Improving Climate Resilience of Vulnerable Communities and Ecosystems in the Gandaki River Basin, Nepal

Annex 6 (a):
Environmental and Social Management Framework (ESMF)

20 May 2020

Contents

Abbreviations

CBO	Community Based Organization
CFUG	Community Forest User Groups
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
FEO	Field Execution Office
FP	Focal Point (IUCN Regional ESMS Focal Point and National ESMS Focal Point)
GCF	Green Climate Fund
GHGs	Green House Gas
GIS	Geographic Information System
GoN	Government of Nepal
GRB	Gandaki River Basin
ICIMOD	International Centre for Integrated Mountain Development
IPP	Indigenous Peoples Plan
IUCN	International Union for Conservation of Nature
MOFE	Ministry of Forests and Environment
NBSAP	National Biodiversity Strategy and Action Plan
NDA	National Designated Authority
NEFIN	Nepal Federation for Indigenous Nationalities
NGO	Non-Government Organization
NTFP	Non-Timber Forest Products
PES	Payment of Ecosystem Services
PMU	Project Management Unit
PRA	Participatory Rural Appraisal
PTL	Project Team Leader
SDG	Sustainable Development Goals
SIA	Social Impact Assessment
SOP	Standard Operating Procedures
ToR	Terms of References
UNDRIP	United Nations Declaration on the Rights of Indigenous People
VDC	Village Development Committee

1. Project description and rationale for ESMF

1.1 Brief description of the project

In view of the high vulnerability of the GRB to climate change (including increased frequency and intensity of rain, floods and landslides), this project is designed with an objective of improving resilience of the communities and ecosystems in the GRB.

The objective of this project is to improve the resilience of climate vulnerable communities and ecosystems in the GRB. This objective will be achieved through the achievement of three outcomes and nine outputs as presented in Table 1.

Table 1: Project outcomes, outputs and activities

Output	Activities	Description
Outcome 1 – ***Enhanced resilience of the livelihood of vulnerable communities, through better adaptation to climate change***		
Output 1.1: Climate resilient agroforestry and livelihood improvement actions implemented for coping with extreme events		
1.1.1. Establish climate resilient agroforestry practices		The declining productivity of rainfed agriculture due to reduced water availability stemming from climate change, youths from rural areas are migrating abroad abandoning agricultural land affecting negatively to food security. Agroforestry, that requires less labour, has been found as a best bet option to cope with reducing water availability and bring back abandoned agricultural land to production. The project will establish agroforestry (of multipurpose trees such as Lapsi (*Cheropondrias oxilaris*, Bel (*Aegle marmalos*)); bamboos, Ipil-Ipil, Bauhinia, etc in 500 ha in vulnerable area.
1.1.2. Construct small nature-based structures (bamboo check dams, plantations of grass and trees)		This proposal is built on the learning of the Ecosystem based Adaptation Approach (of BMUB supported Mountain EbA Project and the Eco DRR project (ecosystem protecting infrastructure and communities – EPIC), restoration of agricultural lands damaged by landslides and floods will be done by using bioengineering approach. The approach constitutes the use of bamboo check-dams, plantation of grass and trees. The approach will be focussed in 15 highly and very highly vulnerable locations in GRB,the need of which was identified during consultation. The project aims to develop a finer detail ste specific plan at the time of implementation.
1.1.3. Promote drought and flood tolerant varieties (at least one drought tolerant variety (wheat) for hill districts and one flood tolerant (paddy)) variety for Terai and plain areas in the Chure and Inner Terai.		To mitigate the impact of flooding and longer inundation of the rice field in Terai and Inner Terai, a flood tolerant rice variety will be identified, introduced and farmers' capacity to adapt to tolerant variety will be enhanced through training and demonstration of a variety in Nawalparasi and Chitwan districts and some plain areas of Makawanpur and Kaski and Lamjung. The area under rice in Nawalparasi and Chitwan in 2014 was 77,025 ha and production was 297,330 mt. Even 50% area being affected by flood and longer-term inundation, adoption of flood tolerant variety of rice will protect at least 148,665 mt of rice contributing to achieve food security during catastrophic flood and inundation of rice field mainly in Nawalparasi and Chitwan.
		Likewise, to mitigate the impact of longer term drought, a drought tolerant variety of wheat will be identified, introduced and farmers' capacity enhanced to cultivate in the hills, it will protect at least 50% of wheat area (50% of 133,498ha) being affected by longer drought and secure production of 177,966 mt (50% of 355,933 mt) in GRB districts.
Output 1.2. Interventions for water availability and water use efficiency from irrigation systems and improved water sources implemented		

1.2.1. Reconcile a water model for the entire GRB	From the several sub-basin level models, a separate model will be reconciled for the entire GRB. The hydrological model will be used to analyse water balance, hydrological flows, etc. and further validate the extrapolated data using the soil and water assessment tool (SWAT model) based expertise from IWMI and the Nepal Department of Hydrology and Meteorology (see Annex 2b).
1.2.2. Construct small scale irrigation systems through improved community participation	In areas where water availability is decreasing but there is still a possibility of promoting surface irrigation through gravity flow, farmers will be supported to establish small scale irrigation schemes by diverting stream water in consultation with the community in the downstream. This community owned system will be engineered, implemented and managed by the community themselves. About 300 (100 small, and 200 micro) such schemes will be supported. Each small irrigation will cover at least 100 households and 100 ropani land (one ropani per family). Some micro schemes will be also supported in some small isolated vulnerable pockets. For each micro scheme, there should be at least 20 families involved with at least 20 ropani land (1 ropani = 500 sq.m.). Modelling of outflow and inflows will be done to ensure a water balance although outflows are expected to be minimal
1.2.3. Establish water harvesting systems (conservation ponds, water reservoirs) and promote water use efficiency through drip and sprinkle irrigation, and the use of waste water	Though the intensity of monsoon rain has increased, the monsoon season is shortened. As a result, the water scarcity in the post monsoon period and in winter has further increased in the recent past. Construction of conservation ponds, water reservoirs and collection of rainwater during the monsoons for supply in the post monsoon period and winter has already been a proven possibility through small scale researches in Nepal. In this project, this possibility will be scaled-out to various places with such feasibility. Water harvesting system during monsoon will not only make water available for the post monsoon and winter but also recharge underground water sources and enhance microbial in the soil to keep soil fertility maintained. In addition, such conservation ponds will also reduce the velocity of surface run-off waters and soil erosion. It also makes water available for wildlife. This project will promote such schemes at least in 310 vulnerable locations (benefiting 7,750 hectares) that will be identified by a local level consultant with the support from the local government officials and the potential water users' groups.
1.2.4 Improve water availability through construction and maintenance of water holes in community grasslands	Water harvesting system during monsoon will not only make water available for the post monsoon and winter but also recharge underground water sources and enhance microbial in the soil to keep soil fertility maintained. In addition, such conservation ponds will also reduce the velocity of surface run-off waters and soil erosion. It also makes water available for wildlife. This project will promote such schemes at least in 310 vulnerable locations (benefiting 7,750 hectares) that will be identified by a local level consultant with the support from the local government officials and the potential water users' groups. Most of the pasturelands in GRB are in rain shadow area. Increasing temperature and drought due to climatic condition has made these areas further dry. Water management and water hole construction is deemed necessary for livestock farming. Waterholes in the pastureland will be created by channelling water from permanent water sources to ensure the water availability for livestock in their managed grazing area. Construction of such water holes will be supported in 30 vulnerable community grasslands, the site specific finer detail of which will be identified by the local consultant with the support from the local government and communities at the time of implementation..
Outcome 2 – ***Strengthened climate resilience of ecosystems***	
Output 2.1. Natural ecosystem restoration based actions implemented for reducing impacts of landslides and floods	

2.1.1. Construct climate resilient green belts to protect forests, wetlands, grasslands and conservation ponds from landslides and floods	Construct green belts by applying bio-engineered structures and some engineering work (check dams) combined with nature based solution such as planting grasses, bamboos in gullies will be constructed to channel the water flow properly during the monsoon and halt further expansion of gullies. Increasing erratic and heavy rainfall due the climate change (that have been experiencing) in the GRB causing more flash floods which damages nearby agricultural field by depositing gravel and sand. Plantation in 8 km green belts along river and stream banks will help to protect the river bank from erosion hence check the degradation of land quality. Enrichment plantation and reforestation activities will be conducted in such degraded forest sites to reduce water runoff thereby preventing surface erosion protecting 2,500 ha forest land, 750 ha wetlands, 500 ha grasslands; and 320 conservation ponds. As most of the project sites are either in high mountains or in mid hills, there are numerous gullies formed by erratic rainfall. Some engineering work (check dams) combined with nature based solution such as planting grasses, bamboos in gullies will be constructed to channel the water flow properly during the monsoon and halt further expansion of gullies in 700 sites.
2.1.2. Apply bio-engineering techniques to provide structural support for erosion prone rural forest roads.	In order to prevent road-slides and soil erosion due to intense rain during monsoon, plantations will be done along such slide prone rural roads. This is important to maintain the rural accessibility during and after the extreme monsoon rains. Plantation along 70 km rural road will be carried-out by the project. The other required structures will be designed at finer scale during implementation.
2.1.3. Restore the biodiversity of vulnerable forests and grassland ecosystems through the removal and (productive) reuse of invasive species	It has been experienced that invasive plant species, including some alien, are coming up in the GRB, with the changed patters of climate. The growth of invasive species, Mikania micrantha, Lantana and Parthenium in the low land terrestrial habitat and water hyacinth in wetlands have already threatened biodiversity and has been a conservation challenge in Chitwan National Park (low land of GRB) and its buffer zone. Similarly, agricultural as well as public lands in mid hills are invaded by Ageratina adenophora, and Ageratum conzoides. Likewise, the understory of forests was reported as being heavily invaded by Ageratina adenophora, and local species such as Lyonia ovalifolia (Angeri), Hadeunyeu, Katre kanda, and Bilaune. In order to restore biodiversity, these invasive species will be managed by uprooting and reusing in value added production in 50 community forests (1000 ha on an average 20 ha per CF), and 10 community grasslands (100 ha @ 10 ha per CG). The private sector adding value to the invasive species removed from the community forests will get regular supply of their raw material for charring and briquette making while community forest members get incentive to control invasive species in their forests.
Output 2.2. Technical capacity of GRB communities enhanced in maintaining and supporting climate resilient ecosystems	
2.2.1. Create new SOP's that support future interventions on agroforestry, forestry, wetlands and grasslands management	A Standard operating procedure (SOP) describing a set of step-by-step instructions will be created and complied by the project to the help communities and the local government to carry our complex routine operation in designing and implementation of activities for the management of agroforestry, forestry, wetlands and grasslands. It aims to achieve efficiency, quality output and uniformity of performance, while reducing miscommunication and failure to comply with existing regulations.

2.2.2. Provide technical training to enhance capacity of CFUGs and NGOs in vulnerable communities in maintaining climate resilient ecosystems	Beneficiary Community Forest User Groups (CFUGs) and NGOs will be trained to capacitate them to operate and maintain climate resilient ecosystems. CFUGs and NGOs will be made able to use an extensive and dynamic menu of EbA options and propose projects that meet their specific requirements for enhancing their forest ecosystem resilient. This practice will promote community buy-in, make effective use of traditional knowledge and contribute to the long-term sustainability of the project interventions. Why not also add in some innovation here that connects continued invasive species control with benefits to communities such as that tried by Conservation International in which conservation agreements are signed with community groups for getting them premiums from private sector companies/offtakers for their agricultural produce in exchange for them taking on resilience measures and maintaining the removal of invasive species, which will keep coming into the project areas even after the project is over otherwise
Outcome 3 – ***Strengthened climate governance and institutional framework to sustain climate***	
Output 3.1:Community-based mechanism for planning, restoration, monitoring, and maintenance of ecosystems established	
3.1.1. Technical assistance for community based planning and development of site specific management structure and tools for conservation and restoration of ecosystem	This is a technical assistance for the development of planning and management structures and tools for conservation and restoration of ecosystem. These are community-based tools for site-specific EbA measures in the target landscapes. The specific type of assistance will be decided in consultation with the local government during field implementation of the project.
3.1.2. Develop community-based monitoring and maintenance programmes through the local and regional management structures to maintain restored ecosystems	For sustainable results, the restored ecosystems need doable monitoring and maintenance programme that is operated by the community. The operation will be supervised by the local and provincial level government structures. For example: monitoring of climate parameters and extreme events; rate of drying out of water sources, human health hazards, monitoring of climate indicator species such as pyrethrum, dengue fly, citrus psylla, distribution shift of flora and fauna, etc
3.1.3 Training and supporting communities in clusters to track the restoration and conservation of the ecosystems in target areas	The projected future scenarios of climate change have reflected that climatic conditions in Nepal will worsen, with more frequent extreme events occurring and impacting farmers. Nevertheless, as studies have shown, farmers' capacity will be enhanced in the GRB through the operationalisation of farmer field schools ensuring at least one demonstration site and training centre in each of 19 districts. It will increase the level of confidence of farmers in adopting the right measures to mitigate the potential impacts of predicted climate change and thus making the farming community more resilient to the challenges posed by climate change. There will be 50 such field schools run by the project. This model will be mainstreamed in the plans and policies of the local government and replicated by the local government in other municipalities gradually. In addition, communities will be also trained and supported to manage climate refugees and human wildlife conflicts in the target area.
3.1.4 Link upstream and downstream vulnerable communities through climate informed management of spring-shed and water source protection	Flooding, inundation and sedimentation during monsoon and too low or no water during winter are problems in the downstream many of which could be reduced through changed or improved land use practices in the upstream. In order to make the upstream aware of such problems and follow joint planning, vulnerable communities in the downstream will be linked to the communities in the upstream through management of spring-shed, land use practices and water source protection in upstream. This support will be provided in 30 vulnerable sites. The specific sites with finer detail will be identified during implementation with the support from the local government and community members.
Output 3.2. Ecosystem-based climate change adaptation approaches incorporated into government policies and plans	
3.2.1. Prepare River Basin Management framework with integrated sub-riverine watershed	In view of the recently changed governance system of the country to federal system, the project has taken an approach of supporting

and water resource management plans for the GRB that includes forests, grasslands, fisheries, wetlands and agro-ecosystems.	local governments to prepare sub-watershed level plans, provincial governments with watershed level plans and federal governments with river-basin level plans. At each level, the plans will be integrating forest, grassland, wetland and agro-ecosystems.
3.2.2. Development a framework for assessment for economic valuation of ecosystem and ecosystems services to support planning	For the sustainability of the project results, provincial and local government will need to allocate budget for the maintenance of the restored ecosystems and continued flow of ecosystem services. In order to persuade the finance people to allocate sufficient budget, there is a need to show the value of ecosystem services in return. Hence, this project will develop an acceptable method of valuing ecosystem services in GRB, that can be understood and used by local, provincial as well as Federal Government in the entire country. The valuation method tried by EbA project will be further reviewed and revised to make it generic for the GRB as ultimately for the country.
3.2.3 Policy Development for local governments to incorporate climate change adaptation and EbA into their Integrated Development Plan	Integrated Development Plan (IDP) is a required document for all local governments, while Local Adaptation Plans for Action (LAPA) is optional and can be prepared as they go along. As the local governments are in the process of preparing IDPs, incorporation of climate change and environmental issues might be overlooked. They will need to have information and capacity to be able to do so, and this is an unforeseen cost to government to incorporate climate change issues in IDPs. The project aims to support 50 local governments and generate information and create local government capacity to do so such that it will be replicated by the Provincial Governments of the GRB and then gradually by other local bodies too of other provinces.
Output 3.3. Knowledge management established for climate resilient River Basin Management	
3.3.1. Establish National and GRB level system for collating data and information on global best practices, lessons learnt, evidence from the field and scientific knowledge on ecosystem- and community-based approaches to adaptation.	A system for collating data and information on global and regional best practices, lessons learnt and evidence based scientific knowledge is not well-developed in Nepal. Location specific such system is more particularly lacking in GRB. There will be one GRB level and three ecological zone level (mountain, hill and Terai) systems established by the project at four centres (at Mustang for Mountain, at Pokhara for hill, Kaski; and at Chitwan for Terai ecozone). The Kaski one will serve at GRB level as well. The system will include MIS on climate change impacts and adaptation measures, climate change adaptation programmes in operation in GRB, market information on adaptation technology and tools, information on access to finance for adaptation, etc.
3.3.2. Capacitating three Provincial government in creating an online platform and associated mobile phone application to facilitate access to information in the Decision-Support Tool for decision-makers, communities, NGOs/CBOs and other relevant stakeholders, as well as to allow them to upload data for tracking changes in ecological and socio-economic vulnerability to climate change in the GRB.	Tracking changes in ecological and socio-economic vulnerability to climate change is important for decision making and selecting appropriate adaptation measure. However, there should be a system where-in communities, NGOs/CBOs and other relevant stakeholders can upload the data for tracking changes in ecological and socio-economic vulnerability and accessing such information for coping with the potential disaster in the short-term and adopting adaptation measures in the longer-term. The project will support the development of an online platform that will be managed by the PCU of Province 4
3.3.3. Generation of the baselines data and mapping of vulnerability, hazard sites, ecosystem services and facilities in communities based on risk profiles	Except 18 communities in Panchase (Kaski district) and Chilime (Rasuwa district) under EbA project baselines data and mapping of vulnerability, hazard sites, ecosystem services and facilities are not available. This information is must for communities to prepare their adaptation plan. Project aims to support 50 communities to adapt to the best option and be well-prepared to cope with potential disasters such as drought, torrential rain, landslides and floods. This will be done in close collaboration with the local bodies and the generated information will be maintained by them for sustainability reasons

3.3.4 Establish climate change adaptation knowledge sharing and learning structures within key clusters to facilitate climate resilient planning and management	The proposed climate change knowledge sharing and learning is organised around the knowledge based management initiatives, more specifically through adaptation knowledge sharing. The knowledge management structure facilitates the development of a "knowledge culture" within key clusters by first supporting the decision making of knowledge workers through collaboration in planning and management, and by facilitating the exchange of tacit knowledge through interaction with other knowledge clusters in the GRB. This project will support to establish such structure at three locations as in 3.3.1.

1.2 Project proponents

MOFE: The project will be led by the Ministry of Forests and Environment (MOFE), as an Executing Agency (EA), in partnership with the Provincial/Local governments, IUCN Nepal and the National Trust for Nature Conservation (NTNC). These organizations have extensive experience in applying nature based solutions to climate change, track records in promoting equity, extensive management, and project delivery.

IUCN: As an Accredited Entity, IUCN will oversee the project implementation and be accountable to GCF. IUCN will be responsible for ensuring that appropriate standards are adhered to, including procurement, finance, reporting and monitoring, and environmental and social safeguards.

NTNC: NTNC is a semi-government agency having over 35 years of experience in the field of nature and natural heritage conservation in Nepal.

NTNC has successfully implemented self-financing community based protected area management in the Annapurna Conservation Area. In addition, it has promoted alternative energy programs to address climate change. It has successfully restored degraded sites that are now major tourism attractions. This is the only organization in the country with extensive experience in community mobilization for integrated conservation and development activities. NTNC has been crucial for knowledge generation and innovation; community engagement; capacity development and institutional strengthening of women and disadvantaged groups; policy development and advocacy. It has far-reaching presence in the GRB with physical presence in almost 40 per cent of the districts in the GRB. NTNC also has experience in disaster management and the construction of infrastructure for community resilience.

1.3 Geographical location

The GRB lies between 27.035^0 to 29.033^0 North latitude and 82.088^0 to 85.080^0 east longitude. In Nepal, GRB falls in Province number 3 (five districts), 4(11 districts), and 5 (three districts) in western part. The GRB extends from the tropical lowland Terai districts (Nawalparasi and Chitwan) (~200m above sea level (asl)) to the high mountains and beyond to the cold and dry Trans-Himalayan districts (Mustang, and Manang) (above 4,000m asl), with peaks exceeding 8,000m. Also refer to the maps in chapter 3 (figure 1 and 2).

1.4 Project area of influence and beneficiaries

The project aims to improve the resilience of 198,016 vulnerable households as indicated in Table 2. The identification of beneficiaries is based on a district-wise vulnerability assessment conducted by NAPA. In order to be able to also take ICIMOD's vulnerability analysis into account a further analysis will be carried out during the inception phase of the project to ensure the number of household under each categories of NAPA classification (by district) is included under each category (by sub-basin).

Table 2: Beneficiary household coverage target in the Gandaki River Basin

Vulnerability status	Districts	Total households		Target coverage %	Target households
		No.	%		
Very high	Lamjung	42,079	3.59	45	18,936
High	Chitwan, Dhading, Gorkha, Manang,	274,299	23.39	25	68,575
Medium	Mustang, Nawalparasi, Makawanpur, Tanahu, Kaski, Parbat, Baglung, Myagdi, Rasuwa	557,037	47.51	15	83,556
Low	Syangja, Gulmi, Arghakhanchi, Nuwakot	239,852	20.46	10	23,985
Very low	Palpa	59,291	5.06	5	2,965
Total		**1,172,558**	**100**	**100**	**198,016**

The proposed number of beneficiaries represents 16.88 per cent of the total population in GRB. The number of women benefitting from the project is expected to be slightly higher than the men - 445,800 women as opposed to 387,847 men (or about 53.46%) due to the demographic constellation of GRB. A large portion of the beneficiaries are considered members of vulnerable groups such as women in disadvantaged situations, Dalits, indigenous people, ethnic groups, and marginalized and resource-poor people.

The project will implement field interventions in the seven sub-basins of the Gandaki River Basin. The actual sites and communities for the field interventions are not defined yet. The feasibility was conducted in eight clusters (in the seven sub-basins plus Chure in Rapti River basin), but the final selection of the exact sites for execution of project interventions will only be decided during the project's inception phase after having gathered and verified additional vulnerability data from ICIMOD. The site selection process will include consultation with the newly established Provincial and Local Governments, civil society organizations and communities.

1.5 Rationale of ESMF

The IUCN ESMS screening report (see Appendix 1) concluded on the need to develop an Environmental and Social Management Framework (ESMF) as the specific sites (villages/communities) for field interventions will only be decided during the project's inception phase. The exact activities to be implemented in the identified sites (in the following referred to as sub-projects) will also only be known after site selection and after having carried out a participatory planning process together with relevant stakeholders at the local level.

The purpose of the ESMF is to serve as guidance for ensuring that the sub-projects – once defined - will be appropriately assessed on potential environmental and social impacts and, where risks have been identified, that impacts are avoided by design changes or measures have been put in place, in consultations with affected groups, for reducing or mitigating impacts.

The ESMF will provide an analysis of the relevant policy and regulatory framework in Nepal and identify implications for the project to ensure compliance on environmental and social matters. It further identifies potential environmental and social risk issues at a high level, based on the generic project activities that are already known at this stage, including recommendations for avoiding or mitigating identified risks. It also delineates principles, concrete procedures and steps to be taken for screening, risks assessment and monitoring as well as the respective organizational responsibilities and arrangements for implementing these procedures. It will also

explain relevant provisions and tools to be adhered with to ensure compliance with the four IUCN ESMS Standards.

1.6 ESMF preparation process

The ESMF was prepared based on the results of ESMS screening. The list of project activities was assessed against the E&S standards and the activities that could potentially trigger the standards were identified. In consultation with the experts and by following IUCN ESMF guidelines, mitigating measures were designed. These measures were verified with the representative community level stakeholders and local government authorities. Institutional arrangement for the implementation of the work-plan was identified. A tentative work-plan to implement such measures was developed with estimated costs for implementation. The ESMF (in English) has been publicly disclosed on the IUCN and MOFE website. A non-technical summary of the ESMF has been prepared and translated in Nepali to be made available to local stakeholders.

2. Policy, legal and institutional framework for social and environmental matters

2.1 Overview of the policies and the legal and regulatory framework relevant for the project

The following section provides details on policy, legal and institutional framework for social and environmental matters relevant to climate change and natural resource management. The key frameworks relevant for the project are described in Table 3.

Table 3: Policies and the legal and regulatory framework

SN	Framework	Environmental provision in the framework	Relevance for the project	Relevant Institutions
1	Constitution of Nepal 2015	• Each person shall have the right to live in a healthy and clean environment' and ensures legal provisions to strike a balance between environment and development. • The Constitution of Nepal prioritises investment in water resources and disaster preparedness to minimize risk of natural disasters	• The project aims in improving resilience of climate vulnerable communities and ecosystems in Gandaki River Basin through a balanced approach of watershed conservation and enhancement of ecosystem goods and services which fairly comply with the constitutional provisions of achieving right to live in healthy environment.	Government of Nepal
2	Environment Protection Act (EPA) (1997) and Environment Protection regulation 1997, amended in 1999, 2007, 2009 & 2010	• The Environment Protection Act is a comprehensive and umbrella type environmental Act; followed by Environmental Protection Regulation and respective amendments which are enforced through appropriate regulatory measures. Section 3 of the Act requires the proponent to conduct an IEE and EIA in relation to the prescribed proposals. Section 4 of the Act prohibits implementation of development proposals without prior approval of the concerned agencies or Ministry of Environment (MoE). • The Environmental Protection Regulations (EPR) 1997 Section 3 defines threshold of project activities that require IEE (Appendix 1) and EIA (Appendix 2) • The clause (K) of schedule 3 (sensitive area criteria) states, "projects located within or near environmentally sensitive areas, required to have an Environmental Impact Assessment (EIA) report prepared (unless exempted by the Act)".	• Schedule 2 of the 1997 Amendment to the Environment Protection Regulation provides a list of activities that require an EII/EIA. The list has been screened but none of them correspond to the project and its activities. Therefore it has been concluded that an Environmental Impact Assessment is not needed.	Ministry of Forests and Environment
3	National EIA Guidelines (1993)	Provides criteria for project screening and initial environmental examination (IEE); includes provisions for scoping, preparation of terms of reference for EIA, methods of EIA report, impact identification and prediction, impact mitigation measures, review of the draft EIA report, impact monitoring, evaluation of impact studies, impact auditing, community participation and schedules and annexes to IEE and EIA.	• This guideline further defines the procedure that should be followed by the sectoral institutions. There are sectoral guidelines for each sector, for example, there is guideline for agriculture, water resources, forestry, etc.	Ministry of Forests and Environment, and Related Ministries for sectoral guidelines.

4	Environmental Standards (Appendix 1)	GoN has formulated different environmental standards including Nepal Water Quality Guidelines for the Protection of Aquatic Ecosystem, 2065BS (2008); Nepal Drinking Water Quality Standards, 2063BS (2006); Tolerance Limits for Generic Industrial Effluent Standards Discharged into Public Sewers & Inland Surface Water, 2060BS (2003); Tolerance Limits for Effluent Standards Discharged into Inland Surface Water from Combined Wastewater Treatment Plants, 2060BS (2003)	Project activities such as promotion of climate responsive agroforestry, land and forest restoration and flood protection, improvement of water retention and the promotion of water use efficiencies are expected to contribute significantly to improvements of the ecological integrity of aquatic ecosystems and of the quality of water.	Ministry of Forests and Environment, Department of Environment
5	National Foundation for Development of Indigenous Nationalities Act 2058 (2002)	Government of Nepal has identified and legally recognized 59 indigenous communities who are officially referred to as Adivasi / Janajati. The objectives of the Foundation are to preserve and promote the language, culture, literature, arts, traditional skill, technology and special knowledge and provide assistance for its vocational use; and provide assistance in building an equitable society by social, economic, religious and cultural upliftment and development of Indigenous Nationalities, among others.	This project has identified the presence of indigenous peoples/ethnic groups as well as disadvantaged groups such as Dalits, women and poor and considers these group as a main target groups. Applying the IUCN ESMS Standard on Indigenous Peoples will ensure that interests and concerns of these groups are fully addressed (see chapter 6). The project is expected to significantly contribute to building equitable society and social, economic, religious and cultural upliftment of indigenous nationalities/ethnic groups.	National Foundation for Development of Indigenous Nationalities (NFDIN)
6	Plant Protection Act (2007) and Plant Protection Rules (2010) Seed Act, 1989 and its regulation 1998	• Provisions for prevention of the introduction, establishment, prevalence and spread of pests while importing and exporting plants and plant products, promoting trade in plants and plant products. • Requires entry permits for importing plants, plant products, biological control agents, beneficial organisms or means of growing plants such as soil, moss and pit. • Imposes a duty to undertake pest risk analysis and determine controlled pests. • Most important legal instrument in support of protection and prevention from invasive species	The project will be guided by the IUCN ESMS Biodiversity Standard (see chapter 6).	Ministry of Agriculture, Land Management and Cooperatives
7	Nepal Biodiversity Strategy and Action Plan (2014)	• Provide a strategic planning framework for the conservation of biological diversity, maintenance of ecological processes and systems, and equitable sharing of the benefits accrued.	The proposed project will support the NBSAP and follow the processes through which communities make decisions on where, when, and how biodiversity and ecosystem services should be conserved, used sustainably, and the benefits are	Ministry of Forests and Environment

		• Strategies and priority actions for managing biodiversity include: improving understanding of biodiversity and ecosystem services; promoting environment friendly economic development and alternative livelihood opportunities through development of local forest and agriculture-based enterprises; designing and implementation of ecosystem-based adaptation programmes; and promoting public–private partnerships and regional cooperation.	shared equitably. The project will contribute to Strategy A: Adaptation and mitigation of the impacts of climate change on biodiversity (CCA2-CCA5) and Strategy B: Enhancing the resilience of ecosystems, species and human communities to climate change impacts (CCB1).	
	National Water Plan 2005 and Water Resources strategy 2002	• The National Water Plan 2005 emphasises a river basin management approach. • Sustainable management of watersheds and aquatic ecosystems is one of the strategic outputs.	The project explicitly applies a river basin management approach	Ministry of Water Resources and Energy
9	National Agriculture Policy (NAP), 2004 and Agriculture Development Strategy (ADS) 2014-34	• The National Agriculture policy has vision of improving living standard through sustainable agricultural development achieved by commercial and competitive farming system. The main objectives of the policy are: Increase production and productivity; increase competitiveness in regional and world markets developing foundations of commercial and competitive agriculture; and protect, promote and utilize existing natural resources, environment and bio diversity. • The policy emphasized to develop an appropriate policy and strategy for encouraging cooperative and private sectors for commercial production, processing and marketing of the agricultural products.	The project involves several activities that directly respond to the policy; including • Promote climate responsive farming practices • to address heat stress and drought • Provide water storage facilities, • Introduce drought and heat tolerant crops and livestock • Support climate resilient livestock management • Reduce loss of agriculture land from landslides and flood using nature based solutions • Promote reforestation to stabilize slopes, improve rainfall absorption and attenuate run-off rates and downstream flows • Support water management practices for climate adaptive agriculture	Ministry of Agriculture, Land Management and Cooperatives
	Forest Policy 2014 and Forest Sector Strategy 2016-25	• The revised Forest Policy (2002) emphasizes the protection of soil, water, flora and fauna constituting the main element of forestry to sustain biodiversity. It recognizes that the sustainable forests management is only possible when it give adequate attention to meet the basic needs of the people, sustainable utilization of forest resources,	The project envisages 90,000 ha of national forest land under improved management. Besides 56,400 ha of community forest area will be under improve management. Project will support community forest and national forest to prepare /revised their management plan giving adequate attention to meet people's basic needs, sustainable utilization of forest resources with enough participation and decision	Ministry of Forests and Environment

		participation indecision making and sharing of benefits and above all on socio-economic growth. The forest policy does not specifically mention environmental policy strategies with regard to other development programs which might intervene the forested areas; however, in other policy strategies related to forest management and forestry program implementation emphasizes on the need of land use planning, prioritization for the conservation of biodiversity, ecosystem, and genetic resources, effective production and utilization of forest resources and blending forestry management, biodiversity conservation and community development activities in holistic sense. • The Forest Policy 2015, emphasize integrated river basin conservation and development to ensure productivity and economic prosperity of communities	making process. Forests in protected areas (Approximately 1,193,400 ha) will also benefit from direct and indirect management interventions by the project.	
11	National Land Use Policy, 2012	• The National Land-use Policy 2012 emphasizes sustainable forest and watershed management. • The Policy aims to encourage optimal use of land for agriculture by classifying the country's • land territory into seven land use categories—agricultural, forest, residential, commercial, public, industrial, and others..	• The project has recognised that carefully selected land use and policy interventions can reduce this vulnerability; therefore, the project will use a range of specific field-based interventions to reduce the vulnerability of people and ecosystems to climate change in vulnerable sites. • The project focuses on enrichment planting, reforestation and slope stabilisation, which are very much aligned with the national Land Use Policy 2012.	Ministry of Agriculture, Land Management and Cooperatives
12	Climate Change Policy, 2011	The main goal of the Climate Change Policy, 2011 is to improve livelihoods by mitigating and adapting to the adverse impacts of climate change, adopting a low carbon emissions socio-economic development path, and meeting the spirit of the country's national and • international agreements related to climate change. Nepal prepared Intended Nationally Determined Contributions (INDC) through a broad-based stakeholder consultation processes. The communicated INDC in response to the decisions of the Conference of the Parties to the UN Framework Convention on Climate Change in 201612. Prior to	• The project focuses on strengthening the resilience of ecosystems and communities which is consistent with the Climate Change Policy goal of improving livelihoods by mitigating and adapting to the adverse impacts of climate change • The National Framework on Local Adaptation Plans for Action (LAPA) 2011: The project has an opportunity to support the development and re-development of LAPAs to fit with the new local government boundaries and to seek a more cost-effective means to adaptation that focuses on the role of local communities and households • The National Adaptation Plan (NAP) 2015 (under preparation): The project supports NAP objectives to	Ministry of Forests and Environment

		the above, National Adaptation Program of Action (NAPA)-Nepal to Climate Change was produced in 201013. In order to localize climate change adaptation National Framework on Local • Adaptation Plans for Action (LAPA) was developed.	address medium and long-term adaptation needs and to reduce climate vulnerabilities. • Intended Nationally Determined Contributions (INDC) 2016: The project will support to reduce climate hazards and build resilience, help climate vulnerable communities cope with climate change impacts, and reduce impacts of climate change on its people, property and natural resources.	
13	Local Self-Governance Act, 1999 and Local Self Governance Rules, 1999	• Provides more autonomy to District Development • Committees, Municipalities and Village Development Committees. Section 25 of the Act provides the functions, rights and duties of the Ward Committee. Section 25(e) of the Act requires the ward to help for protection of environment through plantation over the bare land, cliff and mountains. Section 28 has mentioned the functions, rights, and duties of VDC1. The VDCs are required to protect the environment, nature and natural resources. • Section 55 empowers VDC to levy taxes on utilization of natural resource	Right from the proposal preparation phase, the project has consulted local governments and obtained consent from 40 local governments. The project is designed in such a way that the Local Governments will be leading the execution of field activities. The detail of the project activities that will be implemented annually will be designed in full consultation with the local governments.	Ministry of Federal Affairs and General Administration
14	Environment Friendly Local Governance Framework (2013)	• The objectives are to mainstream environment, climate change, and disaster management in the local planning process; make the local governance system environment-friendly; make every person responsible for environment-friendly sustainable development; encourage coordination and collaboration in environment and development; and increase the local ownership.	The project will support mainstreaming environment, climate change adaptation and disaster management in local planning processes.	Ministry of Federal Affairs and General Administration
15	Agro biodiversity Policy (2007)	• Provides a basis for conservation and promotion of the rights, interests traditional knowledge, skill, innovation, technology, and practices of the farmers; • Makes policy arrangements for equitable distribution of opportunities and benefits arising from access to and utilization of agro-genetic	The project will support conservation of indigenous germplasm and promote indigenous cultivation practices that are climate responsive.	• Ministry of Agriculture, Land Management and Cooperatives, and • Ministry of Forests and Environment

[1] Village Development Committee in earlier governance system, which are now called as Village Institutions and Municipalities.

		resources and materials;		
16	Rangeland Policy (2012)	The Policy defines rangeland as natural pasture land, grassland and shrub-land. Aims to help maintain ecological balance by conserving, promoting, and sustainable utilization of rangeland biodiversity. It further aims to increase productivity by improving forage/grass productivity, to protect livestock farmers' traditional rights for pasturing livestock in community rangeland and forest, and to determine stocking density to minimize competition between grazing domestic and wild animals.	The project will put grassland under improved management with aiming to enhance the ecological balance.	Ministry of Forests and Environment
17	National Wetlands Policy (2012)	• Envisions healthy wetlands for sustainable development and environmental balance. • Aims at conserving and managing wetlands resources sustainably and wisely. • Provides working polices for conservation, restoration, and effective management of wetland areas; wise use of wetlands; and promoting good governance in the management of the wetlands.	The project will contribute to the policy with the following activities: • Construct nature-based structures to protect wetlands from landslides and floods • Support climate responsive wetlands management • Manage and restore upstream reforestation and wetland management and restoration to reduce the impact of floods and droughts on freshwater ecosystems by increasing rainwater absorption, attenuating run-off and downstream flows, and providing natural water storage	• Ministry of Forests and Environment
International Frameworks				
19	ILO Convention on Indigenous and Tribal Peoples, 1989 (No.169)	• An international treaty, adopted by the International Labour Conference of the ILO on the rights of indigenous and tribal peoples within the nation-States where they live and the responsibilities of governments to protect these rights. • Nepal ratified the Convention in 2007 BS2064/05/28	• The project identified indigenous peoples as one of the main target groups. Project implementation is guided by the IUCN ESMS Standard on Indigenous peoples, which is compliant with ILO 169.	Ministry of Labour, Employment, Women, Children and Social Welfare

2.2 Gap analysis

The table below provides a comparison of Government policies and regulations related to environmental and social safeguards against the GCF safeguards and IUCN's Environmental and Social Management System (ESMS)[2]. It further provides recommendations how the project will fill any gaps.

The ESMS is guided by eight overarching principles and four standards that reflect key environmental and social areas and issues that are at the heart of IUCN's conservation approach. They form the core of the ESMS Policy Framework, which governs the ESMS and determines the minimum environmental and social requirements for IUCN projects.

The ESMS principles and standards are rooted in IUCN environmental and social policies and IUCN World Conservation Congress (WCC) resolutions. They also draw on IUCN values, good practice tools developed by IUCN Secretariat programmes and IUCN Commissions and on lessons learned during IUCN's long tradition of working at the interface of conservation and social issues and human rights. The ESMS principles and standards consolidate objectives of the Convention on Biological Diversity as well as other relevant international conventions and agreements on environmental and social issues including the Universal Declaration on Human Rights and the United Nations Declaration of the Rights of Indigenous Peoples.

The ESMS is aligned with globally recognized standards on environmental and social matters. With IUCN being an accredited agency to the Global Environment Facility (GEF) and to the Green Climate Fund (GCF), the ESMS has been rigorously examined by these two entities and found fully compliant with the entities' relevant policies – specifically with the GEF Policy for Agency Minimum Standards on Environmental and Social Safeguards and the Performance Standards of the International Finance Corporation (IFC) as relevant to the nature of projects implemented by IUCN.

[2] Available at www.iucn.org/esms

Table 4: Comparative table of GCF, IUCN and Government policies related to environmental and social safeguards, gaps and recommendations

GCF E&S Safeguards	IUCN ESMS Procedures and Standards	Policy Governement of Nepal (GoN)	Main gaps and recommendations
PS1: Assessment and management of environmental and social risks and impacts PS2: Labour and working conditions PS3: Resource efficiency and pollution prevention PS4: Community health, safety and security	- **ESMS Manual** providing an integrated methodological approach to identifying and managing environmental and social impacts and opportunities. - Selection of measures based on **mitigation hierarchy** using four stages: (i) screening of impacts; (ii) scoping and assessment of impacts; (iii) development of environmental management plans, and (iv) monitoring and review. - ESMS Questionnaire provides for identifying social and environmental risks that are no covered by ESMS Standards (including labour and working conditions, pollution risks and Community health, safety and security issues); **- Stakeholder engagement and Grievance mechanism** established as ESMS principles; detailed procedures for capturing affected peoples' concern through an effective grievance mechanism	Environment Protection Act (EPA) (1997) and Environment Protection Regulation 1997, amended in 1999, 2007, 2009 & 2010: need for IEE and/or EIA for projects listed in schedule 1 and 2 National EIA Guidelines (1993): provisions for social analysis, stakeholder engagement Environmental Standards (Appendix 1) Labour Policy, (1999); Child Labour Act (2000): prohibition on child labour and restriction on minor and women; occupational health and safety; related to settlements of labour disputes. Grievance-handling directives 2063BS (2006) and Regulation Concerning the Conduct of Employees of the Civil Service, 2065 B.S. (2009) has provisioned that a civil servant shall be required to be sensitive all the time towards any grievance of citizens in matters of the services delivered by his or her office Prime Minister's Office has a 24 hour Hello Sarkar (hello Government) service Each Chief district Administration Office and Police Offices is required to set a grievance desk	EIA and IEE requirements are taken as unnecessary hurdles in development rather than the environment management tool. Public hearing process has been almost the formality. Grievances are recorded only and not properly followed-up. The time taken to take action on the people's complaints is too long. Recommendation: The procedures described in chapter 5 of the ESMF provides for adequate assessment of environmental and social risks potentially encountered in sub-projects as well as for risk management. In chapter 7 the ESMF describes the mechanism put in place by the project to receive and address grievances related issues where IUCN projects have failed to respect ESMS principles, standards and procedures.
PS5: Land acquisition and involuntary resettlement	**ESMS Standard Involuntary Resettlement and Access Restrictions** Not triggered by the project	n/a	n/a
PS6: Biodiversity conservation and sustainable management of	**ESMS Standard on Biodiversity Conservation and Sustainable Management of Living Natural Resources** **Provisions relevant for the project:**	Nepal Biodiversity Strategy (2014): specifies impact assessments process in accordance with EPA 1997 to assess the impacts of development activities on biodiversity;	Recommendation: procedures described in chapter 5 provide for adequate assessment of ecological risks and in particular of risks related

living natural resources	• ESIA/targeted assessment and mitigation needed for following risk issues (as per screening): - development of (even small) infrastructure or activities that may cause disturbance to specific elements of biodiversity / areas of high biodiversity value; - introduction or reintroduction of species where risks are identified that species develop invasive characteristics; - harvesting of wild living resources (e.g. NTFP) with risks of unsustainable use of living natural resources or when affecting traditional use systems. • Forest restoration projects need to maintain or enhance biodiversity and ecosystem functionality. • Plantation projects need to demonstrate that they are environmentally appropriate, socially beneficial and economically viable. • Where of biocides are unavoidable need of an appropriate pest management planning process, including risk assessment and disclosure of a Pest Management Plan, where relevant.	Biodiversity Implementation Plan: provides for protection of ecological processes and systems, and equitable sharing of benefits on a sustainable basis for the benefit of people; National Agriculture Policy (NAP) 2004: protect, promote and utilize existing natural resources, environment and bio diversity. Agro biodiversity Policy (2007) Plant Protection Act (2007): supports protection and prevention from invasive species; Forest Policy 2014; and Forest Sector Strategy 2016-25 Rangeland Policy (2012): to help maintain ecological balance by conserving, promoting, and sustainable utilization of rangeland biodiversity National Wetlands Policy (2012) National Water Plan 2005 and Water Resources strategy 2002: The National Water Plan 2005: emphasises river basin management and sustainable management of watersheds and aquatic ecosystems. Environment Friendly Local Governance Framework (2013)	to invasive species
PS7: Indigenous peoples	**ESMS Standard on Indigenous Peoples** • Social analysis carried out by a social scientist and in consultation with affected groups to identify impacts and develop culturally appropriate mitigation measures; • Ensure full and meaningful participation of indigenous peoples in all activities affecting them (positively or negatively); • FPIC for any intervention affecting their rights and access to their lands, territories, waters and resources; • Equitable sharing of benefits from conservation activities among all stakeholders;	National Foundation for Development of Indigenous Nationalities Act 2058 (2002) Ratification of ILO Convention on Indigenous and Tribal Peoples, 1989 (No.169) The Forest Act 1993 The Forests Regulations 1995	The legal framework of the forest sector does not recognize the customary use rights and management practices of indigenous communities. The National Parks and Wildlife Conservation Act, 1973 makes limited reference to the rights of indigenous people, particularly customary rights of use and management practices. Not all indigenous groups are recognized by GoN as Adivasi / Janajati; and as such not eligible to assistance.

			Recommendation: The rapid social assessment to be undertaken in each project site should provide coverage of all indigenous groups following IUCN definition.
PS8: Cultural heritage	**ESMS Standard on Cultural Heritage** • If risks are identified, ESIA guided by competent professionals with consultation of relevant groups such as local communities, government authorities, relevant civil society organisations, local experts and traditional knowledge holders; • Chance Find procedures • Equitable benefit sharing in cases where use of cultural heritage generates economic and social benefits; • Adherence to FPIC when projects affect cultural heritage to which communities have legal (including customary) rights	Clause 28 of EPR: physical and cultural resources shall not be disturbed or damaged without the prior approval of concerned authority.	No provisions for “Chance find” in EPR No provisions for consultation of local communities. Recommendation: When risks are identified in sub-projects, ESMP shall address such issues following GoN provisions and guidance of the ESMS Standard

3. Environmental and social context

Nepal is a physiographically and socio-culturally diverse country interwoven by it sense of spirituality, ecological values and geographical realities. It can be geographically sub-divided mainly into three regions: The Himalayan region, the Middle Hill region and the Terai (Plain Land) region (figure 1). The highest elevation of Nepal is the summit of Mount Everest at 8848m and the lowest elevation is 60m from the sea level at the Terai. The climatic conditions are from subtropical to the freezing.

Figure 1: Nepal – Ecological Zone Map

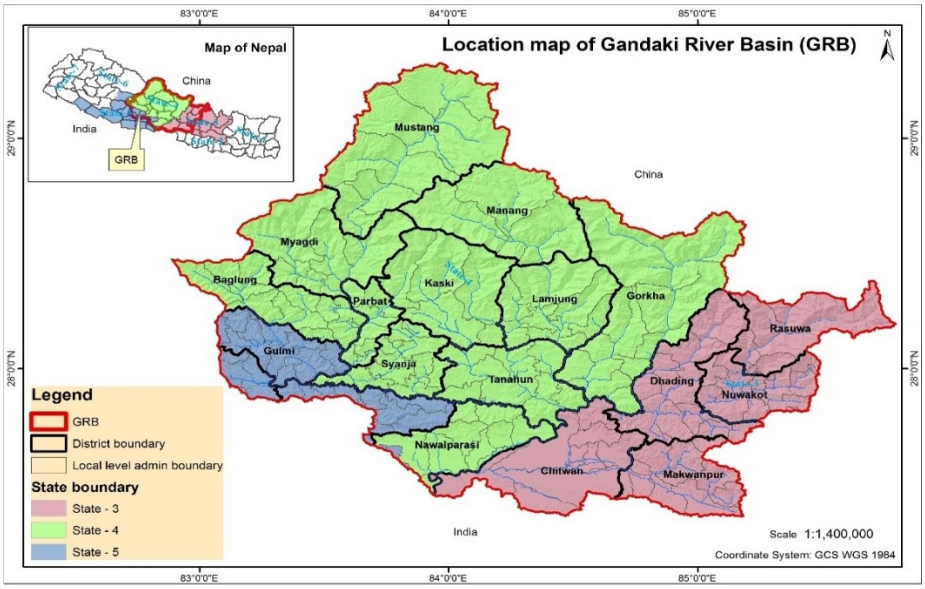
The location of the Gandaki River Basin (GRB) is shown in figure 2 below. It includes 151 local government bodies located within Provinces three, four and five. It is important to note that many environment-related responsibilities have been delegated to the provincial level and local levels, but at the time of designing the project the climate-relevant policies, statutes, institutions, and individuals are not yet fully in place. Where climate related policies and plans exist, they are often out of date or do not align with the new government boundaries. For example, an assessment of climate change vulnerability of the newly formed local government areas has yet to be undertaken.

3.1 Bio-physical context

The GRB is the largest of Nepal's four major river basins, with an area of 3,209,000 ha. Occupying around 22.6 per cent of the country's land area, it contains 1,025 glaciers and 338 lakes, has seven sub-basins and 19 districts. It extends over all three ecological zones, Highhill, Midhills and the Terai. The Highhills (Mountain) which is the land above 2,000m elevation and includes seven of the eight highest peaks in the world, is sparsely populated with subalpine and alpine climatic regime. The Midhills are located between 500m to 2000m altitude and is a densely populated region in valleys with temperate climate. The Terai (Flat Plains) includes densely populated areas in subtropical and tropical climatic regime at a 60 to 500m elevation.

Due to the large number of habitats created by extreme altitudinal variation, the GRB has high biological diversity. It is home to numerous CITES Appendix I[3] species, and provides a trans-Himalayan migratory corridor for many bird species. The basin supports populations of endangered snow leopard (*Panthera uncia*), tiger (*P. tigris*), red panda (*Ailurus fulgens*), one-horned rhinoceros (*Rhinoceros unicornis*), and gharial (*Gavialis gangeticus*). The basin contains six protected areas (out of 20 in Nepal) one world heritage site, and three Ramsar sites (out of 10 in Nepal).

Figure 2: Location map of Gandaki River Basin



Protected area

The Proposed project site is very important in terms of high biodiversity value**.** The basin contains six protected areas (out of 20 in Nepal,) one world heritage site, and three Ramsar sites (out of ten in Nepal). The protected areas in the GRB include - Chitwan National Park and its buffer zone, a portion of Parsa National Park and its buffer zone, Shivapuri Nagarjung National Park, Annapurna Conservation Area, Manaslu Conservation Area, and a portion of Langtang National Park and its buffer zone. GRB also contains three protection forests namely Barandabhar, Madhane and Panchase.

Biodiversity

The GRB contains 14 plants listed in the Annexes of the Convention on International Trade in Endangered Species (CITES). It is home to numerous CITES Appendix I species, and provides a trans-Himalayan migratory corridor for many bird species. The basin supports populations of endangered snow leopard, red panda, musk deer, Royal Bengal tiger, greater one-horned rhinoceros, pangolin and gharial.

Wetlands

Among the wetlands found in the GRB, three natural wetlands - Beeshazari and associated lakes, and Fewa and associated lakes in Kaski; and Gosaikunda and associated lakes in Langtang National Park have been listed as Ramsar Sites.

[3] Convention on Trade in Endangered Species - Appendix I include species threatened with extinction

3.2 Socio-economic context

Demographic status

The census estimated a total population for Nepal of 26.5 million people, of which 5,131,932 (1,172,558 households) are living in the 19 GRB districts (CBS, 2011a). Out of GRB's total human population, 46 per cent are male and 54 per cent female, giving a male to female ratio is 0.85:1. The population of the GRB has increased only at an average annual rate of 0.41 per cent over the past decade (CBS, 2011a) which is significantly lower than Nepal's overall population growth of rate of 1.35%. The average family size is 4.37 which is less than national average of 4.88. Most of the districts (except Chitwan, Makawanpur, Kaski, Tanahu, Nawalparansi, Palpa and Baglung) had negative population growth during the last decade. The main reason accorded was migration of people from the mountains to valleys and the Inner Terai in search of better livelihood opportunities (MOFSC, 2015).

Indigenous Peoples

Nepal is a country of ethnic diversity which is acknowledged in the Interim Constitution (2007) declaring the country as multi-ethnic, multi-lingual, multi-religious and multi-cultural which include and explain "all the Nepali people collectively" constituting the nation. Back in 2002 the National Foundation for Development of Indigenous Nationalities (NFDIN) was established to work for and promote the upliftment of Janajati/Adivasi. According to the 2002 National Foundation for Uplift of Adivasi/Janajati Act, indigenous peoples are:

1. Those who have ethnic languages other than Nepali
2. Those who have distinct traditional customs other than that of ruling high castes
3. Those who espouse distinct cultures other than the Hindu culture of dominant groups
4. Those who have distinct social structures that do not fall under the hierarchical Varna or caste system
5. Those who have written or oral history that traces their line of descent back to the occupants of their territories before the annexation into present Nepal
6. Those who are included in the list of adivasis/janajatis published by the government of Nepal

According to the 2011 census, the indigenous nationalities comprise 35.81 per cent of the total population (approximately 8.5 million out of the 26.5 million Nepalese). The government published an official list of 59 Janajati groups in 2002. The Nepal Federation of Indigenous Nationalities (NEFIN) classified these 59 groups - based on a range of socio-economic and demographic parameters that include literacy, housing, occupation, language, area of residence and population size - into five categories, as shown in Table 5: endangered, highly marginalised, marginalised, disadvantaged, and advantaged.

Table 5: Indigenous People in Nepal by Region and their Level of Marginalization (Source: NEFIN 2017)

	Status				
Region	Endangered	Highly Marginalized	Marginalized	Disadvantaged	Advantaged
Mountain	-	Shiyar, Shingsawa (Lhomi), Thudam	Bhote, Dolpo, Larke, Lhopa, Mugali, Topkegola, Walung	Bara Gaunle, Byansi (Sauka), Chhairotan, Marphali Thakali, Sherpa, Tangbe, Tingaule Thakali	Thakali
Hill	Bankariya, Hayu, Kusbadiya, Kusunda, Lepcha, Surel	Baramu, Thami (Thangmi), Chepang	Bhujel, Dura, Pahari, Phree, Sunuwar, Tamang	Chhantyal, Gurung (Tamu), Jirel, Limbu (Yakthung), Magar, Rai, Yakkha, Hyolmo	Newar

Inner Terai	Raji, Raute	Bote, Danuwar, Majhi	Darai, Kumal	-	-
Terai	Kisan, Meche (Bodo)	Dhanuk(Rajbansi), Jhangad, Santhal(Satar)	Dhimal, Gangai, Rajbanshi, Tajpuriya, Tharu	-	-

In the mountain regions, such as Mustang, Manag and Rasuwa, indigenous peoples comprise 75–95 per cent of the population, but in the Hills and the Terai, indigenous groups are less than 50 per cent of the population because they are outnumbered by the migrant non-indigenous populations. The indigenous peoples in mountain areas still largely control their indigenous way of life. On the contrary, many indigenous peoples of the Hills and the Terai have been losing control over their indigenous way of life because of the influence of the dominant groups through the processes of Gorkhaization, Hinduization, Sanskritization, Nepalization and Westernization.

The GRB has a mix of all types of caste and ethnic/indigenous groups in terms of population. As shown in Table 6, the largest unit are ethnic/indigenous groups (47.3%) followed by Bhramin (21.89%), Dalit[4] (14.73%), Chhetri (13.88%) and other (3.2%).

Table 6: Population composition in GRB

Caste and ethnic group	Population	Per cent
Bhramin	1,071,968	20.89
Chhetri	712,134	13.88
Dalit	756,000	14.73
Ethnic / indigenous peoples	2,427,654	47.30
Others	164,176	3.20
Total	5,131,932	100
Data source: CBS. 2011.		

As table 6 illustrates, GRB is home to more than 40 different indigenous groups; however, not all of them are officially recognized by the Government as indigenous nationalities (2.16%, see last row in Table 7). Among them, disadvantaged group are in highest number (49.37%), followed by marginalised group (34.87%), advantaged group (10.17%), highly marginalised group (3.41%), and endangered group (0.03%).

Table 7: Indigenous Nationalities (Ethnic Groups)

Category	Indigenous/Ethnic group	Number	%
Endangered	Kisan	633	0.03
Highly marginalised	Majhi, Lhomi, Dhanuk, Chepang, Satar (Santhal), Jhagad, Thami, Bote, Danuwar, Baramu	82,663	3.41
Marginalised	Sunuwar, Tharu, Tamang, Bhujel, Kumal, Rajbansi, Gangai, Dhimal, Bhote, Darai, Pahari, Dura	846,553	34.87
Disadvantaged	Tingaunle Thakali, Baragaunle, Marphali Thakali, Gurung, Magar, Rai, Limbu, Sherpa, Yakkha, Chantyal, Jirel	1,198,550	49.37
Advantaged	Newar, Thakali	246,910	10.17
IPs but not in the IP list	Kulung, Kumhar, Lhomi, Lodh, Nachhiring, Nahuwa, Nuniya, Rajdhob, Kahar, Kalwar, Kalar, Kathbaniyan, Dhandi, Baramo, Dev	52,345	2.16
Total		2,427,654	100

[4] Dalits are so called untouchable castes, which is abolished by the law.

The Tharu are indigenous people of the Terai. Gurung, Tamang, Magar and Chepang are traditionally from the Middle Hills. Thakali are from the Himalayan Mountain area. Community consultation undertaken during the project design phase confirmed that in the GRB, Thakali and Newar who are classified as **advantaged** in table 7 are the most economically powerful. They are involved in trade and business and their presence in towns result in economic and integration into the political power structure of the country.

Disadvantaged groups such as Gurung and Magar living in hill and mountain areas tended to have in the distant past livelihoods based on animal raising, but crop farming has become their main livelihood source over the centuries. Most are marginal farmers with low socio-economic status, and low levels of literacy and limited access to services and economic opportunities. Gurung and Magar often seek opportunities through employment in foreign military services (UK and India) or migration in general. Among these indigenous groups, Gurung seem better placed in terms of political power in the GRB, These groups have ownership of private lands and generally shared responsibility for common lands.

The Tamang in the hills and the Tharu in the Terai and several minor groups are classified as **marginalized** IP. Compared to the disadvantaged group category, these groups did not have opportunities like service in foreign armies and other services, while the minor groups are extra disadvantaged because of their small numbers and subsequent under-representation in decision making. Their literacy and other social development indicators are generally low. Many Tharu, who lived in bonded labour on land they previously owned, have been freed, and now live as freed Kamaiya on small plots of government-donated or illegally occupied land in town neighbourhoods and forests and depend on the available on farm and off farm labour.

The Groups classified as **highly marginalized** and **endangered** IP are groups that are either very small in size, or are small in size and live far away from any town and did not integrate with the larger society through e.g. schooling and service (e.g. Chepang). These groups have problems in maintaining their language and their cultural identity, as they are too few in numbers or have to give up essential elements of their lives in order to benefit from educational, health and development services. The Chepang traditionally practiced shifting subsistence agriculture. In Chitwan district For example, the Chepang are the poorest ethnic group in Chitwan district. They live in the hilly areas and because of drought and landslides, their land productivity has declined, and they are forced to work in stone quarries for their livelihoods. Quarrying has accelerated landslides and as a result, the Chepang are pushed further below the poverty line.

A vast majority of indigenous peoples in Nepal are still dependent on forest resources as means for their livelihoods and have a symbiotic relation with the forest and natural resources. Therefore, sustainable management of forest and biodiversity is pertinent for securing their distinct identity and customary practices but also for their ability to pass this on to their future generations.

Dalit castes

Among Dalit castes, there are mainly three categories namely: hill and mountain Dalit, Terai Dalit and Newar Dalit. In the GRB (Table 8), the hill and mountain Dalits were in majority (91.62%) followed by Terai Dalit (8.05%). The presence of Newar Dalits is not recorded in GRB. There were some Dalits (1.34%), that were not included in the Dalits list.

Table 8: Breakdown of Dalit population

Category	Dalit group	Number	Per cent
Hill and mountain Dalit	Kami, Sarki, Damai, Badi, Gaine, Sunar, Chunar,	685,079	90.62
Terai Dalit	Bantar, Chamar, Chidhimar, satar, Dom, Dushad (paswan), Dhobi, Halkhor, Jhangar, Khatwe, Lohar, Mushar, Tatma	60,825	8.05
Newar Dalit	Chyame, Kasai, Kuche, Kusle, Pode, Kau, Nau,	0	0.00
Dalit not in the list		10,096	1.34
Total		756,000	100
Data source: CBS. 2011			

Languages and Religion

The GRB is rich in linguistic diversity where more than 50 different languages spoken. Hinduism is the dominant religion (83 per cent) followed by Buddhism (13 per cent), Christianity (2 per cent) and Islam (1 per cent) in the GRB (CBS, 2011).

Overall Development Status

The Human Development Report (NPC, 2014) has shown that the Human Development Index (HDI) for all ethnic groups in the basin was 0.482, compared to national average of 0.490. The overall per capita income in the basin is Rs 49,362, which is lower than the national average of Rs 51,879. In Nepal, among the broad ethnic and caste groups, hill Brahmins have the highest per capita income at NRs. 63,234, followed by Chhetris at NRs. 46,079, indigenous peoples at NRs. 43,561, and about NRs 25,000 of Dalits (Chaitanya et al, 2014).

The prevalence of poverty is higher in GRB than the national average as demonstrated by the human poverty index (HPI) of 31. The HPI in five out of 19 districts in the GRB (Dhading, Rasuwa, Nuwakot, Mustang, and Gorkha) is very high (above 35) (NPC, 2014). Poverty is particular frequent among indigenous peoples. A study on the Socio-Economic Status of indigenous peoples of Nepal (Chaitanya, 2014) has shown that 40 per cent of Kumal, Sunuwar, Majhi and Chepang; 31.7 per cent of Magars, and 21.7% Gurungs are living below the poverty line. The study has further shown that the different measures of the poverty index often vary among the indigenous and caste groups. For example, Terai castes have the third highest poverty incidence, while they rank sixth in poverty severity. Comparing them to hill indigenous peoples shows that the Terai castes have a higher risk of being in poverty (poverty incidence), but that their level of poverty (poverty severity) tends to be less deep or severe than that of hill indigenous peoples.

High population growth, traditional farming, inequality in productive resource distribution, low industrial development, low infrastructure development in rural area, under-utilization of local resources, underemployment, low literacy, low saving, traditional/old technology and low overall productivity are the main causes of poverty in Nepal.

Regarding literacy, the adult literacy rates among indigenous peoples (not including Newars) range from 43 per cent to 60 per cent; while Hill Bhramin have 75.6% on the contrary of 31% of Dalits (CBS, 2011a, Chaitanya et al, 2014).

An overview of key socio-economic indicators in GRB disaggregated by sex is provided in Table 9.

Table 9: Socio-economic status of GRB

Indicator	Mountains	Hills	Terai	Total
Population				
Male	32,229	1,757,681	582,762	2,372,672
Female	31,061	2,087469	640,730	2,759,260
Total	63,290	3,845,150	1,223,492	5,131,932
Literacy Rate (per cent)				
Male	73	80	82	78
Female	56	64	67	62
Total	65	72	74	70
Economically Active (per cent)				
Male	75	60	64	67
Female	69	59	53	60
Total	72	60	58	63
Under five mortality (per cent)				
Male	29	33	40	34
Female	24	32	45	34
Total	27	33	43	34
Source: CBS, 2011a. Nepal Living Standard Survey 2011. Central Bureau of Statistics Kathmandu, Nepal				

Livelihoods, landholdings and access to natural resources

In Nepal, agriculture accounts for nearly 70 per cent of total employment and contributes nearly one-third of Nepal's gross domestic product (THT, 2017). About 72.8 per cent of economically active women in Nepal are engaged in agriculture and are responsible for 61 per cent of the agricultural production (NDRI, 2017); while up to 80 per cent of women are involved in agriculture and livestock sectors in the GRB (MOAD, 2017).

Though land ownership is taken as a key indicator of identity, power, wealth, and political access in Nepal, there are significant inequalities related to land distribution being evidenced in particular for caste and ethnic groups as well as for women. Men predominantly own most land. Only 19.71% women have ownership of land.

Among indigenous groups, about half of all Newar households rely on agriculture while for Magar households this is true for more than 85 per cent. Indigenous households operate about 38 per cent of the agricultural land in Nepal. Hill Brahmins and Chhetris cultivate 31 per cent, and Terai caste groups 18 per cent of all agricultural land. Dalit households operate only 9 per cent of agricultural land (Chaitanya, 2014).

Of the total number of households in GRB (3,831,100), 1.124% (10,120) were with no land. Most households (47 per cent) in GRB have less than one hectare, and only three per cent of households have landholdings of more than 2ha. The average holding size is 0.61 ha. Landholdings are highly fragmented with average of 3.2 parcels per households (CBS, 2016).

The landless are mostly dalits and marginalised indigenous groups. Many of the landless have their houses or shelters on the landlord's land, and are at risk of homelessness if they do not accept exploitative feudalistic practices imposed upon them by the landlords (CSRC). Landlessness impacts both individual rights to food, housing, water, health, and work, and wider social stability and economic development. Poverty, social injustice and local conflicts are the main reasons for landlessness (RCHC, 2012).

The major sources of livelihoods for people in the GRB are remittances, agriculture, livestock, forests, off-farm business, and wage labour. In the GRB, 72.4 per cent of households depend

solely on forests to meet their energy requirements (WWF, 20165). Remittances contribute almost half (46 per cent) of average household income in the GRB (WWF, 20136) as compared to the national average contribution to GDP of 9.6 per cent (MOF, 20137). Remittances have become the most powerful economic force transforming rural life and livelihoods in the GRB. Salaries and pensions contribute an average of 20 per cent of household income in the GRB, labour contributes 7 per cent, tourism 5 per cent and other sources 3 per cent (WWF, 2013). Agriculture contributes an average of 19 per cent of household income in the GRB, compared to 30 per cent of GDP nationally (MOF, 2016). However, 80 per cent of the population in GRB depends on agriculture for their livelihood. Because of the small size of the holdings and low productivity, agricultural households are poor. There is vicious circle of poverty in agriculture (Dhakal, 2007).

The major cereal crops grown are paddy, maize, wheat, millet, barley and buckwheat. Improved varieties of crops are also grown throughout the region (MOFSC, 2015). However, the agricultural productivity is low (ADB, 2013). Poorer rural communities, including indigenous groups and women, are among the most vulnerable to climate change, partly because in many rural areas they depend on subsistence farming, make up the larger share of the agricultural work force and partly because they tend to have access to fewer income-earning opportunities (Solomon et al, 2007).

In GRB, a substantial proportion of the population lack minimal access to water for drinking, sanitation and irrigation, their livelihoods depend on agriculture, wage earning, and ecosystem services, they live in fragile dwellings and have weak social support networks (Thapa, 2018). These people are most likely to be affected by climate change.

People in the GRB are highly dependent on forest resources for their food, household energy, and livelihoods. Almost three fourths (72.4 per cent) of households solely depend on forests to fulfill their household energy (MOFSC, 2015) and in areas where natural resources are increasingly depleted women, who are primarily responsible for collecting fire wood and fodder, must travel longer and further to collect fire wood as well as fodder for their livestock.

Gender, Social Group and Natural Resource Management

The Global Gender Gap Index (GGI) for Nepal is 0.661, and Nepal ranks 110 out of 144 countries measured. Nepali women are progressing in terms of political representation they rank 68 out of 110. In health and survival, they rank 92. However, in terms of economic opportunity (115) and educational attainment (123) they are ranking far behind their global women counterparts. Nepal's Gender Development Index (GDI) score in 2011 was 0.534. Gender disparities in health, education and income remain major challenges. Nationally, the average income of women is 57 per cent lower than the average for men, whereas 80.1 per cent of women are economically active.

The Gender Empowerment Measure (GEM) for Nepal in 2011 was 0.568. The Mountains have the lowest value at 0.483, while the Hills have the highest at 0.572. This is due to the low share of Mountain women in Parliament at 18.6 per cent, compared to 28.9 per cent for the Hills and 32.9 per cent for the Terai, as well as low combined income values.

Generally, participation of women and other marginalized groups in natural resources management and other community development activities in GRB has increased over the years. Nevertheless, there is are still gaps in the process of participation, assigning clear roles and responsibilities, transparency in work and equity in benefiting sharing (MOFSC, 2015).

[5] WWF. 2016. Forest Carbon Assessment in Chitwan-Annapurna Landscape. Hariyoban Programme. WWF, Kathmandu, Nepal

[6] WWF. 2013. Chitwan-Annapurna Landscape: A Rapid Assessment. Hariyoban Programme. WWF, Kathmandu, Nepal

[7] MOF. 2017. Economic Survey 2013. Ministry of Finance, Kathmandu, Nepal

The key roles played by various social, ethnic/indigenous groups in natural resource use and management are described in Table 10 based on information gathered through field work and reports. Women, poor, ethnic groups, marginalized communities, dalits and disabled groups have substantial roles in using resources, but limited access to manage and benefit share and these groups have lesser roles in politics.

Table 10: Role of Social Groups in Natural Resource Use and Management

Social groups	Role in politics and influence	NRM use and access	NRM management	NRM conflict resolution
Brahmin elite	High	High in hills and mountains	• Majority of the participation in top management body • Key decision makers of plans and policies • Key leadership position • Control resources • Key role in benefit sharing	High involvement
Chettree elite	High to medium	High in all sectors	• Key decision makers • Key leaders	Medium involvement
Brahmin poor	Low	High	• Low in management and decision making • Not participatory in management bodies • No roles in benefit sharing	Low but more in conflict due
Chettree poor	Low	High	• Low participation in decision making and leadership • No role in benefit sharing	Low participation
Tamang	Medium	High in use and medium in access	• High in mountain areas but low in terai areas • Medium access to benefit sharing	Low participation
Magar	Low	High in use and low in access	• Low participation in decision making and leadership • Low in benefit sharing	Low participation
Dalits	Low	High in use and low in access	• Low participation in decision making and leadership	Low participation
Disabled groups	Low participation	High in use and less access	• Low participation in decision making and leadership	Low participation
Other minority group	Low participation	High in use and less access	• Low participation in decision making and leadership	Low participation
Other groups	Medium	High in use and access	• Low participation in decision making and leadership	Medium participation based on population representation
Source: Social Inclusion Assessment report - Annex 6 of Feasibility Study Report				

4. Potential environmental and social risks and proposed mitigation measures

The project aims to improve climate resilience of vulnerable communities and ecosystems in the Gandaki River Basin and is expected to have environmental and social impacts that are overall highly beneficial. It is considered unlikely that the activities carried out under this project will have major adverse environmental and/or social impacts. However, there is a possibility

that some activities might involve minor or moderate environmental or social risks given the sensitivity of the receiving environment, the complex demographic and social context and the vulnerability of social groups, including indigenous groups.

The risks cannot be ascertained in more depth at this stage because the exact sites for field interventions have not been identified yet and because decisions on specific interventions will be determined by the specific vulnerability of locations within each cluster. While the project document has established generic types of interventions, the exact nature of the interventions may change once the baseline is more effectively established in year one of the project's operation, and as a result of more focused consultations with relevant stakeholders, and in particular with women, indigenous groups, Dalits and disadvantaged groups. In light of these uncertainties and knowledge gaps the project has for precautionary reasons been classified for as moderate risk project.

The generic project activities proposed for implementation have been assessed on potential environmental and social risks. An estimation of the significance of the identified risks has been made based on an estimated likelihood of impacts occurring and the magnitude of potential impacts – following the guidance presented in Table 11.

Table 11: Guidance to establish significance of risks

	Magnitude (Mg)		
Likelihood (Lk)	Minor (1)	Medium (2)	Major (3)
Almost Certain (4)	Moderate	High	High
Likely (3)	Moderate	Moderate	High
Possible (2)	Low	Moderate	Moderate
Unlikely (1)	Low	Low	Moderate

Table 12 summarizes the result of this assessment and provides recommendations for mitigating measures for risks deemed significant. Because the assessment is done based on generic activities without knowing further details and location of the activities, the table needs to be understood as indicative and preliminary; its purpose is to provide general guidance for the detailed design of the interventions.

Table 12: Preliminary Risk Table

Project activities	Risk Issues/negative Impacts	Standard triggered	Lk[8]	Mg[9]	Significance[10]	Judgement on Significance & Mitigation Measures
1.1.1: Establish climate resilient agroforestry practices	Practices might conflict with **cultural practices** and customary management regimes	IP CH	2	1	Low	**M1**: The agroforestry practices are developed in consultation with communities in the first place. Documentation and sharing of local people's traditional knowledge, particularly of indigenous communities (subject to FPIC), can be insightful for this purpose. Second, the climate resilient agroforestry practices are only recommendations; the decision to adopt the practices (which are expected to provide tangible benefits) is entirely up to the respective land owner.
	Selection of farmers to benefit from project support (capacity building) might be perceived as **unjustified preferential treatment**	IP	2	1	Low	**M2**: The selection is based on transparent eligibility criteria in order to ensure that no unjustified preferential treatment occurs
	Selection of species might involve negative environmental impacts if it includes **non-native species** that might develop **invasive characteristics**	B	2	1	Low	Generally, the project will promote native species. Close monitoring will be ensured by the Department of Agriculture, Department of Forest and Soil Conservation to manage the risks from accidental introduction of non-native species. The IUCN Biodiversity Guideline for Forest Restoration will provide further guidance for risk mitigation.[11] **M3**: It cannot be fully excluded that certain conditions might require the use of non-native species (outside their natural range) that might be more tolerant to impacts from climate change (e.g. drought). In such cases, the project will undertake specific risk assessment guided by the IUCN Guideline on Species Introduction[12] and only proceed if the Department of Agriculture, Department of Forest and Soil Conservation has cleared the introduction.
1.1.2: Construct small nature-based structures (bamboo check dams, plantations of grass and trees)	Construction of basic structures for restoring agricultural lands damaged by landslides and flood (embankments, diversion channel, and slope stabilization) might damage buried **cultural heritage resources**	CH	1	1	Low	This activity takes place on agricultural land that has been damaged by landslides or floods; it and will not involve major excavation (if at all); hence the risk of impacting buried cultural resources is considered unlikely
	Risks of **invasive behaviour** when introducing native species from different altitude and/or from neighbouring climate zones to test performance	B	2	2	Moderate	**See M3**
	Soil disturbance and erosion impacts from construction of water management infrastructure including bund protection, gully treatment, diversion channels for	B	1	1	Low	The activity is intended to prevent erosion and uses bio-engineering and nature based solutions. Chapter 6 in the feasibility study and annex 11.4 provides a wide range of measures and techniques for slope stabilization and preventions of erosion; hence, the risk of causing soil disturbance and

[8] Likelihood: unlikely (1), possible (2), likely (3), almost certain (4)
[9] Magnitude: minor (1), medium (2), major (3)
[10] Significance is a result of magnitude and likelihood as described in table 11 on the previous page
[11] Available at https://portals.iucn.org/library/sites/library/files/documents/2018-022-En.pdf
[12] Available at https://portals.iucn.org/library/efiles/documents/2013-009.pdf

Project activities	Risk Issues/negative Impacts	Standard triggered	Lk[8]	Mg[9]	Significance [10]	Judgement on Significance & Mitigation Measures
	runoff control or check-dams.					erosion is considered unlikely.
1.1.3: Promote drought and flood tolerant varieties (at least one drought tolerant variety (wheat) for hill districts and one flood tolerant (paddy) variety for Terai and plain areas in the Chure and Inner Terai.	Practices might conflict with **cultural practices** and customary management regimes	CH IP	2	1	Low	The decision making process will be highly participatory to ensure that preferences such as taste and cultural and customary practices are fully taken into consideration; the risk is considered possible but not very likely. **M1** provide guidance to reduce the probability of the risk further.
1.2.1: Reconcile a water model for the entire GRB	n/a	n/a	n/a	n/a	n/a	n/a
1.2.1: Construct small scale irrigation systems through improved community participation	**Soil disturbance and erosion** impacts from construction of small scale irrigation	B	2	1	Low	The project will only construct small scale infrastructure that does not require substantial excavation; hence, the risk of causing soil erosion is considered possible but not very likely. **M4:** To further reduce the probability of the risk occurring technical guidance with operational procedures will be provided to staff, contractors and communities to be followed during construction phase; adherence will be closely monitored
	Construction of basic infrastructures (embankments, diversion channel, and slope stabilization) might damage or affect **cultural heritage resources**	CH	2	1	Low	The project will only construct small scale infrastructure that does not require substantial excavation; hence, the risk of affecting buried cultural resources is considered possible but not very likely. It is also not very likely that irrigation systems will affect cultural sites or be in the vicinity of temples or of other building of cultural importance. **M5:** To further reduce the probability of the risk occurring the project will check prevalence of cultural features when selecting the sites for infrastructure and develop a chance find procedure (based on the template in the Standard) and communicate to entities in charge of infrastructure works
1.2.2: Establish water harvesting systems (conservation ponds, water reservoirs) and promote water use efficiency through drip and sprinkle irrigation, and use of waste water	Construction of water harvesting systems (conservation ponds and water reservoirs) in the hilly mountains might accelerate **soil erosion and landslides** due to loss of top soil and loss of native vegetation.	B	2	1	Low	The biodiversity and soil risks are considered possible but not very likely, as the project will predominantly rehabilitate existing tanks and irrigation networks. Also, construction of water harvesting systems at the site that have a biodiversity and ecosystem importance might involve some disturbance during rehabilitation, however once the system is functioning again, it is becoming an eco-system itself. In case new structures are required, the project will carry-out environmental impact assessment as required by the National EIA Guidelines. **M6:** The project will use traditional techniques and provide technical guidance with operational procedures to guide the works. The sites will be carefully selected to avoid disturbance to native flora and fauna; a GIS-based planning tool will guide localization of appropriate sites to consider relevant biophysical and socio-economic parameters. Works will be carried out during dry season to avoid soil erosion during excavation works. Only small-scale, low-invasive tools will be used, clear boundaries for vegetation clearance and management of retained vegetation will be maintained; natural barriers or micro bunds will be constructed along the contour to control erosion and landslides. Retention of topsoil for restoration (including tilling and revegetation) as soon as practicable.

Project activities	Risk Issues/negative Impacts	Standard triggered	Lk[8]	Mg[9]	Significance [10]	Judgement on Significance & Mitigation Measures
1.2.3: Improve water availability through construction and maintenance of water holes in community grasslands (to support livestock)	Rehabilitation and construction of waterholes might affect buried cultural heritage resources	CH	2	1	Low	The project mostly rehabilitate the existing water sources by constructing small infrastructure and some nature based management of its catchment. The risk of impacting buried cultural resources is considered possible (only for new waterholes) but not very likely, To further reduce the probability of the risk occurring **M5** will be implemented.
	Soil disturbance and erosion impacts from construction of water management infrastructure (water holes)	B	2	1	Low	The biodiversity and soil risks are considered possible but not very likely as the project will predominantly rehabilitate existing waterholes and water sources. To further reduce the probability of the risk occurring **M4** will be implemented.
2.1.1: Construct climate resilient green belts to protect forests, wetlands, grasslands and conservation ponds from landslides and floods	Risks of invasive behaviour when introducing native species from different altitude and/or from neighbouring climate zones to test performance	B	2	2	Moderate	Project will give preference to to native species from the same altitudinal and climate zone. In case species from different zones are needed, **M3** will be implemented.
2.1.2: Apply bio-engineering techniques to provide structural support for 70 km erosion prone rural forest roads.	Risk to further landslides during the construction phase.	B	2	2	Moderate	**M7:** Technical guidance with operational procedures from the Department for Road and Transportation will be followed to minimise destabilisation of soils and debris/mud flows through appropriate design and construction practices. These include, among others, minimisation of cleared areas and soil disturbance, and revegetation with native species as soon as feasible. no vehicle use to be used outside designated areas, early installation and regular maintenance of drainage and diversion structures, timing of works during dry season
	Construction infrastructures might affect cultural heritage resources nearby road	CH	1	1	Low	The project will not construct new roads but only support existing roads against erosion; hence, the risk of affecting soil erosion is considered unlikely.
2.1.3: Restore the biodiversity of vulnerable forests and grassland ecosystems through the removal and (productive) reuse of invasive species	Manual techniques for eradicating/ weeding of invasive species are labour intensive – puts an additional burden on farmers; this might affect in particular women as men often have emigrated		2	2	Moderate	**M8:** Participation of individuals in these works is voluntary. Timing of the activity will be decided in discussion with the communities and appropriate and agreed compensation for the time given as labor will be provided (e.g. use of species biomass for energy bio-briquettes)
2.2.1: Create new SOP's that support future interventions on agroforestry, forestry, wetlands and grasslands management	Standard operating procedure (SOP) may restrict access restriction to natural resource availability to local communities	AR	2	2	Moderate	This activity might trigger the Standard in situations where restrictions are needed and put in place by entities that are not the users themselves. See further guidance in chapter 6.1.
2.2.2: Provide technical training to enhance capacity of CFUGs and NGOs in vulnerable communities in maintaining climate resilient ecosystems	Managing the ecosystems might require putting in place restrictions on resources use (including temporary) which might affect vulnerable groups within the communities who don't have other options / resources for their livelihoods (indirect impact).		1	2	Low	Situations where communities themselves decided about restrictions in order to sustain the long-term use of resources do not trigger the Standard. However, social impacts might still occur in particular for vulnerable groups. Despite considered an indirect/induced impact, the project will provide mitigations through ensuring that the training includes building awareness about social impacts
3.1.1: Technical assistance for community based planning and development of site specific management structure and tools for conservation and	Risk of affecting vulnerable groups and women when implementing restoration measures in case management structures and tools would lead to increased work		1	2	Low	**M9:** The risks do not seem very likely, but as precautionary measure, it will be ensured that vulnerable or affected groups have access to a local grievance mechanism to raise potential complaints or risks.

Project activities	Risk Issues/negative Impacts	Standard triggered	Lk[8]	Mg[9]	Significance [10]	Judgement on Significance & Mitigation Measures
restoration of ecosystem	load					
Activity 3.1.2: Develop community-based monitoring and maintenance programmes through the local and regional management structures to maintain restored ecosystems	The monitoring system might include elements of enforcement of access restrictions and hence affect vulnerable groups	AR	2	2	Moderate	There is a likelihood that this triggers the Standard, in particular as the system is monitored by the local and provincial level government structures. See further guidance in chapter 6.1.
Activity 3.1.3: Training and supporting communities in clusters to track the restoration and conservation of the ecosystems in target areas	n/a	n/a	n/a	n/a	n/a	n/a
Activity 3.1.4: Link upstream and downstream vulnerable communities through climate informed management of spring-shed and water source protection	Risk of activities of upstream communities affecting the availability of water for downstream communities		2	1	Low	**M10:** The risk is considered possible but not very likely, as it is precisely the purpose of the activity to link the communities and enable consultation and agreements on water use and source protection. The project will ensure that the gender dimensions and water needs of vulnerable groups are appropriately addressed.
Activity 3.2.1: Prepare River Basin Management framework with integrated sub-riverine watershed and water resource management plans for the GRB that includes forests, grasslands, fisheries, wetlands and agro-ecosystems.	Risk of affecting water needs of vulnerable people when determining water user rights as part of the water management resource plans, including women		2	1	Low	**M11:** Gandaki river basin management plan will be based on prior analysis, done with the federal government, of needs of all three provinces (Province 3, 4, and 5). Likewise, seven watershed management plans will be based on prior analysis, done with the provincial governments (3,4, and 5), of needs of all local governments under each province. And sub-watershed management plans will be based on prior analysis, done with the communities on the basis of the needs of users.
Activity 3.2.2: Development a framework for assessment for economic valuation of ecosystem and ecosystems services to support planning	n/a	n/a	n/a	n/a	n/a	n/a
Activity 3.2.3: Policy Development for local governments to incorporate climate change adaptation and EbA into their Integrated Development Plan	n/a	n/a	n/a	n/a	n/a	n/a
Activity 3.3.1: Establish National and GRB level system for collating data and information on global best practices, lessons learned, evidence from the field and scientific knowledge on ecosystem- and community-based approaches to adaptation.	n/a	n/a	n/a	n/a	n/a	n/a
Activity 3.3.2: Creating an online platform and associated mobile phone application to facilitate access to information in the Decision-Support Tool for decision-makers, communities, NGOs/CBOs and other relevant stakeholders, as well as to	Risks related to data protection in case individual data will be uploaded		1	1	low	**M12:** The risk will be avoided by ensuring compliance will applicable data protection policy. Before commencing the activity, project staff will compare the national data protection policy with the IUCN Data Protection Policy[13] and apply whatever is more stringent and provides a higher level of protection of individuals or household against misuse of personal data.

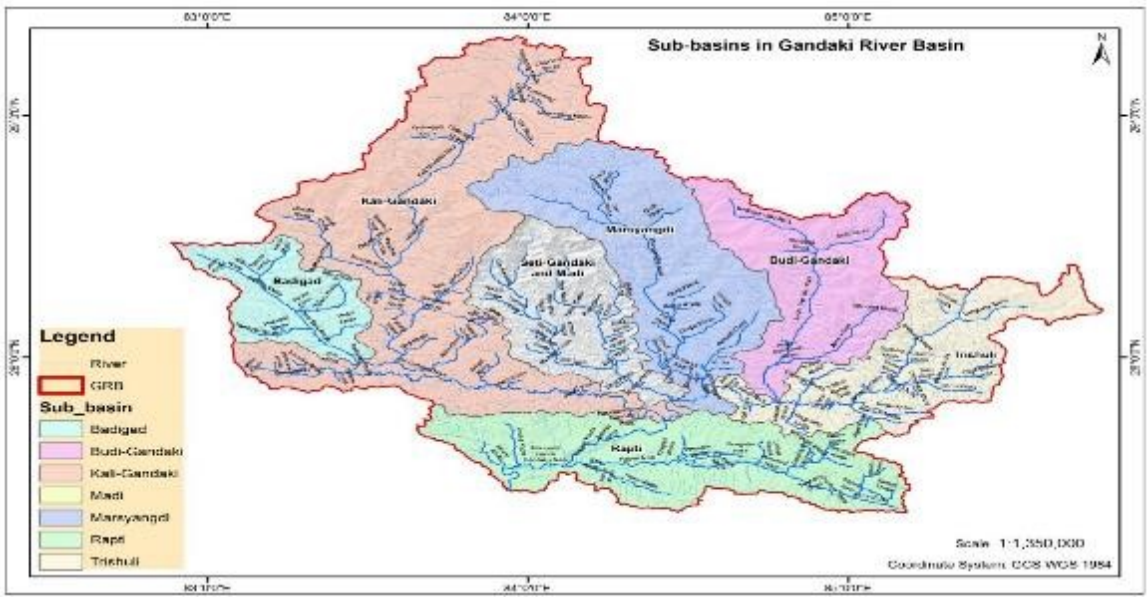
[13] Available at https://www.iucn.org/sites/dev/files/data_protection_policy_25.05.2018_0.pdf

Project activities	Risk Issues/negative Impacts	Standard triggered	Lk[8]	Mg[9]	Significance [10]	Judgement on Significance & Mitigation Measures
allow them to upload data for tracking changes in ecological and socio-economic vulnerability to climate change in the GRB.						
Activity 3.3.3: Generation of the baselines data and mapping of vulnerability, hazard sites, ecosystem services and facilities in communities based on risk profiles.	n/a	n/a	n/a	n/a	n/a	n/a
Activity 3.3.4: Establish climate change adaptation knowledge sharing and learning structures within key clusters to facilitate climate resilient planning and management	n/a	n/a	n/a	n/a	n/a	n/a

5. Procedures for addressing environmental and social risks of sub-projects

The project has adopted a river-basin approach as a means of adapting to and reducing vulnerability to climate change. River basin approach does not follow political boundaries. It considers ecosystems and thus passes through a larger landscape comprising several political units such as municipalities and states. The GRB has seven major tributaries (known as sub-basins) and these seven tributaries have more sub-sub tributaries. Within the GRB the feasibility study selected project districts based on available vulnerability analyses, and the priorities of the GoN in consultation with the NDA and stakeholders in a consultative country/community driven approach. These decisions also considered complementarity with other donors, programmes and projects. Priority was given to the eight clusters within the seven sub basins (see figure 3) that had the greatest vulnerability within each of the physiographic zones of the basin[14]. Site selection was verified through field work undertaken for the feasibility study, and at the same time local scale vulnerabilities were identified as part of the baseline process.

Figure 3: The seven sub-basins of the Gandaki River Basin



The project will implement field interventions in the seven sub-basins of the Gandaki River Basin and in Chure (Siwalik) in the Rapti Sub-basin in GRB. The actual sites and communities for the field interventions are not defined yet, the process of selecting sites is described below in chapter 5.1. The specific interventions implemented in a given site will be considered as sub-projects. The following procedure aims at ensuring that each sub-project is analysed on potential negative social or environmental impacts prior to their implementation, that strategies are identified for impact avoidance or mitigation and that relevant provisions of IUCN ESMS Standards are taken into account.

[14] See chapter 6.1 of the Feasibility Study for a detailed description of the vulnerability mapping.

5.1 Site Selection

As mentioned above the project will implement field interventions in the seven sub-basins of the Gandaki River Basin and in Chure (Siwalik) in the Rapti Sub-basin in GRB. The actual sites and communities for the field interventions are not defined yet. The feasibility study had examined the biophysical vulnerability situation in eight clusters in the seven sub-basins plus Chure, but the selection of the exact sites for execution of project interventions will only be decided during project implementation. This is expected to generate a long list of sites considered as ecologically vulnerable or highly vulnerable. For guiding the process of further narrowing down site selection, social criteria will be taken into consideration. In line with IUCN's ESMS Standard on Indigenous Peoples one criteria for site-selection is the presence of indigenous peoples giving particular emphasis to sites where groups are present which are classified endangered, highly marginalized, marginalised and disadvantaged indigenous groups (see chapter 3.2 for explanation of these categories) or the strong presence of other vulnerable or marginalized groups.

In this process, expert advice from social scientists and indigenous peoples' representative organizations such as the National Foundation for Development of Indigenous Nationalities (NFDIN) and the National Indigenous Women's Federation (NIWF) will be sought. Similarly, the advice of qualified experts working on gender equality and women empowerment will be sought. Information on women headed household from household survey statistics of Central Bureau of Statistics and social vulnerability analysis conducted by UNDP in preparing Human Development Report will also be utilised. The purpose of these social criteria is to guide site selection in order to focus project interventions on sites with a strong presence of vulnerable groups.

Once the sites for field interventions have been selected, a rapid social analysis will be carried out in each site to establish the social baseline. This should provide an overview of social groups by describing main social and demographic features such as ethnicity, forms of social differentiation (caste, status, class, wealth or others), language, main economic activities, and livelihood pattern; and allow identification of vulnerable groups. The analysis should further satisfy information needs of the Standard on Indigenous Peoples, e.g. establishing number of indigenous households/individuals and percentage compared to total population and providing an understanding about their socio-economic status, access to services and opportunities, level of integration of the indigenous population into the mainstream society (e.g. mixed, acculturated etc.) and barriers the groups are facing. Wherever relevant and possible the analysis should disaggregate by gender groups. Aside from identifying potential risks of the sub-projects for different gender groups, sex disaggregated baseline data will be established to enable gender-responsive design of the sub-projects. A sample template outline of the rapid social analysis is provided in Appendix 2.

5.2 Exclusion List

The project will not fund sub-projects that are considered high risk projects. Therefore, the following list has been established that describes the activities / sub-projects that would not be supported by the project:

- Development of new large tanks: The project will consider, however, the rehabilitation of small tanks where the individual tank's surface area is less than one acre, to support the small holder farmers to cope with prolonged dry spells.
- Large scale irrigation systems like transboundary canals and water diversion projects; the project will, however, consider to establish/rehabilitate minor irrigation systems that connect the small tanks and farmer fields.

- As part of the forest restoration work: no introduction of non-native species with risk of developing invasive character.
- With regards to the use of pesticides, the project will not:
    - directly supply or use of pesticides that may cause of adverse effects to health and/or environment or result in violations of the IUCN Guidance Note on Pest Management[15] or national Code of Conduct of pesticides whatever is more stringent;
    - lead to an increased use of pesticides per ha (taking into account active substance, dilution rates and application rates).
    - Pesticides will not be used in buffer areas, fragile ecosystems, areas with high biodiversity value
- The project will not involve physical displacement of people (permanently or temporarily)
- Physical works including earth works will not be situated in an area where cultural resources (in particular hidden resources) are expected.

5.3 ESMS Screening Procedure

The purpose of the screening is to understand whether a sub-project might give rise to negative social and environmental impacts and - if risks have been identified - to determine the need for conducting further assessments to understand the risks. Screening also determines whether sub-project activities trigger any of IUCN's ESMS Standards and what tools should be used in response.

The screening results in a classification of the sub-project as low, moderate or high risk. The classification of sub-projects as **high risk** is considered very unlikely given the exclusion list; and high risk projects would not qualify for funding even if not on the list. . A sub-project is classified as **moderate risk** if it includes activities with potential adverse social and environmental risks and impacts, that can be determined with a reasonable degree of certainty, are limited in scale, few if any of them are irreversible, and can be addressed through application of standard best practice, mitigation measures and stakeholder engagement during project implementation.

The category **low risk** is used for sub-project that are expected to have minimal or no adverse social and environmental risks and impacts, and/or mitigation already devised as part of the project strategy (e.g. in form of outputs or activities) and this is expected to appropriately address risks. No further assessment is required.

The screening will be undertaken by the IUCN Regional ESMS Focal Point (FP) based in the IUCN regional office in Bangkok who will involve additional IUCN ESMS experts on specific technical aspects as needed. The screening is guided by the ESMS Questionnaire, which is completed by the staff in the Field Execution Office (FEO) who is supporting the design of the respective sub-project.. The questionnaire is included in the ESMS Screening Report template (see Appendix 3). The questionnaire analyses impact issues related to the four ESMS standards and respective requirements (Standard on Involuntary Resettlement and Access Restrictions; Standard on Indigenous Peoples; Standard on Cultural Heritage; and Standard on Biodiversity Conservation and Sustainable Use of Natural Resources); but is also assesses the sub-projects on the following social and environmental risk areas:

- Risks of infringing on human rights, including substantive and procedural rights,
- Risks of negatively affecting gender groups (incl. gender-based violence),

[15] See ESMS Guidance Note on Pest Management Planning, available at: www.iucn.org/esms

- Risks of affecting vulnerable groups,
- Community health, safety and security risks (including human-wildlife conflicts and risks related to security personnel),
- Labour and working conditions (including affecting workers' rights, child labour and occupational health and safety),
- Resource Efficiency, Pollution Wastes, Chemicals and GHG emissions and
- Climate Change (risks from project design failing to take climate change into account).

The screening also checks whether statutory requirements such as the need to carry out an Environmental Impact Assessment (EIA) need to be followed.

This screening step concludes by producing a screening report based on the template provided, for each sub-project. The screening report is prepared by the regional ESMS officer.

5.4 Impact assessment and risk management

If the ESMS Screening identifies environmental or social risks and classifies the project as moderate risk project, it will be necessary to

- analyse the significance of the identified risks (probability and severity/magnitude),
- identify alternative approaches in order to avoid risks and/or
- develop culturally appropriate and agreed measures for mitigating the risks.

These steps will require additional consultations with the affected groups and other concerned stakeholders. Depending on the significance and nature of the risk, in the ESMS Screening Report the ESMS Regional FP will determine whether further environmental and/or social impact assessments are required (e.g. SIA, ESIA or partial ESIA or targeted environmental or social assessments). Generic terms of references for SIA and ESIA are attached as Annex 6 and 7, respectively. However, they will need to be adapted by the ESMS Regional FP to reflect the issues identified in the screening and the local context. Where sub-projects trigger statutory EIA requirements, the project will carry-out the respective assessment in line with the National EIA Guidelines.

High-level technical guidance for mitigation of environmental and social impacts

Table 12 presented in chapter 4 has established a preliminary list of possible environmental and social risks that potentially could occur when implementing activities funded under this project. It has further provided a preliminary rating of the probability and magnitude of these risks as well as high-level guidance for mitigation measures. However, as described above, each sub-project will be individually screened on environmental and social risks; and where risks are identified mitigation measures will be developed and documented in form of an Environmental and Social Management Plan (ESMP). A high-level ESMP has been developed and presented in table 13 below. Without knowing the activities in more detail nor the conditions of the respective sites where they will be implemented, measures for preventing or mitigating risks cannot be elaborated in very fine detail at this stage of planning. Hence, the FEO staff supporting each sub-project will use this high-level ESMP as a guidance and will tailor and fine-tune the measures to suit their respective risks. The ESMP Guidance Note (attached as annex 8) provides further instructions for the development of the ESMP, including a template.

Table 13: High-level Environmental and Social Management Plan (ESMP)

Project activities	Risk Issues/negative Impacts	Mitigation Measures	Responsibility Implementation	Timeframe/periodicity
1.1.1: Establish climate resilient agroforestry practices	Practices might conflict with **cultural practices** and customary management regimes	**M1**: The agroforestry practices are developed in consultation with communities in the first place. Documentation and sharing of local people's traditional knowledge, particularly of indigenous communities (subject to FPIC), can be insightful for this purpose.	Field Execution Office (FEO) staff	Prior to establishment of practices
	Selection of farmers to benefit from project support (capacity building) might be perceived as **unjustified preferential treatment**	**M2**: The selection is based on transparent eligibility criteria in order to ensure that no unjustified preferential treatment occurs	Project Team Leader (PTL)	Prior to selection process
	Selection of species might involve negative environmental impacts if it includes **non-native species** that might develop **invasive characteristics**	**M3**: It cannot be fully excluded that certain conditions might require the use of non-native species (outside their natural range) that might be more tolerant to impacts from climate change (e.g. drought). In such cases, the project will undertake specific risk assessment guided by the IUCN Guideline on Species Introduction[16] and only proceed if the Department of Agriculture, Department of Forest and Soil Conservation has cleared the introduction.	FEO staff supported by PTL	Prior to species selection
1.1.2: Construct small nature-based structures (bamboo check dams, plantations of grass and trees)	Construction of basic structures for restoring agricultural lands damaged by landslides and flood (embankments, diversion channel, and slope stabilization) might damage buried **cultural heritage resources**	This activity takes place on agricultural land that has been damaged by landslides or floods; it and will not involve major excavation (if at all); hence the risk of impacting buried cultural resources is considered unlikely; however for precautionary reasons community groups will be consulted	FEO staff	Prior to construction
	Risks of **invasive behaviour** when introducing native species from different altitude and/or from neighbouring climate zones to test performance	**See M3**	**See M3**	**See M3**
	Soil disturbance and erosion impacts from construction of water management infrastructure including bund protection, gully treatment, diversion channels for runoff control or check-dams.	The activity is intended to prevent erosion and uses bio-engineering and nature based solutions. Chapter 6 in the feasibility study and annex 11.4 provides a wide range of measures and techniques for slope stabilization and preventions of erosion; hence, the risk of causing soil disturbance and erosion is considered unlikely. However, for precautionary reasons the risk will be closely monitored.	FEO staff	Adherence to measures and techniques established in FS monitored during the construction phase and annually as part of monitoring
1.2.1: Construct small scale irrigation systems through improved community participation	**Soil disturbance and erosion** impacts from construction of small scale irrigation	**M4:** To further reduce the probability of the risk occurring technical guidance with operational procedures will be provided to staff, contractors and communities to be followed during construction phase; adherence will be closely monitored	Guidance prepared by consultant overseen by FEO staff and PTL	Prior to construction, adherence to guidance monitored during the construction phase and annually as part of monitoring
	Construction of basic infrastructures (embankments, diversion channel, and slope stabilization) might damage or	**M5:** To further reduce the probability of the risk occurring the project will check prevalence of cultural features when selecting the sites for infrastructure and develop a chance find procedure	FEO staff	Prior to construction

[16] Available at https://portals.iucn.org/library/efiles/documents/2013-009.pdf

Project activities	Risk Issues/negative Impacts	Mitigation Measures	Responsibility Implementation	Timeframe/periodicity
	affect **cultural heritage resources**	(based on the template in the Standard) and communicate to entities in charge of infrastructure works		
1.2.2: Establish water harvesting systems (conservation ponds, water reservoirs) and promote water use efficiency through drip and sprinkle irrigation, and use of waste water	Construction of water harvesting systems (conservation ponds and water reservoirs) in the hilly mountains might accelerate **soil erosion and landslides** due to loss of top soil and loss of native vegetation.	In case new structures are required, the project will carry-out environmental impact assessment as required by the National EIA Guidelines.	PTL	Prior to construction
		M6: The project will use traditional techniques and provide technical guidance with operational procedures to guide the works. The sites will be carefully selected to avoid disturbance to native flora and fauna; a GIS-based planning tool will guide localization of appropriate sites to consider relevant biophysical and socio-economic parameters. Works will be carried out during dry season to avoid soil erosion during excavation works. Only small-scale, low-invasive tools will be used, clear boundaries for vegetation clearance and management of retained vegetation will be maintained; natural barriers or micro bunds will be constructed along the contour to control erosion and landslides. Retention of topsoil for restoration (including tilling and revegetation) as soon as practicable.	Technical guidance produced by consultant overseen by FEO staff and PTL	Prior to construction; adherence monitored during the construction phase and annually as part of monitoring
	Soil disturbance and erosion impacts from construction of water management infrastructure (water holes)	To further reduce the probability of the risk occurring **M4** will be implemented.	**See M4**	**See M4**
2.1.1: Construct climate resilient green belts to protect forests, wetlands, grasslands and conservation ponds from landslides and floods	Risks of invasive behaviour when introducing native species from different altitude and/or from neighbouring climate zones to test performance	Project will give preference to to native species from the same altitudinal and climate zone. In case species from different zones are needed **M3** will be implemented.	**See M3**	**See M3**
2.1.2: Apply bio-engineering techniques to provide structural support for 70 km erosion prone rural forest roads.	Risk to further landslides during the construction phase.	**M7:** Technical guidance with operational procedures from the Department for Road and Transportation will be followed to minimise destabilisation of soils and debris/mud flows through appropriate design and construction practices. These include, among others, minimisation of cleared areas and soil disturbance, and revegetation with native species as soon as feasible. no vehicle use to be used outside designated areas, early installation and regular maintenance of drainage and diversion structures, timing of works during dry season	Technical guidance from made available from Department for Road and Transportation; adherence monitored by FEO staff	Guidance made available prior to construction; adherence monitored during the construction phase and annually as part of monitoring
2.1.3: Restore the biodiversity of vulnerable forests and grassland ecosystems through the removal and (productive) reuse of	Manual techniques for eradicating/ weeding of invasive species are labour intensive – puts an additional burden on farmers; this might affect in particular women as men often have emigrated	**M8:** Participation of individuals in these works is voluntary. Timing of the activity will be decided in discussion with the communities and appropriate and agreed compensation for the time given as labor will be provided (e.g. use of species biomass for energy bio-briquettes)	Project Forestry Staff of FEO in cooperation with Community Forest User Groups	During the operation phase

Project activities	Risk Issues/negative Impacts	Mitigation Measures	Responsibility Implementation	Timeframe/periodicity
invasive species				
2.2.1: Create new SOP's that support future interventions on agroforestry, forestry, wetlands and grasslands management	Standard operating procedure (SOP) may restrict access restriction to natural resource availability to local communities	This activity might trigger the Standard in situations where restrictions are needed and put in place by entities that are not the users themselves. See further guidance in chapter 6.1.	FEO staff and PTL	When necessary as determined by the ESMS Screening of the sub-project
2.2.2: Provide technical training to enhance capacity of CFUGs and NGOs in vulnerable communities in maintaining climate resilient ecosystems	Managing the ecosystems might require putting in place restrictions on resources use (including temporary) which might affect vulnerable groups within the communities who don't have other options / resources for their livelihoods (indirect impact).	Situations where communities themselves decided about restrictions in order to sustain the long-term use of resources do not trigger the Standard. However, social impacts might still occur in particular for vulnerable groups. Despite considered an indirect/induced impact, the project will provide mitigations through ensuring that the training includes building awareness about social impacts	Project Forest Staff of FEO in cooperation with Community Forest User Groups	Prior to the training
3.1.1: Technical assistance for community based planning and development of site specific management structure and tools for conservation and restoration of ecosystem	Risk of affecting vulnerable groups and women when implementing restoration measures in case management structures and tools would lead to increased work load	**M9:** The risks do not seem very likely, but as precautionary measure, it will be ensured that vulnerable or affected groups have access to a local grievance mechanism to raise potential complaints or risks.	PTL (responsible for establishment of Grievance Mechanism) and FEO staff (responsible for communicating it at field level)	During inception phase of the project
Activity 3.1.2: Develop community-based monitoring and maintenance programmes through the local and regional management structures to maintain restored ecosystems	The monitoring system might include elements of enforcement of access restrictions and hence affect vulnerable groups	There is a likelihood that this triggers the Standard, in particular as the system is monitored by the local and provincial level government structures. See further guidance in chapter 6.1.	FEO staff and PTL	Prior to the implementation of the activity
Activity 3.1.4: Link upstream and downstream vulnerable communities through climate informed management of spring-shed and water source protection	Risk of activities of upstream communities affecting the availability of water for downstream communities	**M10:** The risk is considered possible but not very likely, as it is precisely the purpose of the activity to link the communities and enable consultation and agreements on water use and source protection. The project will ensure that the gender dimensions and water needs of vulnerable groups are appropriately addressed.	FEO staff and PTL	Prior to the implementation of the activity
Activity 3.2.1: Prepare River Basin Management framework with integrated sub-riverine watershed and water resource management plans for the GRB that includes forests, grasslands, fisheries, wetlands and agro-ecosystems.	Risk of affecting water needs of vulnerable people when determining water user rights as part of the water management resource plans, including women	**M11:** Gandaki river basin management plan will be based on prior analysis, done with the federal government, of needs of all three provinces (Province 3, 4, and 5). Likewise, seven watershed management plans will be based on prior analysis, done with the provincial governments (3,4, and 5), of needs of all local governments under each province. And sub-watershed management plans will be based on prior analysis, done with the communities on the basis of the needs of users.	FEO staff and PTL	Prior to development of framework and management plan

Project activities	Risk Issues/negative Impacts	Mitigation Measures	Responsibility Implementation	Timeframe/periodicity
Activity 3.3.2: Creating an online platform and associated mobile phone application to facilitate access to information in the Decision-Support Tool for decision-makers, communities, NGOs/CBOs and other relevant stakeholders, as well as to allow them to upload data for tracking changes in ecological and socio-economic vulnerability to climate change in the GRB.	Risks related to data protection in case individual data will be uploaded	**M12:** The risk will be avoided by ensuring compliance will applicable data protection policy. Before commencing the activity, project staff will compare the national data protection policy with the IUCN Data Protection Policy[17] and apply whatever is more stringent and provides a higher level of protection of individuals or household against misuse of personal data.	**PTL**	Prior to the implementation of the activity

[17] Available at https://www.iucn.org/sites/dev/files/data_protection_policy_25.05.2018_0.pdf

Emergency Response Plan

Irrespective of the risk category of the sub-projects, an Emergency Response Plan will be prepared for all sub-projects that include construction works given the fact that the area is prone to natural hazards including earthquakes and flooding. The purpose of the plan is to protect local communities from hazards caused and/or exacerbated by project activities (including flooding, landslides) and the accidental collapse or failure structural elements built be the sub-project.

FEO staff responsible for the respective sub-project and a local safeguard consultant will assess the risks to, and potential impacts on, the safety of affected communities during construction and operation of the structures and identify preventive measures to address them in a manner commensurate with the risks. Consideration will be given to potential exposure to both accidental and natural hazards, especially where the structural elements of supported activities are accessible to members of the affected community or where their failure could result in injury to the community.

The measures should favour prevention or avoidance of risks and impacts over their minimization and reduction and shall be consistent with good international practice, such as the World Bank Group Environmental, Health and Safety Guidelines (EHS Guidelines), available at http://www.ifc.org/ehsguidelines) as well as complying with the requirements under the Occupational, Health and Safety Policy of the Government of Nepal. The measures will need take into account differences in risk exposure and sensitivity of women and men, as well as marginalized and disadvantaged groups, including children, older persons, persons with disabilities, minorities and indigenous people and make reference to any residences located near the construction activities.

The plan will also specify emergency scenarios, emergency response or contingency actions that will be implemented in the event of an emergency occurring, which may result in serious health, safety and environmental damage. It will further establish training requirements to ensure that the project team and other relevant stakeholders are prepared to respond to accidental and emergency situations in a manner appropriate to prevent and mitigate any harm to people. The plan will also specify emergency equipment and communication protocols and designate responsibilities among the project team.

Incident reporting

IUCN has an incident reporting procedure in place that requires project executing entities to inform IUCN of all serious incidents caused by or related to a project that have or could have significant negative impacts on people or on the environment. The purpose of reporting serious incidents is to ensure that appropriate responses and corrective actions are taken in order to minimize, mitigate or remedy the impacts. A serious incident is an unplanned or uncontrolled event that has an adverse effect on project personnel and workers, community members or on the environment within the project's area of influence, as well as events that have adverse effects on the project or that give rise to liabilities or reputational risks that could jeopardize achievement of the project's objectives. Serious incidents include the following:

- **Fatalities, serious injuries and accidents at work.** This would cover any fatalities, serious injuries and other occurrences affecting project workers, defined as: (i) people employed or engaged directly by the project executing entity to work specifically in relation to the project, (ii) people employed or engaged through third parties to perform work related to core functions of the project (including contractors and subcontractors), (iii) community workers employed or voluntarily engaged in a project. It would include

deaths and serious injuries occurring during routine patrols or anti-poaching operations, kidnapping, murder and other forms of violence affecting project workers, accidents related to project transport or equipment, and loss of life or serious injuries caused by natural or other disasters.

- **Fatalities, serious injuries and accidents affecting local communities and others.** This would include serious injuries or deaths caused by project workers, including contractors, subcontractors and their workers, or local community workers or volunteers. It would also cover major accidents involving project vehicles or other forms of transport (boats, planes), equipment or materials provided by a project.
- **Violations of human rights.** This would cover human rights violations or public accusations of human rights violations attributed to project workers, contractors of community workers or volunteers. It would cover deaths and injuries to suspects arrested in the conduct of law enforcement activities, torture or other forms of unlawful use of force, or unlawful damage to or confiscation of community or private property. It would include violations of human rights that have occurred as a direct consequence of a project activity and with involvement of project workers, and violations that have taken place using equipment provided by the project, including occurrences that have taken place outside the boundary of the project, where a project partner was implicated (including members of state security agents). It would also cover **sexual and gender-based violence** attributed to project workers, including rape, sexual exploitation, abuse, harassment and physical violence against women. It would also cover the use of, and public accusations of the use of **harmful child labour** by the project, contractors or community workers and volunteers.
- **Conflicts, disputes and disturbances leading to loss of life, violence or the risk of violence.** This would include inter-community or inter-ethnic violence caused or exacerbated by project activities, and conflicts that have the potential for violence towards project personnel and/or local communities.
- **Environmental impacts** or public accusation of significant environmental impacts attributed to project activities that have led to or could lead to serious contamination, destruction or degradation of natural habitats or areas of high biodiversity value.

5.5 ESMS Clearance of sub-project

Sub-projects that are considered low risk will be cleared in one step together with the ESMS Screening report. Sub-projects that have been classified as moderate risk project (high risks projects are excluded), will require a dedicated step for the ESMS Clearance as it needs to be checked whether required assessments (ESIA, SIA etc.) are considered adequate and whether the results have been appropriately incorporated in the design of the sub-project, including through the development of an Environmental and Social Management Plan (ESMP) or development of specific safeguard tools. The ESMS Clearance for each risk sub-project is performed by the IUCN Regional ESMS FP by completing the respective section in the ESMS Screening Report template (see Appendix 3).

5.6 ESMP implementation and monitoring

Sub-projects that have been classified as **moderate risk** project (high risk projects are excluded) will require the implementation of mitigation measures as specified in the sub-project's Environmental and Social Management Plan (ESMP). The FEO responsible for the implementation of the respective sub-project is also in charge of implementing the mitigation measures.

The ESMP Guidance Note (see Appendix 8) provides a format for reporting progress of implementing the mitigation measures – to be completed by the FEO staff responsible for the respective sub-project, supported by PTL and IUCN National ESMS Focal Point (FP) where needed and according to the established frequency. The progress reports will be monitored by IUCN's Regional ESMS FP as part of his supervision role. Aside from checking progress of implementation of the measures, monitoring should also include checking the effectiveness of mitigation measures as well as screening for additional risks that may have emerged since the sub-project start. Where appropriate, stakeholders and in particular affected groups will be engaged to provide feed-back on the effectiveness of measures.

Sub-projects that are considered **low risk** do not require specific action except regular monitoring of potential emerging risks.

6. Provisions from ESMS Standards and other specific considerations

The sub-chapters below highlight relevant provisions from IUCN's four ESMS Standards that need to be taken into consideration for site selection, screening, assessment and management of risks.

6.1 The Standard on Involuntary Resettlement and Access Restrictions

IUCN policies recognize the rights of people to secure their livelihoods, enjoy healthy and productive environments, and live with dignity. In fulfilment of these policies, IUCN applies and actively promotes rights-based approaches. In light of these policies, projects undertaken or supported by IUCN generally aim at promoting positive measures for harmonizing nature conservation activities with respect for people's rights, particularly human rights. However, development and conservation interventions may require, in certain instances, resettlement of communities and livelihood activities or restrictions of various stakeholders' access to natural resources, which may result in costs for the affected groups and in loss of revenues or access to benefits, for instance on wildlife hunting, non-timber forest products, and production areas.

The project has been designed in a way that it will not require involuntary resettlement. It will neither put in place use regulations or restrictions for protected areas nor would it enhance enforcement of existing regulations or restrictions that would trigger the access restrictions element of the Standard. However, the project will facilitate a process where local communities themselves might decide about targeted restrictions to certain natural resources to allow their regeneration and sustainable use. For instance, under activity 2.2.2 the project will provide technical training to enhance the capacity of CFUGs and NGOs in vulnerable communities in maintaining climate resilient ecosystems; which might include discussions around the need to restrict the use of resources in the community forests and guidance how to best implement this. And under activity 3.1.2 the project will develop community-based monitoring and maintenance programmes through the local and regional management structures to maintain restored ecosystems, which could entail measures for increasing enforcement of resource restriction rules that have been put in place by the communities and resource users themselves in order to ensure the sustainability of the resources.

While voluntary decisions about restrictions do not trigger the Standard, the FEO staff responsible for the respective sub-project, supported by a local safeguard consultant as needed, will ensure that any management plans for the community forests developed in the context of the project are based on a decision-making process that is adequate and reflects

voluntary and informed consensus of the community. Informed consensus implies that the implications of the proposed restrictions on all community members (including vulnerable groups) have been assessed and shared with all relevant groups, in particular those who might be affected. If impacts have been identified, measures need to be put in place by the community to mitigate them. The need of a sub-project to carry out an explicit risk assessments will depend on the conditions of each sub-project and will be established as part of the ESMS Screening.

Project activities do not require acquisition of land. Measures such as the construction of nature-based structures for restoring agricultural lands damaged by landslides and flood (embankments, diversion channel, and slope stabilization) will be implemented on land owned by smallholder farmers, but are expected to provide tangible benefits for the owners. They will only be implemented upon explicit wish, and a written agreement from the owner will be obtained prior to execution.

Small infrastructure sub-project such as the construction of small-scale irrigation systems, water harvesting structures, of climate resilient green belts or the structural support for erosion prone rural forest roads (activity 1.1.2, 1.2.1, 1.2.2, 2.1.1 and 2.1.2) might be carried out on both public (including communal) or private land. As described in chapter 5.3 of the feasibility study as well as in chapter E.6 of the Funding Proposal such interventions are preceded by thorough stakeholder consultations in order to reach a common level of understanding within the community, analyses communities' resource uses and needs, communicating the precise objectives of the interventions at the outset and identifying the suitable areas for implementation based on local knowledge and needs. Hence, this process will ensure that members of the community and in particular potentially affected groups are in full agreement with the intervention and no issues related to land acquisitions are triggered.

6.2 The Standard on Indigenous Peoples

The project will operate across a geographically diverse landscape from the lowland Terai area to the trans-Himalyan area with more than different 40 ethnic and indigenous groups present. In the Terai there are mostly Tharu People. Gurung, Tamang, Magar and Chepang are traditionally from the Middle Hills. Loba, Thakali and Bhoti are from the Himalayan area.

The standard is triggered due to the presence of indigenous peoples in the project area. Given the fact that the precise locations of the field interventions (sub-projects) will only be decided during the project implementation, it is the purpose of this chapter to provide guidance on policy, process and procedures applied during the process of site selection and sub-project design. More concretely, this guidance should ensure that the socio-economic situation of indigenous peoples in the context of the sub-projects is well understood and that there are no adverse effects on indigenous peoples, in full compliance with Government of Nepal (GON) and the IUCN ESMS Standard on Indigenous Peoples. Moreover, it ensures, that interventions are designed with greatest possible and cultural adequate benefits for indigenous peoples along with other disadvantaged groups and that the concerns of indigenous peoples are integrated in each cycle of the project.

Nepal has ratified the ILO Convention No. 169, Convention on Biological Diversity (CBD), and adopted UNDRIP in 2007, and as such guarantees indigenous peoples' rights, especially the rights to self-determination, autonomy, self-rule, Free, Prior and Informed Consent (FPIC), land, territories, resources and forest management, customary laws and institutions, along with full and effective participation at all levels.

Because of the complex structure of Nepal's society the definition and identification of indigenous peoples can sometimes be challenging. Nepal is a multi-ethnic, multi-lingual, multi-religious and, multi-cultural country, dominated by Hindu caste groups (Brahmin-Chhetri). The 2001 census has identified 100 different social groups in the country with over 92 languages and a mix of Hindu, Buddhist, Kirat, Animism, Christian and Muslim religions. As explained in chapter 3.2 Indigenous Peoples are known as adivasi or janajati and the NFDIN Act-2002 defines indigenous nationalities as distinct communities having their own mother tongues, traditional cultures, written and oral histories, traditional homeland and geographical areas, distinct egalitarian social structures and identify themselves as "Janajati"18.

Based on these characteristics, the National Foundation of Indigenous Nationalities (NFDIN), a Government founded institution, has recognized 59 different nationalities as indigenous peoples of Nepal who comprise about 37.2% of the country's population of over 25 million. However, in 2010, a high-level taskforce recommended an additional 22 ethnic and caste groups to be recognized as Indigenous Nationalities under the purview of the NFDIN Act, a request that has not been implemented yet. Among them, as shown in chapter 3.2, are 15 ethnic groups that are present in GRB (Kulung, Kumhar, Lhomi, Lodh, Nachhiring, Nahuwa, Nuniya, Rajdhob, Kahar, Kalwar, Kalar, Kathbaniyan, Dhandi, Baramo, Dev).

Given the fact that IUCN practices a wider definition for indigenous peoples than the Government of Nepal and in accordance with the ESMS Principle on Precedence of the Most Stringent Standards, the project will also consider groups that are currently not recognized by the Government but who self-identify themselves as "Janajati" as indigenous groups in the context of this project. It is the role of the rapid social assessment carried out in each site where sub-projects will be implemented, to identify the indigenous groups present in the respective sites.

It is critical to understand indigenous peoples in Nepal as a very heterogeneous group and in the context of this project and its sub-projects it will be important to distinguish the vulnerable and poor IP from the others. As shown in chapter 3.2 the National Federation of Indigenous Nationalities (NEFIN) has classified indigenous peoples into five different categories based on socio-economic variables that include literacy, housing, occupation, language, area of residence and population size. In line with the ESMS Principle on Protecting the Needs of Vulnerable groups, when designing infrastructure and livelihood sub-projects, the project will focus in particular on the needs of the groups classified as endangered, highly marginalised, marginalised and disadvantaged.

Indigenous peoples are not expected to be affected seriously or at all by the project whether it is through loss of livelihoods, displacement or impacts on their social and cultural identity. On the contrary, the project is expected to lead to positive outcomes, in particular for the indigenous people groups considered as vulnerable (e.g. classified as endangered, highly marginalized, marginalized and disadvantaged). However, a few barriers or constraints relevant for indigenous peoples have been identified that could lead to inadvertent negative impacts, that will need to be considered and proactively addressed when designing sub-projects. These are the following:

i. In many instances indigenous groups (together with other ethnic minorities or groups from a lower caste like Dalits) do not have legally registered land and are less able to take risks incurred by adopting new approaches to reduce their vulnerability to climate change. Another consequence of the lack of land titles are difficulties in

[18] The complete definition is provided in chapter 3.2

accessing credit needed for investments in land management. These condition need consideration when developing the agroforestry and livelihood improvement actions in order to avoid unintended discrimination.

ii. Another barrier encountered by indigenous groups is that the regulatory framework and institutional structures are often impediments to conducting business. For example, to establish a shop, hotel or any other business requires documents that show legal status. This requirement is one of the major barriers in diversifying the livelihood options of indigenous peoples, which needs to be addressed by the project in order to avoid unintended discrimination.

iii. Traditional rights to water sources are generally not formalized, but villages normally recognize traditionally held water rights by the various communities in their area. It will be important that any sub-project improving water availability and water use efficiency from irrigation systems is screened for inadvertently affecting traditional rights negatively. E.g. by tapping into water sources considered as underused on which downstream communities depend.

iv. Risk of affecting traditional rights to land and forest resources of especially vulnerable indigenous groups like Chepang, for instance through changes in land use or by placing infrastructure which could lead to an increase in access and competition for forest produce from other groups.

v. Risks of elite capture related to the allocation of project benefits given that indigenous peoples often lack power and representation in decision making processes compared to dominant caste groups; this needs to be taken into consideration when selecting sites for the infrastructure (e.g. irrigation, landslide and flood prevention) and when designing agroforestry and livelihood improvement actions.

Policy objectives, principles and procedures

The objectives of the Indigenous Peoples Standard need to be fully complied with when designing, implementing and monitoring the sub-projects. More concretely, the FEO staff responsible for the respective sub-project will ensure that the sub-project design process:

- anticipates and avoids negative economic, cultural, social and environmental impacts on indigenous peoples or, if avoidance is not possible, minimise and/or compensate for impacts;
- takes specific conditions, rights and needs of indigenous peoples and barriers they are facing fully into account in project planning and implementation;
- ensures that their social and cultural identity, customs, traditions and institutions are fully respected when establishing the detailed design of the interventions, including their cultural and spiritual values and perspectives on the environment;
- optimises opportunities for providing culturally appropriate and gender inclusive benefits to indigenous peoples as agreed with them.

Designing, implementing and monitoring the sub-projects should also adhere to the guiding principles of the Standard as laid out under provision 8 of the Standard[19].

The objective and principles will be put into practice through the following procedures:

1. **Site selection:** One way to ensure equitable access and sharing of project benefits is the formulation of an indigenous peoples criteria to guide the site selection (see

[19] Available at https://www.iucn.org/sites/dev/files/iucn_esms_standard_indigenous_peoples.pdf

chapter 5.1). This will allow the project to focus the interventions on sites with a strong presence of indigenous groups.

2. **Rapid social analysis:** After selecting the sites for field interventions, a rapid social analysis will be conducted by a local safeguard consultant to establish the social baseline. The analysis will provide quantitative and qualitative data about the indigenous communities including number of indigenous households/individuals and percentage compared to total population, their socio-economic status, access to services and opportunities, level of integration of the indigenous population into the mainstream society (e.g. mixed, acculturated etc.) and barriers they are facing (see outline presented in appendix 2).
3. **Consultation**: The development of the sub-project interventions will be carried out with in-depth consultation of local communities and in particular with the indigenous groups present in the sites. It will be ensured that this process does not give rise to any form of discrimination, even unintendedly, to indigenous people including on vulnerable sub-groups within the indigenous communities. As such, not only formal representatives but also indigenous women, youth and elders will be involved in a meaningful manner when planning the sub-project activities; this is to ensure that specific conditions, culture, rights and needs of indigenous peoples and barriers they are facing are fully taken into account when designing the interventions.

   The consultation must be carried out in a meaningful and culturally appropriate way focusing on decision-making processes relevant to them; free, prior and informed consent (FPIC) is obtained for any intervention that:

   a. takes place on their lands, waters, or territories;
   b. may have negative economic, social, cultural or environmental impacts on their rights, resources or livelihoods;
   c. involves the use of their traditional knowledge; or
   d. promotes the development and generation of social or economic benefits from cultural heritage sites or resources to which they have legal (including customary) rights.

   Consultations and FPIC process need to be documented, including the results of each consultation and how issues raised by indigenous groups have been addressed in project design.

4. **Culturally appropriate**: The project will further ensure that indigenous peoples' right to self-determination, social and cultural identity, traditions and institutions are respected, including their cultural and spiritual values and perspectives on the environment; and that opportunities are sought to provide culturally appropriate and gender inclusive benefits to indigenous peoples, as agreed with them and ensure that that these benefits are shared equitably.
5. **Gender**: Gender equality and women empowerment and considerations of intergenerational equity are properly integrated in project design, with due consideration to indigenous peoples' contexts and culture-specific situations.
6. **Screening**: Risk identification for each sub-project is ensured through the screening process described in chapter 5.2. A key input to the screening is the rapid social analysis undertaken for each of the identified sites/villages that will have provided a first overview of social groups and diversity issues. Screening is guided by the ESMS Screening Questionnaire, which includes a dedicated sections to ensure compliance with the Standard (see chapter 5.2). The screening will not only inquire about tangible but also non-tangible, cultural risks of proposed activities. The results of the

screening including actions that need to be taken or further assessments to be carried out are documented in the screening report for each sub-project.

7. **Assessment and mitigation:** If potential impacts have been identified, a social impact assessment (SIA) will be conducted to ascertain the risk issues and develop, in consultation with affected groups (including indigenous women, youth and elders) measures to avoid, minimize or mitigate adverse impacts. The assessment will be undertaken by a local safeguard expert with background in social science with expertise in the interface of indigenous peoples, human rights and conservation and experience working with the respective groups. The measures will be integrated into the ESMP or, if they are substantial and/or there are issues of discrimination by other ethnic groups, prepared in form of a site-specific abbreviated Indigenous Peoples Plan (IPP).
8. **Customary laws and institutions**: Project interventions must recognize and respect the customary laws and institutions of indigenous peoples as national laws and national and local institutions are often discriminatory against indigenous peoples.
9. **Traditional knowledge:** Project interventions will capitalize on appropriate indigenous and traditional knowledge, and technology along with suitable science and technology to identify the best solution for increased climate resilience. The use of indigenous and traditional knowledge will follow FPIC procedures (see above).
10. **Strengthening governance:** Activity 3.1.1 aims at supporting community based planning and development of site specific management structure and tools for conservation and ecosystem restoration. Strengthening indigenous communities and community forest institutions will be prioritized. Implementation of activities will be undertaken through collective decision making and the project will ensure that indigenous groups are appropriately represented in these mechanisms. Community based management of natural resources, particularly community forestry, has been successful in Nepal. This participatory approach is based on indigenous knowledge of local people, their motivation to conserve and manage natural resources and strong local organisation to undertake the initiatives.
11. **Arrangements for implementation:** For each sub-project implementation arrangements and measures for mitigation and for enhancement will be described and documented (either in form of an abbreviated IPP or in the ESMP), including:
    a. How ongoing consultations and disclosure of the ESMP/IPP will be ensured during implementation,
    b. Mitigation measures if risks have been identified,
    c. Monitoring arrangements including for ensuring that indigenous communities have equal access to project benefits,
    d. Arrangements for capacity building (where relevant),
    e. Arrangements for addressing any grievances (also see chapter 7),
    f. Specifications of costs (e.g. for capacity building, consultation, mitigation measures) and how they are covered.

The decision whether an explicit IPP needs to be prepared will be taken by the IUCN Regional ESMS FP as part of the ESMS Screening and will depend on the social composition of the sites. If the local community happens to be homogenous (i.e. presence of only one indigenous group) the provisions might be documented in form of an ESMP. However, in many places in Nepal, indigenous peoples live with non-indigenous peoples, such as Bahun-Chhteri, Dalits, Madhesi, Muslim etc., and the term local communities includes all these categories of people including indigenous peoples. In such case, it is necessary to prepare an explicit, but abbreviated IPP.

6.3 Standard on Cultural Heritage

The ESMS screening of the overall project has identified the Standard as being triggered, however the risks are overall considered of low probability. This is also demonstrated in the preliminary risk matrix (table 12). Nevertheless, the screening will review each sub-project on the following risk issues:

- Risk of physical damage to tangible resources including buried resources and whether there is a need to put in place Chance Find procedures (see Appendix 4 for a template);
- Potential impacts from restricting access to areas with cultural significance and
- Risks related to a wider use or commercialization of community cultural resources and the need to establish equitable sharing of benefits;

The need for the project to carry out a risk assessments on the identified risk issues will depend on the significance of the identified risks. This will be established as part of the ESMS Screening of the sub-projects and might require the consultation of relevant community groups, traditional knowledge holders, concerned Government authorities and local experts. If any of the proposed project activities involve the use or commercialization of community cultural resources a process following FPIC of respective rights holders is required. If indigenous peoples are present, risks related to these groups are covered under the Indigenous Peoples Standard.

6.4 Standard on Biodiversity Conservation and Sustainable Use of Natural Resources

The Standard has been triggered for the overall project as risks have been identified, albeit low, of accidentally affecting biodiversity. As outlined in the preliminary risk matrix (table 12), most of the risk can be readily addressed by adhering to the provided technical guidance and operational procedures. It will be important, though, to take the sensitivity of the receiving ecosystem into consideration, hence after decision about the precise site for the respective interventions. This will be done by the ESMS sub-project screening.

Three aspect will deserve special attention. One is the project's intention to build climate resilient green belts to protect forests, wetlands, grasslands and conservation ponds from landslides and floods (activity 2.1.1) that might include the development of new strips of **plantations** or enrichment plantation as explained in the Feasibility Study and in chapter E1 of the Funding Proposal. By no means will it involve the conversion or degradation of natural forest areas or of other areas with high biodiversity value. Instead, plantations are conceived as a targeted bio-engineering structures with very concrete design specifications. They are used in steep and erosion prone areas or along river and stream banks to stabilize the soil surface and prevent erosion and landslides. Plantations in corridors provide linkages between forest areas creating opportunities for species movement and genetic interchange. Plantations are required in spring-shed areas to maintain water levels in wetlands and prevent water sources from drying. Plantations along the bunds of lakes and ponds help restore wetlands to maintain water levels and improve water quality. Chapter 6.3.1 of the Feasibility Study provides detailed requirements and design specification for carrying out plantation activities, including provisions for consultation to ensure that local people, particularly forest dependent people, women, indigenous peoples and disadvantaged groups, are not adversely impacted. Efforts will be made to encourage and expand the emerging practice of CFUGs providing ultra-poor and disadvantaged communities with special provisions to use areas within the community forest for cultivating NTFPs and other crops, without seriously damaging the existing forest conditions.

The second aspect relates to the threat posed by **invasive species**. Nepal is considered to be one of the countries with the greatest threat (ranked 3 out of 124 countries for the agriculture sector) from biological invasions[20]. This can be attributed to the extreme climatic variation, ranging from tropical to alpine, so that alien introduced plant species native to any bioclimatic region can readily adapt to environmental conditions found in Nepal. Furthermore, the probability of introduction of alien plant species to Nepal appears high due to 1) increasing tourism activities particularly in mountain regions, 2) growing amount and diversity of imported agricultural products, 3) increasing quantity of imported crop seeds and other commodities, and 4) ineffective bio-security efforts including quarantine at international border points and airports. Furthermore, the biological invasions have emerged as a significant threat to biodiversity and ecosystem services in Nepal and its severity and extent is consistently growing.[21] In comparison to native species, the invasive species are usually more abundant, tolerant to a broad range of climatic condition, and possess highly competitive biological traits hence they are more likely to adapt to new climate conditions.[22] The Feasibility Study provided further analysis on this threats, in particular related to impacts in GRB.

The project has identified the threat posed by invasive species and activity 2.1.3 provides measures for combating and removing invasive species in vulnerable forests and grassland ecosystems. At the same time it is recognized that the development of climate resilient green belts (activity 2.1.1) might need to consider the use of species outside their natural range that are better suited to the harsh conditions and where water is a constraint. As stated in the Feasibility Study (chapter 6.3.1) and in the preliminary risk matrix (table 12) the use of non-native species will be minimized and used only where alternatives are not feasible. As stated in the risk matrix the project will undertake a specific risk assessment guided by the IUCN Guideline on Species Introduction[23] and only proceed if the Department of Agriculture, Department of Forest and Soil Conservation has cleared the introduction. The need for a risk assessment will be established by the sub-project screening.

Another aspect is the potential need to **use of synthetic pesticides** for managing invasive species. Generally, the probability of using pesticides is considered very low; however, in case it cannot be avoided by a sub-project, the screening will determine the risk level and whether a Pest Management Plan will be needed and/or other measures such as the development of a robust biosecurity protocol in accordance to the Pest Management Planning Guidance Note (see Appendix 9).

6.5 Specific attention to the need of vulnerable groups

Vulnerability in GRB is highly correlated with gender, caste, ethnicity, regional identity, and geographic location and poverty. Women, because of gender based discrimination and ingrained patriarchal socio economic and political system and their lower socio-economic status in comparison to men are more vulnerable to impacts of climate change and natural disasters. The level of social inclusive participation, decision making, and leadership roles played by poor, women, marginalized ethnic groups, Dalits and disabled people is more theoretical, than actual practice.

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[20] Paini, D.R., Sheppard, A.W., Cook, D.C., De Barro, P.J., Worner, S.P., Thomas, M.B., 2016. Global threat to agriculture from invasive species. P. Natl. Acad. Sci. U.S.A. 113 (27), 7575–7579.

[21] MFSC, 2014. Nepal National Biodiversity Strategy and Action Plan 2014-2020. Ministry of Forests and Soil Conservation (MFSC), Kathmandu, Nepal.

[22] Hellmann, J.J., Byers, J.E., Bierwagen, B.G., Dukes, J.S., 2008. Five potential consequences of climate change for invasive species. Conserv. Biol. 22 (3), 534–543.

[23] Available at https://portals.iucn.org/library/efiles/documents/2013-009.pdf

Some specific groups within the GRB, including small farm holders, cattle herders, poor and marginalized groups, elderly people, children and women are particularly vulnerable due to climate change and are impacted mostly. Because of their poverty or caste-based discrimination, poor and socially excluded groups often live in disaster prone areas such river corridors, foothills, near slumps and landslides and as a result, they are more vulnerable than others. Even within the better off districts of the GRB, there are pockets of poverty in certain geographic and remote areas. These sites are vulnerable to climate change and climate induced disaster. Similarly, certain poor ethnic groups or indigenous peoples who are primarily dependent on forests and water resources for their livelihoods are highly vulnerable.

Generally, these vulnerable groups including vulnerable indigenous groups have been identified as explicit target groups for the project and it is hence expected that their conditions will improve significantly, in particular related to their vulnerability to climate change. However, as the ESMS requires an extra level of precaution in order to avoid unintended negative impacts and as outlined in chapter 5.1, the project will undertake a rapid social analysis in each of the site identified for field intervention to establish the social baseline and understand the social diversity of sites (see Appendix 2 for a sample template outline of the rapid social analysis). As such the sites will be analysed on social and demographic features such as ethnicity, forms of social differentiation (caste, status, class, wealth or others), language, main economic activities, and livelihood pattern; and allow identification of vulnerable groups. Wherever relevant and possible the analysis should disaggregate by gender groups. The availability of this baseline data will inform the screening of the sub-project and allow the identification of risks from project activities on particular vulnerable groups.

7. Provisions for Stakeholder Consultation, Disclosure and Grievance

7.1 Requirements for Stakeholder Consultation and Disclosure

The ESMS Manual establishes stakeholder engagement as one of the eight principles that govern IUCN safeguards system. The ESMS Guidance Note on Stakeholder Engagement defines stakeholder engagement as a process involving stakeholder identification and analysis, planning the actual forms of engagement and implementing the actions.[24] Engagement strategies include dissemination/ disclosure of information, consultation and participation – during all phases of the project cycle as well as for addressing grievances and on-going reporting to stakeholders.

In accordance to the Guidance Note, the process of stakeholder engagement must be guided by the following principles:

- Stakeholder engagement begins as early as possible in the project planning process to gather initial views on the project proposal and inform design;
- Engagement actions are targeted to the audience taking into account the different access and communications needs of various groups and individuals, especially those who are vulnerable or disadvantaged;
- There should be sufficient emphasis on the local level (local communities, traditional leaders etc.) and for local civil society organizations (not only big international NGOs);
- Engagement is carried out on a continuous basis, throughout the project cycle and as environmental and social risks and impacts may arise;

[24] Available at www.iucn.org/esms

- Consultations are based on the prior disclosure and dissemination of relevant, objective, meaningful and easily accessible information in a timeframe that enables consultations with stakeholders in a culturally appropriate format;
- Consultations must be carried out in a non-discriminatory and gender-responsive manner, free of external manipulation, interference, coercion, discrimination and intimidation;
- In accordance with the ESMS Principle on the Protection of Vulnerable Groups, consultations should be responsive to the needs and interests of disadvantaged and vulnerable groups;
- Stakeholder feedback is encouraged and responded to - particularly as a way of informing project design and of identifying potentially affected people which would then need to be engaged in order to assess risks and develop mitigation measures;

Meaningful, effective and informed consultation and participation of stakeholders in the development and implementation of projects is critical to understanding the views and interests of different stakeholders on issues related to the project, flagging gaps and opportunities, establishing a constructive relationship or project roles with relevant parties and enabling stakeholders to take ownership of the project; it is also a vital element for promoting transparency and accountability, effective participation and inclusion. This is why the project preparation put strong emphasis on consultation as demonstrated in Appendix 5, which provides a summary of stakeholder consultation carried out during the project design.

The continuation of effective and meaningful stakeholder engagement during project implementation, which will be ensured by the Project Team Leader (PTL) and staff of the Field Execution Offices (FEO), is of particular importance for this project as concrete site interventions such as the various types of green infrastructure investments and the land use practices will only be detailed after having selected the final sites. Effective and meaningful consultation will be critical to establish ownership within the communities and ensure getting the details of implementation right and suited to the socio-cultural, economic and biophysical conditions. The project's Stakeholder Engagement Plan (included in Appendix 5) provides the framework for ensuring that stakeholders will continue playing a strong role in the detailed design of sub-projects and during implementation. It is further worth pointing out that for many activities stakeholder consultation is part of their design and different forms of engagement are conceptualized as sub-activities, which can be seen in the activity table in chapter E.6 of the Funding Proposal.

The ESMS Manual stresses one other element or function of stakeholder engagement. Following the rights-based approach, meaningful participation in the formulation and implementation of a project must be seen as a genuine right of individuals and communities whose lives might be affected, positively or negatively, by the project. Therefore, the ESMS requires a dedicated stakeholder engagement process as part of the safeguards review process to ensure that:

- stakeholders' concerns are captured and potential risks are adequately identified;
- groups and peoples whose lives might be affected by the project are properly consulted to verify and assess the significance of any impacts;
- affected groups and communities participate in the development of mitigation measures, in decision making regarding their operationalisation, and in monitoring their implementation.

The screening of the sub-projects will establish what level of engagement of stakeholders and affected groups is required for each sub-project during further steps of risk assessment, commensurate with the identified level of risks. This might include different types of

consultation and participation in the identification of risks and the assessment of significance, in the development of mitigation measures and in monitoring, following the ESMS Guidance Note on Stakeholder Engagement. The ESMS Standard on Indigenous Peoples formulates additional requirements for consultation as described in chapter 6.1

In accordance with the IUCN ESMS disclosure policy and with the requirements of the GCF Environmental and Social Policy and Information Disclosure Policy relevant safeguard documents as prescribed by the ESMS Screening (ESIA, ESMP and Pest Management Plan) of Category B sub-projects will be disclosed on the IUCN and GCF website (via the GCF Secretariat) and non-technical summaries in local channels at least 30 days prior to sub-project approval

7.2 Grievance Mechanism

IUCN has an institution-wide ESMS grievance and redress mechanism in place to address stakeholders' complaints related to issues where IUCN projects have failed to respect ESMS principles, standards, and procedures. The aim of the grievance mechanism is to provide people or communities fearing or suffering adverse impacts from a project with the assurance that they will be heard and assisted in a timely manner. The IUCN Grievance Mechanism Guidance Note[25] describes the system's overall principles, roles and responsibilities, and the processes for lodging and recording grievances, for resolving grievance, providing feedback, and monitoring any agreed corrective actions. Key principles of the mechanism are:

- Accessibility: executing entity must inform all relevant project stakeholders (in particular by vulnerable groups) of the existence of this mechanism right at project start; where needed adequate assistance is provided for those that may face barriers to raise their concerns; complainants are not financially impacted by the process of making a complaint;
- Practical: provide for solving concerns at the local level first;
- Effective: allow simple and streamlined access to the Grievance Mechanism through a three-stage process and assurance that concerns submitted to the institution-wide IUCN Project Complaints Management System (PCMS) are resolved within a clear timeline (see more detail below);
- Independent: full independence from executing entity is ensured (starting with stage 2), so that stakeholder don't need to fear potential retaliation or negative consequences of bringing the information forward;
- Transparent: clear and known procedures are provided for each stage of the Grievance Mechanism including clarity on the types of outcomes;
- Maintenance of records: all complaints are registered and are reported on.

In order to provide for adaptations to the local context, enhance accessibility of the grievance mechanism, prevent grievance from building up and provide for effective project-level conflict solution the PTL with supported of the IUCN National ESMS FP will complement the institution-wide mechanism by a project-level mechanism. The main features of the grievance mechanism including the local adaptations done at project-level are the following:

Eligibility

Any community, organisation, project stakeholder or affected group (consisting of two or more individuals) who believes that it may be negatively affected by the executing entity's failure to respect IUCN ESMS principles, standards, or procedures may submit a complaint. Representatives (a person or a local organisation) can submit a complaint on behalf of a community, project stakeholder or affected group. Anonymous complaints will not be

[25] Available at www.iucn.org/esms

considered, however, complainants' identities will be kept confidential upon their written request.

The following requests are not eligible:

- complaints with respect to actions or omissions that are the responsibility of parties other than IUCN and the relevant executing entity under its authority in the context of the project;
- complaints filed:
    - after the date of official closure of the project; or
    - 18 months after the date of the official closure of the project in cases where the complaint addresses an impact resulting from project activities that was not, and reasonably could not have been, known prior to the date of official closure;
- complaints that relate to the laws, policies, and regulations of the country, unless this directly relates to the entity's obligation to comply with IUCN's ESMS principles, standards and procedures;
- complaints that relate to IUCN's non-project-related housekeeping matters, such as finance, human resources and administration because they fall under different mechanisms;

Three-stage process for resolving a grievance

To be practical and cost-effective, resolution of complaints should be sought at the lowest possible level. The IUCN grievance mechanism is conceptualized as a three-stage escalating process as shown in Figure 4. It starts with the Project Management Unit (PMU) – more concretely the Project Team Leader (PTL) and the FEO staff responsible for the respective sub-project - and the affected party reviewing the conflict and deciding together on a way forward that advances their mutual interests (stage 1). 'Deciding together' approaches are often the most accessible, immediate and cost-effective ways to resolve differences. All complainants shall be treated respectfully, politely and with sensitivity.

Figure 4: Three-stage process for resolving a grievance

While recognizing that many complaints may be resolved immediately between the executing entity and complainant, the complainant can escalate the concern to a next higher level (stage 2) if no solution to the complaint is found by contacting the IUCN Nepal Country Office.

If these two stages have not been successful, the complainant can forward the grievance to the centralized IUCN Project Complaints Management System (PCMS) – stage 3. Complainants should explain that good-faith efforts have been made to first address the problem directly with the PMU. It is important to underline, though, that if the concern is sensitive, the complainant fears retaliation or any other justified reason, the first two stages can be skipped and the complaint can be escalated by the complainant directly to the PCMS.

Decision about escalation can also be taken by the PMU. While every possible effort should be made by them to resolve the issues within their purview, there may be certain problems that are more complex and cannot be solved at the local level. Such grievances will be escalated within fifteen working days to stage 2 (IUCN Nepal Country Office). Where also the IUCN Nepal Country Office does not succeed in addressing the issue, it will need to be submitted (within 20 working days) to the PCMS that triggers a dedicated complaint review and response mechanism. The mechanism including timeline for responses and responsibilities is described in Table 14.

Complaints can be raised either directly to the field staff, by phone or placed in writing in complaints box provided at the project sites. Any of these ways can also be chosen for stage 2. A complaint lodged to the Project Complaints Management System can be submitted in one for the following ways:

- by post to IUCN Head of Oversight, Rue Mauverney 28, CH-1196 Gland, Switzerland;
- by email to projectcomplaints@iucn.org;
- by fax to +41 22 999 00 02 (indicating IUCN Head of Oversight as addressee); or
- by telephone to + 41 22 999 02 59.

A written complaint (for any of the three stages) should include the following information (in any language):

- complainant's name, address, telephone number, fax number and email address and valid proof of representation if the complaint is filled by the representative of a legal person/entity;
- description of the project or programme concerned;
- the harm that is, or may result from IUCN's and/or the project executing entity's failures to respect IUCN's ESMS principles, standards, or procedures;
- actions taken to solve the issue, including previous contacts with the executing entity (stage 1) and the PMU (stage 2), where applicable, and reasonably detailed explanations why these stages have not provided a satisfactory solution; and
- list of supporting documents and attachments, as appropriate.

A template for the complaint is available on the IUCN website and will be translated into the local dialects in the project site and made available it appropriate channels. All complaints received through the PCMS trigger a formal review and response process following the action steps outlined in Table 14 below.

A key element of the grievance mechanism is the requirement for the PMU (stage 1), IUCN Nepal Country office (stage 2) or IUCN PCMS (stage 3) to maintain a register of complaints received. The register also documents the response actions and status (solved/not solved). The executing entities are mandated to submit a copy of the complaint register to the IUCN Nepal Country Office every six months. The complaint log will also be included in the annual ESMS report to the IUCN regional ESMS officer.

Table 14: Summary of the Project Complaints Management System (PCMS) Review process

	Action	Responsibility	Timeframe
1	Notify complainant whether complaint is eligible (based on eligibility criteria) and about further process	Head of Oversight, advisors	Within 5 working days of receipt of complaint
2	Appoint investigator for managing the case (based in the regional office and internal to IUCN, but independent from the executing entity)[26]	Director PPG	
3	Notify the executing entity about the review process and request response (cc PMU)	Investigator	
4	Respond to IUCN regarding the complaint: - confirm eligibility of complaint - submit action plan and timetable	Executing entity	Within 20 working days
5	Review and approve action plan	Investigator	
6	Develop corrective actions for issues of non-compliance including - timetable - corrective actions and, if relevant, remedial or preventive measures, - evidence of consent complainant - provisions for progress reports	Executing entity	As per agreed timetable
7	Review and approve corrective actions	Investigator	
8	Produce grievance summary report	Executing entity	
9	Implement corrective actions and report on the progress (monitoring)	Executing entity	As per agreed timetable

Additional local adaptation

In order to ensure that any grievance that may arise is resolved in a manner that will accrue maximum benefits to both the project and affected parties, the PTL, supported by IUCN National ESMS FP and FEO staff will take the following aspects into consideration in fine-tuning and communicating the grievance redress mechanism to all relevant stakeholder during the project's inception phase:

1. **Published information** – The project will publish detailed information about the project, the grievance mechanism and ways of lodging complaints in different forms of publication targeting to different concerned parties and widely disseminated through different social media, print, and IUCN and executing entities' websites. The information will be delivered in an appropriate form in local language assuring that all relevant groups are reached, including women, indigenous peoples and vulnerable groups. The executing entities will ensure that students and personnel in at least one school near the project site are given leaflets with information on the project's nature and objectives, as well as clear guidance on how to contact IUCN in case of concerns or complaints over negative impacts on their livelihood.

[26] For high-risk issues, the Head of Oversight may appoint an external investigator.

2. **Orientation to the Local Communities** – Different orientation programs will be organised at local level, with an aim to orient local communities about the nature and size of the project and the grievance mechanism.
3. **Stakeholder involvement in ESMP monitoring:** Involving stakeholders regularly in ESMP monitoring will serve as an accessible mechanism for the community to articulate concerns before issues are even building up.
4. **Appointing ombudsperson:** Communities are encouraged to appoint an Ombudsperson who will serve as a contact person and mediator in case a conflict between local communities and executing entities might build up. Local communities are free to initiate contact with the ombudsperson at any point. As independent persons of trust, ombudsperson will offer advice and will seek to mediate between the disputing parties. The ombudspersons will be bound to confidentiality.
5. **Grievance Box/ Complain Box:** Grievance boxes will be installed at all project sites. For the effective and accessible use of grievance box, the executing entity will inform all relevant project stakeholders of the existence of IUCN's grievance mechanism (see above).

8. Implementation arrangements and budget

As explained in the organogram in section B4 of the Funding Proposal, the overall supervision of ESMF implementation is with IUCN in accordance with IUCN's role as accredited entity. Within IUCN, the supervision is assumed by the Regional ESMS Focal Point (FP) who is based in the IUCN regional office in Bangkok. In this role, the ESMS FP will be supported by other IUCN ESMS experts who will provide specific technical expertise as needed, as well as by the IUCN ESMS Coordinator based at IUCN HQ. In addition to overseeing ESMF implementation, the Regional ESMS FP will be responsible for screening the sub-projects on environmental and social risks and for providing the final ESMS Clearance of the sub-projects. As such, the responsibilities for design/execution of sub-projects and safeguard compliance are deliberately separated in order to ensure objective and rigorous quality assurance. The executing entity and its collaboration partners (NTNC and IUCN Nepal) will mainly be responsible for following ESMS procedures and for implementing the sub-projects' Environmental and Social Management Plans (ESMP) and respective safeguard tools, as needed.

The detailed procedures for identifying, assessing and managing risks have been described in Chapter 5 including the respective roles and responsibilities. The roles and responsibilities are also summarized in table 15 below.

Table 15: Roles and responsibilities of ESMF implementation

ESMS steps	Applicable for	Responsible entity	Guidance or Template[27]
ESMS Training for all PMU members, FEO and other project staff, local safeguard consultant(s) and other relevant stakeholders	Entire Project	Senior Safeguard Consultant, IUCN Regional ESMS Focal Point (FP) and IUCN National ESMS FP	
Rapid social analysis in each intervention site	All sub-projects	Local safeguard consultant	Social Baseline Guidance Note (GN)
Stakeholder Engagement – continuous activity / project cycle	All sub-projects	Project Team Leader (PTL) and staff of Field Execution Offices (FEO)	SH Engagement Plan and GN Note Stakeholder Engagement
Establish and maintain project-level Grievance Mechanism	All sub-projects	PTL, supported by IUCN National ESMS FP and FEO staff	ESMF Chapter 7.1 and GN Grievance Mechanism
Complete ESMS Questionnaire	All sub-projects	FEO staff	ESMS Questionnaire - Template
ESMS Screening Report and ToR for impact assessments (if needed)	All sub-projects	IUCN Regional ESMS FP, additional IUCN ESMS experts, as needed	ESMS Screening Report – Template
Consultation with groups potentially affected by a community's voluntary decision to restrict use of resources	As per screening	FEO staff and/or local safeguard consultant	ESMS Standard Access Re-strictions, ESMF Chapter 6.1
Consultation with indigenous groups (including FPIC, where required as per ESMS Screening)	All sub-projects with presences of IP	FEO staff and/or local safeguard consultant	ESMS Standard Indigenous Peoples, ESMF Chapter 6.2
ESIA/SIA or targeted assessment of env. or social aspects; development of safeguard tools	As per screening	Local safeguard consultant	Generic ToR ESIA/SIA and relevant ESMS Standards
Development of Emergency Response Plan for each sub-project	All sub-projects with construction works	FEO staff and/or local safeguard consultant	ESMF Chapter 5.4
Development of ESMP together with relevant project stakeholders	Moderate risk sub-projects	FEO staff supported by PTL or local safeguard consultant	ESMP– GN & Template
Appraisal of ESIA report including ESMP	Mod. risk projects requiring ESIA	IUCN National ESMS FP, supported by Regional FP	ESIA Appraisal – Template & Checklist
ESMS clearance of sub-projects	Moderate risk sub-projects	IUCN Regional ESMS FP	ESMS Clearance-Template & Checklist
ESMP implementation & monitoring	Moderate risk sub-projects	FEO staff, supported by PTL and IUCN National ESMS FP	ESMP– GN & Template

[27] Available at www.iucn.org/esms

Annual Supervision of implementation ESMP and Stakeholder Engagement	Moderate risk sub-projects	IUCN Regional ESMS FP	IUCN GN Supervision Mission
Annual Reporting of E&S performance to GCF	Entire Project	PTL, supported by IUCN Regional ESMS FP	Annual Performance Report (APR) General Template GCF
Effectiveness of ESMP (part of project evaluation)	Moderate risk sub-projects	International safeguard consultant	

The project budget has been submitted as Annex 4 of the Funding Proposal. It includes a dedicated budget for ESMF implementation totalling USD 276,706. Details of the ESMF budget are provided in the sheet named “ESMF AP”; a summary can be found in the first sheet of the excel book (“Detailed budget”). It is worth mentioning that the budget needs to be seen as indicative and the amounts are to be understood as up to values as a number of safeguard tasks will only be relevant for moderate risk sub-projects the number of which will only be known during the ESMS screening of the sub-projects.

Appendix - see document “Annex 6b - ESMF Nepal - Appendix - revised 30 March 2020”

Appendix 1: ESMS Screening Report - Improving Climate Resilience of Vulnerable Communities and Ecosystems in the Gandaki River Basin

Appendix 2: Rapid social baseline analysis – sample template outline

Appendix 3: ESMS Screening questionnaire – template for screening of sub-projects

Appendix 4: Procedures for accidental discovery of cultural resources (Chance find)

Appendix 5: Stakeholder Consultation and Engagement Plan

Appendix 6: Environmental and Social Impact Assessment (ESIA) - Guidance Note

Appendix 7: Social Impact Assessment (SIA) - Guidance Note

Appendix 8: Developing and Monitoring an Environmental and Social Management Plan (ESMP) - Guidance Note

Appendix 9: Pest Management Planning and Outline Pest Management Plan - Guidance Note

Appendix 10: References