 1	**Terrestrial protected areas created or under improved management for conservation and sustainable use**					***(Hectares)***
			Hectares (1.1+1.2)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 1.1	Terrestrial protected areas newly created					
Name of Protected Area	WDPA ID	IUCN category	Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				
Indicator 1.2	Terrestrial protected areas under improved management effectiveness					
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score		
				Baseline		Achieved
				Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				
Core Indicator 2	**Marine protected areas created or under improved management for conservation and sustainable use**					***(Hectares)***
			Hectares (2.1+2.2)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	*TE*
Indicator 2.1	Marine protected areas newly created					
Name of Protected Area	WDPA ID	IUCN category	Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				
Indicator 2.2	Marine protected areas under improved management effectiveness					
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score (Scale 1-3)		
				Baseline		Achieved
				PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				
Core Indicator 3	**Area of land restored**					***4050 ha***
			Hectares (3.1+3.2+3.3+3.4)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
				4050		
Indicator 3.1	Area of degraded agricultural land restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			Not stated	*150*		
Indicator 3.2	Area of forest and forest land restored					

			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			Not stated	*2900*		
Indicator 3.3	Area of natural grass and shrublands restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			Not stated	*1000*		
Indicator 3.4	Area of wetlands (including estuaries, mangroves) restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 4	**Area of landscapes under improved practices (hectares; excluding protected areas)**					***233,500 ha***
		Hectares (4.1+4.2+4.3+4.4)				
		Expected		Expected		
		PIF stage	Endorsement	MTR	TE	
		110400	*233,500*			
Indicator 4.1	Area of landscapes under improved management to benefit biodiversity					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			110400	*229500*		
Indicator 4.2	Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations					
Third party certification(s):			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.3	Area of landscapes under sustainable land management in production systems					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			Not stated	*4000*		
Indicator 4.4	Area of High Conservation Value Forest (HCVF) loss avoided					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 5	**Area of marine habitat under improved practices to benefit biodiversity**					***(Hectares)***
Indicator 5.1	Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations					
Third party certification(s):			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE

Indicator 5.2	Number of large marine ecosystems (LMEs) with reduced pollution and hypoxial					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 6	**Greenhouse gas emission mitigated**					***1,270,919***
			Tons (6.1+6.2)			
			Entered		Entered	
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)		*1,267,665*	*1,270,919*		
	Expected CO2e (indirect)					
Indicator 6.1	Carbon sequestered or emissions avoided in the AFOLU sector					
			Tons			
			Entered		Entered	
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)		*1,267,665*	*1,270,919*		
	Expected CO2e (indirect)					
	Anticipated Year					
Indicator 6.2	Emissions avoided					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)					
	Expected CO2e (indirect)					
	Anticipated Year					
Indicator 6.3	Energy saved					
			MJ			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 6.4	Increase in installed renewable energy capacity per technology					
		Technology	Capacity (MW)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
Core Indicator 7	**Number of shared water ecosystems (fresh or marine) under new or improved cooperative management**					***(Number)***
Indicator 7.1	Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.2	Level of Regional Legal Agreements and Regional Management Institutions to support its implementation					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE

Indicator 7.3	Level of National/Local reforms and active participation of Inter-Ministerial Committees					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.4	Level of engagement in IWLEARN through participation and delivery of key products					
		Shared water ecosystem	Rating (scale 1-4)			
			Rating		Rating	
			PIF stage	Endorsement	MTR	TE
Core Indicator 8	**Globally over-exploited fisheries Moved to more sustainable levels**					***(Tons)***
			Metric Tons			
			PIF stage	Endorsement	MTR	TE
Core Indicator 9	**Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products**					***(Tons)***
			Metric Tons (9.1+9.2+9.3)			
			Expected		Achieved	
			PIF stage	PIF stage	MTR	TE
Indicator 9.1	Solid and liquid Persistent Organic Pollutants (POPs) and POPs containing materials and products removed or disposed					
POPs type			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
(select)	(select)	(select)				
(select)	(select)	(select)				
(select)	(select)	(select)				
Indicator 9.2	Quantity of mercury reduced					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.3	Number of countries with legislation and policy implemented to control chemicals and waste					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.4	Number of low-chemical/non-chemical systems implemented particularly in food production, manufacturing and cities					
		Technology	Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 10	**Reduction, avoidance of emissions of POPs to air from point and non-point sources**					***(Grams)***
Indicator 10.1	Number of countries with legislation and policy implemented to control emissions of POPs to air					
			Number of Countries			
			Expected		Achieved	

			PIF stage	Endorsement	MTR	TE
Indicator 10.2	Number of emission control technologies/practices implemented					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 10.3	Number of countries with legislation and policy implemented to control chemicals and waste					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 11	**Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**					***29,960***
					Number Achieved	
					MTR	TE
				Female	*14,936*	
				Male	*15,024*	
				Total	*29,960*	

Instructions for unlocking/locking the Worksheet to allow adding rows in tables if necessary:

Go to File> Select Options > Select Quick Access Toolbar > Under Choose Command from, select All Commands> Scroll down until you find the Lock Icon > Click Add> Click Ok. You will then find your Lock icon installed atop your screen:

When you click on the icon, it would either lock or unlock the template.

APPENDIX 12. GENDER EQUITY AND SOCIAL INCLUSION ANALYSIS (SUMMARY) AND RECOMMENDED ACTIONS

Mainstreaming Gender Equality and Social Inclusion (GESI) in the project "Integrated Landscape Management to Secure Nepal's Protected Areas and Critical Corridors"

Bibhuti Bista and Pratima Sharma, 10 August 2018

Executive Summary[88]

Introduction and Objective: The Ministry of Forests and Environment (MoFE) and World Wildlife Fund (WWF) is committed to mainstreaming Gender Equality and Social Inclusion (GESI), to ensure that women and men have equal access to, and control over, resources for development, benefits, and decision-making at all stages of development processes, projects, programs or policy. The main objective of the GESI analysis is to develop and implement an integrated action plan to promote equitable management of benefits such as the use of natural resources among all citizens as described in the Constitution of Nepal to ensure GESI is fully mainstreamed. The five domains under the GESI assessment are Access to resources; Roles, responsibilities and utilization of time; Norms, beliefs and perceptions; Laws, policies, institutional practices; and Decision-making processes.

Design, Methodology and Field Work of GESI Assessment: The study followed a mixed (qualitative and quantitative) method approach for data collection and conducted a thorough analysis of policy documents, reports as well as primary and secondary data in order to provide credible, valid and useful information to produce a report and to further inform the GESI integrated action plan. For quantitative information, gender and ethnicity disaggregated data were obtained and for the qualitative information, checklists and participatory tool like access and control profile were used. The districts were selected based on suggestion provided by Project Planning Committee (PPC) and the study area were selected based on the five criteria (ethnicity, poverty, high natural resource dependency area, human wild life conflict prone area, disaster prone and low accessibility through roads). A total of 11 Focus Group Discussion (FGD) with 147 beneficiaries and four Key Informant Interview (KII) was carried out. The field visit was conducted from July 3 to 8, 2018 and visited Banke, Surkhet and Kailali.

Facts, Analysis and Findings of the GESI Assessment

Respondent gender: A total of 147 people (91 female and 56 male) participated in the FGD, an overwhelming majority were female (61.9%) whereas about 38.1% were male participants.

Household (HH) head: Out of the total respondents 18.4% of their HHs is headed by female compared with male headed HHs (81.6%). The female headed HHs were found to be 6.8% in Janajati, 6.8% in Others *(that included Brahmin, Chhettri and Thakuri)* and 4.8% in Dalits.

Caste and Ethnicity: Based on the classification of caste/ethnic group, approximately half of the respondents were from Janajati community (50.68%) followed by others (34.93%) and Dalits (14.38%). This exhibits that the proposed project area covers a majority of Janajati and a significant percentage of Dalits who are marginalized.

Sources of income: Five distinctive income sources were identified in the project proposed areas (See Table 5), where most of the respondents (68.7%) are involved in agriculture and

[88] Note – the full report is available from WWF Nepal

24.5% of the respondents are involved in wage-based labor. Similarly, other sources of income are business (3.4%), remittance through foreign employments (2.0%) each and for very few (1.4%) were involved in a full-time job. Agriculture and wage-based labour seems to be the prominent sources of income in the study areas. For those involved in wage-based labour, it is the only source of income as they do not possess any land for agriculture.

Family size: The number of members in a family of the respondent ranges from two members up to 16 members.

Findings on the Five Domains of GESI Assessment

Access to and control of resources: Overall findings suggest that in terms of the resources (forest based and non-forest based) men have higher access and control over the resources. The reason behind higher access and control of natural resources of a large number of women are: bias of chairperson of BZUC/Gs and providing more opportunity to their near ones (could be men or women); women themselves could not carry heavy load. In addition, pregnant women and lactating mothers, and female head of HHs whose husband has migrated for foreign labor have limited access to the resources and those who have higher access utilize the resources. Access and control to resources are more critical to the Dalits and other marginalized population (limited access and poor participation; unable to put their voice in the meetings; do not get equally benefitted). The executive members of BZ/CFUG mainly chairperson along with male members do decision because of male dominated society and practice.

Decision making process: Men do have the decision-making power in most of the valuable matter at HHs level (buying and selling proprieties like house, land, animal and ornaments). Similarly, women's decision- to attend the women's groups meetings was also determined by the males. However, this is gradually changing and women are allowed to make their own decisions to go to group meetings more frequently now. As per the rule of the government, groups and committees need to involve both men and women from different caste and ethnic groups. Accordingly, all decision-making bodies of Community Forest Coordination Committee/ Community Forest Users Groups (CFCC/UGs), Buffer Zone Users Committee/Buffer Zone Users Groups (BZUC/Gs) and their committees have engaged women, marginalized and disadvantaged groups for equitable representation. However, their role is limited as only participant and decisions are influenced and made by the males who exercise more power and are influential. Similarly, in context of decision making (planning, implementation, benefits sharing) current decision makers, especially male members need to develop a greater understanding of GESI and related issues.

Roles and responsibilities: Most of the time women are engaged in household chores (fetching water, cutting vegetables, feeding cows) and men are engaged in economic development activities, leadership development and other outdoor activities. This may limit women's economic empowerment, education and leadership opportunities. Thus, creating a vacuum because women are not able to fully participate in group meetings and take leadership roles at community level.

Policy, law and institutional practices: Few men and majority of the women representing Dalits, Janajati and other groups mentioned that they do not know about legal provisions, law, policy, functioning modality of BZUC/Gs and CFUC/Gs. It is important and necessary to make the committees and groups (which are the institutions) more accountable toward organizing awareness and orientation programs for those groups. A gap has been created where such

affected people are unaware of the design, strategies and planning that the committees are developing and executing. Such findings produce a strong feeling that the process (design, strategies, planning and decision making) without a transparent and participatory working modality seems to be often misinterpreted by the influential ones, to modify the possible result in their own favor.

Norms, values and perspectives: From a social and cultural perspective, a patriarchal mindset still underestimate women. Similarly, marginalized and disadvantaged social groups are not considered capable and normally their presence is not well-thought-out to be valued (during planning, implementing and distribution of the benefits). This typical mindset is acting as a barrier for women and other marginalized groups to access and have control over the resources.

Findings on the Economic Activities of Interest: Local people in both buffer zone and corridor areas are interested to undertake nature-based economic opportunities as well as other possible alternatives to improve their socio-economic aspects. Proposed activities of interest should be related to conservation, resource dependency and distributed in an equitable way to ensure the gender inclusion and equality while receiving the benefits. Local people are interested in: goat rearing; tomato, chilli and seasonal vegetable farming; grocery shops, tailoring; making plates from leaves; and collection, processing and selling of herbs and other forest products.

Conclusion: Meaningful involvement of all sex and ethnicity and understanding of the policy, rules and norms is required to benefit from the natural resources. It is important and necessary to make the committees and groups more accountable towards GESI by creating an enabling environment that is more inclusive, responsive and sensitive. It is important that the concerned stakeholders need to consider such aspects and make local people understand the policies and what practices are required to manage and utilize the resources. It is important that the selected or proposed activities of interest should be related to conservation, resource dependency and distributed in an equitable way to ensure gender inclusion and equity while receiving benefits.

Recommendations: Integration of gender, GESI sensitive activities must be carried out in the proposed project; The project should identify appropriate training, empowerment and knowledge enhancement opportunities for the men, women representing Dalit, Janajati and other caste and ethnic groups. The proposed project needs to develop indicators to address the number of issues related with conservation (decision making, policy and law) that has been identified and address and minimize such issues during the project period. People belonging to different community, following different social setting have dissimilar needs and aspiration. Therefore it is recommended to develop empowerment and engagement plans and approaches to mainstream the GESI perspectives and to promote full and meaningful participation of women and other excluded groups in decision making for natural resource management. The proposed project should also prioritize to support the vulnerable communities to overcome the problems that they are facing in their agriculture production. The BZUC/Gs and CFCC/UGs could establish and mobilize revolving funds to bring visible changes in their subsistence activities.

Recommended GESI mainstreaming process in-line with project activities

ACTIVITY CODE	OUTCOME/OUTPUTS/ACTIVITIES	RECOMMENDATION OF GESI MAINSTREAMING PROCESS
1	**COMPONENT 1: National capacity and enabling environment for cross-sectoral coordination to promote forest and landscape conservation**	
1.1	**Outcome: Improved inter-sectoral coordination from Federal, State to Local level for sustainable forest management and integrated landscape management to support the 2015-2025? TAL Strategy or Forestry Sector Policy?**	
1.1.1	Output: Cross-sectoral coordination mechanisms established to support integrated landscape management for conservation outcomes at different levels	
1.1.1.1	NBCC meeting (Gender and inclusive team)	**1. Review existing coordination mechanism** *(While reviewing ensure that members in the mechanism (Gender and social inclusion) and practice of coordination and synergies across all level)* **2. Ensure 33% of the female participants in the coordination mechanism** *(Representation of women, Dalits, ethnic and indigenous peoples (where applicable)* **3. Capacity development opportunities provided to the members of the coordination mechanism (***Leadership development, functioning of coordination mechanism, sessions on GESI…* **4. Coordination mechanism will listen and value the idea, perception and needs of women, Dalit, Janajati, poor and marginalized people of the community.** *(Do No Harm and safe guard of women, Dalit, Janajati, poor and marginalized people will be ensured during the meeting of coordination mechanism at all three level.)*
1.1.1.2	Facilitate the State Biodiversity Conservation Committee in State 2,3,5,7 and Karnali (establishment of Gender and inclusive team composition)	
1.1.1.3	Operation of State Biodiversity conservation committee (Gender and inclusion sensitive committees)	
1.1.1.4	Support to establish gender and inclusive NBCC subcommittee (forest, agriculture, infrastructure and development)	
1.2	**Outcome: Capacity increased for multi-stakeholder and cross-sector landscape and forest planning and management**	
1.2.1	Output: Conservation Leadership Training provided for ILM focal points and coordinators	
1.2.1.1	Conduct training to ILM focal points and coordinators for capturing international best practice and applying this to the local context (Training manual developed in line with national, WWF GEF strategy on GESI).	**1. Review of the existing training module/manual** *1.1 The training manual/module will have GESI component related with the conservation.* *1.2 It will necessarily cover a gender and inclusion sensitive curriculum/topics, positive change in social norms approach in conservation.* *1.3 The training manuals and materials will be quite different for project staff, government staffs, Army of buffer zone*

ACTIVITY CODE	OUTCOME/OUTPUTS/ACTIVITIES	RECOMMENDATION OF GESI MAINSTREAMING PROCESS
		area, executive members of CFCCs/UGs and BZUCs/UGs. **2 Gender and inclusion sensitive training manual/packages developed** *2.1 Trainer's guide and reading materials for facilitators will be included in all manuals.* *2.2 Participatory training methods will be used in sets of training manuals.* *2.3 Pre-test, Post- test questionnaire will be developed and will be part of manual.*

ACTIVITY CODE	OUTCOME/OUTPUTS/ACTIVITIES	RECOMMENDATION OF GESI MAINSTREAMING PROCESS
2	**COMPONENT 2: Integrated Planning for Protected Area Buffer Zones and Critical Corridors in the Terai Arc Landscape**	
2.1	**Outcome: Improved conservation governance for targeted TAL corridors**	
2.1.1	Output: Biodiversity surveys, socio-economic surveys, and local stakeholder consultation for Brahmadev, Karnali, and Kamdi corridors to determine feasibility of appropriate models for community-based natural resource management and strategic framework development	
2.1.1.1	Carry out forest and biodiversity inventory and socio-economic survey (using GESI lens) in corridors (Database on socio economic and gender and inclusion aspects in selected Corridor areas established)	**1. Formation of the survey team** *(Carried out by external consultant (inclusive team) including researcher with expertise in GESI)* **2. Selection of sampling areas and respondents** *2.1 determined in proportion to the total number of populations in the project area; simple random sampling;* *2.2 At least half of the population of study will be women from all ethnic groups and one third of population will be from Dalit, Janajati, Tharu and Madhesi. …* **3. Carry -out survey** *(Using questionnaire and GESI related PRA tools …developed by Harvard University; FGD and KII methods and related tools)* **4. Analysis and establish data base** *4.1 Develop baseline value;* *4.2 Database (excel) on socio economic and gender and inclusion aspects in selected corridor areas established;* *4.3 By the end of the project period end-line survey carried out.*
2.1.1.2	Review existing forest encroachment status and response options with GESI lens.	**1. Review of forest encroachment status** *(Involvement of Department of Forest Research and Training, external consultant, PMU and*

ACTIVITY CODE	OUTCOME/OUTPUTS/ACTIVITIES	RECOMMENDATION OF GESI MAINSTREAMING PROCESS
		identify areas where GESI seems to be lacking or not properly addressed) **2. Response options developed** *(based on the findings from encroachment status)* *2.1 Participatory methods will be followed while facilitating encroachment status and response options;* *2.2 At least 50% of women, other marginalized and ethnicity group's active participation will be there during the response;* *2.3 From GESI perspective (identify response options)*
2.2	**Outcome: Improved participatory planning for sustainable management of targeted protected area buffer zones and corridors in TAL**	
2.2.1	Output: Land uses, biodiversity values, forest carbon, and key threats assessed, mapped, reported and disseminated to identify priority villages and forest areas in the targeted PA buffer zones and corridors	
2.2.1.1	Prepare GESI responsive management/work-plans for the corridors (Print 3 management plans; Workshops at State level) with stakeholder consultations process to determine appropriate models for community-based management, GESI perspective in the appropriate models)	**1. Training to Project staff on Gender responsive annual workplan** *(Out Sourced TA; Gender mainstreaming intervention (gender audit, gender responsive budgeting, resource allocation in activities, monitoring and tracking…)* **2. Develop annual work-plan (gender responsive)** *2.1 Each activity should ensure Gender and inclusion as a cross cutting issue;* **3. Review of work-plan/management plans** *(Recommendation from PMU, PPME Committee on the gender responsive annual work-plan; make necessary changes; assure gender mainstreaming progress and integration of gender sensitive activities)*
2.2.2	Output: Sustainable Forest Management Operational Plans developed or revised for priority forest areas, incorporating the assessment from 2.2.1	
2.2.2.2	Support CFUGs and BZ CFUGs to develop or revise Sustainable Forest Management Plans (GESI aspect is revised/incorporated) for priority community forest areas in consultation with related stakeholders.	**1. Review of FMO plan** *(Involvement of Department of Forest Research and Training, external consultant, PMU and identify areas where GESI seems to be lacking or not properly addressed)* **2. Revise/amend the FMO plan based on the review** *(GESI addressed in the FMO plan and amendment by GoN)* **3. FMO plan implemented**

ACTIVITY CODE	OUTCOME/OUTPUTS/ACTIVITIES	RECOMMENDATION OF GESI MAINSTREAMING PROCESS
		3.1 Participatory methods will be followed while facilitating to make forest management operational plan; *3.2 At least 50% of women, other marginalized and ethnicity group's active participation will be there during the development of forest management and implementation of the operational plan.* *3.3 From GESI perspective (identify areas which has received little in-puts)* *3.4 Special support (equity) will be provided to women leader to manage demonstration site* *3.5 Capacity building special support (equity) will be provided to women, Dalit, Janajati and Tharu led demonstration site Special support from GESI lens will be identified and provided i.e. planning, implementing, managing, recording… and reporting etc…*
2.2.3	Output: Strategic framework for corridor management developed and management plans prepared or revised for all seven TAL corridors / protected forests	
2.2.3.1	Develop a gender and inclusion responsive guideline (GIRD) to prepare management plans of Protected Forest / Corridor	**1. Develop gender and inclusion responsive guideline (GIRD) as part of guideline for management plans of Protected Forest / Corridor** *1.1 The GRID addresses gender and inclusion related similarities and disparities;* *1.1.1 No GESI elements (GESI is not reflected in existing management plans)* *1.1.2 Limited GESI elements (GESI is reflected in a limited way in existing management plans)* *1.1.3 Effective GESI elements (GESI is reflected effectively and has contributed significantly in existing forest/corridor management plans)* *1.2 Similarities and disparities are recognized, understood and further systematically considered in the formulation of management plans for protected forest/corridor;*

ACTIVITY CODE	OUTCOME/OUTPUTS/ACTIVITIES	RECOMMENDATION OF GESI MAINSTREAMING PROCESS
		1.3 Ensure Women's empowerment (five components) based on GEF's (Gender Equality Action Plan): *1.3.1 Women's sense of self-worth;* *1.3.2 Right to have and determine choices;* *1.3.3 Right to have access to opportunities and resources;* *1.3.4 Right to have power to control own lives both within and outside the home;* *1.3.5 Ability to influence the direction of social change to create a more just social and economic order.* *1.4* ability to influence the direction of social change to create a more just social and economic order, nationally and internationally. *1.5 Build a culture of GESI across the project (Activities are designed to contribute significantly to gender equality and social inclusion);* *1.6 Enhance resources and prosperity for all in the TAL region.*

ACTIVITY CODE	OUTCOME/OUTPUTS/ACTIVITIES	RECOMMENDATION OF GESI MAINSTREAMING PROCESS
3	**COMPONENT 3. Forest and human-wildlife relations management for improved conservation of targeted protected area buffer zones and corridors in the Terai Arc Landscape**	
3.1	**Outcome: Sustainable forest management practices that strengthen livelihoods and biodiversity conservation**	
3.1.1	Output: Technical training to build capacity of government, local communities and private landholders on the management and restoration of forest and associated habitats	
3.1.1.1	Support Forest Training and Extension Division under Forest Research and Training Center to develop a Gender and Inclusion friendly SFM training manual (general and advanced [1]) by consolidating existing resources (grant).	**1. Review of the existing training module/manual** *1.1 The training manual/module will have GESI component related with the conservation.* *1.2 It will necessarily cover a gender and inclusion sensitive curriculum/topics, positive change in social norms approach in conservation.* *1.3 The training manuals and materials will be quite different for project staff, government staffs, Army of buffer zone*

ACTIVITY CODE	OUTCOME/OUTPUTS/ACTIVITIES	RECOMMENDATION OF GESI MAINSTREAMING PROCESS
		area, executive members of CFCCs/UGs and BZUCs/UGs. **2. Gender and inclusion sensitive training manual/packages developed** *2.1 Trainer's guide and reading materials for facilitators will be included in all manuals.* *2.2 Participatory training methods will be used in sets of training manuals.* *2.3 Pre-test, Post- test questionnaire will be developed and will be part of manual.* *2.4 At least 2 days (14 hours) training on gender, social norms approach and GESI strategy will be done for government staffs including army personnel;*
3.1.1.4	Support CFUGs to implement their operational plans based on sustainable forest management through Gender and inclusive revolving fund	**1. Revolving Fund research team formed** *(Inclusive team with experts from GESI, revolving fund, PMU)* **2. Criteria set to undertake the research and research carried out in TAL area** *2.1 Beneficiaries (gender and social inclusive) of revolving fund;* *2.2 Management of revolving fund;* *2.3 Value of revolving fund;* *2.4 Project role in revolving fund;* *2.5 Government role in revolving fund; R* *2.6 Risk and challenges;* *2.7 External learnings (PAF, UMN, Consultative Group to Assist the Poor, NAREC Nepal, The United Nations Human Settlements Programme, Community Managed Revolving Fund…)* **3. Analysis of the findings and developing revolving fund guidelines** *(Must be gender and social inclusive; keep updated and separate financial records…)* **4. Establishment and mobilization of the revolving fund** *(Based on the models identified under the research)*
3.2	**Outcome: Improved management of the human-wildlife interface**	
3.2.1	Output: Capacity and resources for participatory management of human wildlife relations	
3.2.1.12	Training to communities (counselling support to assist psychosocial counseling and Psychological First Aid (PFA)/front line staff: behavior of conflict creating wild animals.	**1. Training package developed** *(An expert will develop the training package based on the field visit and interaction with the respondents)* **2. Finalization of the project area for intervention** *(Don't need intervention; May*

ACTIVITY CODE	OUTCOME/OUTPUTS/ACTIVITIES	RECOMMENDATION OF GESI MAINSTREAMING PROCESS
		need minimal intervention; High priority areas; and other criteria could be developed…) 3. **Training provided** *(Two days training will be provided to women, children and adolescent girls and boys in the selected buffer zone and corridor area of TAL project)*
3.2.1.7	Implement community-based reporting system of HWC incidents to monitor trends and build awareness (IEC/BCC materials developed)	1. **Develop IEC/BCC materials for awareness generation** *(Gender and inclusion sensitive)* *1.1 develop IEC/BCC materials to promote positive behavior and build awareness that are appropriate to the local setting;* *1.2 Community-based approaches* *1.3 Gender differences in attitudes towards wildlife and wildlife conservation*
3.2.1.14	Support to develop business plan in collaboration with TAL Programme, Hariyo Ban, ERP and rural development programmes (e.g. to address gaps, replicate successful examples and target their investments in critical locations, focusing poor, marginalized, women and).	1. **Carry out market assessment** *(By an inclusive team comprised of livelihood expert and value chain expert)* 2. **PMU invites individual and group application and prioritization** *2.1 Recommendation from CFUGs/BZUGs;* *2.2 IGA should be based on the market assessment and women, Dalit, Tharu, Janajati, and other poor and landless applicant* 3. **PMU selects potential participants and facilitate in developing business plan** *(women, Dalit, Tharu, Janajati, and other poor and landless applicant; support in developing business plan)* 4. **PMU provides technical and financial support** *(To execute forest and non-forest-based products; training through qualified service providers; linking to revolving fund)* **NOTE:** special consideration and priority will be given to women, Dalit, Janajati, Tharu and poor community.
3.2.2.3	Support revolving fund to initiate enterprise for CBAPUs member (GESI focused)	1. **Revolving Fund research team formed** *(Inclusive team with experts from GESI, revolving fund, PMU)* 2. **Criteria set to undertake the research and research carried out in TAL area** *2.1 Beneficiaries (gender and social inclusive) of revolving fund;* *2.2 Management of revolving fund;* *2.3 Value of revolving fund;* *2.4 Project role in revolving fund;*

ACTIVITY CODE	OUTCOME/OUTPUTS/ACTIVITIES	RECOMMENDATION OF GESI MAINSTREAMING PROCESS
		2.5 Government role in revolving fund; *2.6 Risk and challenges;* *2.7 External learnings (PAF, UMN, Consultative Group to Assist the Poor, NAREC Nepal, The United Nations Human Settlements Programme, Community Managed Revolving Fund…)* **3. Analysis of the findings and developing revolving fund guidelines** *(Must be gender and social inclusive; keep updated and separate financial records…)* **4. Establishment and mobilization of the revolving fund** *(Based on the models identified under the research)*

ACTIVITY CODE	OUTCOME/OUTPUTS/ACTIVITIES	RECOMMENDATION OF GESI MAINSTREAMING PROCESS
4	**COMPONENT 4. Knowledge Management and Monitoring and Evaluation**	
4.2	**Outcome: Project monitoring system operates, systematically provides information on progress, and informs adaptive management to ensure results**	
4.2.1	Output: Capacity for participatory and efficient monitoring and evaluation and adaptive management	
4.2.1.2	Carry out training sessions for PMU staff to ensure adequate capacity for project coordination, results-based management, monitoring and evaluation, gender mainstreaming and application of social and environmental safeguards during implementation of the project	**1. Training session includes GESI aspects** *(The training session will cover gender equality and social inclusion related contents as indicated in the manual)* *1.1 At least 2 days (14 hours) training on gender, social norms approach and GESI strategy will be done for PMU staffs;* *1.2 At least 6 sessions on gender, GBV, social norms approach in integrated landscape management to PMU staffs;*
4.2.1.8	Formation of Participatory Planning, Monitoring and Evaluation (PPME) team, gender and inclusive in nature, develop GESI sensitive PPME guideline and conduct periodic and joint monitoring events (Biannual and annual)	**1. Formation of PPME committee** *(One each in buffer zone and corridor area; Gender and inclusive team; A sharing learning, experience, and challenges during project interventions; effective role in quality assurance)* *1.1 Develop ToR and guideline (gender and inclusive) of the committee; In a democratic way elect member secretary; Should be gender and inclusive sensitive.* **2. Develop ToR and functionality (guidelines) of PPME Committee** *2.1 Planning (Follow PANEL principles)*

ACTIVITY CODE	OUTCOME/OUTPUTS/ACTIVITIES	RECOMMENDATION OF GESI MAINSTREAMING PROCESS
		• *Participation: People (gender and inclusive sensitive) should be involved in decisions that affect their rights;* • *Accountability: There should be monitoring of how people's (women, Dalit, Janajati, poor and ethnic groups) rights are being affected and there must be remedies to solve things that go wrong.* • *Non-Discrimination and Equality: All forms of discrimination must be prohibited, prevented, and eliminated.* • *Empowerment: Everyone should understand their rights and should be fully supported to take part in developing users committee policy and practices which affect their lives.* • *Legality: Approaches should be grounded in the legal rights and set out in domestic and international laws.)* 2.2 *Monitoring* • *PROCESS (Field visit process observation and interaction with beneficiaries; Joint monitoring with stakeholders; DPAC/CPAC review meeting; PPME Committee meeting)* • PROGRESS *(Data collection based on planned activities; analysis of the data; PPME Committee meeting)* • RESULT *(Result based monitoring; PPME Committee monitoring and review meeting)* 2.3 *Evaluation:* Using the DAC criteria for the evaluation; PPME committee members involved in internal evaluation; out sourced for mid-term and final evaluation.

APPENDIX 13: SITUATION ANALYSIS OF THE POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK FOR INTEGRATED LANDSCAPE MANAGEMENT

Policy, legal and institutional context

Nepal's forestry sector has been restructuring and has undergone major political, economic and social change in recent years. Correspondingly, the proposed project in the TAL area has to adjust because it has to cover more than one state of the country as well as trans-boundary issues. This part of the desk study explores the situation analysis of policy, legal and institutional frameworks of the forestry sector pertaining to each of the project's components (i.e. with a focus on integrated landscape management; biodiversity conservation in PAs, PA Buffer Zones and corridors; sustainable forest management; and sustainable land management) which may have implications for the planning, implementation and monitoring and evaluation of the project in TAL area.

Integrated landscape management

The first long term policy document on forestry was the Master Plan for the Forestry Sector (MPFS), 1988. A policy and legal reform program was one of the six supportive programs of the MPFS and has proved to be a highly critical component. Despite the positive efforts, there were many policy-related issues and challenges raised during a review of the Plan[89].

Box 13-1: Recommendations from review of the policy and legal reform program in MPFS, 1988

i. Address inconsistency in roles and responsibilities *vis* the Forest Act (1993) and the Local Government Act (1999) and developing policies within the forest sector that enhance and encourage decentralized decision-making and local involvement.
ii. Better stakeholder engagement in policy processes especially for policy preparation and to ensure better coordination within MFSC at different levels
iii. Simplification of the regulations under the Environment Protection Act (EPA) requiring Environmental Impact Assessments (EIAs) to be prepared for different plans and other activities in the forest sector.

Box 13-2: Review on Institutional reform program in MPFS, 1988

The MPFS contained an institutional development plan that aimed to reform government forestry sector institutions in line with the requirements and provisions of the components of the MPFS and within the framework of Nepal's new forest sector policy and legislative reforms. The most significant achievements of this reform program were a restructuring of the MFSC and its various departments that took place almost immediately after 1989 broadly in line with the programs of the MPFS and taking into consideration their scale and staffing requirements. Further administrative reforms took place in 1993 and 2000 but these were largely driven from outside MFSC under the influence of a High Level Administrative Improvement Commission of GoN which required drastic reductions in staff numbers – especially at central level. Consequently, they were somewhat inconsistent with the staffing needs of MPFS.

A positive aspect of the 1993 reforms was the establishment of a new semi-autonomous entity called the Centre for Forest Research and Survey - although this did not last long and it was upgraded to a new Department of Forest Research and Survey (DFRS). Other institutional reforms proposed in the MPFS and largely put into place concerned the restructuring or dismantling of a series of Government parastatals (organizations having some

[89] MFSC, 2014. Review of Implementation of the Master Plan for the Forestry Sector: Achievements and Lessons: A Synthesis Report, Ministry of Forests and Soil Conservation.

political authority and serving the state indirectly). Some of these were privatized (e.g. Bhrikuti Paper Mills, Nepal Paper Industries Ltd, Butwal Plywood factory and Nepal Rosin and Turpentine Industries Co) others were merged (e.g. Timber Corporation of Nepal (TCN) merged with the Nepal Fuelwood Corporation) and Royal Drugs Ltd. was shifted to the Ministry of Health.
At the present time only TCN, the Forest Products Development Board (FPDB) and the Herbs Production and Processing Company Ltd. (HPPCL) remain as parastatals in the forest sector.

There is growing acknowledgement that conventional sectoral approaches to often inter-connected social, environmental, economic and political challenges are insufficient. An alternative is to focus on integrated solutions at landscape scales or 'landscape approaches'[90]. A landscape approach is a multi-faceted integrated strategy that aims to bring together stakeholders from multiple sectors to provide solutions at multiple scales.

The introduction of the landscape level approach to conservation in Nepal in 2001 has become a game changer – it marked a paradigm shift in conservation programming to evolve from a single species and protected area focus to one that brought together connected landscapes, local communities and integrated conservation approaches to benefit people, nature and wildlife. This led to the birth of the far-reaching Terai Arc Landscape (TAL). The first National Biodiversity Strategy 2002 incorporated the landscape level concept of integrated landscape management in the national scale[91] which was further strengthened through the National Biodiversity Strategy and Action Plan (NBSAP) 2014-2020 in Nepal [92]. "An integrated approach to managing landscapes is not a new concept, but rather one refined through multiple iterations during attempts to integrate social and economic development with biodiversity conservation and climate change mitigation. It is widely acknowledged that traditional communities have managed natural resources in a holistic manner for centuries to meet social needs" [93].

The National Conservation Strategy was published in 1988 at almost the same time as the Master Plan for the Forestry Sector. Mostly it urged for environmental assessment prior to starting large-scale infrastructure development. The second version of the strategy was prepared by the National Planning Commission and endorsed by the GoN in 2015, entitled 'Nature Conservation National Strategic Framework for Sustainable Development (NCNSFSD)' for the period 2015-2030 AD[94]. The goal of the framework is to contribute towards achieving sustainable development by integrating nature conservation into all development efforts. It is an umbrella framework, which emphasises nature conservation, sustainable use of natural resources and the equitable distribution of their benefits. Further, this Framework addresses topical questions, such as how to carry out the conservation of heritage sites such as National Parks and sensitive watershed areas such as Churia, mitigation of water and air pollution and reduction in greenhouse gas emissions, while developing physical infrastructure

[90] Reed, Van Vianen J, Deakin EL, Barlow J and Sunderland T, 2016. Integrated landscape approaches to managing social and environmental issues in the tropics: learning from the past to guide the future, Global Change Biology (2016) 22, 2540–2554, doi: 10.1111/gcb.13284.
[91] GoN, 2002. National Biodiversity Strategy 2002, Ministry of Forests and Soil Conservation.
[92] GoN, 2014. National Biodiversity Strategy and Action Plan (NBSAP) 2014-2020, MFSC.
[93] Feeny et al., 1990; Ostrom, 1990; Lansing, 2006; Sayer et al., 2013; Cairns, 2015 - cited in Reed, et al, 2016. Ibid.).
[94] GoN, 2015. 'Nature Conservation National Strategic Framework for Sustainable Development (NCNSFSD) 2015-2030 AD, National Planning Commission.

that does not compromise the environment. In addition, the implementation of this Framework will play an effective role in achieving the country's development goals at a rapid pace and in a sustainable manner.

The Forest Policy 2015 is a step forward for managing landscapes through integrated approaches. One of its policies envisions biodiversity conservation through landscape level conservation and management to achieve sustainable development and environmental balance[95]. Moreover, the policy is being implemented through the working guidelines as mentioned in the Forestry Sector Strategy (2016-2025)[96]. The Strategy has envisioned eight strategic pillars and identified seven key thematic areas to achieve the vision of MoFE. With the implementation of the strategy, five major outcomes will be achieved, viz: sustainable production and supply of forest products, improvement of biodiversity conservation, watershed and ecosystem services, increased contribution to national economy, inclusive and accountable forestry sector institutions and organizations, and climate resilient society and ecosystem. Moreover, the strategy has made a commitment towards strengthening the landscape approach[97].

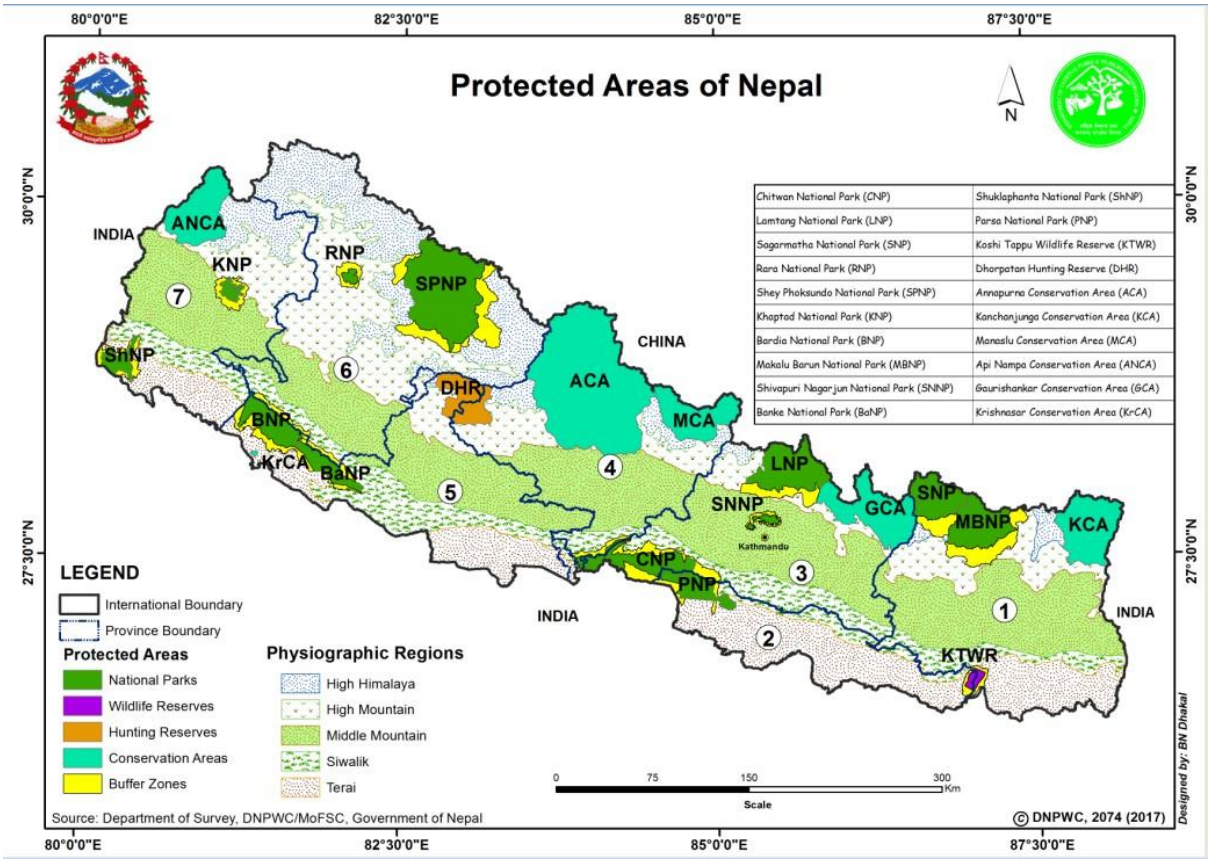
Protected Areas, Buffer Zones, Corridors and Biodiversity Conservation

In Nepal, biodiversity is closely linked to the livelihoods and economic wellbeing of millions of rural people who directly depend on natural resources for meeting their daily subsistence needs and cash income. The subject touches upon many aspects of life directly and indirectly, including agricultural productivity, food security, human health and nutrition, indigenous knowledge, gender and social equality, culture, climate, water resources and aesthetic value to the society. The country's biodiversity also represents an important source of revenue to the government.

The Government of Nepal is fully committed to managing the country's rich biological diversity as per the national need, and in the spirit of the Convention on Biological Diversity and other relevant multilateral environmental agreements to which Nepal is a Party. The promulgation of the very first National Parks and Wildlife Conservation Act (1973) and National Parks and Wildlife Conservation Regulations (1974) provided the legal space to establish a number of National Parks and Wildlife Reserves in the country. The Government of Nepal has established a network of 20 protected areas since 1973, consisting of 12 national parks, one wildlife reserves, one hunting reserve and six conservation areas , 13 with buffer zones. In 2017, the Shuklaphanta and Parsa Wildlife Reserves were upgraded to National Parks. Additionally, 10 Ramsar sites were declared between 1988 and 2016. The total area of PAs is 34,419.75 km^2 , of which national parks, wildlife reserve and hunting reserve cover 9.04 %, conservation areas cover 10.48% and buffer zones cover 3.86 %.

Figure 1-4: Map Showing the Protected Areas of Nepal

[95] GoN, 2015 b. Forest Policy 2015. Ministry of Forests and Soil Conservation.
[96] GoN, 2016. Scientific Forest Management Initiatives in Nepal: MSFP Experiences and Lessons Learned, Multi Stakeholder Forestry Program.
[97] GoN, 2016. Ibid.



Source: DNPWC Website, 3 September 2018

The NBSAP v2 (2014-2020) provides a guiding framework for the management of Nepal's biodiversity. It has been prepared to meet the national needs for managing biodiversity on a sustainable basis for the benefit of present and future generations, and also to fulfil the country's international obligations. It provides a long-term vision (35 years) and includes specific short-term (up to 2020) strategies and priorities for action. There is a number of species conservation initiatives through species action plans for tiger, rhino, elephant, snow leopard, and vulture, which help to protect threatened fauna in Nepal in line with the NBSAP.

The Forestry Sector Strategy 2016 has clearly envisioned targets as follows on Ecosystems and Biodiversity (see **Table 1-10** below).

Table 13-1: Milestones in the Forestry Sector Strategy 2016

2015	2025
Protected areas comprise 23.3% of Nepal's land area	Protected areas are conserved and sustainably land area managed
	Landscape approach is strengthened
	Community conserved areas are identified, protected and sustainably managed
;ones in place in 12 national parks	Buffer zones in place for all national parks and reserves and hunting reserves
Populations of tigers, rhinoceroses and wild buffalos are 198, 645 and 259	Populations of tigers, rhinoceroses and buffalos maintained at 250, 700 and 400 respectively

2015	2025
	Carrying capacity assessed, five endangered species trans-located
No commercial farming of common wild animal species	At least five common wild animal species being commercially farmed
ntral zoo in Kathmandu	Additional zoo in Kathmandu
aching of rhino in 2011, 2013 and 2014	Zero poaching of rhino maintained and enforcement efforts for other key species scaled up
nical gardens	20 botanical gardens established with better coverage in all physiographic regions
lumes of flora of Nepal published	All 10 volumes of flora of Nepal published

Sustainable forest management (SFM)

The terms 'scientific forest management' and 'sustainable forest management' have been used and understood interchangeably in the global forestry scenario in recent decades linking management activities to principles of sustainable development and focusing on the balance between three major pillars: ecological, economic, and socio-cultural. In the Nepalese context, SFM is perceived as a way forward for improving depleted forest quality and productivity, and for harnessing the true economic potential of forest resources[98].

Forest occupies a total of 5.96 million ha, which is 40.36% of the total area of the country. Other Wooded Land (OWL) covers 0.65 million ha (4.38%). Forest and OWL together represent 44.74% of the total area of the country. A periodic forest inventory is carried out in Nepal which provides forest statistics for the better management of the forests. Forests occupy 40.36% of the total area of the country with a stem volume of 982.33 million m^3 (164.76 m^3/ha)[99]; this is being managed through different regimes based on the various management objectives. For example, protected areas are more focused on biodiversity conservation, while participatory forest management regimes - such as community forests, leasehold forests, and collaborative forests - are focused on supplying forest products and environmental services to improve local livelihoods and development.

The TAL area has a long history of forest management. The extensive Terai forests were little disturbed until the late 1920s, when the government initiated expansion of cultivated areas by clearing some forests and extracting timber in other forests for export to India to collect revenue[100]. Initially (1925-1930) the government hired a British forester (J.V. Collier), and later during the 1990s, with Finnish technical assistance, resulting in technically sound (for timber production) operational forest management plans (OFMPs) for 19 Terai districts. However, no active silvicultural interventions are practised, except in a few small research plots[101]. This has led to over-mature degraded forests with many deformed trees, inadequate regeneration and stagnation well below potential growth rates.

[98] MSFP, 2015. Promoting Sustainable Forest Management in Nepal's Forest-Contributing to Local and National Economy, Multi-Stakeholder Forestry Programme, Kathmandu, Nepal.
[99] DFRS (2015b) State of Nepal's Forests: Forest Resource Assessment (FRA) Nepal. Kathmandu.
[100] Gautam AP, Shivakoti GP and Webb EL, 2004. A review of forest policies, institutions, and changes in the resource condition in Nepal, International Forestry Review 6(2).
[101] Parajuli and Amatya 2001 cited in Bampton JFR, Ebregt A and Banjade MR, 2007. Collaborative Forest Management in Nepal's Terai: Policy, Practice and Contestation, Journal of Forest and Livelihood 6(2) .

The revised Forest Policy, 2000 argued for and introduced a new forest management modality for 'contiguous large blocks' of productive Terai and Inner Terai national forests, named Collaborative Forest Management. However, the legitimacy of the CFM policy has been criticised by some[102] because no provision for CFM is provided in the Forest Act 1993, and a fully open consultative and deliberative process did not take place.

Community-based forest management (CBFM) has become a major forest management approach in Nepal. CBFM groups operate under various models which have developed in response to different geographical and socio-economic contexts. These groups now manage about 2 million ha or about 34% of Nepal's forest. Almost 20,000 community forest user groups (CFUGs) protect and manage approximately 1.88 million ha of community forest (CF) in all regions of Nepal; twenty-eight CFM groups protect and manage about 70,000 ha of forest in the Terai and about 40,000 ha of forest have been transferred to about 7,000 lease hold forest (LHF) groups mostly in the Middle Hills[103].

CBFM is a longstanding national priority and remains a priority development programme under the 14th National Development Plan, although the pace of handover has been reduced in recent years, partly due to a reduction in externally funded programmes in Nepal's forest sector, but also because in many districts, a large proportion of the accessible forest has already been handed over. Recently, the Forest Act, 1993 has been amended and incorporated the provision for Collaborative Forest Management (CFM), which opens up opportunities for further strengthening this approach. In the Terai, the handover of forests to various CBFM groups has been limited in recent years due to a lack of clear policy direction and political will, although this has been resolved following Nepal's Forest Policy of 2015 and there is now a backlog of applications by communities awaiting approval for transfer[104].

The Department of Forests organised a very First National Silviculture Workshop on 19-21 February, 2017 in Kathmandu, Nepal. One of the key messages was "silviculture based sustainable forest management, considering local practices and knowledge, need to be applied in all accessible forests with the active participation of concerned users"[105]. In fact, the government has already committed to move towards sustainable forest management. As per the Forestry Sector Strategy 2016, about 50% of Terai and Inner Terai forests and at least 25% of middle hills and mountain forests will be sustainably/scientifically managed by 2025[106].

Extensive efforts over the past 30 years to decentralise and localise forest management through CBFM approaches have enabled the country to make significant progress in reducing rates of deforestation and forest degradation. Despite this progress significant risks still remain and the country has committed to developing an approach to REDD+ with a vision of: optimizing the carbon and non-carbon benefits of forest ecosystems for the prosperity of the people of Nepal. The National REDD+ Strategy of Nepal (NRSN) that was developed over a number of years and sent for approval by cabinet

[102] Bhattarai 2006; Ojha 2005a cited in Bampton, 2007. Ibid.
[103] GoN, 2017. Forest Investment Program (FIP), Ministry of Forests and Soil Conservation.
[104] GoN, 2017. Ibid.
[105] GoN, 2017. Proceeding of First National Silviculture Workshop. 19-21 February, 2017. Kathmandu, Nepal. Department of Forests.
[106] GoN, 2016. Scientific Forest Management Initiatives in Nepal: MSFP Experiences and Lessons Learned, Multi Stakeholder Forestry Program.

in early 2018 sets out 5 objectives to achieve this vision as well as actions under 12 Policy Areas and 72 strategic actions[107]. These represent Nepal's overarching REDD+ Policies and Measures (PAMs). The actions presented, however, show significant variation between those actions that are directly implementable and those that represent broader policy objectives.

Other policies and plans for conserving nature and natural resources

The Compensation to Wildlife Victim Policy 2013 reduces the human wildlife conflicts and making good relation with people in the country. Similarly, Wetland Policy 2012 also opens avenue for investment in wetland management through the country. Further, Medicinal and NTFP Development Policy 2004 envisioned the development of storehouse of medicinal and aromatic plants in Nepal and provides basis for formulating technical and managerial directives on the NTFPs. To stop the unsustainable way of infrastructure development in the PAs, the government enacted a Construction of Infrastructure Inside the Protected Area Policy in 2003 and revised recently.

Sustainable Land Management

The United Nations defines sustainable land management (SLM) as "the use of land resources, including soils, water, animals and plants, for the production of goods to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions"[108]. SLM is based on four principles:

- targeted policy and institutional support, including the development of incentive mechanisms for SLM adoption and income generation at the local level;
- land-user-driven and participatory approaches;
- the integrated use of natural resources on farms and at the ecosystem scale; and
- multi-level, multi-stakeholder involvement and partnerships at all levels – land users, technical experts and policy-makers.

In Nepal, the Chure physiographic region was identified as an environmental protection zone in 2014. WWF Nepal implemented a GEF project entitled "Sustainable Land Management in the Churia Range, Nepal" (2013-2016). The Churia Range of Southern Nepal is home to Asian elephants, one-horned rhinos, and Bengal tigers. It is also an important source of community livelihoods. To protect this area's valuable resources from land degradation, this GEF-funded project brought together five technical ministries for the first time.

The project promoted sustainable land and forest management practices alongside local community groups, working to improve the management of 7,500 ha of agro-pastoral and mixed forest land areas. Mainly focusing on land degradation, the project involved the Ministry of Agricultural Development; Ministry of Forests and Soil Conservation; Ministry of Land Reform and Management; and WWF- Nepal were the GEF implementing agency and partners through the GEF Grant. The SLMCRNP was designed as a pilot project aimed at addressing the above-mentioned issues, especially focusing on reducing forest and agricultural land degradation, water shortages and biodiversity loss by incentivizing local communities with different kinds of livelihood

[107] See Annex 1 of the National REDD+ Strategy of Nepal

[108] http://www.fao.org/land-water/land/sustainable-land-management/en/

opportunities, especially through forest, pasture and agricultural land based income generating activities[109].

The project area covered Churia hills and Bhawar areas of Rautahat, Bara, Parsa and Makwanpur districts. The overall objective of the project was to substantially reduce degradation and maintain or improve conditions of agro-pastoral lands and Churia Sal and mixed forest areas in strategic project locations. The overall lesson that can be drawn from the SLMCRN project is that SLM projects should be designed using multi-disciplinary knowledge, multi-stakeholder consultation and bottom-up planning processes, while other lessons are described in the TE report such as that fewer and well coordinated and integrated sites can generate better outputs and outcomes[110]. The key recommendation was to reform land use policies and institutional framework for SLM. Moreover, the National Land Use Policy, 2012 (NLUP) was an effort to introduce the concept of scientific land management in Nepal. This policy remains unimplemented, warranting its critical review to transform it into an implementable policy by elevating its ownership to the NPC level. The lessons learned from the Project have clearly shown that this policy first needs to be owned by all the relevant ministries. In the context of the federalization of the country and land management falling under the jurisdiction of the provinces, a multi-scale new Land Use Policy needs to be formulated.

National Policies

- Forestry Sector Strategy 2016-2025
- Nature Conservation: Strategic Framework for the Sustainable Development (2015-2030)
- Forest Policy 2015
- Strategy and Action Plan: 2015-2025 Terai Arc Landscape, Nepal
- National Biodiversity Strategy and Action Plan 2014-2020
- National Ramsar Strategy and Action Plan, Nepal (2018-2024)
- Compensation to Wildlife Victim Policy 2013
- Wetland Policy 2012
- National Ramsar Strategy and Action Plan 2018-2024
- Medicinal and NTFP Development Policy 2004
- Construction of Infrastructure Inside the Protected Area Policy 2003
- Species actiopagen plans ----Tiger (2016-2020), Greater One-horned Rhinoceros (2017-2021), Gharial (2018-2022), Pangolin (2018-2022), Elephant (2009-2018), Snow Leopard (2017-2021), and Vulture (2015-2019)

International Treaties and Agreements

Table 13-2: Multi-Environmental Agreements (MEAs) ratified by Nepal

Name of Convention	Ratification	Enforcement Date	Lead Agency	Reporting Obligations
Convention on International Trade in	18 June 1975	16 Sept 1975	MOFSC	• Implementation of measures to protect wild flora and fauna for future generations.

[109] Karki M, Wagle MP and Khadka SR, 2017. Sustainable Land Management in Churia Range, Nepal, Evaluator's Report, WWF, Nepal.
[110] Source: SLMCRNP Terminal Evaluation report

Name of Convention	Ratification	Enforcement Date	Lead Agency	Reporting Obligations
Endangered Species of Wild Fauna and Flora (CITES) 1973				• Control and monitoring of international trade in wildlife or products made from wildlife parts that are listed in the CITES Appendices Reports to each CoP
Convention on Wetlands of International Importance Especially as Waterfowl Habitat, 1971	17 Dec 1975	17 Apr 1988	MOFSC	• Nepal formulated a Nepal Biodiversity Strategy with inclusion of Integrated Wetland Management Strategy in 2002 and its implementation plan in 2006. • National Wetlands Policy in 2003 • Formation of National Wetland Committee • The completion of the project "Conservation and sustainable Use of Wetlands in Nepal (CSUWN, 2008-2013)" through Ministry of Forest and soil conservation (MOFSC) • National Ramsar Strategy and Action Plan 2018-2024 • Maintain the ecological character of listed Ramsar Sites • Make wise use of all wetlands • National Reports to each CoP
International Agreement for Tropical Timber (ITTA), 1983	3 July 1990		MOFSC	To comply with the ITTA Agreement for Nepal • Cooperate to promote the attainment of the objectives of the Agreement • Conduct research and development, market intelligence, further and increased wood processing and reforestation and forest management.
Convention on Biodiversity, 1992	23 Nov 1993	21 Feb 1994	MOFSC	Development and implementation of the national biodiversity strategy and action plan based on the agreement of the convention. Reports to each CoP
Convention for the Protection of the World Cultural and	21 Jun, 1978	20 Sep, 1978	Department of Architecture (DoA)/DNPWC	• Report on the adopted legislative and administrative provisions and other action which is taken for the application of this convention.

Name of Convention	Ratification	Enforcement Date	Lead Agency	Reporting Obligations
Natural Heritage, 1972				• To maintain the status of listed cultural and natural world heritage sites ensuring that the sites do not fall into the "List of World Heritage Sites in Danger".
United Nations Framework Convention On Climate Change, 1992	1994 May 2	1994 July 31	MoFE	• National Communication Report • Nationally Determined Contributions • NAP/NAPA/LAPAs
United Nations Convention on Combatting Desertification (UNCCD) 1994	October 1996	13 Jan 1997	MoFE	• Linking UNFCCC and UNCCD • National Report on Implementation of UNCCD

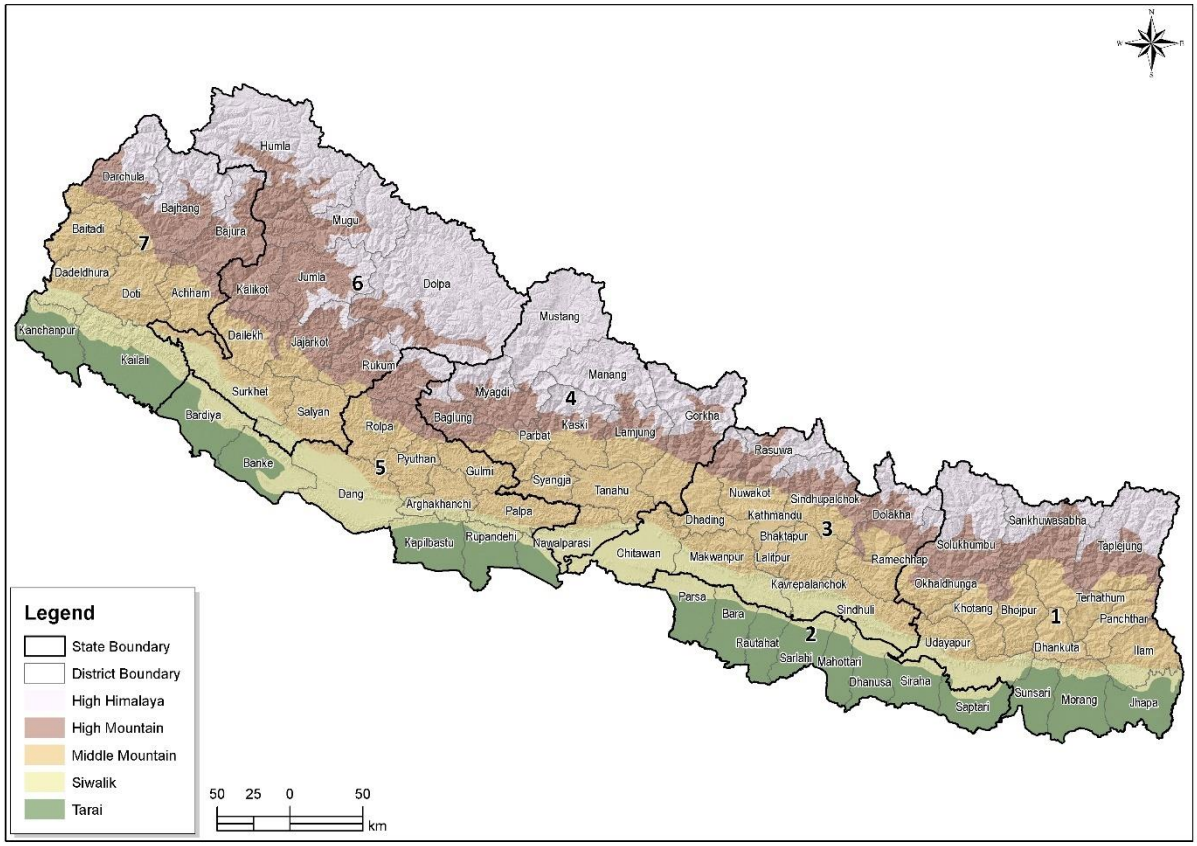
Legislation / regulations

- Forest Act 1993
- Community Forestry Development Directives 2015
- Forest Rules 1995
- Collaborative Forest Management Guideline 2003
- Community Forest Inventory Guidelines 2004
- Forest Products Collection and Sale Procedure 2015
- Scientific Forest Management Guidelines 2014
- Procedures for National Priority Program under Forest Area, 2017
- Standards for Importing Wood from Overseas, 2016
- Environment Protection Act 1995
- Environment Protection Rules 1996
- IEE/EIA Review Guidelines for Forestry Sector 2003
- National Parks and Wildlife Protection Act 1973
- National Parks and Wildlife Conservation Regulations 1974
- CITES Act 2017
- Local Government Operation Act, 2017
- Environment Friendly Local Governance Framework -2013
- Non-Governmental Service Providers Guideline 2003

Institutional Arrangements

Article 30 of the Constitution of Nepal ensures the right to a clean environment under fundamental rights. Further, under the Policy of State, Article 51 incorporated policies relating to the protection, promotion and use of natural resources (GoN, 2015). In 2015, the Constitution of the Federal Democratic Republic of Nepal came into effect, structuring the country into three levels: the federation (at the centre), seven states (provinces) and 753 local units (also called municipalities) - see **Figure 1-5.**

Figure 1-5: Nepal's new administrative structure and ecological regions



Local elections were held in 2017. Now all levels of government including Local, State and Federal governments and administrations have already started work. Recently the Government of Nepal decided to establish a Forest and Soil Conservation Department under the Ministry of Forests and Environment at Federal level. The department is headed by the Director General (Gazetted Class-1 Technical (Forest)). There are three divisions, each headed by a Deputy Director General, while each section is headed by a Gazetted Class II Forest Officer. Three sections under the DG are headed by concerned experts.

- Forest and Wildlife Protection Division with five sections (Armed Forest Protection, Forest Protection, Wildlife Protection, CITES and Certification)
- Forest Management Division with five sections (Forest Management, Silviculture, Social Forestry, Private and Public Forest, GIS and Mapping)
- Watershed and Land Management Division with six sections (Planning and Watershed Information System, Sensitive Watershed Management, Wetland Protection, Landslide Management, Conservation Technology Development, Land Use Development and Disaster Reduction)
- Personnel Administration Section
- Financial Administration Section
- Legal Consultation Section

At State level, a number of Ministries have been established including the Industry, Tourism, Forest and Environment Ministry. Under State government, there are State Forest Directorate (Divisional

Forest Officers and Sub Divisions, and Soil Conservation Watershed Management Offices) , Forest Research and Training Centers have been proposed. . At the local level, there is a provision for nature conservation including forest and wildlife protection. There have been huge exercises going on to set up forest divisions at local level. However, the decision has not been made at the present time (May 2018).

In forestry, there are number of stakeholders involved in the sustainable management of forests. This represents a fundamental change for Nepal with huge implications for the functions and responsibilities of government at all levels. **Table 1-12** explores some of the major areas of interest which need to be considered during program implementation.

Table 13-3. Concerned institutions and scope in the forestry sector

ions	Scope
Local communities	• Forest Policy (2015) and recently amended forest legislation has assigned sufficient rights to local communities including CFUGs, Collaborative FUGs, & Pro-poor leasehold FUGs to manage their forests and generate income and other benefits based on approved forest management plans. • Central government is committed to allocating a budget for CBFM through local government making such funds more accessible to them in future. • The 2nd amendment (2016) of the Forest Act (1993) has given increased autonomy to FUGs for utilising and benefitting from forest products and establishing enterprises • Community Forestry Development Program Guideline (revised 2015)[111] stipulates compulsory inclusion of women's names along with men's as members in the list of the CFUG`s constitution and joint ownership in forest tenure-ship, management and utilization rights. • One of the priority actions in the Forestry Sector Strategy (2016) is: "Promote gender equity, inclusive development and social and economic uplift of the poor, women, Dalits, Janajatis, Adibasi and other marginalised groups of people". • Nepal National Biodiversity Strategy and Action Plan 2014-20 has specifically incorporated the GESI strategy. • Recently parliament has endorsed the Nagoya Protocol on Access to Benefit Sharing which has created opportunities for benefiting sharing for IPs and local communities
Local level government	• Forest is included in the list of concurrent powers of the Constitution of Nepal. Based on this constitutional power-sharing mechanism, local government can develop plans and programs for the management of forests under their jurisdiction by following the forest-related federal and state laws. • Based on the Constitution of Nepal (Article 56 & 60) local government can collect local taxes from forest-based enterprises and business. This will be an important revenue source for local government in future. Therefore, by promoting and encouraging forest enterprise and business they can improve their tax revenues.
Civil society (CSOs & CBOs)	• Forest Policy (2015) has defined the roles of stakeholders (namely CSOs/CBOs) for their full and effective participation in forest sector policy processes and monitoring mechanisms. These stakeholders can thus actively advocate to influence policy process of the forestry sector. • CSOs/CBOs can also work to develop capacity of local government according to the Local Governance Act (2017).

[111] DoF, 2015. Community Forestry Development Program Guideline (revised 2015), CFD, DoF.

ions	Scope
Private Sector	• The 2nd Amendment (2016) of the Forest Act (1993) has opened a window for the private sector to form partnerships with government, cooperatives and communities for increasing forest productivity. Also for partnerships between government and the private sector for block forest management or leasing forest areas to private entities. • Provision has been made for 23 tree species and 13 NTFP species plus bamboo (bans & nigalo) for relaxed rules regarding harvest and transport in the 5th Amendment of the Forest Regulation (1995) • The same amendment has created a new opportunity for FUGs to establish and manage enterprises through private partnerships • The Industrial Enterprise Act (2017) has given greater assurance to the private sector for allowing any part of national forest to be leased for the commercial production of forest products to supply the industrial sector
Government agencies	• The new Constitution of Nepal has given exclusive power to Federal and states (Schedules 5 & 6) to formulate policy and legislation for the sustainable management of national forests. Based on this power the federation and states can more appropriately regulate the forestry sector taking into consideration priorities and needs of local government and communities. The enabling environments of different states may thus diverge according to the local context. • States are now able to establish their own Ministries for forest and environment with a single minister. • Combining forest and environment into a single federal ministry and also into single state ministries is an opportunity for the forest sector to benefit more from funding associated with climate change. • The Prevention of Corruption Act (2002) and Good Governance (Management and Operation) Act (2008) has given enhanced powers for government agencies to improve forest sector governance in the public sector including the forestry sector. • GESI strategy (2009) has now to be integrated into all aspects of forest sector planning and implementation
Development partners	• Forestry Sector Strategy (2016), draft REDD+ Strategy (2016) and the Project Bank in the Forestry Sector of Nepal (2015) have defined the key areas or sectors that need support from development partners. This will result in a more coordinated and effective level of international development cooperation in forestry • The Intergovernmental Fiscal Management Act (2017) has defined the priority areas for donor support with the aim of coordinating donor support.

Stakeholder Analysis

A stakeholder analysis was conducted based on the following categories: civil society, government, private sector (see **Table 1-13**).

Civil society stakeholders: Rural communities and their networks in the TAL area are interested in secure supplies of ecosystem services, particularly forest and grassland products (e.g. fuel wood, timber), disaster mitigation, and improved local microclimate and water supply. There is a range of national NGOs alliances and researchers relevant to the project involved in subjects such as climate change, watershed management, gender equality and NRM.

Private sector stakeholders: The proposed project for the TAL area should build capacity of the private sector and engage with local financial institutions and cooperatives on both farm and non-farm enterprises and the market value chain through a 5Ps (pro-poor public private partnership) approach. In the TAL, resilient livelihoods should be promoted through a range of economic activities based on ecosystem services including cultural services (eco-tourism), and provisioning services (dairy, vegetables/agriculture, and NTFPs and forestry). Through improving the enabling environment and incentive structures to engage with the private sector, the project should pave the way for scale up and replication in the future. Further, the project should collaborate with private firms and institutions to encourage the adoption of climate smart technologies in farm and non-farm enterprises.

Government stakeholders: A wide range of individuals were consulted from the government agencies. Consultations have already been undertaken at sub-national level and there is strong engagement of especially the Dept of Forest, Dept. of Soil Conservation and Watershed Management and Dept. of National Parks and Wildlife Conservation under the MoFE.

Table 13-4: Stakeholders with their roles, strengths and capacity building needs

A. Civil Society	Role of Stakeholders	Strengths	Capacity Building Needs
Community Forest User Groups (CFUGs)	Established for development, conservation and utilization for the collective interests of community forests-handed over according to Forest Act, 1993.	Strong and legally organized for protecting and managing forests. Very much interested to manage local forest for fulfilling local requirements by conserving landscape.	Landscape plan implementation, Biodiversity documentation and registration, Coordination with Local Level government, Green enterprise development, Green campaign, ecotourism, sanitation etc.
Collaborative Forest Management User Groups (CFMUGs)	Established for the management of government forests by collaborating among users, District Forest office and local level government. It aims to support local and national economy through forest development and sustainable management, supply of forest products to distant user by involving in forest protection, increase productivity of forests, protection and promotion of biodiversity and watershed area,	Local and distance users are legally organized for protecting and managing production forests Harmony between people to people in low land	Landscape plan implementation, Biodiversity documentation and registration, Coordination with Local Level government, Green enterprise development, Green campaign, ecotourism, sanitation etc. Corridors and connectivity management

A. Civil Society	Role of Stakeholders	Strengths	Capacity Building Needs
	and improve livelihoods of local people.		River bank protection, Catchment pond, Conservation pond River system-based management Agro-forestry based Public land management
Buffer Zone-Community Forest User Group (BZ-CFUG)	Established to manage forests around protected areas (PA) aiming to: (1) address the local communities needs and demands of forest resources (e.g. firewood and fodder) and generate income from tourism, (2) reduce the dependency of local population on PA resources and thereby mitigate the pressures on PA forest resources and eventually improve biodiversity and wildlife habitat restoration, (3) conserve forest as extended habitat for wildlife, (4) motivate local communities for PA management, biodiversity conservation, forest management and, (5) eventually resolve park-people conflicts over resource use and thereby harmonize park-people relations.	New model to reduce conflict between PAs and local people Greening buffer areas to mitigate and adaptation	Coordination with Local Level Government, Human-Wildlife Relation management, Up-stream down-stream landscape planning process, Water harvesting and River bank protection
Federation of Community Forestry Users Nepal (FECOFUN)	An umbrella organization of community forest user groups registered in the government institution, aiming to conduct advocacy and empowerment of CFUGs to encourage proper utilization and equitable sharing of benefits from community forests.	Appropriate platform to discuss policy formulation and evaluation	Watershed based organization PES and sustainable financing Coordination with Local Level Government
Nepal Federation of Indigenous Nationalities (NEFIN)	An umbrella organization of indigenous peoples/nationalities which is registered in the government institution, is widely distributed across Nepal and is a member of the United Nation's Working Group on Indigenous Populations.	A good initiation for advocacy on forest conservation and climate change impact	Forest-watershed management planning and monitoring PES establishment for sustainable financing for mitigation and adaptation

A. Civil Society	Role of Stakeholders	Strengths	Capacity Building Needs
Nepal Agriculture Research Council (NARC)	Aiming to conduct qualitative studies and researches on different aspects of agriculture, to identify the existing problems in agriculture and find out the solution and to assist government in formulation of agricultural policies and strategies.	New variety for food security	Biodiversity documentation and registration Seed Bank Biodiversity Conservation and Access and Benefit Sharing on Genetic Resources

B. Private Sector	Role	Strength	Capacity building needs
Nepal Herbs and Herbal Products Associations (NEHHPA)	An umbrella organization of Nepalese herbal producers, manufacturers and traders in the sector of Non-Timber Forest Products (NTFPs), particularly Medicinal and Aromatic Plants (MAPs) aiming to promoting Nepal's unique herbs and herbal products at the national and international levels and to strengthening responsible business through producing and marketing quality products.	Helped local people by providing proper values of NTPFs and encouraged then to be involved in enterprises	Business plan, Public-Private Partnership model
Federation of Nepalese Forest-based Industry and Trade (FeNFIT)	Aimed to take necessary steps towards stabilizing the industry by contributing to the conservation and development of Nepali forests and at the same time strengthening the national economy as well as making use of the forest in a scientific and legal way.	Awareness has been increased on the timber business, focusing on progress towards sustainable forest management principles	Investment model development Training for Saw Mill staff Coordination with Bank and Forest User Groups
Federation of Nepalese Chambers of Commerce and Industry (FNCCI)	FNCCI is a leading institution of Nepal on commerce and industry and has a wing to look after the private sector investment in forestry.	Established a unit for the development and promotion of forest enterprises	Enabling environment for investment in sustainable forest watershed management
Jadibuti Association of Nepal (JABAN)	Aim to make sustainable use of the country's natural resources and provide necessary support to rural communities for	Focusing on the use of Nepalese NTFPs and MAPs in Nepal and value addition	Business planning Marketing information management Biodiversity conservation and Access and Benefit

	producing and marketing quality products		Sharing on Genetic Resources

C. Government Institutions	Role	Strengths	Capacity building needs
Legislative assembly Federal-Parliament members State-parliament members Local government: - Rural municipality - Municipality - District Coordination Committee	Local Government Operation Act 2017, Clause 11 (2) provisioned the rights of Municipalities and Rural Municipalities, including: -local roads, rural roads, agricultural roads and irrigation -Agriculture and livestock development, agriculture production management, veterinary services, cooperation -Drinking water, micro-hydro, alternative energy -watershed, wildlife, mining and mineral protection -Disaster management	Constitutional provision for environmental management at Federal level, Disaster management at Province level, and watershed conservation at Local level	Basin level planning and international coordination for Federal level, Watershed Level planning and PES development for State level and sub watershed level planning for local level, Biodiversity conservation and Access and Benefit Sharing on Genetic Resources.
Executive bodies State government Local level government	Planning and budgeting at concerned level	Provision on nature and natural resources	River Basin approach, IWS management, PES, Biodiversity Conservation
Ministry of Forests and Environment (MoFE)	A governmental body of Nepal responsible for the management forests in the country. Its main purposes are to enhance sustainable manage of forests, and biodiversity. Aims to promote sustainable development of the country through environmental protection; conserve the natural environment and cultural heritage; create a clean and healthy environment; move towards poverty alleviation through environment related research activities; encourage the involvement of academics, scientists and intellectuals in environmental decision-	Policy and legal commitments on forest and watershed management, climate change mitigation and adaptation program. National report on climate change through nationally determined commitments for UNFCCC, and on desertification for UNCCD.	Forest-watershed basin level management PES establishment Biodiversity conservation and Access and Benefit Sharing on Genetic Resources Environmental Assessment

C. Government Institutions	Role	Strengths	Capacity building needs
	making; and coordinate adaptation and mitigation programs in order to minimize the negative impacts of climate change.		
Planning, Monitoring and Coordination Division (of MoFE)	Coordination of policy and planning for MoFE, preparation and approval of programmes, coordinate budget implementation for ODA projects with MPC and MoF, coordinate research, coordination with NGOs and INGOs, etc.	Main coordination body within MoFE at Federal level to support integrated landscape management	Strengthened integration of conservation and development Strengthened Environmental Assessment for development in environmentally sensitive areas Forest-watershed basin level management Biodiversity conservation and Access and Benefit Sharing on Genetic Resources Integration of climate change adaptation into policies and plans
Department of National Parks and Wildlife Conservation (DNPWC) (of MoFE)	Includes the conservation of endangered and other wildlife species, the scientific management of habitat for wildlife species, the creation of buffer zones in and around parks and reserves for the sustainable management of forest resources, the organisation of eco-tourism to improve socio-economic conditions of local communities, and awareness-raising of the importance of wildlife conservation through conservation education.	Conservation of wildlife and especially large charismatic wildlife species	National parks and wildlife reserves management Human-wildlife relation improvement Zoo and orphan centers management
Department of Forests and Soil Conservation (DoFSC) (of MoFE)	DoFSC is the only government agency for the sustainable management, utilization, protection and	CBFM is encouraged	Forest Watershed level plan PES establishment

C. Government Institutions	Role	Strengths	Capacity building needs
	development of forest resources outside the protected areas.		
Department of Plant Resources (DPR) (of MoFE)	Conducting and providing services in the field of research and development of plant resources in Nepal. It is a multidisciplinary organization comprising mainly of botanists, chemists, pharmacists and veterinary practitioners.	Conservation and research on MAPS and NTFPs	Biodiversity documentation and characterization Coordination with research, training and extension
Department of Forest Research and Survey (DFRS) (of MoFE)	Mandated to conduct forestry research and survey to produce knowledge and information for sustainable management and utilization of forest resources of Nepal.	State of Nepal's forests published	Operational level plan Coordination with research, training and extension Publishing an Atlas on Micro-watersheds, Sub-watersheds, Watersheds and Basins
Ministry of Agriculture and Livestock Development Department of Agriculture (DoA) Department of Livestock Service (DLS)	MoALMC is responsible for increasing agricultural productivity, promoting sustainable agriculture development and knowledge based farming, and supports livestock management and development. DLS is responsible for pasture management, feed development and livestock breeding at national level.	Technical assistance and extension services for sustainable land management, sustainable livestock husbandry practices, strengthening value chains for agricultural commodities	Coordination and training at all levels on integrated landscape management approaches
Ratrapati Chure Terai Madhesh Conservation Development Board (RCTMCDB)	Aims to coordinate and create an enabling environment to conserve the Chure area for the betterment of ecosystems and livelihoods of the people by implementing the Master Plan.	Master Plan for Rastrapati Chure Terai Madhesh Conservation and Management approach is being implemented	Mainstreaming all sectors activities in the Chure area and investment.

C. Government Institutions	Role	Strengths	Capacity building needs
National Planning Commission (NPC)	Important aims include to: formulate basic development policies and prepare periodic development plans accordingly within the framework of a long-term development perspective, explore internal and external resources as well as indigenous and foreign technology and recommend suggestions to GoN to accelerate the pace of development as well as to explore innovative approaches for sustainable development based on the economic situation of the country.	Periodic plans prepared for forest and soil conservation including climate change mitigation and adaptation	Program and budgeting based on the periodic plan Legitimize the working policy into practice such as landscape level planning
Alternate Energy Promotion Center (AEPC)	A government institution established under the Ministry of Population and Environment with the objective of developing and promoting renewable/alternative energy technologies in Nepal.	Contributing towards sustainable development goal	Coordination with Local Level government Model village development
Para-State Organizations			
National Trust for Nature Conservation (NTNC)	Established by Legislative Act as an autonomous not-for-profit organization, mandated to work in the field of nature conservation in Nepal. The goal of The National Trust for Nature Conservation is to preserve the natural heritage and in so doing, to achieve a high quality of human life.	Conservation and Development approach	Research on Forest and Wildlife and Watershed management

APPENDIX 14: EX-ACT CALCULATIONS

See Google Drive URL for Appendix 14
https://drive.google.com/drive/folders/1b4I_zTENuXoecdAD9pD9JK0W8E6rJ8IS?usp=sharing