

Government of Nepal

Ministry of Agriculture and Livestock Development



NEPAL RURAL ECONOMIC AND ENTERPRISE DEVELOPMENT PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

September 2020

Executive Summary in English

The Rural Economic and Enterprise Development (REED) Project of the Ministry of Agriculture and Livestock Development (MoALD) aims to stimulate the development of rural enterprises by strengthening market linkages among smallholder producers and players in the agricultural commodity value chain; and by strengthening the enabling environment for the development of enterprises in key economic corridors of the country. The project will, among others, provide funding for the productive partnership's start-up business plans, upgrading and building demanddriven market centers, value chain related infrastructures and semi-public infrastructures and facilities at local level to support the partnerships and their communities. The project will also construct market and export promotion infrastructure in the form of regional market centers and agriculture centers of excellence. The project has been considered for World Bank funding. This Environmental and Social Management Framework (ESMF) sets out the policies and procedures for managing the Environmental and Social (E&S) risks and impacts of the project activities when specific interventions and locations under the project are not identified and their specific impacts are not known during project design and preparation. This report has been prepared in accordance with the World Bank Environmental and Social Framework (ESF) including ten Environmental and Social Standards (ESS). All ESSs, apart from ESS 9, are relevant to the project. All investments to be financed by this Project will apply national environmental laws and regulations as well as the relevant World Bank environmental and social standards. The matrix below shows the applicability and overview of the relevance of each ESSs for the Project.

Applicability of the World Bank Environmental and Social Standards

Applicability of the World Bank Environmental and Social Standards						
World Bank ESS	d Bank ESS Relevant/Not Overview of relevance of the ESS					
	relevant					
ESS 1: Assessment and	Assessment and Relevant The PP subprojects, demand-driven marke					
Management of		chain related infrastructure and facilities and semi-public				
Environmental and Social		infrastructures at local level and others having potential to				
Risks and Impacts		cause environmental and social risks and impacts.				
ESS 2: Labor and	Relevant	This standard will be relevant to the entire project				
Working Conditions		organization, including hired and organic employees of				
		MoALD and other government entities who will be involved				
		in the project, and project contractors. The assessment looks				
		at the prevailing country laws on labor and working				
		conditions, and the number of workers and personnel to be				
		potentially be working in the project.				
ESS 3: Resource	Relevant	This standard will apply as there is possibility on potential				
Efficiency and Pollution		water and air pollution during construction and the potential				
		pollution issues of commercial agricultural production and				

Prevention and Management		processing which may involve use of pesticides and chemicals.						
ESS 4: Community Health and Safety	Relevant	This standard will apply to all project interventions on the ground, including small-scale infrastructure and PP production and trading activities. The assessment looks at the health and safety risks of residents and communities of small-scale village construction and PP activities.						
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant	The project is not expected to involve any involuntary lar acquisition or restrictions on land use leading to physic and/or economic displacement of people. However, as precautionary measure this standard has been considered relevant.						
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant	Expansion of agricultural production areas could impact the country's forest and natural habitat. The assessment loc at potential direct short-term and long-term impacts forest, natural habitat and wildlife.						
ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Relevant	The project is expected to be implemented in 6 provinces. The assessment will determine the potential presence of ethnic minorities that may qualify as indigenous people as defined in the WB ESS7 standard.						
ESS 8: Cultural Heritage	Relevant	The assessment determines potential presence of cultu- heritage sites in the project sites and the probability encountering chance finds during construction infrastructure and facilities						
ESS 10: Stakeholder Engagement and Information Disclosure	Relevant	Effective and meaningful engagement and participation of the diverse stakeholder groups identified for the project is critical to its successful implementation and to ensure that mechanisms are in place for information sharing and addressing complaints and grievances.						

Prevailing Environmental and Social Issues in Nepal. A quick survey of Nepal's environmental and social profile reveals a list of the prevailing environmental and social issues in the country. These include: (1) land degradation due to felling of trees and clearing of vegetation, flooding, soil erosion and landslides which are also the main cause of sedimentation; (2) frequent forest fires which results in the loss of thousands of ha of forest and biodiversity every year; (3) disease epidemics which had been responsible for 55% of disaster deaths; (4) poverty, about twenty-five percent of the Nepalese population live below the national poverty line; (5) prevalence of substandard labor practices and working conditions, including issues with child labor; (6) high rates of malnutrition among children; (7) social and political exclusion of ethnic indigenous communities and members of Dalit castes; and (8) gender issues.

Potential Impacts and Risks. Given these prevailing issues, the project will likely pose the following risks/potential impacts: (1) failure to meet labor and working conditions standards among contractors and Productive Partnerships (PP) business operations; (2) land degradation in areas subjected to intensified production and opening of new clearings3) landslides and erosions due to construction activities in hilly areas causing localized sedimentation of rivers and streams; (4) generalized long term pollution from possible increased use of pesticides and agrochemicals; (5) potential waste generation from the operation PP facilities; (6) community health and safety issues including possible spread of diseases in project communities, exposure of residents to safety and traffic hazards at construction sites and routes and potential conflict between community residents and construction workers; (7) loss of natural habitat and biodiversity, and disturbance of wildlife due to construction of infrastructure and facilities or encroachments into forests and protected areas of natural habitat; (8) loss of family home gardens among smallholder farmers due to cultivation of PP-supported cash crop, aggravating the nutrition problem; (9) involuntary loss of assets due to land acquisition; (10) failure to respect the rights of indigenous people and exclusion from benefits of ethnic minorities and Dalit castes; and, (11) possible impacts on cultural heritage sites, monuments and structures, traditional knowledge, skills and culture (12) possible impacts due to SEA/SH due to labor influx in project communities, within project area.

Environmental and Social Risk Management. These risks can be mitigated by adopting designand approach-related measures, providing generic mitigation plans and other frameworks for individual subprojects, and adopting an internal control system for preparing and vetting subproject proposals.

Project design measures and approaches. The project will adopt the following design measures and approaches: (i) close consultation with stakeholders during economic corridor and subproject planning, exerting efforts to reach out to representatives of indigenous peoples and Dalit communities and women groups to ensure their voice in key decision making. A stakeholder engagement plan has been prepared which lays out the approaches and strategies for stakeholder engagements during project implementation; (ii) establishment of a multi-tier grievance redress mechanism which is accessible to all stakeholders and would accommodate grievance from all aspects of the project; (iii) eligibility criteria for subprojects to screen out/avoid high risk projects; (iv) undertake climate resilience consideration in the design of infrastructure subprojects, using the Local Adaptation Plans for Actions Framework (LAPA, 2011); and, (v) requiring PPs that receive grants to adopt a policy of open membership in their partnerships and plans/programs for expansion of members and number of workers in their operations to help ensure social inclusion.

Generic ESMPs, Forms, Protocols, and other Management Frameworks. A generic environmental and social management plan (ESMP) has been prepared providing standard mitigation measure for each risk and potential impact identified in the assessment. This generic ESMP, together with various forms, templates, and frameworks will serve as reference during the assessment and preparation of individual subproject ESMPs and associated plans. For land acquisition and involuntary resettlement impacts, a separate Resettlement Policy Framework (RPF) has been prepared to guide for the preparation of individual subproject Resettlement Action Plans (RAP), if required. A separate Indigenous People Policy Framework (IPPF) has likewise been prepared to guide subproject compliance with the World Bank standard for dealing with indigenous people. A Stakeholder Engagement Plan (SEP) was prepared outlining the approaches and strategies for stakeholder engagements during implementation and detailing institutional arrangements, operational procedures and steps involved in the setting up of a multi-tiered, project-wide Grievance Redress Mechanism (GRM). The labor management procedure will be developed for the project as outlined in the ESMF consistent with national legislation and ESS 2. Emergency Response Plan that is commensurate with the risk levels will be developed to address the risk to the community, laborers etc. and will be adopted when required. This is required to adhere to the principle of non-discrimination, equal opportunities, health and safety, and security of workers/communities and will be applicable to contractors, project workers and sub-contractors.

Internal Vetting Process for Subprojects. The management of environmental and social risks and impacts of the project's ground activities will be undertaken on per subproject basis. Subprojects are PP businesses undertakings that receives funding from the project, and agriculture related public and semi-public infrastructure and facilities related to production and market promotion. The preparation, review and approval of these subprojects will be undertaken through the following steps:

- (1) Environmental and Social Screening Subproject proposals shall be initially screened by the proposal development team to ensure eligibility of subproject for funding and to determine the risk category, scope and level of assessment and the types of instrument required as per the national requirements and WB's ESS. Screening will categorize the Subprojects in four categories:
 - i) **Category I** Subprojects will not be supported by the REED Project. The ineligible projects are provided in exclusion list in <u>Annex 1 A</u>.
 - ii) Category II Subprojects are those with substantial adverse environmental and/or social impacts that are limited to actual site of the activity and its immediate surroundings and which can be addressed through readily known or readily available mitigation measures. These Subprojects may require a Concise Environmental Study or Initial Environmental Examination (IEE) or Environmental Impact Assessment (EIA) which will include ESMPs

- iii) Category III Subprojects are those for which there is a 'moderate risk of impact' which requires preparation of ESMPs. An activity is classed as Category III if its impacts will be specific site, reversible and mitigation measures applied can address the impacts. A Concise Environmental Study may be required.
 - iv) **Category IV** Subprojects are those that have minimal or no adverse environmental and/or social impacts. For these Subprojects, further environmental and social assessment beyond initial screening is not required.
- (2) Preparation of the required environmental and social (E&S) Instruments Once the projects are screened, the proponent, ECO and Office of the Project Director (OPD)will prepare a Terms of Reference (TOR) for the preparation of Environmental and Social Assessment reports including ESMPs ensuring integration of the ESF requirements. The TOR will then be submitted to the concerned government agencies for approval. A consultant will then be hired to undertake the E&S assessment in accordance with the approved TOR. If required, RAPs, IPPs, pest management plan, labor management procedure (LMP) and Emergency Response Plan shall be prepared simultaneously with the Environmental and Social Assessment report and including sub-project specific ESMPs.
- (3) Approval of Subproject All Subprojects shall be reviewed and approved by the OPD E&S Specialists. The OPD shall ensure that all the impacts identified in the Environmental and Social Assessment have been assessed and adequately addressed in the subproject's ESMP.
- (5) Implementation of the Mitigation Measures During the procurement stage, the proponent may already start implementing the RAP, IPP and some of the measures in the ESMP.

Compliance Monitoring - Subproject proponents shall submit quarterly reports to the ECO regarding the status of subproject compliance and any issues and constraints encountered. ECOs will validate the report through site inspection as necessary and submit a consolidated report to the OPD which would conduct random and purposive site visits as necessary and consolidate the report for inclusion in the semi-annual progress report.

Institutional Arrangements and Capacity Building Plan. The E&S risk management function will be embedded within the proposed project management unit (PMU) to be set up by MoALD which would consist of Project Steering Committee (PSC), Office of the Project Director (OPD) at the head office, and Economic Corridor Technical Coordinating Committees (ECTCCs), Economic Corridors Office (ECOs) at the five selected economic corridors. The provincial and local governments shall participate in the identification and implementation of subprojects within their jurisdictions and will be represented in the ETCTCCs. An Environment and social unit shall be set up at the OPD, consisting of (1) Senior Environmental Specialist and (1) Senior Social Specialist. Each ECO will have one (1) Environmental and one (1) Social Specialist. The E&S teams shall be

mirrored at the provincial and municipal levels and subproject levels by designating focal point persons from the Project for environmental and social concerns. The ES specialists and focal persons will have a regular coordination meeting. They shall be trained on the ESMF, RPF and IPPF.

Furthermore, the existing capacity risk for E&S issues management will to some extent be mitigated through component 2 b, through institutional capacity and skill development program which will be designed and rolled out to help strengthen the capacity of both federal and decentralized government agencies. In the course of the skills development program, government institutions will be capacitated to identify and address climate-induced risks and challenges and measures to strengthen climate resilience along the agribusiness value chain, as well as strategies to enhance efficiency and resource use along the value chains (e.g. production input use efficiency, energy-efficiency). At the provincial and rural municipalities specialized demand-based service trainings, capacity building for technical standards and quality assurance mechanisms for agriculture inputs, services and outputs etc. will be delivered. The local governments will be supported to develop their capacity on agriculture sector planning, implementation, monitoring and reporting for effective implementation of periodic and sectoral plans.

Executive Summary in Nepali

कार्यकारी सारांश

कृषि तथा पशुपन्छी विकास मन्त्रालय अन्तर्गतको ग्रामीण आर्थिक तथा उद्यम विकास आयोजना (REED Project) ले साना उत्पादक र कृषिजन्य वस्तुहरुको मूल्य श्रृंखलामा महत्वपूर्ण भूमिका निर्वाह गर्ने पक्षहरुबीचको बजार सम्पर्क सद्ढीकरण र देशका प्रमुख आर्थिक करिडोरहरुमा उद्यम विकासका लागि अन्कूल वातावरण निर्माण गर्दै ग्रामीण उद्यम विकासलाई प्रोत्साहित गर्ने लक्ष्य लिएको छ । यस आयोजनाले स्थानीय तहमा साभोदारी तथा उनीहरुको समुदायलाई टेवा पुऱ्याउन उत्पादनमूलक साभोदारी (PP) को स्रु व्यवसाय योजना (Start-up business plans) र माग निर्देशित बजार केन्द्र (Demand-driven market center), मूल्य श्रृंखला सम्बन्धी पूर्वाधार र अर्धसार्वजनिक पूर्वाधार तथा स्विधाहरुको स्तरोन्नती तथा विकासका लागि आर्थिक लगायत अन्य सहायताहरु उपलब्ध गराउनेछ । साथै यस आयोजनाले क्षेत्रीय बजार केन्द्र र कृषि उत्कृष्टता केन्द्र (Agriculture centers of excellence) को रुपमा बजार तथा निर्यात प्रवर्धन पूर्वाधार निर्माण गर्नेछ । यस आयोजनामा विश्व बैंकको लगानी रहनेछ । यस वातावरणीय तथा सामाजिक व्यवस्थापन रुपरेखा (ESMF) ले आयोजना क्रियाकलापहरुबाट उत्पन्न हुने वातावरणीय तथा सामाजिक (E&S) जोखिम र प्रभावहरुलाई व्यवस्थित गर्न नीति तथा कार्यविधिहरु निर्धारण गरेको छ । तथापि आयोजना डिजाइन तथा तयारीका क्रममा यस आयोजना अन्तर्गत अवलम्बन गरिने न्युनीकरणका निश्चित उपाय तथा स्थानहरु पहिचान गर्न बाँकी छ भने प्रभावहरु समेत स्पष्ट भइसकेको छैन । यो प्रतिवेदन विश्व बैंकको वातावरणीय तथा सामाजिक रुपरेखा (ESF) लगायत १० वटा वातावरणीय तथा सामाजिक मापदण्ड (ESS) अन्रुप तयार पारिएको छ । ESS ९ बाहेक सबै वातावरणीय तथा सामाजिक मापदण्डहरु यस आयोजनासँग सान्दर्भिक रहेका छन् । यस आयोजनाद्वारा गरिने सबै लगानीमा राष्ट्रिय वातावरण संरक्षण ऐन तथा नियमावली साथै विश्व बैंकको सान्दर्भिक वातावरणीय तथा सामाजिक मापदण्डहरु (ESSs) लागू हुनेछन् ।

तल दिइएको तालिकाले आयोजनामा लागू हुने प्रत्येक वातावरणीय तथा सामाजिक मापदण्ड (ESS) को प्रयोजनीयता तथा सान्दर्भिकताको सिंहावलोकन प्रस्तुत गरेको छ ।

विश्व बैंकको वातावरणीय तथा सामाजिक मापदण्ड (ESS) को प्रयोजनीयता

विश्व बैंकको ESS	सान्दर्भिक	\mathbf{ESS} को सान्दर्भिकताको सिंहावलोकन
	हुने ⁄ नहुने	
ESS १ : वातावरणीय तथा	सान्दर्भिक हुने	स्थानीय तह तथा अन्य स्थानका उत्पादनमूलक साभोदारी (PP)
सामाजिक जोखिम र		उपआयोजनाहरु, माग निर्देशित बजार केन्द्र (Demand-
प्रभावहरुको मूल्यांकन तथा		driven market center), मूल्य श्रृंखला सम्बन्धी पूर्वाधार
व्यवस्थापन		, and a second s

	T						
		तथा सुविधा र अर्धसार्वजनिक पूर्वाधारहरुले वातावरणीय तथा					
		सामाजिक जोखिम र प्रभावहरु पार्ने सम्भावना रहेको छ ।					
ESS २ : श्रम तथा काम	सान्दर्भिक हुने	यो मापदण्ड आयोजनामा संलग्न हुने नयाँ नियुक्त गरिएका र					
गर्ने अवस्था		कृषि तथा पशुपन्छी विकास मन्त्रालय र अन्य सरकारी निकाय					
		मातहतका कर्मचारीहरु र निर्माण व्यवसायीहरु सहित सम्पूर्ण					
		आयोजना संगठनमा सान्दर्भिक हुनेछ । यसमा श्रम तथा काम					
		गर्ने अवस्था सम्बन्धी मुलुकको प्रचलित कानून र आयोजनामा					
		काम गर्ने कामदार तथा कर्मचारीहरुको सम्भावित संख्यालाई					
		आधार मानी मूल्यांकन तथा लेखाजोखा गरिन्छ ।					
ESS ३ : स्रोत दक्षता र	सान्दर्भिक हुने	निर्माणको क्रममा जल तथा वायु प्रदूषण हुने सम्भावना रहेकोले					
प्रदूषण रोकथाम तथा		यो मापदण्ड लागू हुन्छ । साथै व्यवसायिक कृषि उत्पादन र					
व्यवस्थापन		प्रशोधन गर्दा विषादी र रसायनहरुको प्रयोग हुन सक्ने कारणले					
		गर्दा सम्भावित प्रदूषणलाई ध्यान दिनुपर्ने हुन्छ ।					
ESS ४ : सामुदायिक	सान्दर्भिक हुने	आयोजना कार्यान्वयनका सबै चरणहरु लगायत साना पूर्वाधार र					
स्वास्थ्य तथा सुरक्षा		उत्पादनमूलक साभनेदारी (PP) उत्पादन र व्यापार सम्बन्धी					
3		क्रियाकलापहरुमा यो मापदण्ड लागू हुनेछ । यस अन्तर्गत गरिने					
		मूल्यांकन तथा लेखाजोखाले साना ग्राम (Village) निर्माण र					
		PP क्रियाकलापहरुमा त्यहाँका स्थानीय वासिन्दा तथा					
		समुदायहरुको स्वास्थ्य र सुरक्षा जोखिमलाई केन्द्रविन्दुमा राख्दछ					
		1					
ESS ५ : जग्गा प्राप्ति,	सान्दर्भिक हुने	यस आयोजनाले अस्वैच्छिक जग्गा प्राप्ति र मानिहरुको भौतिक					
भूउपयोग र अस्वैच्छिक		र/वा आर्थिक विस्थापन हुने गरी भूउपयोग गर्ने अपेक्षा गरेको					
पूनर्वासमा निषेध		छैन । तथापि एउटा पूर्वसावधानीको उपायका रुपमा यस					
6		मापदण्डलाई सान्दर्भिक ठानिएको छ ।					
ESS ६ : जैविक विविधता	सान्दर्भिक हुने	कृषि उत्पादन क्षेत्रको विस्तारले मुलुकको वन र प्राकृतिक					
संरक्षण र सजीव प्राकृतिक	_	वासस्थानमा प्रतिकूल प्रभाव पार्न सक्छ । यस अन्तर्गत गरिने					
स्रोतहरुको दिगो व्यवस्थापन		मूल्यांकन तथा लेखाजोखाले वन, प्राकृतिक वासस्थान र					
		वन्यजन्तुमाथि पर्ने सम्भावित प्रत्यक्ष अल्पकालीन तथा					
		दीर्घकालीन प्रभावहरुलाई ध्यान दिन्छ ।					
ESS ७ : आदिवासी	सान्दर्भिक हुने	यस आयोजना सातै प्रदेशमा कार्यान्वयन हुने अपेक्षा गरिएको छ					
जनजाति / अफ्रिकी		। यस अन्तर्गत गरिने मूल्यांकन तथा लेखाजोखाले विश्व बैंकको					
उपसहारा क्षेत्रका		ESS ७ मा परिभाषित भए बमोजिम आदिवासी जनजातिका					
ऐतिहासिक रुपमै पछाडि		रुपमा योग्य हुने जातीय अल्पसंख्यकहरुको उपस्थिती रहने नरहने					
		निक्योंल गर्नेछ ।					
	<u> </u>						

पारिएका परम्परागत		
स्थानीय समुदायहरु		
ESS द : सांस्कृतिक	सान्दर्भिक हुने	यस अन्तर्गत गरिने मूल्यांकन तथा लेखाजोखाले आयोजना क्षेत्रमा
सम्पदा		सांस्कृतिक सम्पदाहरुको उपस्थिती रहने नरहने र सडक,
		उत्पादनमूलक साभ्नेदारी (PP) तथा सार्वजनिक सुविधाहरुको
		निर्माणका क्रममा त्यस्ता सम्पदाहरुसँग जम्काभेट हुन सक्ने
		नसक्ने सम्बन्धमा निक्योंल गर्नेछ ।
ESS 90 :	सान्दर्भिक हुने	आयोजनाको सफल कार्यान्वयन र सूचना आदानप्रदान तथा
सरोकारवालाहरूको		उजुरी र गुनासाहरुको सम्बोधनका लागि आवश्यक संयन्त्रको
सहभागिता र सूचनाको		व्यवस्था रहेको सुनिश्चित गर्न पहिचान गरिएका विविध
सार्वजनिकीकरण		सरोकारवाला समूहहरुको प्रभावकारी तथा अर्थपूर्ण संलग्नता र
		सहभागिता महत्वपूर्ण हुन्छ ।

नेपालमा विद्यमान वातावरणीय तथा सामाजिक सवालहरु । नेपालको वातावरणीय तथा सामाजिक पार्श्विचित्र (प्रोफाइल) सम्बन्धमा गरिएको एक द्रुत सर्वेक्षणले मुलुकमा विद्यमान सामाजिक तथा वातावरणीय सवालहरुको एउटा सूची तयार पारेको छ । जुन निम्न बमोजिम छन् : (१) रुख कटान तथा वनस्पति फँडानीले गर्दा भू-क्षयीकरण भइरहेको छ भने बाढी, भूक्षय र पिहरो आदि समेत सेडिमेन्टेसनका प्रमुख कारणहरु हुन् ; (२) बारम्बार भइरहेका डढेलोबाट वर्षेनी हजारौँ हेक्टर वन क्षेत्र र जैविक विविधता विनाश हुने गरेको छ ; (३) विपद्जन्य मृत्युको ४५ प्रतिशत हिस्सा रोगको महामारीले ओगटेको छ ; (४) नेपालको कूल जनसंख्याको २५ प्रतिशत जनता राष्ट्रिय गरिबीको रेखामुनि रहेका छन् ; (५) गुणस्तरिहन श्रम अभ्यास र काम गर्ने अवस्था लगायत बालश्रमसँग जोडिएका सवालहरुको व्यापकता ; (६) बालबालिकाहरुमा कुपोषणको उच्च दर ; (७) जातीय आदिवासी समुदाय र दिलत सदस्यहरुको सामाजिक तथा राजनीतिक विन्चतीकरण र (६) लैंगिक सवालहरु ।

सम्भावित प्रभाव तथा जोखिमहरु । यी विद्यमान सवालहरुका कारण यस आयोजनाबाट देहायका जोखिम/सम्भावित प्रभावहरु पर्ने देखिन्छ : (१) निर्माण व्यवसायीहरु र उत्पादनमूलक साभेदारी (PP) व्यवसाय सञ्चालनबीच श्रम तथा काम गर्ने अवस्थाको मापदण्ड पूरा गर्न नसक्नु ; (२) तीव्र उत्पादन र नयाँ फँडानी हुने स्थानहरुमा भू-क्षयीकरण ; (३) निर्माण विशेषगरी पहाडी क्षेत्रमा गरिने सडकको पुनर्स्थापना तथा स्तरोन्नतीबाट पहिरो र कटान हुन गई नदी र खोलाहरुमा स्थानीयकृत सेडिमेन्टेसनको समस्या आउने ; (४) विषादी र कृषि रसायनहरुको सम्भावित बढ्दो प्रयोगबाट दीर्घकालीन रुपमा व्यापक प्रदूषण ; (४) उत्पादनमूलक साभेदारी (PP) सम्बन्धी केन्द्रहरुको सञ्चालनबाट फोहोर उत्पादन हुने

सम्भावना ; (६) आयोजना समुदायहरुमा रोग फैलिने लगायत सामुदायिक स्वास्थ्य तथा सुरक्षाका सवालहरु, निर्माणस्थल र सवारीमार्गमा सुरक्षा तथा ट्राफिक जोखिमको सम्मुखता (Exposure) र स्थानीय वासिन्दा र निर्माणकर्मीहरुबीचको सम्भावित द्वन्द्व ; (७) प्राकृतिक वासस्थान तथा जैविक विविधतामा हानी नोक्सानी र कृषि क्षेत्र विस्तारका लागि गरिने वन/चरणभूमिको फँडानी, नयाँ सडकहरुको निर्माण र प्राकृतिक वासस्थान रहेका वन तथा संरक्षित क्षेत्रहरुको अतिक्रमणबाट वन्यजन्तुलाई खलल पुग्ने ; (८) उत्पादनमूलक साभेदारी (PP) बाट सहयोग प्राप्त नगदे बाली खेतीका कारण साना किसानहरुको करेसाबारीमा हानी नोक्सानी भई पोषणको समस्या बढ्ने ; (९) जग्गा प्राप्तिको कारण सम्पत्तीमा अस्वैच्छिक हानी नोक्सानी हुने ; (१०) आदिवासी जनजातिको अधिकारको सम्मान हुन नसक्ने र जातीय अल्पसंख्यक तथा दलितहरु आयोजनाको लाभ उपभोग गर्नबाट बञ्चित हुन सक्ने ; (११) सांस्कृतिक सम्पदा स्थलहरु, धरोहर तथा संरचनाहरु, परम्परागत ज्ञान, सीप र संस्कृतिमा प्रतिकृल प्रभाव पर्न सक्ने र (१२) श्रमिकहरुको आगमनका कारण आयोजना क्षेत्रभित्रको समुदाय यौनजन्य शोषण तथा दुर्व्यवहार/यौन दुराचार (SEA/SH) का घटनाबाट प्रभावित हुन सक्ने।

वातावरणीय तथा सामाजिक जोखिम व्यवस्थापन । डिजाइन तथा पद्धित सम्बन्धी उपायहरु अवलम्बन गरी यी जोखिमहरु न्यूनीकरण गर्न सिकन्छ। यस अन्तर्गत विशिष्ट उपआयोजनाहरुका सामान्य (Generic) न्यूनीकरण योजना तथा अन्य रुपरेखाहरु निर्माण गरिनुका साथै उपआयोजना प्रस्तावहरुको तयारी र पुनरीक्षण (Vetting) का लागि आन्तरिक नियन्त्रण प्रणाली अवलम्बन गरिन्छ।

आयोजना डिजाइन उपाय तथा पद्धितहरु । यस आयोजनाले देहाय बमोजिमका डिजाइन उपाय तथा पद्धितहरु अवलम्बन गर्नेछ : (क) महत्वपूर्ण निर्णयहरु गर्दा आदिवासी जनजाति तथा दिलत समुदायहरु र महिला समूहहरुका आवाजलाई स्थान दिइएको सुनिश्चित गर्न उनीहरुका प्रतिनिधिहरुलाई सहभागी गराई आर्थिक करिडोर र उपआयोजनाको निर्माणमा सरोकारवालाहरुसँग निकट परामर्श । सरोकारवालाहरुको सहभागिता योजना तयार पारिएको छ जसले आयोजना कार्यान्वयनका क्रममा कसरी उनीहरुको सहभागिता सुनिश्चित गर्न सिकन्छ भन्ने सम्बन्धमा आवश्यक पद्धित तथा रणनीति खाका प्रस्तुत गरेको छ ; (ख) सबै सरोकारवालाहरुको पहुँचयोग्य र आयोजनाका सम्पूर्ण पक्षहरुसँग सम्बन्धित गुनासाहरुलाई स्थान दिने बहुतहगत गुनासो व्यवस्थापन संयन्त्रको स्थापना ; (ग) उच्च जोखिमयुक्त आयोजनाहरुको पृथकीकरण गर्न/रोक्न उपआयोजनाहको योग्यताका आधारहरु तयार ; (घ) पूर्वाधार उपआयोजनाहरुको डिजाइन गर्दा स्थानीय अनुकूल कार्ययोजना, २०६८ (LAPA, 2011) अनुरुप जलवायु उत्थानशीलतामा ध्यान र (ङ) अनुदान प्राप्त गर्ने उत्पादनमूलक साभेदारीहरु (PPs) ले उनीहरुका साभेदारी र योजना/कार्यक्रमहरुमा सामाजिक समावेशीता सुनिश्चित गर्दे कार्यसञ्चालनमा सदस्य र कामदारहरुको संख्या विस्तार गर्न खुला सदस्यताको नीति अवलम्बन गर्न्पर्ने अनिवार्यता।

सामान्य (Generic) वातावरणीय तथा सामाजिक व्यवस्थापन योजना (ESMP), स्वरुप, प्रोटोकल तथा अन्य व्यवस्थापन रुपरेखाहरु । मूल्यांकन तथा लेखाजोखाका ऋममा पहिचान गरिएका प्रत्येक जोखिम र सम्भावित प्रभावका सर्वस्वीकार्य न्यूनीकरणका उपायसहितको एक सामान्य (Generic) वातावरणीय तथा सामाजिक व्यवस्थापन योजना तयार पारिएको छ । विभिन्न स्वरुप, ढाँचा र रुपरेखा समेटिएको यस प्रकारको सामान्य (Generic) वातावरणीय तथा सामाजिक व्यवस्थापन योजनाले विशिष्ट (Individual) उपआयोजना ESMPs र त्यससँग सम्बन्धित योजनाहरुको मूल्यांकन तथा तयारीको क्रममा सन्दर्भ सामग्रीको रुपमा सहयोग गर्नेछ । जग्गा प्राप्ति र अस्वैच्छिक पुनर्वासबाट पर्ने प्रभावका सम्बन्धमा एउटा छुट्टै प्नर्वास नीति ढाँचा (RPF) तयार पारिएको छ जसले विशिष्ट उपआयोजना प्नर्वास कार्ययोजना (RAP) निर्माणमा मार्गदर्शन प्रदान गर्दछ । यसैगरी आदिवासी जनजातिका सवालहरुलाई सम्बोधन गर्न विश्व बैंकको मापदण्ड बमोजिम एउटा छुट्टै आदिवासी जनजाती नीति ढाँचा (IPPF) तयार पारिएको छ । आयोजना कार्यान्वयनका ऋममा सरोकारवालाहरुको सहभागिता सम्बन्धी पद्धित तथा रणनीतिहरुका खाका आयोजनाव्यापी ग्नासो बह्तहगत संयन्त्र (GRM) स्थापनाका चरणहरु तथा सञ्चालन प्रिक्रया र संस्थागत व्यवस्था समेटिएको सरोकारवाला सहभागिता योजना (SEP) तयार पारिएको छ । ESMF मा उल्लेख भए बमोजिम राष्ट्रिय कानून र ESS आयोजनाको लागि श्रम व्यवस्थापन गरिनेछ । जोखिमको स्तर अनुरुपको आपत्कालीन प्रतिकार्य योजना तर्जुमा गरी आवश्यकता अनुसार अवलम्बन गरिनेछ जसले समुदाय, श्रमिक आदिमा पर्ने जोखिमलाई सम्बोधन गर्नेछ । यसले विभेदरहित, समान अवसर, स्वास्थ्य तथा सुरक्षा, कामदार/समुदायको सुरक्षा सम्बन्धी सिद्धान्तलाई आत्मसात गर्दै निर्माण व्यवसायी, आयोजना कर्मचारी र उपनिर्माण व्यवसायी (Sub-contractors) हरुमा लागू हुनेछ ।

उपआयोजनाहरूको आन्तिरक पुनरीक्षण (Internal Vetting) प्रिक्रया । आयोजनाको स्थलगत कियाकलापहरूबाट पर्ने वातावरणीय तथा सामाजिक जोखिम र प्रभावहरूको व्यवस्थापन प्रत्येक उपआयोजनामा गरिनेछ । आयोजनाबाट आर्थिक सहायता प्राप्त गर्ने उत्पादनमूलक साभोदारी (PP) व्यवसायका उपक्रमहरू र कृषि सम्बन्धी सार्वजनिक तथा अर्धसार्वजनिक पूर्वाधार र उत्पादन तथा बजार प्रवर्धन सम्बन्धी सुविधाहरू नै उपआयोजनाहरू हुन् । यी उपआयोजनाहरूको तयारी, पुनरावलोकन र स्वीकृती देहायका चरण अनुसार सम्पन्न गरिनेछ :

(१) वातावरणीय तथा सामाजिक जाँच (स्क्रिनिङ)- राष्ट्रिय प्रावधान र विश्व बैंकको ESS बमोजिम लगानीको लागि उपआयोजना योग्य छ भन्ने सुनिश्चित गरी जोखिमको वर्ग, क्षेत्र तथा मूल्यांकनको तह र आवश्यक उपकरणका प्रकारहरु निर्धारण गर्न प्रस्ताव तर्जुमा टोलीद्वारा उपआयोजना प्रस्तावहरुको प्रारम्भिक जाँच (स्क्रिनिङ) गरिनेछ । जाँच (स्क्रिनिङ) ले उपआयोजनाहरुलाई चार वर्गमा वर्गीकरण गर्नेछ :

- क) **वर्ग १** अन्तर्गत पर्ने उपआयोजनाहरुलाई REED आयोजनाले सहायता उपलब्ध गराउनेछैन । अयोग्य आयोजनाहरुलाई अनुसूची १ बमोजिको बहिस्करण सूची (Exclusion list) मा उल्लेख गरिएको छ ।
- (ख) वर्ग २ अन्तर्गत उल्लेख्य प्रतिकूल वातावरणीय र/वा सामाजिक प्रभाव पर्ने तर सम्बन्धित स्थलगत क्रियाकलाप र यस वरपरका क्षेत्रमा मात्रै सिमित रहने र जसलाई थाहा भइसकेको र तत्कालै उपलब्ध हुने न्यूनीकरणका उपायहरुद्वारा सम्बोधन गर्न सिकने खालका उपआयोजनाहरु पर्दछन् । यी उपआयोजनाहरुका लागि संक्षिप्त वातावरणीय अध्ययन वा प्रारम्भिक वातावरणीय परीक्षण वा वातावरणीय प्रभाव मूल्यांकन आवश्यक पर्न सक्छ जसलाई ESMPs मा समावेश गरिनेछ ।
- (ग) **वर्ग ३** अन्तर्गतका उपआयोजनाहरु ती हुन् जसमा प्रभावको मध्यम जोखिम रहेको हुन्छ र ESMPs तयार पार्नुपर्दछ । यदि प्रभावहरु निश्चित क्षेत्रमा सिमित रहन्छन्, तटस्थ गर्न / उल्ट्याउन सिकने (Reversible) र न्यूनीकरणका उपायहरुद्वारा सम्बोधन गर्न सिकने खालका छन् भने त्यस्ता क्रियाकलापलाई वर्ग ३ मा समाविष्ट गरिन्छ । यसमा संक्षिप्त वातावरणीय अध्ययन आवश्यक पूर्न सुक्छ ।
- (घ) वर्ग ४ अन्तर्गतका उपआयोजनाहरुबाट नगण्य वा कुनै प्रकारको प्रतिकूल वातावरणीय र/वा सामाजिक प्रभाव पर्दैन । यस्ता उपआयोजनाहरुका लागि प्रारम्भिक जाँच (स्क्रिनिङ) बाहेक थप वातावरणीय तथा सामाजिक मूल्यांकन आवश्यक पर्दैन ।
- (२) आवश्यक वातावरणीय तथा सामाजिक (E&S) उपकरणहरुको तयारी- आयोजनाहरुको जाँच (स्क्रिनिङ) सम्पन्न भइसकेपछि वातावरणीय तथा सामाजिक रुपरेखा (ESF) ले तोकेका आवश्यक प्रावधानहरु आबद्ध गरिएको सुनिश्चित गर्दै प्रस्तावक, आर्थिक करिडोर कार्यालय (ECO) र आयोजना निर्देशकको कार्यालय (OPD) ले वातावरणीय तथा सामाजिक मूल्यांकन प्रतिवेदनहरु लगायत ESMPs को तयारीका लागि कार्यसूची (TOR) निर्माण गर्नेछन् । त्यसपछि उक्त कार्यसूचीलाई स्वीकृतीका लागि सम्बन्धित निकाय समक्ष पेश गरिनेछ। स्वीकृत कार्यसूची बमोजिम E&S मूल्यांकन

गर्न एक परामर्शदाता नियक्त गरिनेछ । आवश्यक अनुसार वातावरणीय तथा सामाजिक मूल्यांकन प्रतिवेदनसँगै र उपआयोजना विशिष्ट ESMPs समावेश गरी पुनर्वास कार्ययोजना (RAP), आदिवासी जनजाति योजना (IPP), विषादी व्यवस्थापन योजना, श्रम व्यवस्थापन कार्यविधि र आपत्कालीन प्रतिकार्य योजना एकैसाथ तयार गर्नुपर्नेछ ।

- (३) उपआयोजनाको स्वीकृती- सबै उपआयोजनाहरुलाई OPD E&S विशेषज्ञहरुले पुनरावलोकन गरी स्वीकृत गर्नुपर्नेछ । यसरी स्वीकृत गर्दा OPD ले वातावरणीय तथा सामाजिक मूल्यांकनमा पहिचान भएका सबै प्रभावहरुलाई उपआयोजनाको ESMP मा लेखाजोखा गरी पर्याप्त मात्रामा सम्बोधन गरिएको सुनिश्चित गर्नुपर्नेछ ।
- (४) न्यूनीकरणका उपायहरुको कार्यान्वयन- खरीदको चरणमा प्रस्तावले पहिले नै RAP, IPP र ESMP मा उल्लेखित केही उपायहरुको कार्यान्वयन सुरु गर्न सक्नेछ ।

अनुपालन अनुगमन (Compliance Monitoring)- उपआयोजना प्रस्तावकहरुले उपआयोजनाको अनुपालन स्थिती र आइपरेका कुनै पिन सवाल तथा व्यवधानहरुका सम्बन्धमा आर्थिक करिडोर कार्यालय (ECO) समक्ष त्रैमाशिक प्रतिवेदन पेश गर्नुपर्नेछ । ECO ले आवश्यकता अनुसार स्थलगत निरीक्षण मार्फत प्रतिवेदन प्रमाणीकरण गरी OPD समक्ष एकीकृत प्रतिवेदन पेश गर्नेछ । त्यसपछि OPD ले आवश्यकता अनुसार सांयोगिक (Random) तथा उद्देश्यकपरक (Purposive) स्थलगत भ्रमण गरी अर्धवार्षिक प्रगति प्रतिवेदनमा समावेश गर्न प्रतिवेनलाई एकीकृत गर्नेछ ।

संस्थागत व्यवस्था र क्षमता विकास योजना । वातावरणीय तथा सामाजिक जोखिम व्यवस्थापन सम्बन्धी कार्यलाई कृषि तथा पशुपन्छी विकास मन्त्रालयद्वारा स्थापना गरिने आयोजना व्यवस्थापन इकाई (PMU) मा आबद्ध गरिनेछ, जसमा आयोजना निर्देशक समिति (PSC), मुख्य कार्यालयको OPD, आर्थिक करिडोर प्राविधिक समन्वय समितिहरु (ECTCCs), र छानिएका आर्थिक करिडोरहरुका आर्थिक करिडोर कार्यालय (ECOs) रहनेछन् । प्रदेश तथा स्थानीय सरकारहरुले आफ्ना क्षेत्राधिकारभित्र पर्ने उपआयोजनाहरुको पहिचान तथा कार्यान्वयनमा सहभागिता जनाउनुका साथै ETCTCCs मा प्रतिनिधित्व गर्नेछन् । OPD मा एउटा वातावरणीय तथा सामाजिक इकाई स्थापना गरिनेछ । उक्त इकाईमा एकजना वरिष्ठ वातावरण विशेषज्ञ र एकजना वरिष्ठ सामाजिक विशेषज्ञ रहनेछन् । प्रत्येक ECO मा एक जना वातावरण विशेषज्ञ र एकजना सामाजिक विशेषज्ञ रहनेछन् । वातावरणीय तथा सामाजिक टोलीहरु वातावरणीय तथा सामाजिक चासोहरुका लागि आयोजनाका तोकिएका सम्पर्क व्यक्तिहरु (Focal point persons) द्वारा प्रदेश तथा स्थानीय तहहरुमा प्रतिविध्वत हनेछन् । वातावरण तथा सामाजिक विशेषज्ञ र सम्पर्क व्यक्तिहरुको

नियमित रुपमा समन्वय बैठक बस्नेछ । उनीहरुलाई ESMF, RPF र IPPF का सम्बन्धमा आवश्यक तालिम प्रदान गरिनेछ ।

साथै वातावरणीय तथा सामाजिक सवालहरुको व्यवस्थापनका लागि विद्यमान क्षमता जोखिम कम्पोनेन्ट (अवयव) २ख मार्फत र संस्थागत क्षमता तथा सीप विकास कार्यक्रम सञ्चालन गरी केही हदसम्म न्यूनीकरण गरिनेछ । यस्ता कार्यक्रमहरुको डिजाइन तयार पारी संघीय तथा विकेन्द्रित सरकारका निकायहरु दुवैको क्षमता सुदृढीकरणका लागि कार्यान्वयनमा ल्याइनेछ । क्षमता विकास कार्यक्रमका क्रममा सरकारी निकायहरुलाई कृषि व्यवसायको मूल्य श्रृंखलामा जलवायुजन्य जोखिम र चुनौतीहरुको पहिचान तथा सम्बोधन गर्ने र जलवायु उत्थानशीलता हासिल गर्न अवलम्बन गरिनुपर्ने उपायहरुका साथै मूल्य श्रृंखला (जस्तै: उत्पादन सामग्री (Input) उपयोग दक्षता, ऊर्जा दक्षता आदि) दक्षता अभिवृद्धि र स्रोतको अधिकतम उपयोग गर्ने रणनीतिका सम्बन्धमा सक्षम बनाइनेछ । प्रदेश तथा गाउँपालिकाहरुमा विशिष्टिकृत मागमा आधारित सेवा तालिम, प्राविधिक मापदण्डका लागि क्षमता विकास र कृषि सामग्री, सेवा तथा उत्पादनका लागि गुणस्तर सुनिश्चितता संयन्त्रको व्यवस्था मिलाइनेछ । आविधक तथा क्षेत्रगत योजनाहरुको प्रभावकारी कार्यान्वयनका लागि कृषि क्षेत्रको योजना निर्माण, कार्यान्वयन, अनुगमन र प्रतिवेदन सम्बन्धमा स्थानीय सरकारहरुको क्षमता विकास गर्न उनीहरुलाई सहयोग प्रदान गरिनेछ ।

Acronyms

CES Concise Environmental Study ECO Economic Corridor Office

ECTCC Economic Corridor Technical Coordinating Committee

EIA Environmental Impact Assessment

E&S Environmental and Social

ESA Environmental and Social Assessment

ESIA Environmental and Social Impact Assessment

ESMF Environmental and Social Management Framework

ESMP Environmental and Social Management Plan

ESS Environmental and Social Standards

E&S Environmental and Social
GRM Grievance Redress Mechanism
IEE Initial Environmental Examination

IP Indigenous People

IPP Indigenous Peoples Plan

IPPF Indigenous Peoples Policy Framework

LAPAF Local Adaptations Plans for Actions Framework
MoALD Ministry of Agriculture and Livestock Development

OPD Office of the Project Director
PIM Project Implementation Manual

PAP Project Affected People/Person (generally people affected by land

acquisition)

PIU Project Implementing Unit/Subproject implementing unit

PMU Project Management Unit
PO Producer Organization
PP Productive Partnership
PSC Project Steering Committee
RAP Resettlement Action Plan

REED Rural Economic and Enterprise Development

RE Rural enterprises

RPF Resettlement Policy Framework SEP Stakeholder Engagement Plan

Table of Contents Executive Summary in English	ii
Executive Summary in Nepali	
Acronyms	
1. Introduction	1
2. Project Description	1
2.1 Project Components	
2.2 Activities with Potential E&S Impacts and Risks	3
2.3 Project Location	
2.4 Project Management Unit	7
3. Scope of the Report	11
4. Baseline Environmental and Social Profile	13
4.1 Socioeconomic Profile	13
4.2 Environmental Profile	18
4.3 Prevailing Environmental and Social Issues	20
5. Social and Environmental Risks/Potential Impacts	24
5.1 Project Activities that have potential E&S Impacts	24
5.2 E&S Risks and Impacts of REED Project and Mitigation Options	24
6. Regulatory Framework for E&S Risk Management	34
6.1 Nepal's EIA System	34
7. E&S Risk Management Capacity at MoALD	41
8. Environmental and Social Management Procedures	42
8.1. Project Design-related Measures and Approaches	42
8.2 Generic Environmental and Social Mitigation Measures	44
8.3 Institutional Arrangements for E&S Risk Management	48
8.4 E&S Risk and Impact Management Procedures for Subprojects	49
8.5 ESMF Public Consultation and Disclosure	53
8.6 Capacity Building Plan	53
8.7 Monitoring and Reporting Plan	54
8.8 Budget for implementing ESMF	56
References	58
Annexes	60
Annex 1: Environmental and Social Screening Forms for REED Subprojects	60
Annex 2: ESMP Template for Category III Subprojects	66
Annex 3: Subproject ESMP Compliance Report	71

Annex 4: ECO Consolidated Subproject ESMP Compliance Report	4
Annex 5: Chance Find Procedure	15
Annex 6: Responsibility and Obligations of Contractors of REED Subprojects	7
Annex 7: List of Dalits in Nepal	19
Annex 8: SEA/SH Action Plan	32
Annex 9: Nepal's Country Standards Relevant to ESS 2-8 and 10	38
Annex 10: Guidance note for preparing Pest Management Plan/sample template for IPM 9)5
Annex 11: ESF/safeguards Interim Note	00
List of Tables	
Table 3.1: World Bank ES Standards and relevant aspects of the project	. 1
Table 4.1: Area and population by province	.3
Table 4.2: Land cover status of Nepal (in % of total area)	4
Table 4.3: Land Cover Types in Nepal	9
Table 4.4: Province-wise poverty and life expectancy in FY 2018	22
Table 5.1: Types of project activities and their potential social and environmental impacts 3	31
Table 6.1: The EIA Process in Nepal	34
Table 6.2: Provisions for IEE in the agriculture sector	35
Table 6.3: Relevant Country Legislations and Gaps vis-á-vis World Bank ESS	37
Table 8.1: Generic Environmental and Social Mitigation Measures for Subprojects 4	5
Table 8.2: Institutional arrangement for implementation of E&S mitigation measures 4	8
Table 8.3: E&S Assessments and Plans for Different Categories of Sub Projects	52
Table 8.4: Stages in Subproject Development Cycle and E&S Activities and Requirements 5	52
Table 8.5: Cost Estimate for the Implementation of this ESMF	6
List of figures	
Figure 1: Economic corridors to be initially covered by the Project	7
Figure 2: Proposed Project Organization	0

1. Introduction

The Government of Nepal (GoN) through the Ministry of Agriculture and Livestock (MoALD) is currently developing the Rural Economic and Enterprise Development Project (REEDP). The project is being considered for World Bank funding and would thus be subjected to the World Bank Environmental and Social Management Framework (ESF). The World Bank ESF requires that the project complies with ten (10) Environmental and Social Standards (WB ESSs) (except ESS9) as follows:

WB ESS1 - Environmental and Social Risk Assessment and Management

WB ESS2 - Labor and Working Conditions

WB ESS3 - Resource Efficiency and Pollution Prevention and Control

WB ESS4 - Community Health and Safety

WB ESS5 - Involuntary Resettlement and Restrictions of Access

WB ESS6 - Biodiversity Conservation & Sustainable Management of Living Natural Resources

WB ESS7 - Indigenous People

WB ESS8 - Cultural Heritage

WB ESS9 - Financial Intermediation

WB ESS10- Stakeholder Engagement and Disclosure of Information

This report provides an assessment of the environmental and social risks and impacts associated with the project, and based on the assessment, identifies project design-related risk mitigation measures, and develops a framework for managing the project's risks and impacts during implementation. The scope of the assessment and framework will cover nine of the World Bank's Environmental and Social Standards (ESS) listed above.

2. Project Description

The REED project aims to enhance rural entrepreneurship and strengthen the market linkages of rural entrepreneurs, including smallholder farmers and producers. The project will be implemented by the Ministry of Agriculture and Livestock Development (MoALD) in selected rural economic corridors of the country. The project is estimated to cost USD 80 million and aims to be able to directly support rural enterprises through building of productive partnerships between smallholder producers and traders and/or other players in the value chain.

2.1 Project Components

The project will have the following four core components:

Component 1 (Strengthening Market Linkages through Productive Partnerships) - Budgeted at US\$ 40 million, this component aims to promote the development of sustainable business partnerships between Producer Organizations (POs), represented by small farmers and rural

producers organized in groups, organizations, cooperatives or other forms of association, such as cottage industries and buyers. The component will support a comprehensive communication campaign, including women-focused campaign, brokering support for prospective buyer and POs to develop joint profiles, technical assistance to jointly develop business plans, start-up grants to POs, and support to formalize POs into legal entities.

Component 2 (Strengthening the entrepreneurship ecosystem in the federal structure) - With a proposed budget of US\$ 8 million, the component aims to support the POs by strengthening ecosystems of both public and private sectors to ensure their sustainability. In order to achieve the goal, the component will focus on building capacity in the federal structure to strengthen agrobusiness competitiveness, entrepreneurship development and build capacity of expert intermediary institutions that, in turn, will strengthen SMEs and agro-start up entities. The project will undertake a comprehensive capacity needs assessment to identify the capacity gap and design appropriate measures to bridge the gap. The interventions would include: (Subcomponent 2a) Capacity building of provincial and local government and related agencies to maintain service delivery and address capacity constraints at the provincial and local government levels, especially in terms of implementation capacity to ensure proper utilization of available resources; and (Subcomponent 2b) Capacity building of Intermediary Institutions and SMEs to strengthen the capacity and coordination mechanism of the concerned public agencies at provincial and local level in the agriculture sector in the Project area.

Component 3 will support to restoring and strengthening COVID-disrupted food supply chain and local economy. With the proposed budget of US\$ 22 million the project as part of COVID-19 response will support investments in restoring the regional food and inputs supply disrupted due to the limited movement, lockdown and the restriction of border trade and their long-term safe storage at municipal level to ensure food and inputs security. As the recovery actions, the project will support transfer of technologies and knowledge to farmers and agriculture related public and semi-public infrastructure and facilities. The project will also support to build public and semipublic agro-infrastructures and facilities by using labor-intensive Cash for Work (CfW) to create jobs in the rural area and contribute to enhancing rural income. The project will also support upgrading and building demand-driven market centers, value chain related infrastructures and semi-public infrastructures at local level, which could include regional market centers, collection centers, storage centers, cold-chain centers, packaging and processing centers, value addition facilities, among others. The value chain related infrastructures will be managed and operated by private sector/cooperatives to generate fees and businesses to ensure sustainability. The project will support upgrading or building municipal agriculture centers to ensure safe storage at municipal level to ensure food and agriculture inputs security. These centers will also provide agriculture

related training to returnee migrant workers to reengage them in agriculture sector on demand basis. This will also support post-COVID-19 rural economic recovery as restoring of supply and storage through municipal centers. All of the infrastructure and facilities will be constructed/upgraded by the project in the land owned either by the government or participating municipalities in COVID-19-compliant physical venues. The project will reinforce climate and environment considerations during the construction of the infrastructure in line with the ESMF to ensure that local knowledge and users' needs, and concerns are adequately addressed. In addition, the project will actively promote the use of renewable energy for the proposed infrastructures.

Component 4: Project Management with a proposed budget of US\$ 7.5 million will provide for the project management. This will cover the activities of the Federal-level Office of the Project Director (OPD) in Kathmandu within MoALD and Economic Corridor Offices (ECOs) that will be established in four selected locations (Province 1, Province 2, Province 5 and Sudurpaschim) including the Technical Assistance (TA) firms to support the OPD at the higher-level of project management, including setting up operational procedures and manuals, and developing and implementing communication strategy.

2.2 Activities with Potential E&S Impacts and Risks

While all project activities are subject to the World Bank ES Standards, the assessment and management of risks and impacts will focus on three activities on the ground: (i) the project's funding of selected PP subprojects under their business plans (1a) and (ii) and the implementation of market and export promotion infrastructure (3). These activities are further discussed below.

2.2.1 Grants to PP Subprojects under Subcomponent 1a

The project will hire a technical assistance to help the PPs prepare business plans. The business plans of PPs would typically include, among others, specifying product quality, quantity, delivery and a price determination mechanism. The business plan will include screening checklist with identified environmental and social risks and a section in which the beneficiaries will have to describe measures to address the Environmental and Social impacts of the sub-project. A template for E&S question and requirements will be developed during the initial phase of project implementation. The project will provide 50% start-up grants to the PO's business plan, purposively to finance assets, working capital, specialized technical assistance and capacity building activities within the subproject proposals.

The proposals will be screened and selected through the evaluation at ECO level. The POs will be invited to formulate Business Plans with assistance from the Project. Eligibility criteria for profile screening would proactively consider and incorporate, social and environmental criteria such as: the number of beneficiaries, identification of ES issues, mitigating measures against ES issues

and budgeting for ES management .Special consideration will be given to women-led POs to assist in meeting the criteria and building their capacity to become economically viable and sustainable. Though the project does not fund activities related to infrastructure development, the federal government through the transfer of conditional grant to participating municipalities will provide necessary resources in building and reconstructing value chain related infrastructure and facilities for the viability of PPs.

2.2.2 Upgrading and building value chain related infrastructures and semi-public infrastructures at local level under Component 3

As part of the WBG's COVID-19 response, this component will support investments in restoring the regional food and inputs supply disrupted due to the limited movement, lockdown and the restriction of border trade and their long-term safe storage at municipal level to ensure food and inputs security. This component will address disruptions in food supply by strengthening safe food storage and address disruptions in inputs supply by restoring seeds, breeder seeds and fertilizer supply. This will support post-COVID-19 rural economic recovery through job creations and enable continued operation of intra/inter-municipal level rural based agricultural businesses and value-chains working in inputs sector. The project will also support upgrading and building demand-driven market centers, value chain related infrastructures and semi-public infrastructures and facilities at local level, which will address disruptions in food supply by strengthening safe food storage and address disruptions in inputs supply by restoring seeds, breeder seeds and fertilizer supply.

All of the infrastructure and facilities will be constructed/upgraded by the project in the land owned either by the government or participating municipalities in COVID-19-compliant physical venues. The project will reinforce climate and environment considerations during the construction of the infrastructure in line with the ESMF to ensure that local knowledge and users' needs, and concerns are adequately addressed. In addition, the project will actively promote the use of renewable energy for the proposed infrastructures.

2.3 Project Location

The project is expected to cover six (6) provinces, with a phased approach, using a provincial or district focus, depending on the agreed criteria with the GoN. The project will prioritize project locations based on North-South and East-West road corridors, which connect provinces, and where main roads have created opportunities to link rural agriculture catchment with markets.

The criteria could include economic potential of the project areas, including SME intensity, scalable value chains identified by Country Private Sector Diagnostic for Nepal and other studies, intensity of financial access as well as density of youth population. The following highways/main roads have been identified as such economic corridors (Figure 1):

- a. Mid-hill highway (Province 1 and 3)
- b. East-West Highway¹ and Postal Highway (Province 2)
- c. Mid-hill Highway (Gandaki)
- d. Bhalubang-Rolpa Highway (Province 5)
- e. Dhangadhi-Darchula Highway (Sudurpashchim)

Province No. 1 - This province is bordered by the china to the north, Indian states to South and East and Bagmati and province no 2 in the west. There are around 4.5 million people living in this province with a 175.6 population density per square kilometer. This province is famous for tea and large cardamom production on mid-hill topography and paddy/maize and millet in the Terai region. Mechi, Koshi, Sagarmatha and Middle Mountain Highways are major road connectivity. Middle Mountain and East-west Highway link with Province 2 and Bagmati province.

Province No. 2 - This is the second-largest populous province and smallest by area. The most densely populated province with 3,720 square kilometers area with a population of 5,404,145. The Koshi River and Koshi Tapu Wildlife Reserve act as provincial demarcation border between Province 2 and Province 1 in the east. And the demarcation line between Chitwan National Park and Parsa National Park as the provincial border between Province 2 and Province 3 in the west. The province is located on flat plains of Terai and Chure or the Shiwalik Hills are the natural border of the Province which falls in the northern side. The southern side has an international border with India. The province is rich from agriculture productivity. Fishery, paddy, maize and wheat as food grain including vegetable and sugarcane, and tobacco are cash crops have high potentiality in this province. Form highway perspective, Mahindra highway (East-West), Postal highway and Tribhuvan highway are major. Besides Tribhuvan Highway, other two links east to west.

Bagmati Pradesh - Bagmati province covers 20,300 square kilometers area and Hetauda in provincial headquarter. It is in central Nepal, bordered Province 2 and India in South and Province 1 in the east, Gandaki province in the west and China in the north. It spread from 141 sea level to 7,229 at Rasuwa. The province is rich in production of paddy, cash crops, vegetable and other grains. Having 119 local government, including three metro cities, Hetauda is the province capital of Bagmati Pradesh. East-West, Postal and Tribhuvan Highways are major ERCs in the Province. East-West Highway traverses east to west, while and Postal Highway is close to Indian border and south to the East-West Highway. Tribhuvan Highway links to Birgunj to Kathmandu.

5

i¹ East-West Highway in Province 2 will overlap with Kamala-Dhalkebar-Pathlaiya (KDP) Road under Strategic Road Connectivity and Trade Improvement Project (SRCTIP)

Gandaki Province - Gandaki province, which lies in the mid of the country, covers a total of 21,733 square kilometers area, representing 14.66% of the total land of the country. Pokhara is the provincial headquarter and bordered Province 3 in the East, Province 5 in the West, China in the north and India in the south. The province has a population of 2.4 million, which represents 9%.06% of the national population. The province, which host several famous tourist destinations of Nepal, is also rich is agriculture products, such as paddy, cash crops, vegetable and other grains. It hosts 11 of the 77 districts and 85 local bodies.

Province No. 5 - Out of 109 local levels in Province 5, there are four sub-metropolitan cities, 32 municipalities and 73 rural municipalities. The Province has a population of 4.458 million. Of this, 52.43 per cent are women, and 47.57 per cent are men. As per the position paper, out of 210 billion Gross Domestic Product of province no 5, the agriculture sector has 46.5 per cent contribution. The province stands on the first position on lentil and oilseeds production. Bhalubang – Rolpa-Pyuthan and Bhairahawa-Palpa-Gulmi-Arghakhanchi – Kapilbastu Highways are two major ERCs of this Province.

Sudurpaschim Pradesh -Sudurpaschim province is located in western Nepal bordered China to the north, Karnali province and Province 5 to the east Indian states in south and west. Godavari has been announced the capital of the Province. The province has a population of 2,552,517 (is 9.63% of the total population of Nepal) with the population density about 130 persons per square kilometers. The province has a population growth rate of 1.53%. The sex ratio is 912 males for 1000 females, with a total of 1,217,887 males and 1,334,630 females recorded in 2011. The urban population of the region is 1,504,279 (58.9%) and the rural population is 1,048,238 (41.1%). Seti and Mahakali Highways are major ERCs in the province.



[Province 1 and 3: Mid-hill highway; Province 2: East-West Highway; Province 5: Bhalubang-Rolpa Highway; and Province 7 (Sudur paschim): Dhangadhi-Darchula Highway.]

Figure 1: Economic corridors to be initially covered by the Project

2.4 Project Management Unit

The project will be implemented by MoALD. A project management unit (PMU) shall be organized consisting of a Project Steering Committee (PSC), Office of the Project Director (OPD) and at four Economic Corridors Offices (ECOs).

Project Steering Committee (PSC). A project steering committee shall be constituted by MoALD, chaired by the permanent secretary for the MoALD and comprising of representatives from National Planning Commission, Ministry of Finance, Ministry of Industry and Commerce, Department of Agriculture. The PSC will: (a) ensure strategic oversight of overall project implementation; (b) ensure coordination and cooperation among all participating agencies, federal and sub-national governments; (c) endorse annual work plans and budgets for all project-related activities; (d) provide overall guidance during project implementation; and (e) endorse financial, programmatic and monitoring reports to be presented to the World Bank and other national

stakeholders to ensure transparency and accountability. The Project Director shall serve as the Secretary of the Project Steering Committee.

Office of the Project Director (OPD). A Project Director Office (OPD) will be established at the central MoALD office. The OPD will be responsible for the overall supervision, quality assurance and M&E and coordination with other relevant ministries as well as the coordination and implementation of policy and regulatory framework related issues. The OPD will be headed by a Joint Secretary, designated as project director (PD), deputed from the MoALD. The PD will have the authority to make decisions related to the project administration as well as FM. The PD will be supported by an Account Officer, Planning Officer, M&E Officer, Environment and Social specialists, and Administrative Assistant to assist in the smooth functioning of the project management. These officers will also be deputed from the MoALD for the entire project period. The OPD will be responsible for preparing and approving Annual Work Plan with inputs from beneficiaries, key stakeholder and partners; (ii) overseeing overall performance of the project and providing policy guidance; (iii) suggesting necessary adjustments based on M&E results; (iii) development and consolidation of Procurement Plans and procurement of works, goods, services and non-consulting services for the project activities in accordance with legal agreements; and (iv) responsible for the implementation of the Environmental and Social Management Framework (ESMF).

The OPD will be supported by a Technical Assistance (TA) firm which will provide technical services in project management, including setting up operational procedures, developing criteria, developing communication campaign; while also supporting technical assistance as defined in subcomponent 1c and 2c. On an on-call basis, the TA firm will employ sector/theme experts to review and validate the PP proposals (1.a) and Intermediaries proposal (component 1.c). They will be short term consultants and will provide independent financial and technical validation of the proposals received.

Economic Corridor Offices (ECOs). MoALD will also establish Economic Corridor Offices in four selected locations (Provinces 1, 2, 5 and Sudurpaschim. The ECO will be led by Under Secretary deputed by MoALD with the support from an Accountant, Planning Officer, M&E Officer, Environment officer, and Social officers and Administrative Assistant; procurement offices, seconded from the Ministry, to assist in the smooth implementation of the project. There will be additional technical staff (technical officers as well as technicians, seconded from the Ministry at the ECO in implementation of the project activities. The ECO will be responsible for (a) implementing the project activities at the economic corridor level; (b) conduct procurement activities for infrastructure related activities under Component 1.b and 2.b; (c) facilitating planning and inter-agency coordination; (d) assisting in selection of project sites and beneficiaries; (e)

ensuring appropriate governance and accountability, including through management of a suitable grievance redressal system; and supervising Economic Corridor Level TA firm.

Each ECO will also be supported by local TA firms which will assist in the execution of the following activities: (i) support the formation of productive alliances and throughout the implementation of the business plan; (ii) provide capacity building support to the Provincial Ministry based on the Capacity Enabling Needs Assessment; (iii) provide support to rural municipalities to develop plan for demand driven, value chain related and semi-public infrastructure and facilities (under Comp 3); and (iv) support the Economic Corridor office to pursue procurement.

Linkages with Provincial Ministry of Agriculture. While the day-to- day implementation will be conducted by economic corridor project teams with support from TA firms, the project will engage the Provincial Ministry of Agriculture, Land Management, and Cooperatives (MoLMAC) in overall planning, monitoring, oversight and advisories. The project will also support the Provincial Ministries through capacity building through Component 2.b. In the transition phase of the Federalization, the engagement of the provincial ministry of agriculture will take place in two folds; (1) active engagement in policy guidance, monitoring and advisories; (2) capacity and institutional building activities to support rural entrepreneurs, which has been detailed in the Component description 2.a.

Economic Corridor Technical and Coordination Committee (ECTCC). ECTCCs will be established for each of the Economic Corridors. Headed by the Province-level Secretary of Ministry of Agriculture, Land Management, and Cooperatives, the ETTCs will have equivalent function as the Project Steering Committee at Provincial level, i.e., provide strategic oversight of overall project implementation at provincial level: (a) facilitating provincial-level program planning and implementation of all project activities with the provinces; (b) coordinating with relevant implementing line provincial departments and agencies and stakeholders; (c) organizing periodic progress review; (d) guiding Economic Corridor Offices to work in accordance with the spirit and principles of the project; (e) monitoring and supervising the work being done in the field; (f) ensure coordination and cooperation among all participating agencies, at provincial level; and, (g) provide overall guidance during project implementation.

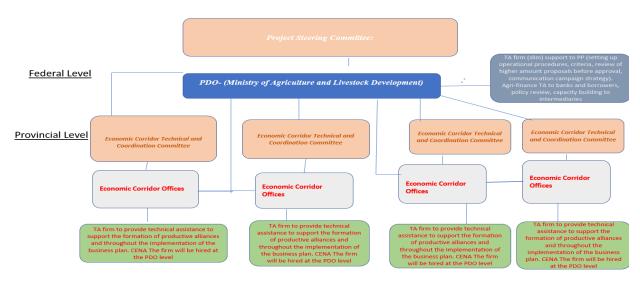


Figure 2: Proposed Project Organization

3. Scope of the Report

This ESMF contains a rapid assessment of the environmental and social risks and impacts of the project and a framework for managing these impacts. The assessment and the management framework that covers the World Bank ES Standards (ESS1-8 and ESS10) along with their relevancy and areas has been presented in the table given below.

Table 3.1: World Bank ES Standards and relevant aspects of the project

World Bank ES Standard	Relevance and Areas Assessed		
ESS1 Assessment and	This standard applies to the REEDP's Subprojects, including demand		
Management of Environmental	driven, value chain related semi-public market promotion infrastructure		
and Social Risks and Impacts	and facilities. The assessment provides a quick review of the existing		
	country's ES risk management systems in terms of processes and		
	procedures and whether they could adequately address the project's		
	requirements.		
ESS2 Labor and Working	This standard applies to the entire project organization, including hired		
Conditions	and regular employees of MoALD and other government entities who		
	will be involved in the project, and project contractors. The assessment		
	looks at the prevailing country laws on labor and working conditions,		
	number of workers and personnel potentially working in the project and		
	its impact on the beneficiary community.		
ESS3 Resource Efficiency and	The project is not expected to have significant direct impact on resource		
Pollution Prevention and Control	efficiency. The assessment focuses on potential water and air pollution		
	during construction and the potential pollution issues of commercial		
	agricultural production and processing which may involve use of		
	chemicals and pesticides.		
ESS 4 Community Health and	This standard applies to all project interventions on the ground, including		
Safety	small-scale infrastructure and PP production and trading activities. The		
	assessment looks at the health and safety risks of residents and		
	communities of small-scale village construction and PP activities.		
ESS 5 Involuntary Resettlement	The project is not expected to involve large scale involuntary resettlement		
and Restrictions of Access	impacts.		
ESS 6 Biodiversity Conservation	Expansion of agricultural production areas could impact on the country's		
and Sustainable Management of	forest and natural habitat. The assessment looks at potential direct short-		
Living Natural Resources	term and long-term impacts on forest, natural habitat and wildlife.		
ESS 7 Indigenous People	The project is expected to be implemented in 6 provinces. The assessment		
	determines the potential presence of ethnic minorities that may qualify as		
	indigenous people as defined in the WB ESS7 standard and the		
	government		
ESS 8 Cultural Heritage	Cultural heritage sites in the project sites and the probability of		
	encountering chance finds during construction of value chain related		
	infrastructure and facilities, PP and public facilities is possible.		
ESS 10 Stakeholder Engagement	A Stakeholder Engagement Plan has been prepared to establish a		
and Disclosure	functioning platform for effective interaction and meaningful		

consultations	with	potentially	affected	populations	and	project
stakeholders.						

4. Baseline Environmental and Social Profile

4.1 Socioeconomic Profile

Nepal is a low income (nominal GDP per capita of US\$1,034), land-locked country sandwiched between two giant countries of India to the South and China to the North. It lies between 80° 04' and 88° 12' East and 26° 22' and 30° 27' North, and, extends 885 km East to West and 145 to 241 km North to South. Nepal has a total land area of 147,516 sq. km.

Demography. The population of Nepal in 2011 reached 26.6 million with an average annual growth rate of 1.4%. Average household size is 5.6 persons with 5,659,984 households. Of the total population, 1.8 million (6.7%) live in mountain, 11.5 million (43.2%) in hills and 13.3 million (50.1%) in Terai. A total of 17% of the population are urban. The sex ratio is high with 51.4% female and 48.6% male. Population density is 181 persons per sq. km4, with 1380 per sq. km in urban and 153 per sq. km in rural area; and 205, 354.4, 168.2, 84.6, and 130.2 persons per sq. km in the Eastern, Central, Western, Mid-western and Far-western Regions of Nepal. Population growth rate between 1991 and 2001 was 2.25%. Nepal is a young country with 63.7 percent of the country's overall population (26.5 million) aged below 30 years.

Table 4.1: Area and population by province

	Provinces	Capital	Area (km²)	Population (2011)	Density people/km ²			
1	Province No. 1	Biratnagar	25,905	4,534,943	175			
2	Province No. 2	<u>Janakpur</u>	9,661	5,404,145	559			
3	Bagmati Pradesh	Hetauda	20,300	5,529,452	272			
4	Gandaki Pradesh	Pokhara	21,504	2,403,757	111			
5	Province No. 5	Butwal	22,288	4,741,716	212			
6	Karnali Pradesh	Birendranagar	27,984	1,327,957	47			
7	Sudurpaschim Pradesh	Dhangadhi	19874	2,552,517	130			
	Total		147,516	26,494,487	180			

In 2012, the rural population was estimated to be about 82.7 percent of the total and population. Agricultural land made up 29.7 percent of the total land area.

Ethnicity and Social Structure. Nepal is country with great ethnic and social diversity. The country's population is a mixture of various ethnic groups. The 2011 census listed 59 indigenous people groups which are collectively referred to as Adivasi Janajati (AJ). According to the census, the AJs represent about 36% of the country's population. As a predominantly Hindu country, Nepal has a highly stratified and hierarchical social structure. There are about 63 castes which including 15 Dalits castes. About 86% of the population follows Hinduism, 8% follows Buddhism and 3% follows Islam. Dalit castes are at the bottom of the caste hierarchy and the most disadvantaged

among the castes. The following groups have been identified as Dalit groups: Hill and Mountain Dalits, Terai Dalits and Newar Dalits (Annex 7).

Human Development. Nepal's Human Development Index (HDI) value for 2018 is at 0.579—which puts the country in the medium human development category—positioning it at 147 out of 189 countries and territories. The literacy rate is at 67.9% with male at 78.6% and female at 60%. The life expectancy at birth is 70.5 years with male life expectancy at 68.8 years and female 71.6 years. Currently, Nepal ranks 105th out of 157 countries in progress towards meeting the Sustainable Development Goals (SDGs) (Sachs et al. 2017). According to the most recent Demographic and Health Survey (DHS) in Nepal (2016), the maternal mortality ratio is 239 per 100,000 live births, meaning 1 out of every 167 women have a lifetime risk of dying related to pregnancy or childbearing. Nepal has made significant strides in reducing neonatal, infant, and under-5 mortality (around a 60 percent reduction between 1996 and 2016), but additional work is required to further reduce child mortality and to meet the SDG targets for neonatal and under-5 mortality (MOH 2017) (USAID, 2017).

Land resources. With almost 45% of coverage area, Nepal has the largest coverage of forests in South Asia behind Bhutan, which has forest coverage of 70%. The land use pattern of the country by type is 3,090,780 ha (21%) crops; 1,030,390 ha (7%) non-cultivated land; 4,268,200 ha (29%) forest; 1,560,110 ha (10.6%) shrub; 1,766,160 ha (12%) grass land; 382,660 ha (2.6%) water/lake, and 2,619,800 ha (17.8%) other. Nepal has been successful in participatory forest management and consists of 1.23 million hectare of community forest and 0.54 million hectare of buffer zone forest area.

Table 4.2: Land cover status of Nepal (in % of total area)

Forest	Cropland	Grassland	Wetland	Settlement	Other land
44.47	21.88	2.60	1.22	1.15	28.68

Source: Ministry of Forests and Environment, Forest Research and Training Center

Agriculture Sector. Agriculture is the mainstay of the economy, providing a livelihood for almost two-thirds of the population but accounting for less than a third of GDP. It provides employment to 69% of labor force but contributes only about 27% of GDP (Index Mundi, 2019). Nepal has 2.97 million ha gross cultivated land and 2.64 million ha net cultivated land, of which 51.5% lies in Terai, 39.9% in hills and 8.6% in mountain. Size of landholding has decreased from 0.96 ha in 1991/92, 0.8 ha in 2001/02 (CBS 2006), and 0.7 ha in 2010 (JICA 2012). With 65% of cultivated land in the slopes of hills and mountains, loss of fertile topsoil due to erosion is common. Soil is shallow, acidic, poor in organic content, and deficient in available nitrogen in the hills. Cereals, including rice, wheat and maize, are grown on almost 90 percent of the cropped area and account for 56 percent of the total agricultural production. Subsistence small farmers, who produce less

than 2 percent of the marketed agricultural produce, operate nearly 90 percent of the 3.4 million agricultural holdings. In FY 2018/19, the total number of cows /oxen, buffaloes, goats, milking cows and buffaloes, pigs, chickens, egg laying chickens and egg laying ducks increased by 0.2 percent to 3.7 percent as compared to FY 2017/18 whereas the number of yaks, sheep, buffaloes, and donkey decreased by the same level of percentage. Up to mid-March of FY 2018/19, 1475.333 thousand metric tons of milk and 248 thousand metric tons of meat was produced, which was about 6.5 percent greater than the production in the corresponding period of FY 2017/18. In 2010, 92.48 percent of the female population was economically active in agriculture. Women comprise 65 percent of the workforce in agriculture, although statistics do not include much of the unpaid family labor in subsistence agriculture. Additionally, women are responsible for 70 percent of the livestock production, carrying out activities like feed preparation, feeding, cleaning sheds and preparing milk products.

Industry and Services Sectors. Nepal's GDP is driven by services sector. Nineteen percent (19%) of the labor force are employed in the services sector and yet contribute about 60% of the GDP. However, much of these are coming from abroad. Nepal is heavily dependent on remittances, which amount to as much as 30% of GDP. On the other hand, the industrial sector is small and currently contributing only 13.5% of the GDP and employing about 12% of the labor force (Index Mundi, 2019). Industrial activity mainly involves the processing of agricultural products, including pulses, jute, sugarcane, tobacco, and grain.

Water Resources. Nepal possesses 2.27% of the world's freshwater resources. There are over 6,000 rivers and rivulets and 660 lakes of more than 1 ha with annual runoff of 220 billion cubic meter (BCM) of which only 15 BCM is utilized. Groundwater potential is 12 BCM, of which annual withdrawal is 0.756 BCM for irrigation and 0.297 BCM for domestic uses. There are 242 wetlands covering 0.42 million ha. Out of 2.641 million hectares of total arable agricultural land in the country, a total of 1.473 million hectares of land had irrigation facility till FY 2017/18. However, due to lack of availability of sufficient amount of water in the source only 33.0 percent areas of irrigated land have irrigation facility throughout 12 months of a year.

Energy. Firewood is still the major source of cooking fuel in Nepal as 52.4 percent are using it. In urban, the use of LPG has increased, and the use of firewood has decreased from last year. In 2016/17, in urban areas 54.1 percent households are using LPG and 35.4 are using firewood which in 2015/16 was 53.3 percent for LPG and 37.9 percent for firewood. Electricity has become the prime source of lighting for Nepali households as 85.2 percent of the households are using electricity, 91.2 percent in urban and 80.4 percent in rural areas. Use of solar energy has decreased by 9.6 percent as compared to 13.4 in 2015/16.Solar power is found more popular in lower quintiles and rural households which should be due to the special subsidies by government to these

groups. Solar energy is used by 13.1 percent rural and 5.2 percent urban areas, and by 13.7 percent of the poorest quantile.

Land Tenure and Ownership. The following tenure systems exist in the country: (i) Raikar or private land with absolute ownership which may be leased or mortgaged; (ii) Public and government land; and, (iii) Guthi or trust land is land which is set aside by individuals and the State for religious and philanthropic institutions such as temples and schools and often is farmed by tenants. The cash or in-kind incomes from farming such lands are used to finance religious and social functions. Land under tenancy, both pure and mixed, constitutes about 10 percent of the total farmland. But the actual incidence of tenancy is much higher due to the presence of informal or unregistered tenants. Landowners have continued engaging tenants on an informal basis especially in the Terai Region where landowners often engage Indian cultivators informally, since the latter cannot legally own or rent lands.

Landlords reportedly are generally hesitant to rent out their land for sharecropping out of fear of property claims by tenants. Existing tillers are being evicted on a daily basis which is a testament to weak tenure security of both the landowners and tillers. Although contract farming has started being practiced in some places, a formal act concerning contract farming agreement is not in place. (USAID, 2018)

Labor and Working Conditions. Basic employment-related challenges in Nepal are attributed to the predominance of employment in the informal segments of the Nepali economy with low productivity and earnings, and poor working conditions, resulting in underemployment in the country. A recent survey by the World Bank (2020) on a few of its projects reveal, a heavy reliance of contractors to informal labor contracting. The lack of formal contracts was the norm rather than the exception, according to the findings of this study. Instead, verbal agreements were common while hiring laborers and high skilled workers, such as surveyors and engineers as well. Among those who did have a signed contract were mostly petty contractors/leaders followed by a few lab technicians, cooks and heavy equipment operators.

The practice of labor provision in Nepal is done through a labor broker or Naike which provides cheaper workforce to project contractors. Only verbal work agreement is made between Naikes and contractors, and the agreement between Naikes and individual workers are made informally. Regarding the prevention of child labor, Nepal is one of the countries with a very high proportion of child labor. According to the ILO statistics, Nepal accounts for 1.6 million children between the ages of 15-17 engaged in child labor, out of which 62,000 children between ages 5-17 are engaged in hazardous work (ILO, 2012). Occurrence of direct or primary contractor-hired child labor in donor-funded project is rare because the PMUs and supervising consultants are constantly highlighting and monitoring the no-child labor compliance. However, the issue may be significant for subcontracted labor (Naike) or subcontractor labor where employee data are difficult to obtain,

and for suppliers of some manufactured construction materials such as bricks and stones. Complaints are done in a traditional informal way, i.e. through the supervisor. There is no documented formal grievance redress mechanism for laborers in projects.

Occupational Health and Safety. The consensus in the literature is that the overall status of occupational safety and health in Nepal is not satisfactory. Most of the workplaces, especially the ones requiring more physical work and labor, do not possess proper safety and preventive measures and the workers do not have proper understanding of exposure to hazards and measures to minimize them. In a survey conducted among construction workers in Nepal it was revealed that: (i) awareness of OHS standards is very low or non-existent; (ii) the workers generally disagree with the workplace ergonomics; and (iii) are not satisfied with their managers concern for their safety (Koirala, 2017). In general, enforcement of OHS standards in infrastructure development projects is lax, even for donor-funded projects with only very few exceptions. A recent survey by the World Bank of five projects reveals that issues such as poor housekeeping, lack of signages, and non-wearing of personal protective equipment (PPE) are very common occurrences at construction sites, and some project contractors on site are not even aware of the OHS clauses in their contracts (SARSS, 2018). In donor-funded projects, OHS has been part of the ESMP compliance monitoring but compliance remain low as contractors tend to ignore constant citation of violation primary because of lack of sanctions from PMUs. Meanwhile the Ministry of Health and Population does not cover nor is mandated on occupational health and safety issues. No health programs in Nepal address the prevention and control of occupational related diseases and conditions. Though the Labour Act states that occupational diseases are required to be reported, it has not defined the list of the occupational diseases and the process for providing welfare and compensation to the workers suffering from occupational diseases.

Community Health and Safety. Nepal's topographical and sociological diversity results in periodic epidemics of infectious diseases, epizootics and natural hazards such as floods, forest fires, landslides, and earthquakes. A large section of the population, particularly those living in rural poverty, are at risk of infection and mortality by communicable diseases, malnutrition and other health-related events. EIAs in Nepal have traditionally included basic information about the baseline health profile of the population in the project influence area. However very few or none have assessed specific health issues that may be impacted or exacerbated by the project interventions. Community health management measures such as awareness campaigns on HIV/AIDS, STI/STD and other communicable diseases often get inserted into the ESMP without the benefit of justification from impact assessment or analysis. Also, while community-based health programs of the Ministry of Health and Population, tackling issues of community health are

present and showing positive results (See APC, 2017), infrastructure projects rarely link with and/or tap into these community-based programs.

Cultural Heritage Sites. Nepal is a treasure land for cultural heritage sites. Seven of the cultural heritage sites of Nepal are listed in World Cultural Heritage List by UNESCO. These ancient monuments date back to 13th century. Pashupatinath, Swayambhunath, Boudhanath, Changunarayan, Kathmandu Durbar square, Bhaktapur Durbar square and Patan Durbar Square (Durbar square means "King's Palace" in Nepalese term) are listed in the world cultural heritage list. Kathmandu, Bhaktapur and Patan are three major historical cities where art, architecture and culture was developed and flourished to its full potential during 13th century to 17th century. Another UNESCO listed world cultural heritage site is Lumbini where Lord Buddha was born and spread Buddhism all over the world. Nepal is a culturally rich country with cultural artifacts such as temples, monuments and sacred sites spread across the country and having a diverse cultural value, traditions, beliefs, knowledge. Often infrastructure projects are not directly related to the risks and impacts to cultural heritage from project activities. The Project ESMP will set out measures to protect cultural heritage in general of the project area, in cases of chance finding and in particular where IPs are prevalent.

4.2 Environmental Profile

Climate and Meteorology. Nepal represents two bio-geographical realms: the Palearctic and Indo-Malayan. It lies at the cross-roads of the Southeast Asian, Northeast Asian and Mediterranean tracts. Average annual precipitation is 1,630 mm. Eastern Nepal receives 2,500 mm and Western Nepal receives 1,000 mm annual rainfall. A total of 80% rainfall occurs in monsoon (June to September). The annual mean temperature is around 15°C. The climate of Nepal greatly varies from north to south and east to west. In general, climatic zones in Nepal are categorized by temperature regimes based on altitudinal ranges. These climatic zones are sub-tropical (<1,000 m elevation), warm-temperate (1,000-2,000 m elevation), cool-temperate (2,000-3,000 m elevation), alpine (3,000–4,000 m elevation) and arctic (>4,500 m elevation). The Terai region is in the sub-tropical climatic zone characterized by hot and humid summers, intense monsoon rain, and dry winters. The annual rainfall decreases gradually from the Eastern to the Western Terai. The annual total rainfall in this region varies from 1,138 mm to 2,680 mm, and the mean monthly precipitation ranges from 8 mm to 535 mm. The climate of Churia region ranges from sub-tropical to warm-temperate and is characterized by hot and sub-humid summers, heavy monsoon rain, and cold, dry winters. The precipitation pattern in Churia is variable, with the highest annual rainfall in the Eastern and Central Development Regions. The total annual rainfall varies from a minimum of 1,138 mm to the maximum of 2,671 mm.

Topography and Geology. Nepal is located between 260 20' 53" N to 300 26' 51" N latitude and 800 03' 30" E to 880 12' 05" E longitude. Nepal is predominantly a mountainous country characterized by fragile and young geology, unstable slopes and high topographical variations. There are five physiographic regions in Nepal (Figure 1) based on geology and geomorphology (LRMP, 1986). These are: Terai, Churia, Middle Mountains, High Mountains, High Himal. With an area of 147,181 sq. km, of which Terai, which is the northern extension of the Indo-Gangetic plains comprises 14%, Churia hills 12%, mid-hills (Mahabharat) 30%, high mountains 20% and high Himalaya 24% area. About 14% of the country's land area is permanently covered with snow. Earthquakes of major consequence are reported in Nepal in an average of every 75 years.

Land cover types. Land cover of Nepal is categorized as forest, agriculture, grassland, water/wetlands, settlement, and other categories (Table 3). Studies show that forest is the dominant form of land cover in Nepal, covering 6.54 million hectares with a contribution of 44.5 % to the total geographical area of the country. Agriculture area is extending over 3.2 million hectares (21.9 %). The settlement and water bodies cover about 0.17 and 0.18 million hectares, that is 1.2 % and 1.2 % of the total area of the country. A large part of the country is classified as other, which is about 4.22 million hectares, equivalent to 28.7% of the total area. The high mountain area is largely covered by snow and glaciers and barren land which is classified as 'other' land cover type.

Table 4.1: Land Cover Types in Nepal

Land cover types	Land area (million hectares)	Per cent
Forest (including shrubs)	6.54	44.5
Agriculture	3.22	21.9
Wetland (including water bodies)	0.17	1.2
Settlements	0.18	1.2
Grassland	0.38	2.6
Other	4.22	28.7
Total	14.71	100.0

Source: FRTC, 2019

Forest and Biodiversity. The country possesses great diversity of flora and fauna comprising 11 bio-climatic zones, 118 ecosystems and 35 forests. Nepal is placed in 25th position in the World in biodiversity richness. Despite Nepal occupies only 0.1% of the World's land area, it hosts 850 species of birds (9.3%), 185 mammals Country Partnership Strategy: Nepal, 2013–2017 2 (4.5%), 100 reptiles (1%), 43 amphibians (1%), 170 fish (1%), 645 butterflies (2.6%), and 5856 flowering plants (2.7%). There is currently around 3.73 million ha of forest in Nepal, including shrublands. Forests and wetlands provide habitat to 25% of the country's biodiversity. A total of 28 mammals, 22 bird, 9 reptile, and 2 invertebrates are registered as vulnerable and protected species by the Government of Nepal. Twenty protected areas (10 national parks of 1.08 million ha, 3 wildlife reserves of 0.1 million ha, 1 hunting reserve of 0.13 million ha and 6 conservation areas of 1.54

million ha) are established, which covers 19.4% of total area of the country. The twelve protected areas have buffer zones conserving 0.58 million ha forest. A total of 1.23 million ha forest is managed by 17,685 community forest user groups. There are 9 Ramsar sites in Nepal covering a total area of 34,445 ha. Protection in protected areas and their buffer zones, community forests and leasehold forests are better than in Government managed forest (1.2 million ha), where forest degradation is high and requires substantial improvement. Regular monitoring of status of trees is needed in community forests.

Air Quality. About 92.3% of the households in rural and 40.1% in urban areas used firewood in 2001, which contributed about 86% of TSP, 82% CO, 94% NOx and about 80% SO to the total pollutant emissions. The ambient air quality measured in major urban areas such as Biratnagar, Birgunj, and Janakpur. There is currently around 3.73 million ha of forest in Nepal, including shrubland. Butwal, Bhairawa, Pokhara and Nepalgunj indicated high level of PM10 (196 to 2,104 ug/m3), TSP (260-2,222 ug/m3), and SO2 (85 – 140 ug/m3). However, there is no system of continued monitoring of urban air quality. Total number of vehicles in the country has reached 1.13 million at the end of 2010/11, with a density of 53 vehicles per km road. These vehicles lack proper pollution reduction devices, and, are responsible for 37% of total PM10 generation. Vehicle emission testing facilities are limited. The Government has recently decided to allow import of only Euro 3 standard vehicles.

Water Quality. Surface water in urban areas is highly polluted by direct discharge of domestic and industrial wastes from carpet washing and dyeing, leather processing and tanning, foam, plastic, and nutrients from agrochemicals in rural areas. Rivers of Kathmandu Valley and many other towns like Birgunj have become biologically dead. Wetlands including ponds and lakes in the town of Janakpur and other towns have become highly contaminated. Water in Terai is contaminated by Arsenic in the range of more than $10-50 \,\mu\text{g/l}$ (WHO threshold is $10 \,\mu\text{g/l}$) exposing 2 million population.

Solid Waste. About 1400 tons per day of solid waste (72% organic) is generated daily in the 58 municipalities at a rate of 0.25 kg/person/day, of which only 42% is collected and managed. In the absence of proper landfill sites, the collected waste is directly dumped in rivers, forest or agriculture fields. There are no separate arrangements for managing hazardous and medical waste.

4.3 Prevailing Environmental and Social Issues

Land degradation. Soil erosion and flooding are the major causes of land degradation in Nepal. The extent of area mainly affected by riverbank erosion was 16,398 sq. km, slumping and gully erosion was 4,244 sq. km, and mass wasting was 116,566 sq. km. Rivers carried around 336 million tons of soil per year, causing riverbed aggradations at a rate of 35-45 cm annually,47 causing

increased incidents of flooding in Terai. In 2001-02, an area of 0.7% in Mountain 0.6% in Hill and 1.7% in Terai was made uncultivable by flood and soil erosion. The steep mountainous terrain of Nepal combined with heavy monsoon rainfalls result in a high risk of landslides each year. Floods and landslides have caused approximately 8,400 deaths in Nepal from 1983 to 2013, with an average of 269 deaths per year. In general, the mountainous and hilly regions are more prone to landslides, while the Terai (lowland) region is more susceptible to floods. Because of the topography and the relatively young geology of the country, roads are particularly vulnerable to frequent roadside erosions and landslips, requiring engineering and biological slope stabilization measures.

Fire. Fire is a recurring disaster occurring almost every year during the dry season in Nepal, i.e. from February to May. The fire in the town of Myanglung in Terhathum District in 2002 and Phungling Bazaar in Taplejung District in 2003 in Eastern Nepal, and in Aurahi, Siraha District of Central Nepal in May 2012 are some of the major and devastating fire incidents. In addition, frequent forest fire causes loss of thousands of ha of forest and biodiversity every year. A study by ICIMOD suggests that 4,217 forest fire incidents took place in 2009. In 2012, with the help of Moderate Resolution Imaging Spectroradiometer (MODIS) instrument on NASA's Aqua satellite, Nepalese officials counted at least 225 with the largest destroying 600 hectares of forest. Officials say the fires have been caused by a long dry spell, windy weather, and discarded cigarettes.

Epidemics. Epidemics are responsible for about 55% of disaster deaths in Nepal. Among the communicable diseases causing epidemics are Dengue, Acute Gastroenteritis/Diarrhea. Among the other major infectious and vector-borne diseases present in Nepal are Malaria, Tuberculosis, Japanese Encephalitis, Lymphatic Filariasis, Visceral leishmaniasis in Terai region and HIV/AIDS. HIV/AIDS is characterized as a concentrated epidemic in Nepal with an adult (ages 15-49) HIV prevalence of 0.3 percent in 2011. According to recent estimates, Nepal is home to approximately 50,200 people living with HIV and four out of every five **infections** in Nepal have occurred through sexual transmission. Nepal stands highly vulnerable to the unfolding COVID-19 pandemic, which has affected all sectors of the country including food security and the agricultural sector.

Poverty. Poverty in Nepal has gradually decreased due to factors like high economic growth, investment on social and economic infrastructure and robust increment in the flow of remittance. The Living Standard Survey 2011 showed that 25.16 percent of the total population was living below the poverty line FY 2011. Because of the massive migration of youths for employment in foreign countries and subsequent rise in remittance income, the portion of the population below absolute poverty line has declined. Latest government estimates say that the poverty defined in terms of population living below the poverty line has reached at 18.7 percent in the FY 2018.

Despite the declining poverty, the high inequality is still a major concern. Of the seven provinces, Sudur pashchim province has the highest number of people living below the poverty line, followed by Karnali province, which also has the lowest life expectancy.

Table 4.4: Province-wise poverty and life expectancy in FY 2018

	Province	Province	Bagmati	Gandaki	Province	Karnali	S. Pashchim	Nepal
	No. 1	No. 2	Pradesh	Pradesh	No. 5	Pradesh	Pradesh	
Population under	12.4	19.8	15.3	15.5	18.2	28.9	33.9	18.7
absolute poverty (%)								
Life expectancy	70.7	67.8	70.7	71.7	69.3	66.8	68.6	69.7
(living born)								

Source: National Planning Commission, approach Paper of 15th Five Year Plan, 2019

Exclusion of Indigenous People. Nepal's highly stratified and hierarchical social structure has controlled access to resources and economic opportunities. The indigenous nationalities (Adivasi Janajati) of Nepal comprise 36% of the total population. The 2011 census listed the population as belonging to 125 castes and ethnic groups, including 63 indigenous peoples; 59 castes, including 15 Dalit castes; and three religious' groups. Even though indigenous peoples constitute a significant proportion of the population, throughout the history of Nepal, they along with the lower caste groups have been discriminated, marginalized, excluded in terms of land, territories, resources, language, culture, customary laws, political and economic opportunities. Discrimination and systematic exclusion of indigenous people and other lower caste groups have since been outlawed. However, caste-based discrimination has been deeply ingrained in Nepalese culture and continues to be experienced by members of the lower castes. Nepal has already ratified ILO Convention 169 on Indigenous and Tribal Peoples and passed the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) and the World Council of Indigenous Peoples (WCIP) Outcome Document. However, the local laws do not yet reflect many of the key elements of these international conventions such as the provision for Free and Prior Informed Consent.

Caste-based discrimination and vulnerability. The Nepal caste system which has its roots in the ancient Hindu religious texts, codes and traditions, divides people into unequal and hierarchical social groups. Those at bottom of the system (which are composed of several Castes collectively known as the Dalits are discriminated against and excluded socio-culturally, economically and politically. Due to exclusion and discrimination, Dalits have limited access to resources, services, education and employment, keeping most of them in severe poverty. Although caste-based discrimination was legally abolished by an amendment on the Nepal Civil Code (Muluki Ain) in 1963, the caste system, is still pervades in the Nepali society. Based on the 2011 census enumeration Dalits account for 13.6% of the country population.

Land ownership in Nepal. There is a significant imbalance in distribution of land in Nepal. According to Nepal Standard Survey 2011, top 7 percent of the ownership occupy 31 percent of the agricultural land while the bottom 20 percent own only about 3 percent. 45.7 percent of agricultural households own between half a hectare and three hectares of land and occupy 69.3 percent of total cultivable land. 52.7 percent of those households own half a hectare or less and occupy 18.5 percent of cultivable area. The average size of agricultural landholding is 0.7 hectares in rural areas and 0.5 percent in urban areas. Similarly, many of the agricultural households depend on small farm size for cultivation. Of the total farmers, about 53 percent are "small" farmers, defined as those who are operating less than 0.5 ha of land, and other 4 percent are "large" farmers (operating 2 ha and more land). There is also an uneven distribution of the agricultural land in the country. Small farmers operate only 18 percent of total agricultural land while 22 percent of the land is operated by "large" farmers. Similarly, in terms of land tenure, about 95 percent of the agricultural households' own land and 10 percent rent out some or all their land to others. On the other hand, 32 percent of households operate at least some land rented-in from others. At the other extreme, 5 percent households do not own any land but operate land owned by others on contractual basis, says the survey.

5. Social and Environmental Risks/Potential Impacts

5.1 Project Activities that have potential E&S Impacts

The interventions that can have environmental and social impacts or E&S risks are: (i) the implementation of PP business plans/proposals (Component 1); (ii) the implementation of semipublic value chain related infrastructure and facilities (Component 3). The PP business plans will range from, production of crops or livestock, post-harvest processing, manufacturing and marketing. The types of PP subproject proposals to be funded by the project are not yet specified but are anticipated to include crop/livestock production, construction of small buildings to be used as enterprise offices, aggregation centers, storage, sorting and/or processing/manufacturing activities, and installation and operation of processing equipment and machineries. The value chain related infrastructure and facilities includes. small-scale irrigation schemes. construction/upgradation of regional market centers, agro-knowledge centers and agriculture centers in strategic locations along the economic corridors and municipal agriculture centers. It will also support agriculture related public and semi-public infrastructure and facilities. In summary, the project will involve the undertaking of the following types of activities:

- Crop production, including bee keeping;
- Animal production (livestock, piggery, poultry);
- Procurement, installation and operation of processing/manufacturing equipment and facilities;
- Trading and marketing activities, including collection, storage, aggregation, sorting, coldchain centers, packaging and processing centers, value addition facilities and transport of farm products;
- Construction of buildings (to house trading centers, PP offices and post-harvest facilities, construction and rehabilitation of regional markets, agro-knowledge centers, agriculture centers and municipal agriculture centers);
- Construction and operation of irrigation ponds and small-scale irrigation schemes;
- Others small-scale facilities

5.2 E&S Risks and Impacts of REED Project and Mitigation Options

As discussed, the environmental and social risks of the project would come from the activities enumerated above. The following are their specific risks or potential impacts:

5.2.1 Risk of labor and working conditions

Labor and working conditions standards are likely to be the risk due to weak enforcement of the labor laws and worker rights by the contractor and weak compliance monitoring by the client. The following are critical:

Risk of workers in the project being denied their rights. The project will hire new staff and engage MoALD staff into the project. These new staff will be subject to the government's consultant hiring policies and are expected to be provided with adequate rights. However, project contractors would not be directly under the control of MoALD. Given the lax enforcement of labor laws and the documented prevalence of informal contracting in the construction industry, there is a risk that workers hired by contractors may not provide adequate worker's rights. The labor management process will be developed as outlined in the ESMF and consistent with national legislation and ESS 2 addressing all issues including the applicable requirements regarding non-discrimination, equal opportunities, health and safety for those mobilizing labor works for construction. It will be ensured that LMP will be updated, maintained and implemented throughout the Project period and that they are applicable to contractors, Project workers and all sub-contractors engaged in the Project. The LMP will be part of the bid document for contractors and the compliance monitoring of the same the responsibility of the government. LMP for subprojects will be developed as part of ESMP and applied throughout Project life cycle.

Risk of children being hired to work in the project and in the Productive Partnership activities. There is a possibility that children could be hired in construction works, either directly through the Naike system or indirectly through suppliers of building materials. The bricks industry in Nepal is notorious for using children. The project should have a strict policy against hiring children by contractors and this shall be specified as part of the contract. If the subproject involved bricks as building material, the contractor should be required to show evidence that the bricks used are coming from factories that do not use children labor. The sub-projects will not hire children below the age of 14 and it is consistent with the Child Labour (Prohibition and Regulation) Act, 2000 of Nepal as the Act bars employing any child below the age of 14. However, the law allows limited and selected use of children between the age of 14-18 and can be assigned only on light duties, and not on hazardous task or work environment, such as public transportation and construction related works. However, use of children between the age of 14-18 requires a lengthy legal process, such as obtaining approval form the family of the child and concerned labor office, and providing detailed information of the child to labor office. The child workers are not allowed to deploy in work for more than 6 hours per day and 30 hours of work per week and are entitled to a leisure of half an hour after working for three consecutive hours in a day. They are entitled for one-day leave in every week. In order to monitor the condition of the child labor, the labor office, as per the law, can depute an employee for inspection of the enterprises that engage child worker. Product partnership (PP) facilities should adopt strict policies about hiring underage children. No bonded labor should be allowed in PP's supported by the project.

Occupational health and safety standards. Left on their own without ESS requirements, contractors of small infrastructure are unlikely to meet OHS standards due to lack of government enforcement of the law and lack of safety culture among the employers and employees. The same can be expected of the operations in PP facilities involving process equipment. The project shall require contractors to implement standard OHS on construction sites. This will be included in the contract. A training on OHS maybe provided by the project for selected contractors who are already engaged in the project. In the case of operations of PP facilities, the project should ensure that OHS standards are incorporated in the Operations and Maintenance Plans/Manuals of PP establishments. For processing equipment, PPs are required to obtain an operation manual from manufacturers/suppliers of the equipment and to properly train operators.

5.2.2 Potential pollution impacts of project activities

Sedimentation of rivers and generation of dusts. Construction activities in small-scale village-level infrastructure may cause localized low-level pollution. Activities that would involve vegetation clearing, slope cuts and excavations, will result sedimentation of rivers during rainy days or the generation of dust during dry days. This impact is expected to be temporary occurring mostly during construction period. Sedimentation can be minimized by prohibiting the dumping or storing of boulders and soil materials in the river or along runoff/drainage channels. Contractors may also be required to immediately stabilize exposed soils or loose embankments. Unusable soil materials (such as organic materials, dismantled pavements) should be disposed of in designated disposal sites. Dusts nuisance can be minimized by requiring the contractor to slow down in residential areas or in school zones and regularly spray water on the construction routes during dry days. To minimize nuisance from construction noise, contractors can be required to restrict construction activities within daytime period.

Increase use of pesticides. The project will prohibit the purchase of banned pesticides and agrochemicals. However, PP production scheme will likely involve use of chemical inputs using their own equity. In the long term, intensification of agricultural production may result in increased use of pesticides and agrochemicals which could pollute surface water in the area. This may happen immediately if required in the PP business plan or may happen gradually over time as production because more and more commercialized. The project should prohibit the use of banned pesticides (i.e. those that are persistent pollutants). PP business plans involving crop production should include provisions for proper handling and storage of pesticides and training of farmers. Integrated Pest Management Plans will be prepared where necessary.

Soil erosion and landslide from infrastructure sites. There is an always potential for erosion of slopes considering the weak geological formation of Nepal. The construction value chain related infrastructure and facilities, such as cold-chain centers, regional markets, agro-knowledge centers,

agriculture centers, municipal agriculture centers etc., and construction of small irrigation canals may require slope cuts and clearing of vegetation on sites triggering landslide and erosion. Cultivation of hillsides and steep slopes will likely increase soil erosion and sedimentation of waterways due to cultivation of the hillsides and slopes. PP participants engaged in crop production in hilly lands shall be provided technical assistance to undertake soil conservation measures such as terracing, contour farming and/or agroforestry.

Waste from operation PP facilities. There would be wastes generated from the operation of PPs facilities (e.g. post-harvest processing, food manufacturing, etc.). These wastes (liquid or organic solid wastes) have the possibility of polluting the local water bodies and can accumulate and pollute the vicinity of the facilities. All business plan/feasibility studies of PP subprojects involving operation of equipment/facilities should include provisions for waste treatment and a waste management plan in the subproject.

5.2.3 Risk on Natural Habitat, Wildlife and Biodiversity

Loss of natural habitat. The construction of value chain related infrastructure and facilities, semipublic and public infrastructure and facilities, small irrigation schemes and regional market centers
etc. could result in the felling of trees, clearing vegetation which may have some impact on natural
habitats. This impact could be direct if PP business plans require expansion of farm areas or
opening of new areas for cultivation. The impact may also occur in long term as increased access
to markets could influence private individual decisions to clear additional patch of land for crop
or grazing. PP business proposals should be screened against plans to encroach into strict
protection zones of protected areas. Felling of tress and clearing of vegetation will require
clearance by the Department of Forestry and Soil Conservation. Plans to utilize buffer zones of
protected areas should also be approved by the protected area management.

Impacts on wildlife. The construction activities like rehabilitation of value chain related infrastructure and facilities may impact the wildlife temporarily. Noise during construction activities is expected to have temporary impacts on wildlife. Wildlife are expected to return when there are no more activities in the area.

Conversion of family home gardens. Home gardens in Nepal provides critical role in nutrition and food security of the rural household. Conversion of smallholders' home gardens into or as part of the PP monocrop commercial farm, could impact into agrobiodiversity and family food and nutrition security. PP business plans that involves commercial crop production should include provisions to require smallholder PP members to retain portions of landholdings for multi crop home gardens. MoALD may also provide extension support to smallholders to improve the productivity of their home gardens through other programs.

5.2.4 Land Acquisition Requirements

Land requirements under the project may cause some physical displacement (such as through relocation, loss of residential land or loss of shelter) or economic displacement (loss of land, assets, leading to loss of income sources or other means of livelihood). The scope and scale of displacement is not yet known at this stage of project preparation. Any activities related to construction of demand driven, value chain related, and semi-public infrastructure and facilities will be undertaken in the government land. Though there will be no private land acquisition, appropriate mitigation measures, including the preparation of the RAP will completed before the bidding process if the land that will be made available by the participating municipalities for upgrading and building demand-driven market centers, value chain related infrastructures and semi-public infrastructure causes any displacement and resettlement of people or if such activities restrict access to private property or common resources. A Resettlement Policy Framework (RPF) has been prepared for the project which outlines the resettlement principles, procedures, organizational arrangements, and design criteria that will informed the identification of project-affected persons (PAPs) and which will guide the preparation of Resettlement Action Plan (RAPs) to address involuntary resettlement impacts, if such situation appears.

5.2.5 Indigenous People and Vulnerable Sector

Indigenous Peoples. The project will be implemented in strategic rural economic corridors in six provinces. It is highly likely that some of these corridors will have ethnic minorities that may qualify as indigenous people as defined by the government of Nepal and WB ESS7 standard. An Indigenous People's Policy Framework (IPPF) has been prepared for the project. Under IPPF, subprojects located in territories of indigenous peoples are required to undertake consultation with IPs and if the impact is large then a free and prior informed /consent maybe required with the IP community followed by the IP development plan.

Vulnerable Groups. Members of the bottom castes (Dalits), women headed households and landless agricultural workers, in the project areas are at risk of being adversely impacted and/or excluded from the benefits of the project, further contributing to their impoverishment and marginalization. Efforts will be exerted to reach out to vulnerable groups to consult them and provide them assistance so they can participate in the subprojects. Vulnerable households that would lose land or other assets due to the project will be provided special treatment, including additional assistance under the Resettlement Policy Framework.

Women. Women are more likely than men to work in agriculture and less likely than men to work in industry/manufacturing and services. For example, 80.1 percent of women work in agriculture versus 59.4 percent of men. Similarly, while women are more likely than men to work in subsistence agriculture (about three quarters of working women compared to 53 percent of men),

they are less likely to engage in paid work and to own businesses (for example, women hold only 24.9 percent of non-agriculture wage jobs2 and own 34 percent of rural non-farm enterprises3). The predominant areas where substantive gender gap identified are confined to i) access to markets and market information and (ii) access to finance and (iii) access to technology, and iv) access to business skills training and business development services. The project will make special effort to address these constraints of women in accessing project benefits and opportunities and while providing compensation and other mitigation measures.

5.2.6 Sexual Exploitation and Abuse and Sexual Harassment:

Nepal has high incidences of GBV cases with mostly women as victims. Out of the 15 most GBV prevalent countries in the world, Nepal ranks 4th in domestic violence and violence by a partner. In Nepal, GBV is prevalent due to unequal gender relations and discrimination towards women in both public and private sphere. It has direct implications on the reproductive health status of women and physical, emotional, and mental health of their children. NDHS 2016 records 23 percent women experiencing physical violence with Madhesi Dalit women at 44 percent, Muslims at 38 percent and hill Brahmin at nine percent. By province, women's experience of physical violence varies from a low of 12 percent in Province 4 to a high of 34 percent in Province 2. The project includes component 3 that aims to support semi-public and value chain related facilities that includes, small-scale irrigation infrastructure and schemes, construction/upgradation of four regional market centers, collection centers, cold storage centers, packaging and processing centers. As such, a flow of labor is expected in the project areas to support these constructions and installation. The labor influx is expected to induce negative impact on the host community and may also pose SEA/SH risks.

The project was assessed using the WB SEA/SH risk assessment tool and the risk assessed was 'low'. Although the assessed risk is low, potential SEA/SH risks incurred by labor and/or other project interventions cannot be precluded. Hence the project will take measures to prevent, mitigate and respond the risk related to SEA/SH through the implementation of SEA/SH plan (Annex 8) This SEA/SH action plan is prerequisite to laying out specific actions, with clear responsibilities and commitments to integrate SEA/SH prevention and response in all phases of the project. The purpose of this action plan is to identify risks, , key stakeholders, available service providers, preparing code of conduct as part of the bid document for laborers, and contractors and also for consultants and project staff, communication outreach and awareness creation and develop accountability mechanism on SEA/SH. SEA/SH. Action Plan covering laborers, contractors,

_

² Central Bureau of Statistics (CBS). 2011. Nepal Living Standard Survey 2010/11. Statistical Report, Volume II.

³ World Bank. (2016). Nepal Household Risk and Vulnerability Survey (HRVS), Wave 1. Social Protection and Jobs Global Practice. Washington D.C.: World Bank Group.

communities, project staff will be prepared and measures such as prevention procedures, campaigns, code of conduct, and redressal mechanisms implemented in accordance with the ESMF and relevant national laws. It will also focus on the action plan is applicable to Project implementing agency, including contractors, consultants, workers and cover Project's footprint and adjoining communities.

For the mapping of GBV service providers there is a GBV service provider mapping by the region available at the National level maintained by the <u>National Women's Commission</u>, Nepal. This was developed with the WB support in 2017 and includes a list of NGOs/CSOs providing GBV services across the country. This is a live document and is updated on a periodic basis to ensure functionality of the services even at times of COVID. This will provide as a reference for the counterpart to contact for support in case of need for SEA/SH related grievances and/or issues.

5.2.7 Risk on the Health and Safety of Project Communities

Risk of spread of diseases at the villages. Construction activities at the villages could result to the spread of infectious diseases among residents and workers such as HIV/AIDs. Workers who are not from the area may bring in diseases for which the locals are vulnerable. Conversely, workers who are not from the area may contract diseases for which he/she is vulnerable. Contractors can be required to undertake medical screening of their workers and employees and conduct awareness campaign through seminars and information materials regarding endemic diseases in the area and educate the workers on how to protect themselves. Contractors should be required to provide a set of appropriate Personal Protective Equipment (PPE) that includes, rubber boots, helmet, gloves, high visibility vest and mosquito nets, among others. MoALD may also coordinate with MoHP on their disease surveillance program especially in context of COVID-19. The contractor will develop COVID-19 procedures for the work site to prevent transmission of virus which will include social distancing measures, safe accommodation standards, sanitation and hygiene, onsite monitoring protocol etc. The ESF/safeguards Interim Note on COVID-19 considerations in construction/civil works developed by WB can be referred to while developing procedures.

Conflict between workers and local communities. There is risk of conflict between contractors and local communities due to migrant worker's behavior or lack of sensitivity of local culture. In order to minimize this risk, the project could require contractors to undertake awareness briefing on local sensitivities and culture and traditions with their workers and employees.

Exposure of local communities to safety issues. Local communities will be exposed to construction hazards (e.g. vehicle, heavy equipment traffic and deep excavations). The project could require contractors to slow down in residential areas and school zones and to provide adequate barriers and warning signs on deep excavations and other dangerous areas.

5.2.8 Risk to Cultural Heritage

The construction related infrastructure and facilities, particularly small irrigation schemes and regional market centers, collection, storage and packaging centers, cold storage centers, if not carefully sited and designed could impact cultural heritage sites, modifying them or rendering them inaccessible. There is also a possibility that excavations in the infrastructure subprojects will encounter artifacts and fossils with great archaeological and paleontological values. Although likely to be built on public land managed by partnering municipalities, the construction of related infrastructure and facilities could contain ancient monuments or lie at the access to a certain cultural or religious structure or site. Moreover, there is also a possibility of encountering buried artifacts or objects of cultural or paleontological value during civil excavations associated with these infrastructure subprojects.

Also, the local communities in Nepal have diverse cultural values, traditions, beliefs, and knowledge. Often these are overlooked as these are not directly related to the risks and impacts to cultural heritage from project activities. The project level ESMP will set out measures to protect not only tangible but also the intangible cultural heritage related to their traditional agriculture knowledge. The project can screen subproject sites for presence of or proximity of cultural heritage sites. Chance find Procedures are provided in Annex 5 in case archaeological or paleontological sites, are encountered. A chance finds procedure for cultural heritage, consistent with the relevant national legislation and ESS 8, will be part of all contracts or activities involving any excavation, movement of earth or related changes in the physical environment under the Project. The procedure will be implemented as needed throughout the Project cycle.

The table given below highlights the major activities associated with the project and potential environmental and social issues and impacts.

Table 5.1: Types of project activities and their potential social and environmental impacts

Type of Activity	Potential Issues and Impacts	
1. Crop production	Income and employment generation for local people leading to cash	
	income	
	Less out-migration	
	Enhance food security	
	• Felling of forest, encroachment into forest lands, loss of vegetation	
	• Cultivation of hillsides leading to soil erosion and sedimentation	
	and land degradation	
	Increase use of pesticides due to commercialization of production	
	Displacement of tenants	
	Child labor on the farm	
	Tenure and landownership issues	
	High value crops may have disproportionate impact on the poor and	
	vulnerable groups - unfavorable labor practices with low wages,	
	long hours, no benefits	

2. Animal production	Increase income from selling meat and milk	
2. Annual production		
	• Use dung as manure and fur for textiles	
	Overgrazing of rangelands, leading to soil erosion and land	
	degradation	
	Conflict in open-access grazing;	
	Waste management for piggery and poultry	
	Child labor	
	Increase women drudgery	
3. Procurement, installation and	Occupational health and safety	
operation of	Child labor in processing	
processing/manufacturing	Safety of equipment	
equipment and facilities	Waste management	
	Product safety	
	Hiring of low paid workers/women	
	Lack of involvement of women, IPs and other vulnerable groups in	
	the development of business plans and access to grants	
	Inability to provide equity to women and vulnerable groups	
4. Trading and marketing activities,	Waste management	
including collection, sorting,	Food safety	
aggregation, minor post-harvest	Proper handling of chemicals	
treatment, packaging and transport	Child labor	
of farm products	Unequal wages to labors	
	Hiring of low paid workers/women	
5. Construction of buildings (to	Land acquisition/ownership	
house trading centers, PP offices • Clearing of Vegetation		
and post-harvest facilities)	Occupational health and safety	
	Child labor during construction	
	Landslide and erosion	
	Labor influx impact	
	SEA/SH due to labor influx	
	Safety, health noncompliance and poor working conditions	
	• Income and employment generation for local people, especially	
	poor and disadvantaged households	
	Pollution – air, water, noise	
6. Value chain related	Felling of trees, loss of vegetation	
infrastructures	Landslide and erosion	
	Impacts on Protected areas and wildlife	
	Land acquisition leading to involuntary loss of asset and	
	resettlement	
	Impact on the water resources flow and quality	
	Occupational health and safety	
	Labor influx issues during construction	

	Child labor
	SEA/SH due to labor influx
7. Construction and operation of	Community health and safety
irrigation ponds and small-scale	Ecological impact
irrigation schemes	Expansion of agricultural areas encroachment into the forest
	Water use conflict
8. Construction of Agriculture	Pollution-air, water, noise
Products Collection Centers	Waste management
(APCCs), Agriculture Products	• Safety, health noncompliance and poor working conditions
Market Centers (APMCs)	Community health and safety
(provincial and local), cold storage	Clearing of vegetation
and Sanitary and Phyto-Sanitary	Landslide and erosion
(SPS) facility	Child labor during construction
	Labor influx impact
	Increased income from agriculture products
	Income and employment generation for local people leading to cash
	income
	Workers exploitation (including sexual exploitation of female
	workers)
	Low paid jobs for poor people
	Skilled employment opportunities may not be available to local
	poor people
9. Access to finance by rural	
· ·	Increased banking investment in SMEs creates new jobs.
entrepreneurs	Lack of information on financial services and banking products
	Inability to access finance due to lack of collateral
	Lack of capacity and knowledge on financing

6. Regulatory Framework for E&S Risk Management

6.1 Nepal's EIA System

Nepal's Environmental and Social Impact Assessment (ESIA) system is mandated in Nepal's Environmental Protection Act (EPA) of 2019 and further articulated in the Environmental Protection Regulation (EPR) of 2020. The national acts, regulations and other standards that are relevant to ESS 2-8 and ESS 10 are described in Annex 9. The EPA 2019 requires the proponents to prepare a concise environmental study or initial environmental examination (IEE) or environmental impact assessment (EIA) report in relation to prescribed plans, programs, or projects which may cause changes in existing environmental conditions by physical activity, development activity, or change in land use. The Act puts emphasis on the need of Alternative analysis stating that the potential initial, mid-term and long-term adverse impacts on the environment and the method and procedure to be adopted for minimizing the impact. After having prepared a Concise Environmental Study or IEE or EIA, the proponent is required to submit it to the relevant government agency for approval. The Act delineates and defines the role and responsibilities of the three tiers of governments regarding preparation of IEEs and EIAs, their approval and clearance procedures. The projects requiring concise environmental study, IEE and EIA are defined in Schedules 1, 2 and 3 of the EPR. IEEs are reviewed and approved by the concerned approving agency (i.e. concerned ministry (MoALD in this case) or the agency prescribed by provincial law or local law) while EIAs are reviewed and approved by the Ministry of Forest and Environment (MoFE) through MoALD or the agency prescribed by provincial law. Projects are implemented only after securing approvals of IEE or EIA from these authorities. Compliance monitoring during implementation falls with the concerned ministry for both Schedule 1 and Schedule 2 projects while MoFE and relevant provincial ministry has the authority to conduct post implementation environmental audit. The entire environmental assessment process is shown below (Table 5).

Table 6.1: The EIA Process in Nepal

Phase	Task	Agency Responsible
Screening	Consult EPR Schedules 1 2 and 3 and determine Project Category	Proponent
	Confirm Project Category	Concerned federal or provincial (ECOs) or local authority
Scoping and TOR Formulation	Public Consultation	Proponent and Project Community

	Prepare EIA Scoping Report and TOR	Proponent
	Review EIA Scoping Report and TOR and endorse to MoFE or Provincial Approving Agency together with opinions	Concerned Ministry (OPD MoALD) or Provincial Authority
	Approve the EIA TOR	MoFE - DoE - EIA Unit or Provincial Approving Agency
EIA Study and Report Preparation	Detailed Baseline Study Prediction of Impacts Analysis of Measures and Options Environmental Management Plan	Proponent
Public Review	Posting of Notices	Proponent
Disclosure of Report for Public Review	Public Hearing	Proponent
	Endorsement and Recommendations	Concerned Rural Municipalities/Municipalities
Review and Approval	Submission of EIA Report	Proponent
	Review of EIA Report and endorsement with opinions	Proponent
	Constitution of EIA Review Committee	MoFE DoE - EIA Unit or Provincial Approving Agency
	Approval	MoFE or Provincial Approving Agency (Decision required in 35 days) after all the requirements of study are fulfilled
Implementation and	Implementation of ESMP	Proponent
Compliance Monitoring	Compliance Monitoring	Concerned federal, provincial (ECOs) or local implementing agency
Operation	Post implementation Evaluation/Audit	Concerned federal and provincial agency

Table 2.2: Provisions for IEE in the agriculture sector

- 1. Any proposals requiring clearance of national forest up to 5 ha in Terai and 1 ha in hills for agricultural purposes,
- 2. Construction activities involving the following:
 - (a) Domestic fowls keeping with more than 30,000

- (b) Big cattle numbering more than 1,000
- (c) Small cattle (sheep and goats) numbering more than 5000
- (d) Establishment of the agricultural wholesale market in more than 1 Ha of land in Metropolitan and sub-metropolitan areas of Terai and 0.5 ha in other areas
- (e) Construction of approved slaughterhouse
- 3. Storage and disposal of obsolete (date expired) pesticides
- 4. Production, formulation, storage, repackaging and disposal of inorganic fertilizers and inorganic pesticides
- 5. Establishment of blending industry of chemical fertilizer and chemical pesticides
- 6. Above mentioned proposals and those below the standards of such proposals as well as the proposals below the standards of those mentioned in Schedule 2 of the EPR 1997 (see below) and those small scale development activities s and projects, programs and activities related to physical infrastructure works and land-use change which involve investment from NRs 5,00,00,000 (Five Crore) to 25,00,00,000 (Twenty Five Crore).

Source: EPA 2020

The Environment Protection Rule 2020 has come into force by virtue of the power given by Section 44 of the Environment Protection Act. The rule has the provision for Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA) before establishing industry and developing physical infrastructure and any other works that may create environmental damage. A list of such industries and works requiring EIA and IEE are mentioned in the schedules. The government has the authority to prescribe pollution control standards for different industries. The methods and procedures for IEE and EIA are laid down in the rules. This rule has made IEE/EIA mandatory for the governmental as well as the private sector.

Following the EPA 2019 and EPR 2020, the MoALD or the agency prescribed by the relevant provincial law are responsible for approving the IEE reports in the agriculture sector while EIA reports will be approved by the Ministry of Forests and Environment (MoFE) or the agency prescribed by the relevant provincial law. MoALD has issued the Guidelines for IEE4 in the agricultural sector (Table 6). The proposer receives MoALD's approval through respective government agencies.

Categorization. Nepal EIA system divides E&S impact assessment into four categories: those that would not require any assessment; those that would require Concise Environmental Study only; those that would undergo only IEE; and those that would require EIA. Schedule 1 of EPR provides the criteria and thresholds for the projects that are required to undergo Concise Environmental Study only. Schedule 2 of the EPR provides the criteria and thresholds for projects required only to undergo IEE. Schedule 3 of the EPR provides the criteria and thresholds for projects that are

⁻

⁴ IEE Manual for Agricultural Sector (2008) developed by then Ministry of Agriculture provides the guidelines for IEE in agricultural sector are as per EPR 1997. The EPR 2020 has come into effect from June 2020 but the new guidelines have not been developed yet therefore the existing guideline will prevail

required to undergo EIA. For projects that cannot be ascertained if EIA is required during screening, an IEE will first be undertaken to determine whether a full EIA is warranted.

This categorization allows for some efficiency by requiring scope and levels of details that are proportional with the project risks relating to the types, scales and location of the project.

Scope of the Assessment. Formal scoping including stakeholder consultation is required only for EIAs. However, the TOR preparation is required for Concise Environmental Study, IEE and EIA. The ESA study (i.e., IEE and EIA) typically covers only the environmental and social issues that are captured in the TOR formulation. Although the key elements of the World Bank ES standards are covered by various national legislations (Table 7), the scoping does not necessarily cover all of them, or make a clear determination of whether they are applicable or not. The closest definition of scope one can get from the EPR are the Schedules 5 (content of scoping) and Schedules 6-12 (Contents of different ToRs and Concise Environmental Study, IEE and EIA reports).

Table 6.3: Relevant Country Legislations and Gaps vis-á-vis World Bank ESS

World Bank ESS	Relevant Nepal Laws, Regulations and Policy Issuances	Gaps vis-à-vis WB ESS
1. Assessment and Management of Environmental and Social Risks and Impacts	National Environmental Impact Assessment Guidelines (1993) Environment Protection Act (EPA) (2019) Environment Protection Regulation (EPR) (2020)	 No provision for associated projects/activities; large projects can be split into smaller projects to avoid full EIA study. Scope of EIA may not cover all WB ESS. EPA/EPR does not allow use of other types/forms of assessments. Does not emphasize hierarchy of measures in ES risk management planning
2. Labor and Working Conditions	Labor Act (2017) Child Labor (Prohibition and Regulation) Act (2000)	 Current OHS legislation is not adequate (No separate legislation on OHS. Current OHS mandate is provided only in Chapter 12 of the Labor Act) Lack of industry-specific standards (DoLOS has so far issued only one directive: OHS Directive for Brick Workers)

World Bank ESS	Relevant Nepal Laws, Regulations and Policy Issuances	Gaps vis-à-vis WB ESS
3. Resource Efficiency and Pollution Prevention and Management	EPA (2019). EPR (2020) National Ambient Air Quality Standards (2003) Nepal Vehicle Mass Emission Standard (2012), National Ambient Sound Quality Standard (2012), Standard on Emission of Smoke in Air by New and Existing Diesel Generator (2012), National Water Quality Standard (2008) Tolerance Limits for Industrial Effluents to be discharged into Inland Surface Waters (2003) The Solid Waste Management Act (2011) Solid Waste Management Rule (2013) Water Resources Act (1992) Water Resources Rules (1993) Drinking Water Quality Standards Water Quality Guidelines for the Protection of Aquatic Ecosystem.	Lack of legislations on resource use efficiency in projects Management of pesticides and hazardous waste is done as per country legislations and GIIP and EHS guidelines are not followed except for IFI funded projects.
4. Community Health and Safety	Disaster Risk and Management Act, 2017 Public Health Service Act 2018 Solid Waste Management Act, 2011 Local Government Operation Act, 2017 Pesticides Management Act, 2019	 There is limited coverage as scope of ESIAs do not necessarily include community safety issues. Public health legislations do not specifically impose requirements for development and infrastructure projects.
5. Land Acquisition, Restriction on Land Uses and Involuntary Resettlement	Public Road Act (1974) Land Acquisition Act (1977) Guthi Corporation Act (1976) Land Acquisition Guidelines (1989) Land Reform Act (1964) Land Revenue Act (1977)	 Does not require preparation of RAP Does not allow for PAP consultation in the compensation options Does not allow non-cash compensation options such as landfor-land and replacement homes, only "arrangements for rehabilitation" and "priority in employment". Valuation of lost assets considers depreciation and hence not at replacement cost

World Bank ESS	Relevant Nepal Laws, Regulations and Policy Issuances	Gaps vis-à-vis WB ESS
		Leasing of land is not allowed for temporary easements. Compensation for any temporary use of land is limited to damage compensation.
6. Biodiversity Conservation and Sustainable Management of Living Natural Resources	Aquatic Animal Protection Act (1961) National Park and Wildlife Conservation Act (1973) National Park and Wildlife Conservation Regulations (1974), Soil and Watershed Conservation Act (1982), Himalayan National Park Regulation (1979) National Trust for Nature Conservation Act (1983), Forest Act (2019), ⁵ Forest Regulation (1995) Conservation Area Management Rules (1996), Buffer Zone Management Rules (1996) Plant Protection Act (2007)	 Natural habitats are not specifically required to be assessed in the EIA Biodiversity assessment rely mainly on EIA and follows national legal instruments for defining scope and nature of assessment. Specific Biodiversity Impact Assessment of the impacts on natural habitats and biodiversity hot spots are not done and Biodiversity Management Plan is not prepared. Assessment of potential introduction of alien invasive species and their control is not adequate. Most of the EIA/IEE studies do not consider the invasive species issue as significant; and this might create serious biodiversity issues in the long run.
7. Indigenous Peoples	National Foundation for the Development of Indigenous Nationalities Act (2002) Local Self-Governance Act (1999) ILO Convention 169 (2007) Forest Act (1993) and Forest Regulation (1995)	 Does not require "Free and Prior Informed Consent" for projects in IP territories Does not require focus social assessment on IP population Does not require preparation of IP Plan
8. Cultural Heritage	EPA (2019) EPR (1997) Chapter 5 Ancient Monument Act (1956)	 Does not include intangible cultural heritage Does not provide for the development of Cultural Heritage Plan Does not provide for the application of globally recognized practices in the study, documentation and protection of cultural heritage Does not provide for adoption of chance find procedures

_

⁵ The Forest Act 1993 has now been replaced by Forest Act 2019 but the regulations are not enacted yet and Forest Regulation 1995 is followed.

World Bank ESS	Relevant Nepal Laws, Regulations and Policy Issuances	Gaps vis-à-vis WB ESS
9. Financial Intermediaries	Not applicable. Projects undertaken through financial intermediaries are subject to the same processes and procedures as any other projects.	
10. Stakeholder Engagement and Information Disclosure	The EPR as amended requires consultations during scoping and a public hearing is required in all projects that require either CES or IEE or EIA.	 Does not require stakeholder analysis and preparation of stakeholder engagement plan. Does not provide for continuous stakeholder engagement/consultations beyond EIA process during construction and operation phase

Nepal's EIA system is well developed, having started as early as 1993 with the issuance of National Environmental Assessment Guidelines. The current system is governed by the EPA of 2019 which are articulated further in the EPR issued in 2020 by the Ministry of Forestry and Environment (MoFE). The system allows for categorization of projects based on risk factors particularly in terms of nature, scale and location of the project. It also requires reasonable level of public consultation and participation. The country system prescribes Concise Environmental Study/IEE/EIA as the acceptable form of assessment for projects, but other assessment instruments are also being used such as Strategic Environmental Assessment (SEA) for development policies and programs. The key gaps, as discussed above, include: (i) lack of provisions for associated projects, which makes the system vulnerable to splitting of projects into several low risks components; and, (ii) the scope of the assessment may not necessarily cover all the World Bank ES standards.

7. E&S Risk Management Capacity at MoALD

The MoALD is a new merger of the former Nepal's Ministry of Agriculture and Cooperatives and Ministry of Livestock Development (MoLD). Both ministries have had long experience implementing World Bank and other donor-funded projects. The former MoLD now Department of Livestock Services under MoALD has an ongoing World Bank-funded project called Nepal Livestock Sector Innovation Project (NSLIP) which was approved in 2017 while the former Ministry of Agriculture has the Food and Nutrition Enhancement Project (FANSEP, approved in 2018). Both agencies have EIA/IEE units established in compliance with EPA/EPR which approve IEE and review EIA for endorsement to MoFE of projects under their respective sectors. There are two sections in the MoALD, namely Agriculture Biodiversity and Environment Section and Human Resources, Gender Development and Inclusion Section for ESMF compliance monitoring and the project will help in capacity building of these sections. In order to strengthen the compliance monitoring capacity, the project aims to hire environmental and social experts at the central and field level project offices to provide technical support for the project management on matters of E&S compliance.

8. Environmental and Social Management Procedures

Based on the general assessment of the environmental and social impacts of the project, this ESMF provides for general project-level measures, including design-related measures and approaches. Since the types and exact locations of the project interventions on ground are still unknown and hence cannot be assessed yet, this ESMF also provides for the processes, procedures and requirements for assessing and managing the risks and impacts of the various interventions/subprojects during the project implementation. For the purpose of this ESMF subprojects are understood to be either of the following:

- (a) A Productive Partnership subproject proposal which is part of its business plan, which is being considered for funding with a grant; and,
- (b) Demand driven, value chain related and semi-public and public infrastructure and facilities that includes small-scale irrigation schemes, construction/upgradation of regional market centers, collection centers and processing and packaging centers, storage; and trade and market promotion value chain facilities.

8.1. Project Design-related Measures and Approaches

The following are design-related measures which have been adopted to avoid or minimize the project's ES risks:

- (i) Close consultation with stakeholders during subproject planning and implementation. The development of the REED project design including the preparation of this ESMF has benefited from consultations with various stakeholders. The consultations so far conducted and the planned for future engagements are described in the Stakeholder Engagement Plan (SEP) which is prepared as a separate document in compliance with the World Bank ESS10. In order to keep the stakeholder informed and to get timely feedbacks from stakeholders, the OPD shall implement and continually update the SEP throughout the project lifecycle. There shall be two levels of consultations:
 - (a) Consultations during Economic Corridor-level planning. At the economic corridor/province or district levels, the project should consult identified stakeholders, including the organizations that represent the AJs, Dalits, women and other vulnerable communities. The consultations are aimed at getting inputs from these sectors in terms of the identification E&S risks of productive partnerships in terms of areas with great economic potentials within the corridor as well as identification of potential sites for demand driven, value chain related infrastructure and facilities includes, small-scale irrigation schemes, construction/upgradation of Regional Market Centers, construction of other trade and market promotion agro business centers such as for collection, storage, processing and

- marketing. Potential productive partnerships could be developed among Dalits, Women, IDP groups, etc.
- (b) Consultations at the Subproject-level planning. It is expected that there will be women, Dalits and other vulnerable groups in almost every village and hence in subproject sites. There will also be groups, cooperatives and NGOs representing women, Dalits and other vulnerable groups operating in project sites. The subproject proponent (subproject proposal development team) can seek the assistance of these groups to help mobilize representation of women, Dalit and other vulnerable groups into the subproject assessment and planning process. Otherwise, the subproject proposal development team must exert efforts to locate and engage with these groups to seek their inputs and participation. In the case of people potentially affected by any land acquisition, the purpose and manner of the consultation shall be in accordance with the RPF. Similarly, consultations with the IP groups shall be in accordance with the IPPF. The assessment (EIA, IEE, or CES) shall assess the impacts of the subprojects on the Dalits and other vulnerable groups.
- (ii) Setting up of subproject-specific and project-wide Grievance Redress Mechanisms (GRM). The project shall set up a multi-tier grievance redress mechanism system that allows lodging and resolution of complaints at the lowest level of the project organization (i.e. for PPs at the partnership levels) before they are elevated to the higher tier. The GRM is described in detail in the Stakeholder Engagement Plan (SEP) which has been prepared as a separate instrument in compliance with the World Bank ESS10.
- (iii) Application of eligibility criteria for subprojects as part of the ES Screening. The project activities (i.e. PP business plans and infrastructure and facilities) will be screened for certain eligibility criteria. The activity will be screened against national regulatory requirements as well as WB's ESSs. The following subprojects shall not be eligible for funding under the project:
 - (a) PP subproject proposals which would involve large farms defined as farms greater than 3.0 hectares, except when they are participating as Lead Partner/Farmer/Entrepreneur of a group of smallholders;
 - (b) Subprojects that would cause dislocation, modification, or restriction of access to cultural heritage sites, and pose adverse impacts to cultural and heritage sites;
 - (c) Subprojects that would encroach into the protection zone of declared protected areas of natural habitat;
 - (d) PP subproject proposals that would involve involuntary resettlement and/or eminent domain land acquisition by government for use of PP. Public good subprojects (value chain related, semi-public infrastructure and facilities) shall be subject to REEDs Resettlement Policy Framework.

- (e) PP subproject proposals that would result in the exclusion/restriction of certain groups who are traditional users, from accessing an otherwise open-access resource such as public forests, lake or rangelands;
- (f) PP subproject proposals that involve use of project funds for purchase of pesticide and agrochemicals.
- (iv) Climate resilience consideration in design of subprojects. All subprojects shall consider in their design site-specific climate and disaster risk mitigation measures, using the 2011 Local Adaptation Plans for Actions Framework (LAPA).
- (v) Ensuring social inclusion in PPs receiving grants from the Project The project will require PPs that receive grants to adopt a policy of open membership in their partnerships and plans/programs for expansion of members and number of workers in their operations to help ensure social inclusion. During the development of productive partnerships, the ECO team should promote and prioritize gender/caste/ethnicity inclusive, multi-ethnic, multi-caste, and inclusive associations over exclusive, ethnically/socially homogenous groups. To be eligible for grants, the partnerships should be required to:
 - (a) The PP organization shall adopt an open membership policy which means it cannot restrict membership to certain criteria other than basic qualification of trade (i.e. rice farmers, beekeeper, etc.). Partnerships that restrict memberships based on family relations, clan membership, upper castes, ethnicity or religion shall not be supported, except for exclusive group of recognized IP and Dalits groups.
 - (b) The PP organization shall adopt a program/plan for expansion of memberships and employees in their enterprise operations.

These policies shall be clearly reflected in the partnerships official policy documents and/or organizational charter documents.

8.2 Generic Environmental and Social Mitigation Measures

Table 8 provides a summary of the standard mitigation/management measures for each risk and potential impact identified in the assessment above. These mitigation measures, together with various forms, templates, and frameworks will serve as reference during the assessment and preparation of individual subproject ESMPs and associated E&S plans. For land acquisition and involuntary resettlement impacts, a separate Resettlement Policy Framework (RPF) has been prepared to guide for the preparation of individual subproject Resettlement Action Plans (RAP). A separate Indigenous People Policy Framework (IPPF) has likewise been prepared to guide subproject compliance with the World Bank standard for dealing with indigenous people. A

Stakeholder Engagement Plan (SEP) has also been prepared separately to guide the continual process of stakeholder engagement throughout the life of the project.

Table 3.1: Generic Environmental and Social Mitigation Measures for Subprojects

Impacts/Risks/Issues	Mitigation Measures Mitigation Measures
Environmental and Social	
Assessments	
Impacts of subproject activities not properly assessed	 All subprojects shall undergo some form of impact assessments with level of details and scope commensurate with the risks involved. This will be determined initially through the ES Screening which all subprojects shall be subjected to.
Labor and Working Conditions	
Hiring and/or involvement of children in the project activities	 Require contractors to comply with Nepal Labor Act, Child Labour (Prohibition and Regulation) Act and ILO labor standards. This responsibility shall be reflected in the contractors' contract (<u>Annex</u> 6)
Worker's exposed to unsafe working environment in constructions value chain related infrastructure and facilities	 Require contractors to comply with the Nepal Labor Act and the industry OHS Standards. This responsibility shall be included in the contractor's contract. ((<u>Annex 6</u>). LMP to be adopted
Workers being denied of worker's rights.	• Require contractors to comply with Nepal Labor Act and ILO labor standards. This responsibility shall be reflected in the contractors' contract ((Annex 6)
Possible occupational health and safety issues in the operation of PP facilities	 Include strict adoption of OHS Standards in the Operations and Maintenance Plans/Manuals of PP facilities. Require simple manual of operations for all installed equipment or facilities and proper training of operators. These should be reflected in the PP's business plans and/or Subproject proposals.
Possible SEA/SH due to labor influx in host communities	• Require contractors to comply with National Laws and ILO labor standards. This shall be reflected as code of conduct in contractors bidding documents (Annex 8).
Pollution Prevention	
Generation of dust and noise during construction of subprojects	 Require contractors to restrict construction activities within daytime hours and adopt possible alternative measures. Require contractors to undertake dust suppression measures such as regular spraying of roads with water.
Possible sedimentation of waterways during construction of subprojects	 Prohibit dumping of boulders and soil materials in the river or along runoff channels. Immediately stabilize exposed soils or loose embankments.
Potential erosion of slopes and embankments as well as slope cuts on sites of buildings and facilities	• Incorporate slope stabilization measures in construction of value chain related infrastructure and facilities.

Impacts/Risks/Issues	Mitigation Measures	
Possible generation of wastes	• Include a waste management plan in the subproject proposal.	
during the operation of PP facilities	Incorporate Waste Management Plan in the Operations and Maintenance Plans/Manuals of PP facilities.	
Possible use of pesticides in the PP	• Screen out subprojects that intend to use project funds to purchase	
areas	pesticides or agrochemicals	
	Prohibit use of banned pesticides	
	• Conduct training on farmers on the safe handling and storage of pesticides.	
	Making available of alternate safe pesticides and chemicals	
	Promote use of bio-pesticides	
	 During screening, if significant pest management issues are anticipated, prepare a Stand-alone Pest Management Plans (PMP). Otherwise, PMP will be included as part of the ESMPs For subprojects requiring application of pesticides, identify 	
	Integrated Pest Management (IPM) techniques relevant for subprojects.	
Increased soil erosion and	PP participants engaged in crop production in hilly lands shall be	
sedimentation of waterways due to	provided technical assistance to undertake soil conservation	
cultivation of the hillsides and	measures such as terracing, contour farming or agroforestry and	
slopes.	bioengineering and river embarkment.	
Community Health and Safety		
Spread of diseases among residents and workers such as HIV/AIDs during construction due to presence of non-resident laborers, triggering outbreak of epidemics.	 Require contractors to undertake medical screening of employees Undertake an awareness campaign through seminars and info materials of endemic diseases in the area and educate workers of ways to protect themselves Provide necessary protective equipment such as mosquito nets, 	
	rubber boots.	
	Coordinate with MoHP for disease surveillance.	
	• Emergency Response Plan to be developed to address the risk to the community, labourers etc. and adopted when required.	
Exposure of local communities to safety issues due to construction	• Contractors to provide adequate barriers and warning signs on deep excavations and other dangerous areas.	
activities (e.g. traffic accidents or a fall into deep excavations)	• Contractors to be required to slow down in residential areas and school zones.	
Possible conflict between contractors and local communities due to migrant worker's behavior or lack of sensitivity of local culture.	Require contractors to undertake awareness briefing on local sensitivities and culture and traditions.	
Land acquisition,	• Prepare appropriate mitigation plan (RAP) prior to the bidding	
Loss/Restriction of access to	process if there are any land acquisition and resettlement	
lands and other assets	Land Acquisition and Involuntary Resettlement	

Impacts/Risks/Issues	Mitigation Measures	
	• Prepare Resettlement Action Plan (RAP) in accordance with the	
	Resettlement Policy Framework	
Biodiversity Conservation and	Possible encroachment of agricultural activities and infrastructure	
Sustainable Management of	f into protected areas.	
Living Natural Resources	• Felling of trees	
	 Seek clearance/approval from the Protected Area Management for any activities inside the buffer zone. Prohibit encroachment of PP production areas into strict protection zones of protected areas. Require PPs to adopt a policy of non-encroachment of individual farms into protected areas. The potential risks and impacts on biodiversity or habitats due to construction activities will be mitigated by the project by 	
	developing good practice guidelines for such activities as part of ESMPs.	
Conversion of smallholders' home gardens into or as part of the PP monocrop commercial farm, impacting on agrobiodiversity and family food and nutrition security.	 Require smallholder PP members to retain portions of landholdings for multi crop home gardens. MoALD to provide support home gardens by providing extension support or linking them through FANSEP or other programs. 	
Felling of trees and possible	• ESMPs will determine the exact numbers of trees to be felled and	
expansion of agricultural production into forestlands.	obtain clearance from respective authority. The potential risks and impacts on vegetation will be mitigated by the project by developing good practice guidelines for such activities as part of ESMPs	
Indigenous People		
Project fails to respect AJs rights and go ahead with the subproject without consulting them; Project activities not in accord with culture, tradition and needs of AJs; AJs unable to participate in subproject planning and share the benefits of the project	• Conduct consultations with the IP group at the corridor levels and at the subproject levels to solicit their inputs to the corridor plans. Undertake free and prior informed consultation/consent, depending upon the nature and level of impacts to IPs. Prepare IPP in consultations with the IP community in accordance with the IP Policy Framework.	
Dalits and other vulnerable sectors may be excluded from the project or unable to participate in the project planning and partake in its benefits	• Conduct consultations with vulnerable groups, including Dalit representative organizations at the Economic Corridor levels to solicit their inputs on the corridor plans, associated E&S risk and mitigation measures. At the subproject level, Dalits and other vulnerable groups will be engaged and consulted regarding the impacts and possibility of them participating in the implementation of E&S mitigation activities in the subprojects.	
PP Subprojects are captured by the local elites; many in the	• Screen out grant recipient PPs in terms of social inclusion criteria such as: members shall be majority smallholders; PP should have open memberships written in their charters or organizational	

Impacts/Risks/Issues	Mitigation Measures	
communities are excluded from the	policies; membership of the PP shall not be exclusive to certain	
PP.	castes, clans or families; and shall be open to new members without	
	any unreasonable requirements or barriers.	
	• PPs should have a plan for expansion of memberships and/or	
	increase hiring of employees/workers in their operations	
Cultural Heritage		
Potential displacement of, loss	Subprojects that would involve destruction of structures or sites that	
access to, or damage to Cultural	have cultural, historical or religions value to the community will be	
Heritage structure or site	avoided.	
Potential Chance Discovery of	• Adopt the Chance Find Procedure (<u>Annex 5</u>)	
Artifacts and Objects of		
Paleontological and other scientific		
Value		
Stakeholder Engagements		
Public perception of the project is	• Undertake stakeholder engagements in accordance with the	
unfavorable;	Stakeholder Engagement Plan.	
Stakeholders are unable to		
participate in the planning and		
many are excluded from the project		
benefits.		

8.3 Institutional Arrangements for E&S Risk Management

The implementing agency will be the Ministry of Agriculture and Livestock Development (MoALD). Implementation will take place in five economic corridors, which will encompass six provinces (Province 1, Province 2, Bagmati, Gandaki, Province 5 and Sudurpaschim). At the Federal Level, the Project implementation mechanism will comprise of Office of Project Director (OPD) based in Kathmandu, at the Provincial/Economic Corridor Level, Economic Corridor Office (ECO) and at the municipality level, a local level coordination committee will be established. The following are the units to be involved in the ES Risk Management of REED Project:

Table 8.2: Institutional arrangement for implementation of E&S mitigation measures

Agency/Unit	Roles in ES Risk Management	
1. Office of the Project Director	• Hear and decide on grievances that cannot be resolved by the ECO.	
(OPD) - E&S Team	Reviews and approves all ESMPs.	
	 Monitors and conduct periodic reviews of subproject's compliance to the ESMF 	
2. Economic Corridor Offices	Validate the ES screening	
(ECO)	• Guide, assist and ensure quality of Environmental and Social	
	Assessment, ESMP, RAPs and IPPs of subprojects.	

	 Monitor their implementation and submit consolidated reports to the OPD.
	• Hear and decide on grievances that cannot be resolved by the sub- project
3. Provincial Ministries of Agriculture	• Assist the ECO in the implementation of project in their respective provinces
4. Rural Municipalities	• Develop, with the assistance from ECO, proposals for value chain related infrastructure and facilities
5. Sub-project proponent	 Ensure first round of ES screening for eligibility, regular monitoring Work as the Level 1 of GRM. Hear and decide on grievances lodged on activities related to infrastructure and facilities in its project area Hear and decide on grievances that forwarded by the PP
6. PPs: Rural Entrepreneurs and their Partners	 With the assistance of the local TA firm hired by ECO, they will be responsible for the preparation and implementation of Environmental and Social Assessments, ESMPs, RAPs and IPPs if required for their subproject proposals; Secures Environmental Clearance from MoALD or MoFE
8. MoALD - Environmental Unit and its provincial and local agencies	 Reviews and clears screening and scoping report of REED Subprojects Reviews and approve ToR for Concise Environmental Study and IEEs Reviews and approve Concise Environmental Study and IEEs Reviews and endorse EIAs/ESIAs to approving agency
9. MoFE and its provincial agencies	 Review and approval of Screening/Scoping Report for ESIA Review and approval of TOR for ESIA Review and approval of the ESIA

8.4 E&S Risk and Impact Management Procedures for Subprojects

The management of ES Risks of REED's activities on the ground shall be done on a per Subproject basis. The following are the key steps in the process:

Step 1. Environmental and social screening: The ESMF will ensure that the identified activities are correctly assessed as per the Nepal's legal environmental and social framework as well as to meet WB's ESSs. Environmental and social screening is a critical step for initial assessment of the environmental and social impacts and risks of project activities. Each proposed activity will be first screened to help to determine the extent and depth of environmental and social due diligence required. The process of screening will identify the key aspects that may need to be further examined and managed.

Objectives of the environmental and social screening process are:

- i. To screen the eligibility of the sub-projects against the Criteria in Annex 1 A. Eligibility Criteria;
- ii. To preliminarily assess/screen the environmental and social risks and impacts of the proposed activities, assign environmental category and determine Environmental and Social Standards (ESSs) based on the outcomes of the screening; and,
- iii. To determine the scope of the assessments and specific instruments/plans to be prepared based on the outcomes of the screening or the level of environmental and social risks and impacts.

Every proposed sub project will be subjected to an environmental and social screening process before it is selected for implementation. The activity will be screened for national regulatory requirements as well as WB's ESSs. An environmental and social checklist will be developed and used during the screening (Annex 1: Environmental and Social Screening Forms for REED Subprojects for an example). The screening will be carried out at the sub project level by ECO. Since the sub projects will be implemented at the provincial and local level, clear guidance will be provided by OPD to ECO to ensure that screening takes place to categorize activities and that all concerned local stakeholders are consulted and involved in this.

The results of the screening form the basis for assigning the environmental and social risk category of Subprojects and informs decisions on the extent and depth of environmental and social due diligence that will be undertaken. The process of screening identifies the key aspects that may need to be further examined and managed. Categorization of Subproject activity is essential for early understanding of the type, nature and scale of any impacts.

Category I Subprojects will not be supported by the REED Project. See Annex 1 A. Eligibility Criteria for exclusion list.

Category II Subprojects are those with substantial adverse environmental and/or social impacts that are limited to actual site of the activity and its immediate surroundings and which can be addressed through readily known or readily available mitigation measures. Those Subprojects that are eligible for project support may require a Concise Environmental Study or Initial Environmental Examination (IEE) or Environmental Impact Assessment (EIA)/ESIA as per the National regulations and WB ESS. If E&S screening indicates physical as well as economic displacement, preparation of RAPs will also be required. IP issues identified during the screening will be addressed through support measures suggested in the site level IPPs. Other plans may also be required, as determined by E&S screening e.g. Integrated Pest Management and Pest Management Plan. Stakeholder engagement activities will be required in all cases. The E&S documents for such Subprojects will be reviewed by the OPD and will be submitted to the World

Bank for review, no-objection and/or clearance. E&S risk as well as level of assessments required will be agreed with the World Bank.

Category III Subprojects are those for which there is a 'moderate risk of impact' which requires preparation of ESMPs to meet ESS requirements. A Concise Environmental Study for these Subprojects. A Subproject is classed as Category III if its potential adverse environmental or social impacts on human and/or on the environment are less adverse than those of Category II Subprojects. Impacts will be limited to a specific site, will be reversible and mitigation measures will be known or can easily be designed.

Category IV Subprojects are those that have minimal or no adverse environmental and/or social impacts. For these Subprojects, further environmental and social assessment beyond initial screening is not required to meet ESS requirements. The screening report for a Category IV Subproject will recommend mitigations measures for the minor issues/impacts identified. This may be in the form of a good practice code for activity implementation (to be developed by OPD/ECOs).

In determining the environmental study requirements of the Subproject as per Nepal's legal requirements, the project proponent should refer to the EPR (2020) Schedules 2 and 3, and the relevant guidelines issued by MoFE. The Screening Form shall be validated by the ECO –E&S specialists on site.

Step 2. Preparation of the required Safeguard Instruments (IEE, ESIA or ESMP, RAP and IPP) - Once the Category is confirmed the proponent, ECO and OPD will prepare a TOR for carrying out the environmental and social assessment⁶. The ECO and OPD will make sure that the TOR covers, apart from national requirements, all the World Bank ESS requirements and considers the impacts and mitigation measures identified in this ESMF. The ToR will be approved by the concerned approving agencies as required by the EPR 2020. A consultant will then be hired to undertake the environmental and social assessment in accordance with the approved TOR.

If required, RAPs and IPPs shall be prepared simultaneously with the IEE/EIA or ESMP. The proponent may also hire a consultant to prepare the RAP and the IPPs. TORs for RAP shall be based on the requirements of the RPF while for IPP, the IPPF. Emergency Response Plan that is commensurate with the risk levels will be developed to address the risk to the community, laborers etc. and will be adopted when required. Table 9 details the E&S assessment and plans for different categories.

.

⁶ For the projects that fall under Schedule 3 thresholds of EPR 2020 and require Environmental Impact Assessment, a scoping report need to be approved from the concerned agency prior to preparation of ToR for carrying out EIA study.

Table 8.3: E&S Assessments and Plans for Different Categories of Sub Projects

Category of	Is E&S and Social	Is E&S Impact	ESMP	Comments
Sub-Project	Impact Assessment	Assessment Required?	required?	
	Required? (beyond	(beyond initial		
	initial screening)	screening)		
	WB Requirement	National Requirement		
Category I	Not supported	Not supported	Not supported	Not supported
Category II	Yes ESIA	Yes, either IEE or EIA	Yes	May also require an IPP, RAP, ESMPs or other type of specialized management plan (depending on likely impacts).
Category III	No	ESMPs, Concise Environmental Study (IEE may be required in some cases)	Yes	May also require a RAP, ESMPs and/or other Plans (depending on likely impacts).
Category IV	No	No.	No	Use code of practice to mitigate adverse impacts during implementation.

Step 3. Approval of Subproject. All Subprojects shall be reviewed and approved by the OPD E&S Specialists. The OPD shall ensure that all the impacts identified in the ESMF had been assessed and adequately addressed in the subproject's ESMP. Category II subprojects however shall be submitted to the World Bank for review and issuance of "no objection."

Step 4. Implementation of the Mitigation Measures. During the procurement stage, the proponent may already start implementing the RAP, IPP and some of the measures in the ESMP.

Table 8.4: Stages in Subproject Development Cycle and E&S Activities and Requirements

Stage	Safeguard Activity	Required Document
Subproject Identification	E&S Screening	E&S Screening Form
	Category Confirmation	Screening/Scoping Report
	TOR preparation	TOR
Feasibility Study/Business Plan	E&S Instruments Preparation	ESIA/IEE/ESMP, RAP, IPP
Preparation		
Detailed Engineering		ESIA/IEE/ESMP, RAP (if any) or
		IPP (if any)
Review and Approval	Review and E&S Clearance	ESIA/IEE/ESMP, RAP, IPP

Procurement	Start ESMP, RAP, IP	Compliance Monitoring Report
	Implementation	
Implementation/Construction	Continue Implementation ESMI	, Compliance
	RAP, IPP	Monitoring Report
	Compliance Monitoring	
Completion and Operation	Continue ESMP Implementation	Compliance Monitoring Report
	Compliance Monitoring	

8.5 ESMF Public Consultation and Disclosure

The virtual consultation on the draft ESMF of the REED project was organized by MoALD on July 16, 2020. Participants were well represented from provincial governments, local governments, Indigenous People, women's group, cooperatives/farmers' groups, and NGOs/INGOs working in the project areas. There were altogether 41 participants in the consultation from 27 different stations such as Taulihawa, Tansen and Sandhikarka. The brief consultation began with the MoALD highlighting the core project activities, potential E&S risks and proposed mitigation measures, consultations, information and grievance redressal mechanism and organizational set up to ensure effective implementation of the ESMF. Participants were asked to provide comments, concerns or feedback on the E&S risk findings and mitigation provisions in the EMSF. Discussions were geared mainly towards technical training to rural farmers, group livestock farming, promoting and supporting agro-based enterprises etc. Based on suggestions received during the consultation workshops, the ESMF has been updated. The executive summary of ESMF has been translated into Nepali language. The ESMF has been disclosed on MOALD and Bank's website on and the details of the consultation are provided in the SEP.

8.6 Capacity Building Plan

1. Staffing. The project will hire the following experts full time throughout the implementation of the project:

At the OPD:

Senior Specialist

- 1 Senior Environmental Specialist
- 1 Senior Social Specialist

At each ECO:

- 1 Environmental Specialist
- 1 Social Specialist

In addition, the ECO shall ask the Provincial Government to designate an E&S focal person at the Provincial Government's Ministries/Department of Agriculture. Similar request shall be made at the Municipal Government and at each Productive Partnership organization.

- 2. *Trainings*. The project shall provide the following training to the E&S Specialists and focal persons as well as key personnel in the OPD and ECO:
 - i. Familiarization Training for the ESMF, RPF and IPPF to be held at the start of the project implementation;
 - ii. Familiarization Training on the World Bank ESF;
 - iii. Training on the writing of TOR for the ESIA, RAP and IPP to be held during the first month of project implementation;
 - iv. Training on Nepal Labor Act, focusing on worker's rights and Occupational Health and Safety Standards;
 - v. Training on slope stabilization bioengineering and farm soil conservation techniques; and,
 - vi. Training on the project's Grievance Redress Mechanism.

In addition, the E&S specialists and selected focal persons shall have semi-annual coordination meetings in order to share experiences in the field and to discuss and find solutions to recurring issues and constraints in the implementation of the ESMP.

Considering the weak capacity at the three tiers of the government, institutional capacity and skill development program will be designed and rolled out to help strengthen the capacity of both federal and decentralized government agencies and strengthen enabling environment at decentralized level to support the development and upgrading of rural based value chains rural entrepreneurship. In the course of the skills development program, government institutions will be capacitated to identify and address climate-induced risks and challenges and measures to strengthen climate resilience along the agribusiness value chain, as well as strategies to enhance efficiency and resources use along the value chains (e.g. production input use efficiency, energy-efficiency). At the provincial and rural municipalities specialized demand-based services trainings, capacity building for technical standards and quality assurance mechanisms for agriculture inputs, services and outputs etc. will be delivered. The local governments will be supported to develop their capacity on agriculture sector planning, implementation, monitoring and reporting for effective implementation of periodic and sectoral plans.

8.7 Monitoring and Reporting Plan

Each Subproject Implementing Unit (subproject implementation team) will carry out the compliance monitoring and must submit ESMP compliance reports every month to the ECO. The ECO E&S Officers shall consolidate the report and submit a summary to the OPD every month. Regular monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project and status of implementation of environmental and social mitigation measures, stakeholder engagement activities and functioning of the grievance mechanism(s) will be prepared

and submitted to the Bank every quarter. Subproject ESMP compliance report template is provided in <u>Annex</u> 3 while the ECO Consolidated Compliance Report Template is given in <u>Annex</u> 4.

8.7.1 Internal ESMF Monitoring and Reporting

The monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project, including but not limited to the implementation of the ESCP, status of preparation and implementation of Environmental and Social documents required under the ESCP and/or ESMF, stakeholder engagement activities and functioning of the grievance mechanism(s) will be prepared and submitted to the World Bank quarterly by OPD. Internal monitoring/reporting for ESMF will be the responsibility of the Safeguard Units of ECO and OPD. Project activities planned at the economic corridor will be screened to assess their requirements for environmental and social standards monitoring before they are implemented. The safeguard specialists at ECO and OPD will provide field level support in situations where this is required and will develop a simple monitoring system for field reports covering those activities identified as requiring implementation of environmental and social standards (ESSs) and ESMPs. These reports will be aggregated at the ECO and then submitted to the OPD for the preparation of required E&S reports. These reports will cover (for those activities that require application of environmental and social standards):

- List of consultations held (sites, dates, names or participants)
- Main points arising from consultations
- Description of mitigating actions/corrective actions (if required)
- Follow up monitoring visits will be required to ensure the effective implementation of any required mitigation measures and to assess whether the standards continue to be met.

8.7.2 External ESMF Monitoring and Reporting (Independent Audit)

External or third-party ESMF monitoring (independent audit) will be conducted twice during project implementation; at mid-term and during the final year of project implementation; to ensure that all E&S issues are being properly addressed and that mitigation measures are being implemented where these are required. The audit will be able to identify and recommend any amendments to the approach embodied in this ESMF to improve its effectiveness. The third-party monitoring will be done by an independent body procured by the OPD, external to the project, not a beneficiary nor part of the project management and implementation structure.

The external monitoring will also validate and check the internal, project level monitoring systems. It will also ensure that the project's GRM system to address complaints is functioning effectively. Some site visits will be required by the Independent Auditors to determine the real situation and to check on the measures that have been applied.

The OPD will submit these ESMF monitoring reports to the World Bank. The reports will be disclosed in the GoN and World Bank webpages.

ESMF monitoring reports during the project implementation will provide information on key environmental and social aspects of the project activities and on the effectiveness of ESMF and ESMPs. Such information will allow the OPD and the World Bank to evaluate the success of measures to mitigate adverse impacts within the project and allow corrective actions to be identified and taken.

8.7.3 Supervision by the World Bank

Supervision of ESMF-related project activities, including through field visits as appropriate, will also be carried out as part of the World Bank's regular project supervisions. In the case of specific issues/complaints or non-compliance with the ESMF, the World Bank task team may wish to contract further independent monitors to carry out site-based investigations and prepare reports identifying further actions required.

8.8 Budget for implementing ESMF

The implementation of this ESMF including the associated frameworks and plans is estimated to cost is USD 3.23 million. Note that this does not include the cost incurred by local governments or PP organizations in complying with the requirements of this framework. The actual cost of mitigation, including the cost of implementation of RAPs and IP Plans shall be incorporated in the subproject costs.

Table 8.5: Cost Estimate for the Implementation of this ESMF

Cost Item	Assumptions	Estimate in USD million
Staff Recruitment	2 OPD Environment and Social Specialists for 4 years	1.48
	8 Environment and Social Specialists at ECOs for 4	
	years	
Training and capacity	Trainings and Semi-Annual Coordination Meetings	0.06
building for ESMF		
compliance and etc.		
Assessments and	Lumpsum	1.5
Preparation of		
Subprojects (ESMPs		
and ESIAs)		
Implementation of the	See RPF (Does not include cost of the	
RPF	implementation of RAP which will be incorporated	
	into the subproject cost)	
GRM		0.02
Implementation of the	See IPPF (Does not include the cost of IP Plan	
IPPF	implementation which is factored into the subproject	
	cost)	
Cost of ESMP	Incorporated into the Subprojects cost.	
mitigation measures		
Independent audit	2 times	0.06

Implementation of the	See SEP	0.01
SEP/stakeholder		
consultation		
Compliance	10 Site Inspections per year by ECO	0.1
Monitoring and	10 Random Site Inspections per year by OPD @ 1000	
Reporting	per/inspection	
Total		3.23

References

World Bank (2020), "Nepal Rural Economic and Enterprise Development Project," Project Concept Note.

World Bank (2020), "Nepal Rural Economic and Enterprise Development Project," Project Appraisal Document, Draft. March 2020.

ADB (2013). "Country Environment Note - Nepal, Asian Development Bank Country Partnership Strategy 2013-2017". Asian Development Bank.

Bhattachan K. B. (2019) Nepal in *The Indigenous World 2019*. International Work Group for Indigenous Affairs, Prinsessegade 29 B, 3rd floor, DK 1422 – Copenhagen, Denmark.

USAID (2018), "Nepal Property Rights and Resource Governance" in *USAID Country Profiles*. USIS. https://www.land-links.org/country-profile/nepal-2/

FAO (2020). Gender and Land Rights Database - Nepal. Food and Agriculture Organization. http://www.fao.org/gender-landrights-database/country-profiles/countries-list/general-introduction/en/?country_iso3=NPL

World Bank (2019). "Borrowers' Environmental and Social Management Capacity Assessment and Capacity Building Plan for Strategic Road Connectivity and Trade Improvement Program," Draft. July 2019.

MOALMC (2018). "Environmental and Social Management Framework for Food Security Enhancement Project", Ministry of Agriculture, Land Management and Cooperative Agriculture, Nepal.

UNDP 2019. "Briefing note for countries on the 2019 Human Development Report, Nepal" *Human Development Report 2019. Inequalities in Human Development in the 21st Century.* United Nations Development Program. http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/NPL.pdf.

Index Mundi (2019). Nepal Economy Profile 2019. https://www.indexmundi.com/nepal/economy profile.html

Cosic, D., Dahal, S., and M. Kitzmuller. (2017). "Climbing Higher: Toward a Middle-Income Nepal." *Country Economic Memorandum*. Washington, DC: World Bank.

ILO (2014). Decent Work Country Programme, Nepal. International Labour Office for Nepal, August 2013.

USAID (2018). Nutrition Profile -Nepal. February 2018. https://www.usaid.gov/sites/default/files/documents/1864/Nepal-Nutrition-Profile-Mar2018-508.pdf

BFN 2004. "Home Gardens in Nepal, A Case Study". Biodiversity for Food and Nutrition. http://www.b4fn.org/case-studies/case-studies/home-gardens-in-nepal/

Bhuwon Sthapit, Resham Gautam and Pablo Eyzaguirre (2006). "The value of home gardens to small farmers" in *Home Gardens in Nepal* by Gautam, R, BR Sthapit and PK Shrestha (eds.).

Proceeding of a workshop on "Enhancing the contribution of home garden to on-farm management of plant genetic resources and to improve the livelihoods of Nepalese farmers: Lessons learned and policy implications", 6-7 August 2004, Pokhara, Nepal. LI-BIRD, Biodiversity International and SDC.

Ram Pulami and Deepak Paudel (2006), Contribution of Home gardens to Livelihoods of Nepalese farmers. in *Home Gardens in Nepal* by Gautam, R, BR Sthapit and PK Shrestha (eds.).

Proceeding of a workshop on "Enhancing the contribution of home garden to on-farm management of plant genetic resources and to improve the livelihoods of Nepalese farmers: Lessons learned and policy implications", 6-7 August 2004, Pokhara, Nepal. LI-BIRD, Biodiversity International and SDC.

UNDP (2008). The Dalits of Nepal and a New Constitution: A Resource on the Situation of Dalits in Nepal, their Demands and the Implications for a new Constitution. Compiled by: United Nations Development Programme, Kathmandu, September 2008

Annexes

Annex 1: Environmental and Social Screening Forms for REED Subprojects

Nepal Rural Economic and Enterprise Development Project Environmental and Social Screening Form

Name of Subproject:		
Type of Subproject (check):	PP Subproject Value cha Market Promotion Infrastructure	in Infrastructure
Nature of Subproject:		
	Cold storage centers	
	Building	
Market centers	Small scale irriga	tion schemes
Others (describe)		
Location of Subproject:(Ward, Mu	inicipality, Province):	
Criteria Question		Answer (Yes/No)
1. Does the Subproject contravene	Nepal's obligations under its international	
agreements?		
2. Is the Subproject going to encroach	into national parks of protected area, including	
their buffer zone?		
3. Is the Subproject going to displa	ce, modify or restrict/block access to cultural	
heritage sites, historical monuments,	religious structure and other sites considered	
sacred by the local community?		
4. Is the Subproject going to convert	or degrade critical natural habitats?	
5. If the Subproject is a PP Subprojec	t:	
Would involve large farmers (landhol	dings of more than 3.0 hectares)?	
Would involve acquisition of land by	government?	
Would result in the exclusion/restrict	ion of certain groups who are traditional users,	
from accessing an otherwise open-a	access resource which they have traditionally	
accessed such as public forests, lake of	or rangelands?	
Would involve use of project funds for	or purchase of pesticide and agrochemicals?	

Note: If the answer of at least one of the questions above is "Yes", then the subproject is NOT ELIGIBLE FOR FUNDING.

B. EPA/EPR Categorization

Please consult Schedule 1,2 and 3 of EPR (2020) or the latest MoFE Screening/Scoping Protocol relevant to the Subproject, if any. Attach the completed protocol to this ES Screening Form.

What is the Subproject's Category (Check)?	EA Process Requirements
Schedule 3?	The subproject would be required to undertake the national regulatory requirements of the EIA process and approved by MoFE or concerned provincial authority prescribed by provincial law.
Schedule 2?	The subproject would be required to undertake an IEE as per national requirements to be approved by appropriate agency (i.e., MoALD or its provincial or local agencies for agricultural project).
Schedule 1?	The subproject would be required to prepare a Concise Environmental Study and to be approved by appropriate provincial or local government agency

C. Issues

Questions	(Yes/No)				
1. Labor and Working Conditions					
1.1 Is the number of laborers to be hired more than 50 at the peak of the activity/construction?					
1.2 Would the subproject during operations phase involve operation of equipment/factory tools?					
2. Pollution Prevention and Resource Efficiency					
2.1 Would the subproject involve substantial amount of earth works or hauling of materials?					
2.2 Would the subproject when operational generate substantial amount of liquid waste?					
2.3 Would the subproject when operational generate substantial amount of air emission?					
2.4 Would the subproject when operational generate substantial amount of solid waste?					
2.5 Would the subproject involve use of pesticide during construction or during operations phase?					
3. Community Health and Safety					

3.1 Would the subproject likely involve hiring/bringing in more than 12 laborers from	
outside the community during construction?	
3.2 Are there endemic infectious or vector-borne diseases in the project community?	
4. Biodiversity and Sustainable Management of Living Natural Resources	
4.1 Would the subproject involve clearing of vegetation or expansion of agricultural	
production into any forested area?	
4.2 Would the subproject involve draining or conversion of any wetland?	
4.3 Would the subproject involve cultivation of or grazing in steep slopes (i.e. lands	
with slopes greater than 18%)?	
5. Involuntary Resettlement and Restriction of Access	
(Mitigation plans, including preparation of RAP will be conducted if land acquisition	
causes any displacement or resettlement)	
5.1 Would the subproject require any acquisition by any government unit/body?	
5.2 Are there crops and privately-owned trees in the proposed subproject sites?	
6. Indigenous People*	
6.1 Is there presence of indigenous people (as defined in the World Bank ESF*) within	Prepare IPP based on
the direct influence area of the subproject?	the IPPF.
6.2 Are there other ethnic minorities that have been marginalized from the mainstream	
in the project site?	
6.3 Are there vulnerable households or households with vulnerable persons within the	
beneficiary community?	
7. Cultural Heritage	
7.1 Is there a cultural heritage site/structure within or adjacent to the proposed	
subproject site??	
7.2 Would the subproject involve excavation and there is a high probability of	
encountering buried archaeological artifacts or objects paleontological value on the	
project site?	

^{*}Indigenous Peoples refer exclusively to a distinct social and cultural group possessing the following characteristics in varying degrees:

- 1. Self-identification as members of a distinct indigenous social and cultural group and recognition of this identity by others; and
- 2. Collective attachment ^{to} geographically distinct habitats, ancestral territories, or areas of seasonal use or occupation, as well as to the natural resources in these areas; and
- 3. Customary cultural, economic, social, or political institutions that are distinct or separate from those of the mainstream society or culture; and
- 4. A distinct language or dialect, often different from the official language or languages of the country or region in which they reside.

The term still applies even if the group has already lost, within the lifetime of the members, collective attachment to distinct habitats or ancestral territories in the project area due to forced severance, conflict, government resettlement programs, dispossession of their land, natural disasters, or incorporation of such territories into an urban area. The term also applies to forest dwellers, hunter-gatherers, pastoralists or other nomadic groups, subject to satisfaction of the criteria above.

D. Summary of Screening Results

 Eligibility (Base on item A above, please check those that apply below). This Subproject is eligible for funding as per eligibility criteria.
This Subproject cannot be considered for funding due to (Please describe the reason/s):
This Subproject is deemed ineligible for funding but may be revised and resubmitted for re-Screening with a change/changes on the following (Please specify the required changes):
2. Subproject will need to prepare the following instruments (Please check the ones that are required based on the answers in item B and C above):
ESIA/EIAOthers please specify
ESMP
RAP
IPP
LMP Change Find Procedure
Grievance Redress Mechanism
3. Scope of the assessments. Note that all subprojects must undergo some assessments (i.e.
EIA/ESIA, IEE, Concise Environmental Study, and a Rapid Assessment as part of the ESMP
(Check the items that apply to the assessments. The assessments shall discuss/determine the
significance of the risks regarding the checked items and if they are substantial, the ESMP mus
include a mitigation measure on that specific risk.)
Labor and Working Conditions
Occupational Health and Safety Risk
Child Labor
Use of chemical including pesticide
Pollution and Resource Efficiency
Dust nuisance
Noise nuisance
Waterway sedimentation
Generation of wastewater
Solid waste
Pesticide residue
Vulnerable households
Presence of households below National poverty threshold

Households with small children	
Households with PWD	
Malnutrition rate indicator if available	
Impact displacement or conversion of HH's food gardens	
Community Health and Safety	
Risk of spread of diseases (Prevalence of HIV/AIDs, Other endem	ic
infectious or vector-borne diseases in the community).	
Construction traffic and traffic routes	
Exposure of residents to safety issues at construction sites	
Risk of migrant workers clash with local community culture	
Biodiversity and Sustainable Management of Living Natural Resources	
Encroachment to forests or declared forest areas	
Encroachment to wetlands and other natural habitats	
Introduction of alien/new species intentional or risk of in inadverted	ent
Introduction of new and invasive species of plants	
Ecological (aquatic) impact of diversion of river water for irrigation	n
Land Acquisition, Involuntary Resettlement and Restriction of Access	
Acquisition of lands/properties by a government entity	
Displacement of homes	
Displacement of trees and damage to crops	
Temporary possession of private properties during construction	
Indigenous People	
Presence of IP (as defined in WB ESS7)	
Cultural heritage	
Displacement/modification/restriction of access to a cultural herita	ıge
site or structure	
Possibility of change archaeological/paleontological finds	
Stakeholder Engagement and Disclosure	
Stakeholder analysis	
Stakeholder engagement plan and disclosure	
Subproject level Grievance Redress Mechanism	
repared by:	
creening Officer/Proponent ES Focal Person	

Validated by:
ECO Environmental Specialist

Annex 2: ESMP Template for Category III Subprojects

Environmental and Social Management Plan for Category III Subproject

[Note that this ESMP should be accomplished for Category III Subprojects. Category II and III Subprojects may use this as reference in preparing their respective ESMPs which may need to follow their agreed format with the MoFE and MoALD. The Screening Form should always be attached to this ESMP.]

Name	of S	ubproject:								
Addre	ss (V	Vard, Munici	pality,	Provinc	e):					
Econo	mic	Corridor:								
Type	of	Subproject	(PP,	Value	Chain	infrastructure,	or	Market	Promotion	Infra)
Nature	e of S	Subproject: _								
Subpr	oject	Proponent/C)wner:							

I. Project Information

A. Subproject Components and Scale

Component (Specify if:	Parameter (Specify if:	Unit of Measure	Value
value chain related	Length, Width, Area,	(km, m, kg, tons,	
infrastructure and	Capacity such as volume	etc.)	
facilities, etc.)	of production, etc.)		
Examples:			
Building	Floor area	sqm	100
Impounding dam	Volume capacity	cubic meter	
Canal	Length	km	

B. Subproject Location

Component	Describe the site (Salient features such as topography, presence of/proximity with waterbody/drainage, vegetation, existing structures, roads, settlements, other locational issues, ownership status of lot, etc.)
Examples:	Example:
Building	Flat, built up area along the highway.
Impounding dam	Small creek, etc.
Canal	

II. ESMP Matrix

Impacts/Risks	Assessment (Check Yes or "Not Applicable" Briefly	Management Measure (Identified Impacts/Risk must	Responsibility
	describe why.)	have mitigation measure)	
Land Acquisition	Yes _Not Applicable	Prepare Resettlement Action Plan	
and Involuntary	[Briefly explain basis of the	(RAP) in accordance with the	
Resettlement	assessment]	Resettlement Policy Framework	
	-	(Annex 8)	
Presence of	Yes _ Not Applicable	Undertake free and prior	
Indigenous People	[Briefly explain basis of the	informed consultation/consent.	
	assessment]	Prepare with the IP community an	
		IP Development Plan in	
		accordance with the IP Policy	
		Framework (Annex 9)	
Potential Chance	Yes _ Not Applicable	Adopt the Chance Find Procedure	
Discovery of	[Briefly explain basis of the	(Annex 5)	
Artifacts and	assessment]		
Objects of			
Paleontological			
and other scientific			
Value			
Labor and			
Working			
Conditions			
Hiring and/or	Yes _ Not Applicable	Adoption of Labor Management	
involvement of	[Briefly explain basis of the	Plan (Annex 6)	
children in the	assessment]		
project activities	**		
Worker's exposed	Yes _ Not Applicable	Comply with the Nepal Labor	
to unsafe working	[Briefly explain basis of the	Act.	
environment in	assessment]	Adoption of OHS Standards	
constructions of			
value chain related infrastructure and			
facilities, including			
PP facilities			
Workers being	Yes _ Not Applicable	Comply with the Nepal Labor	
denied of employee	Briefly explain basis of the	Act.	
rights.	assessment]	1100.	
Possible	Yes _ Not Applicable	Include strict adoption of OHS	
occupational health	[Briefly explain basis of the	Standards in the Operations and	
and safety issues in	assessment]	Maintenance Plans/Manuals of	
the operation of PP		PP facilities	
facilities			
-30111100		<u> </u>	

Impacts/Risks	Assessment (Check Yes or "Not Applicable" Briefly describe why.)	Management Measure (Identified Impacts/Risk must have mitigation measure)	Responsibility
		Require simple manual of operations for all installed equipment or facilities and proper training of operators.	
Pollution			
Prevention			
Generation of dust	Yes _ Not Applicable	Require contractors to restrict	
and noise during	[Briefly explain basis of the	construction activities within	
Construction of	assessment]	daytime hours.	
subprojects		Require contractors to undertake	
		dust suppression measures such	
		as regular spraying of roads with	
D '11	X	water.	
Possible	Yes _ Not Applicable	Prohibit dumping of boulders and	
sedimentation of	[Briefly explain basis of the	soil materials in the river or along	
waterways during construction of	assessment]	runoff channels.	
		Immediately stabilize exposed soils or loose embankments.	
subprojects Potential erosion of	Voc. Not Applicable		
slopes as well as	Yes _ Not Applicable [Briefly explain basis of the	Incorporate slope stabilization measures sites of building.	
slope cuts on sites	assessment]	measures sites of building.	
of buildings and	assessment		
facilities			
Possible generation	Yes _ Not Applicable	Include a waste management plan	
of wastes during	Briefly explain basis of the	in the subproject proposal.	
the operation of PP	assessment]	Incorporate Waste Management	
facilities		Plan in the Operations and	
		Maintenance Plans/Manuals of	
		PP facilities.	
Possible use of	Yes _ Not Applicable	Prohibit use of banned pesticides.	
pesticides in the PP	[Briefly explain basis of the	Prohibit use of project's grant to	
areas	assessment]	purchase pesticide and	
		agrochemicals (ES screening	
		eligibility requirement).	
		Conduct training on farmers on	
		the safe handling and storage of	
		pesticides.	
Increased soil	Yes _ Not Applicable	PP participants engaged in crop	
erosion and	[Briefly explain basis of the	production in hilly lands shall be	
sedimentation of	assessment]	provided technical assistance to	
waterways due to		undertake soil conservation	

Impacts/Risks	Assessment (Check Yes or	Management Measure	Responsibility
	"Not Applicable" Briefly	(Identified Impacts/Risk must	
	describe why.)	have mitigation measure)	
cultivation of the		measures such as terracing,	
hillsides and		contour farming or agroforestry.	
slopes.			
Community health			
and safety			
Spread of diseases	Yes _ Not Applicable	Require contractors to undertake	
among residents	[Briefly explain basis of the	medical screening of employees	
and workers such	assessment]	Undertake an awareness	
as HIV/AIDs		campaign through seminars and	
during construction		info materials of endemic	
due to presence of		diseases in the area and educate	
non-resident		workers of ways to protect	
laborers, triggering		themselves	
outbreak of		Provide necessary protective	
epidemics.		equipment such as mosquito nets,	
		rubber boots.	
		Coordinate with MoHP for	
		disease surveillance.	
Possible conflict	Yes _ Not Applicable	Require contractors to undertake	
between	[Briefly explain basis of the	awareness briefing on local	
contractors and	assessment]	sensitivities and culture and	
local communities		traditions.	
due to migrant			
worker's behavior			
or lack of			
sensitivity of local			
culture.			
Exposure of local	Yes _ Not Applicable	Contractors to provide adequate	
communities to	[Briefly explain basis of the	barriers and warning signs on	
safety issues due to	assessment]	deep excavations and other	
construction		dangerous areas.	
activities (e.g.		Contractors to be required to slow	
traffic accidents or		down in residential areas and	
a fall into deep		school zones.	
excavations)			
Biodiversity			
Conservation and			
Sustainable			
Management of			
Living Natural			
Resources			

Impacts/Risks	Assessment (Check Yes or	Management Measure	Responsibility
	"Not Applicable" Briefly	(Identified Impacts/Risk must	
	describe why.)	have mitigation measure)	
Possible	Yes _ Not Applicable	Prohibit encroachment of PP	
encroachment of	[Briefly explain basis of the	production areas into strict	
agricultural	assessment]	protection zones of protected	
activities and		areas.	
infrastructure into		Seek clearance/approval from the	
protected areas.		Protected Area Management for	
		any activities inside the buffer	
		zone.	
Conversion of	Yes_ Not Applicable	Require smallholder PP members	
smallholders' home	[Briefly explain basis of the	to retain portions of landholdings	
gardens into or as	assessment]	for multi crop home gardens.	
part of the PP		MoALD to provide support home	
monocrop		gardens by providing extension	
commercial farm,		support or linking them through	
impacting on		FANSEP or other programs.	
agrobiodiversity			
and family food			
and nutrition			
security.			
Felling of trees and	Yes _ Not Applicable	ESMPs to be prepared, clearance	
possible expansion	[Briefly explain basis of the	will be sought	
of agricultural	assessment]		
production into			
forestlands.			
•••			
Other impacts	Yes _ Not Applicable		
	[Briefly explain basis of the		
	assessment]		

Annex 3: Subproject ESMP Compliance Report

Rural Economic and Enterprise Development Project Subproject ESMP Compliance Report

Repor	ting	Period:								
Name	of S	ubproject:								
Addre	ss (V	Ward, Munici	pality,	Province	e):					
Econo	mic	Corridor:								
Type	of	Subproject	(PP,	Value	chain	infrastructure,	or	Market	Promotion	Infra)
		Subproject: _								
Subpr	oject	Proponent/C	wner:							

Management Measure	Status/Implementation
Wallagement Weasure	Issue/Constraints
	issue, constraints
	Management Measure

Impacts/Risks	Management Measure	Status/Implementation Issue/Constraints
Possible occupational health		
and safety issues in the		
operation of PP facilities		
Pollution Prevention		
Generation of dust and noise		
during construction of		
subprojects		
Possible sedimentation of		
waterways during		
construction of subprojects		
Potential erosion of slopes in		
construction of value chain		
related infrastructure and		
facilities		
Possible generation of		
wastes during the operation		
of PP facilities		
Possible use of pesticides in		
the PP areas		
Increased soil erosion and		
sedimentation of waterways		
due to cultivation of the		
hillsides and slopes.		
Community health and		
safety		
Spread of diseases among		
residents and workers such		
as HIV/AIDs during		
construction due to presence		
of non-resident laborers,		
triggering outbreak of		
epidemics.		
Possible conflict between		
contractors and local		
communities due to migrant		
worker's behavior or lack of		
sensitivity of local culture.		
Exposure of local		
communities to safety issues		
due to construction activities		
(e.g. traffic accidents or a		
fall into deep excavations)		

Impacts/Risks	Management Measure	Status/Implementation
		Issue/Constraints
Biodiversity Conservation		
and Sustainable		
Management of Living		
Natural Resources		
Possible encroachment of		
agricultural activities and		
infrastructure into protected		
areas.		
Conversion of smallholders'		
home gardens into or as part		
of the PP monocrop		
commercial farm, impacting		
on agrobiodiversity and		
family food and nutrition		
security.		
Felling of trees: possible		
expansion of agricultural		
production into forestlands.		
Other impacts		

Annex 4: ECO Consolidated Subproject ESMP Compliance Report

Rural Economic and Enterprise Development Project ECO Consolidated Subproject ESMP Compliance Report

(Use landscape orientation paper for more space)

Reporting Period:		
1 0		
Economic Corridor Office:	 	

Subproject Name	Status (Preparation, Review, Procurement, Implementation)	Main Issues/Constraints	Agreed/Recommended Actions and Timeline for Addressing the Actions
1.			
2.			
3.			
4.			
5.			

Annex 5: Chance Find Procedure

Nepal Rural Economic and Enterprise Development (REED) Project Archaeological Chance Find Procedure

[This procedure must be posted in Subproject Construction Field Offices/Camps.]

CHANCE FINDS PROCEDURES

The ESF of the WB defines chance finds as any unanticipated discovery or recognition of cultural heritage. The incident of unexpected encounter of previously unknown cultural heritage, such as archaeologically, historically, culturally importance and/or materials or remains can happen during project activities, particularly during physical construction or operation. Change finds include the discovery of a single artifact, an artifact indicating the presence of a buried archaeological site, human remains, fossilized plant or animal remains or animal tracks, or a natural object or soil feature that appears to indicate the presence of archaeological material.

The main objectives of the chance find procedures are

- To protect chance finds from possible adverse impacts of project activities, and
- To support concerned agencies on investigation and preservation of the chance finds.

Procedures:

The project is committed to follow a set of specific procedures if previously unknown cultural heritage is encountered during physical investment activities as per the existing regulatory framework of Nepal and the requirements of the ESF. The procedures include:

- In case of discovery of chance finds, immediately halt all the construction activities, and delineate and fence the area to avoid further disturbances;
- Secure the site to prevent any damage or loss of removable objects. In cases if there are removable antiquities or sensitive remains, necessary security will be provided until such remains are taken up by the concerned government authorities;
- Take immediate steps to communicate with the Department of Archeology (DOA) about the chance finds and seek their involvement at earliest;
- Make sure that the DOA or other government authorities under it are responsible in charge of protecting and preserving the site before deciding on subsequent appropriate procedures.
- Responsible government authorities to take the decisions on how to handle the finding. This may include changes in the layout, conservation, preservation, restoration and salvage.
- Make sure an early survey and monitoring of other locations where the likelihoods of cultural heritage are high during ground-disturbing activities;

- Provide training to project personnel and project workers in chance find procedures; and,
- Make sure that construction works resume only after permission is acquired from the responsible authorities or the DOA

Responsibility of Monitoring and Reporting:

If case of any chance finds, the Social safeguard officers of the ECO shall immediately inform the chief of the ECO. The chief of the ECO is turn will inform the project director and the office of the Project Director (OPD) will officially communicate with the DOA and/or other responsible government agencies. The OPD will also inform the concerned officer of the WB about the chance finds.

Annex 6: Responsibility and Obligations of Contractors of REED Subprojects

Nepal Rural Economic and Enterprise Development Project Checklist of ES Risk Management Obligations for Contractors of REED Subprojects

[This checklist shall be reflected and/or made part of the contractor's contract]

The Contractor of REED Subproject shall be responsible for complying with the following:

- 1. The implementation of the management measures in the Subproject's Environmental and Social Management Plan (ESMP) for which the Contractor is identified as responsible.
- 2. Compliance with the Nepal Labor Act (2017) and ILO/International Labor Standards, giving special attention to the following:
 - (i) Compliance with Occupational Health and Safety (OHS) Regulations of the Department of Labor and Occupational Safety. The contractor should provide to its workers: (a) appropriate gears and personal protective equipment (PPE); (b) access to safe drinking water; and (c) toilet and washroom facilities at workers camp.
 - (ii) No hiring of minors below 14 years of age. Minors below 18 years old shall not be assigned to perform heavy or hazardous tasks or to work in hazardous areas. Minors should not be required to work beyond standard working hours.
 - (ii) No gender-based or caste-based discrimination in hiring of workers and in the provision of wages and benefits.
- 3. It shall be the responsibility of the Contractor to ensure that all its subcontractors including labor subcontractors comply with the Labor and OSH Standards. The Contractor shall be responsible for Health and Safety, and SEA/SH prevention and mitigation of all workers in the construction site, including workers hired through informal labor contracting (e.g. Naike system).
- 4. The Contractor should provide a Grievance Redress Mechanism which are accessible to all its workers on site. It should designate a Grievance Officer among his HR personnel to receive grievances from workers, and to relay the same to the concerned managers.
- 5. The Contractor shall brief its workers about local endemic diseases and how to avoid contracting them.
- 6. The Contractor shall adopt the following Code of Conduct for their workers.

Worker's Code of Conduct for REED Subprojects

A. Health and Safety at Work and Living Quarters

i. Wear prescribed Personal Protective Equipment (PPE) when required by Superiors or Safety Officers.

- ii. Be aware of endemic diseases in the area and take the necessary precautions as provided by your Health and Safety Officer.
- iii. Avoid wading through streams and pools of water if area is infested with Schistosomiasis.
- iv. Use mosquito repellent lotion when working in Malaria infested area. Use mosquito nets when sleeping at night
- v. Avoid open defecation or urination. Use latrines or sanitary toilets when available at work site.
- vi. Practice personal hygiene daily.
- vii. Inform your employer of any personal health issues and conditions. Immediately inform your Health and Safety Officer when feeling sick.
- viii. Separate living quarters, toilets and facilities for male and female workers.
- ix. 24-hour well-lit camp site, quarters, facilities.

B. Community Relations and Community Health and Safety

- i. Slow down your vehicles in residential area. If you are not the one driving, remind your driver to do so.
- ii. Respect the local culture: customs and traditions. Be aware of the local regional sensitivities.
- iii. Respect women. Avoid making remarks or actions which could be misconstrued as sexual harassment and abuse. No catcalls. Lewd and lascivious remarks and behaviors towards women in the workplace or in the community are strictly prohibited.
- iv. Do not engage in debate over religion or politics with any community member.
- v. At work, do not discriminate any members of your team, including community-hired workers and volunteers. Treat everyone as equals.
- vi. Any act of SEA/SH violation (with children, members of the community of the project area, inside and outside working area and during and after working hours) will result in the breach of contract and punishable by existing laws.

C. Sanctions

Anyone caught violating this Code of Conduct shall be subject to appropriate disciplinary actions.

Annex 7: List of Dalits in Nepal

Castes	Sub-castes	Surnames	
HILL DALITS			
	Kami	Agri; Acharya; Afaldhoti; Od; Kasara; Kallohar; Kalikote; Kaliraj;	
	Sonar	Gadal; Gahatraj (Gahate); Kumarki; Kaini; Koli; Koirala;	
	Lohar	Khadkathoki; Khapangi; Khati; Gajamer; Gajurel; Gadilee; Giri;	
	Od	Gotame; Gawa; Jandkami; Tamata (Tamrakar); Niraula; Nepal;	
	Chunara	Panthi; Pokharel; Paudel; Paudeli; Barailee (Baral, Baralee);	
	Parki	Sripali; Diyalee; Dudhraj; Bhushal; Bhool; Mahilipar; Rahapal;	
17.	Tamata	Rajilauhar; Sapkota; Sigaure; Sijapati; Setipar; Ramdam; Rijal;	
Kami		Lwagoon; Sonam; Hemchuyuri; Tiruwa; Ghatanee (Ghatne);	
		Ghamal; Ghartee; Ghimire; Ghamchatla; Chunar; Chhistal;	
		Thagunna; Thatara; Nagarkoti; Pallaya; Parajuli; Potel;	
		Buchebhale; Banskota; Bhatta; Bhattarai; Mahar; Rasailee;	
		Suchyuree; Sundhuwa; Setisuruwal; Setimahar; Sashankar	
		(Sadshankar); Serela; Lamgade; Sob; Ruchal; Pahari; Padhyabati;	
		Lamakarki	
		Acchami; Uparkoti; Upreti; Kamar; Kisan; Koirala; Khatiwada;	
		Giri; Gaire; Gairipipal; Gathe; Ghimiore; Chand; Gotame; Chudal;	
		Chuhan; Thagunna; Chhamarki; Thaurasya; Thadarai; Dale;	
	Mijar	Tolangi; Thak; Thapaliya; Thapa; Daulakoti; Dhaulakoti; Dabe;	
	Charmakar	Dahal; Dulal; Dhamel; Dhamala; Dhanali; Payeli; Purkoti; Pulami;	
Sarki	Bhool	Paudel; Dasel; Bamarel; Bayelkoti; Bishunkhe; Bastakoti; Bogati;	
		Bhagyal; Bheyel; Bhool; Bhurtel; Bhipal; Mangrati; Majakoti;	
		Majaboti; Malbul; Malchok; Mudel; Ramtel; Ruchal; Raut; Roila;	
		Roka; Lamjel; Lamsal; Sahi; Srimali; Siraute; Surkheti; Sanyel;	
		Sanjawal; Hamal; Hitang	
Damai/Dholi			
	Pariyar Suchikar	Adhikari; Asasaya; Aujee; Kanal (Kandel); Katuwal; Kakrki	
	Ngarachi	Dholee (Mudula; Sutar; Lama; Khulal); Kalakheti; Koirala;	
	Dholi	Khatiwada; Khati; Guide (Guindel); Gautam (Gotame [Siwa]);	
	Hudke	Ghale; Gurung; Cahar; Chuhan; Jairu; Thagunna; Thatal; Daude;	
		Dhyakee; Tiwari; Trikatri; Thapa; Darnal; Das; Nagarchi; Negi;	
		Nepal; Naubag; Chudal; Panta; Panchkoti; Pokharel; Bardewa;	
		Bagchand; Bagdas; Baiju; Budhathoki; Budhaprithi; Bhandari;	
		Bhattarai; Bhitrikoti; Bhusal; Magar; Mote; Mahara; Male;	
		Rajabar; Ranapaili (Ranapal; Ranapaheli); Rana; Rai; Raingai;	
		Raika; Ryainjhyain; Lapre; Lamghate; Luintel; Shildhar; Sunam;	
		Sundas; Suncheuri; Sahi Samundri (Sai; Saisamundri;	
		Samundrasai); Suji; Hingmang; Hudke; Aptarya; Ghalek;	
		Samanarasar), Suji, rinigmang, riuake, Aptarya, Onaiek,	

		Bhedikar; Betuwa; Dharal; Retan; Bitalu; Nagarkoti; Yagne;
		Ghatani; Bhende Siba; Kekhure Siba; Sungure Siba; Damai
		Pariyar; Ratnapariyar; Achhame Pariyar; Chhinal Pariyar; Thak
		Pariyar; Nakadholi
	N/A	Adhikari; Kami; Kalakausik; Kala Paudel; Kalichan; Gosain; Jogi;
		Thakuri; Turki; Bahun; Budhathoki; Baikar; Badhyakar; Bestha;
Gaine		Bista; Bogatai; Bhusal (Parbate); Maheswar; Biswakarma;
		Bishnupad; Raisamundra; Sursaman; Setaparbat; Setichan;
		Kookchin Rana
	N/A	Khati; Rasailithapa; Rasaili; Lekali; Chhinal; Baral; Thakur; Rana;
Badi		Kumal; Khadka; Jogi; Bote; Upadhyaya; Rijal; Singha; Shrestha;
		Paudel; Adhikari; Kami; Damai; Badsaha; Khan; Dhital; Niraula
MADHESI DALIT		
	N/A	Ram; Mochi; Harijan; Rabidas (Raidas); Chamara; Mahar; Mahara;
		Mehara; Raut; Bhagat; Das; Bajar; Bagh; Dhusiya; Daswatiya;
		Madhesiya; Chamar/ Harijan/ Ram
	N/A	Sada; Sadaya; Rishidev; Rishikul; Raut; Tirhutiya; Madhaiya;
Musahar		Kharpuria; Satnapuria; Kauchh; Gharmunta; Pachharu; Mudi;
		Macharu
	N/A	Paswan; Hajari; Hajara; Madhaiya (Magaiya); Kurmi; Kamhar;
		Paliwar; Kurna; Dar; Sarjaha (Surajiya); Panjiyar; Pakhir Daid;
		Suryabanshi; Dusadh/Paswan/Pasi
T-4 IZ141	N/A	Mandal; Tirhutia; Badaha; Kyotar; Parasa; Pokharbhinda;
Tatma Khatbe		Hasuliya; Newar; Nanaud; Bake
D1 1' (D ' 1)	N/A	Kanujiya; Madhaiya; Belbar; Surjaha; Tamoli; Tirhitiya; Turtuk;
Dhobi (Rajak)		Dhoiba; Baitha; Rajak; Pathik; Safi; Arya
Bantar (Sardar)	N/A	Rajdhami; Dhami; Sardar; Majhi; Raut; Bant
Chidimar	N/A	N/A
Dom	N/A	Kothita; Mkhaita; Talwar; Tawakait; Chachewar; Kolniyar;
		Sanparaya; Ghatait; Amleriya; Mahawaita; Balgachhiya; Kanoon;
		Bakhatiya; Modaliya; Jhojhawa; Chirniya; Bhalwait; Baisi; Baswar
Mestor/Halkhor	N/A	Jamadar; Raut; Sariswal; Turka; Amariya; Dahaiya (Darwe);
		Panpuri; Bakhariya; Mahar; Mestar; Halkho
Kuswadiya/Patharkatta	N/A	N/A
Kakahiya	N/A	N/A
Kalar	N/A	N/A
Khatik	N/A	Chandal; Barawa; Bhogariya; Bachara; Chaula; Khirahi; Tawada;
		Chamariya; Taki; Dayama; Bagadi
Pasi	N/A	N/A

Sarvanga/Sarbariya	N/A	N/A
--------------------	-----	-----

Source: National Dalit Commission 2003

Note: Sarvanga/Sarbariya and Kalar are the same caste group. Kalar is a derogatory term.

Therefore, they prefer to call themselves as Sarvanga/Sarbariya.

Annex 8: SEA/SH Action Plan

SEA/SH Prevention and Response Action Plan

Actions to Address SEA/SH Risks	Indicators	Timing for Action	Responsibilities	Ongoing Risk Management	Recent Update
Project Preparation					
Orientation to OPD, MoALD on GBV/SEA/SH and to prioritize SEA/SH on the project, and the mechanism that will be implemented		 Preparation Implementation	Task team	Task team to monitor and provide additional guidance as necessary.	
Include the assessment of GBV as part of the social/gender assessment in project's Environmental and Social Impact Assessment (ESIA) • Conduct consultations and identify key SEA/SH risks in project areas and indicate the main measures agreed to with the PMU • Map out GBV prevention and response services in project area of influence Reference to be made from the service mapping that already exists at the national level	SEA/SH risks highlighted and preliminary mitigation measures identified Mapping completed of available, quality services in the project affected area	• Preparation • Implementation (before civil works commence) •	 OPD, MoALD for social assessment and ESMP. Contractor for C- ESMP. Task Team for SEA/SH Risk Assessment Tool. 	 Ongoing review during implementation support missions. Update project ESMP and C-ESMP if risk situation changes. 	
Stakeholder Engagement Plan (SEP) to include SEA/SH risks and options for response during: Orientation and consultation with the project affected communities. 7	• of awareness and consultations held	PreparationImplementation	PMU Task Team	Monitoring of Implementation of Stakeholder Engagement Plan	

⁷ This would include the community members, local leaders, youth groups, women groups, Dalit and Indigenous group government bodies- municipalities, rural municipalities,

 Mapping of GBV service providers for prevention and response in project area Field Consultation with the local stakeholders to assess and identify existing GBV service providers Assess the capacity of the local service providers to provide survivor centric approach including a proper GBV case management system, linkage with the other GBV service providers Linkage and coordination with the toll-free 24-hour helpline "Khabar-Garau 1145" and National GBV service directory⁸ 	organizations	Implementatio n	OPD, MoALD, Gender specialist	Ongoing consultations particularly when C-ESMP is updated Update mapping as appropriate Task Team guidance/ support as necessary
Develop SEA/SH Prevention and Response Action Plan	SEA/SH Risk Mitigation Action plan included in the C- ESMP Procurement for SEA/SH related activities and costs outlined in the contract	Preparation Implementation (before civil works commence) Procurement	Contractors PMU, MoALD C-ESMP Technical support by Task Team	SEA/SH Action Plan developed Ongoing review during implementation

_

wards, police working on GBV, local GBV service providers. (A separate consultation with women group as they would most likely not speak in the presence of men.) Their feedback and suggestion will help in preparing better SEA/ prevention and response plan

⁸ https://nwchelpline.gov.np/service-mapping

Develop Codes of Conduct each for	• Contractors have	• preparation	• PMU, social	Amend CoCs as necessary
MoALD, contractors and labor in	their own CoC as		development	-
consultation with relevant stakeholders	well as a separate		specialist of the	
	CoC for the		project	
	subcontractor and		Contractors	
	workers		• Technical support by	
	employees		Task Team	
	•			
Review MoALD (including OPD ECO,	• # trainings and	Preparation	Task Team, OPD,	Ongoing review during
ECTCC and all relevant staffs of the	orientation on	Implementation	Social Specialist of the	implementation support
project) capacity to	SEA/SH to Client	•	project	missions.
prevent and respond to SEA/SH				Update project ESMP if risk
as part of safeguard				situation changes.
preparation.				
Project Implementation				
Establish and strengthen grievance	• No. of personnel	Implementation	• PMU	Ongoing monitoring
redressal	associated with		• Gender Specialist of	reporting
• Provide appropriate referral to	GRM trained		the project	
complainants.	• No. of service			
• At project level, select one women	providers			
member as first point of contact for	informed about			
SEA/SH survivors and provide	and linked with			
appropriate training to them.	GRM			
• Implement stakeholder engagement	• No. of SEA/SH			
plan and conduct community	cases reported to			
awareness raising mitigation measures	GRM			
- e.g. Codes of Conduct, GRM, how	• No of SEA/SH			
to report and provide multiple entry-	cases outcome/			
points	results			

Proper documentation is maintained for complaint registration and management					
Review C-ESMP to verify that appropriate mitigation actions are included.	C-ESMP reviewed	Implementation	• PMU	 Review by PMU Review by Task Team	
Conduct induction program for the understanding and signing of the Codes of Conduct • Ensure requirements in CoCs are	 No. of workers and staff trained on code of conduct No. of CoCs signed 	Initiated prior to contractor mobilization and continued during implementation.	 ECO Contractors Social Specialist of the project 	reporting of workers understanding, signing and training on CoCs	
Orientation and training on GBV/SEA/SH to subcontractors and their employees	 no of trainings on SEA/SH no of trained staff in SEA/SH 	1	ContractorsSocial Specialist of the project	 Ongoing reporting by ECOs, gender specialist Linkage with the GRM to understand the overall SEA/SH situation based on type and number of cases filed and to amend CoC as necessary. 	

Implement appropriate project-level	• Documentation of	Implementation	OPD, Social Specialist	
activities to reduce SEA/SH risks prior	measures taken to	Implementation	-	
-			of the project	
to civil works commencing	reduce SEA/SH			
• Have separate, safe and easily	risks.			
accessible facilities for women and				
men working on the site.				
Locker rooms and/or latrines should				
be located in separate areas, well-lit				
and locking from inside.				
• Visibly display signs around the				
project site (if applicable) that signal				
to workers and the community that the				
project site is an area where				
GBV/SEA/SH is prohibited.				
As appropriate, public spaces around				
the project grounds should be well-lit.				
the project grounds should be well-lit.				
Report in the quarterly progress report	Successful	Implementation	OPD Social Specialist	Ongoing reporting
and review during ISR missions.	implementation of	1		
	agreed SEA/SH			
	Action Plan (Y/N)			
	Tretion Train (1/11)			<u> </u>
Procurement				
Clearly define the requirement of		Procurement	OPD, MoALD	Review by task team
SEA/SH action plan and CoCs in the				
contractors bid documents.				
Clearly itemize incurring costs for		Procurement	OPD, MoALD	Review by task team
SEA/SH activities in procurement				-
documents including contingency fund				
	l			

for undefined or comprehensive				
activities				
Clearly explain and define the	Procurement.	PMU, MoALD	Review by task team	
requirements of the bidders' CoC to				
bidders before submission of the bids				

Annex 9: Nepal's Country Standards Relevant to ESS 2-8 and 10

a. Laws on Labor and Working Conditions

The Labor Act (2017) has provisions against unfair labor practices such as: (i) contractualization (i.e., workers or employees engaged in any contract work of a permanent nature in any enterprise must also be made permanent); (ii) denial of benefits; (iii) exploitation of children; and, (iv) non-provision of safety gears and equipment. The law also includes provisions on standard working hours, overtime pay, physical infrastructural setup, housing, provident fund, and, yearly medical examination, among other benefits. Freedom of association and collective bargaining (Section 116) are also guaranteed rights as well as minimum wage (Section 106). Meanwhile, the Child Labor Act of 2001 prohibits employment of any child below the age of 14 while children below 16 are prohibited to work in hazardous work environment such as in public transportation and construction related works. Legislations on occupational health and safety in Nepal are currently inadequate. The mandate for OHS is provided only in Chapter 12 of the Labor Act (2017). There are currently no specific implementing rules and regulations issued pursuant to the Labor Act which give clear and enforceable mandates to relevant government agencies. Works on the OHS remains more on the advocacy, promotion and awareness side rather than rules formulation and enforcement.

b. Laws on Resource Efficiency and Pollution Prevention and Management

The EPA/EPR provides for the prevention and control of pollution, prohibiting emission and discharge of pollutants that are harmful to human health and requiring registrations/permits of operations that emit pollutants. The law also provides for the appointment and powers of Environmental Inspectors to enforce the law. The Motor Vehicle and Transport Management Act (1993) and Nepal Vehicle Mass Emission Standard (2012) which prescribes standards for vehicles emissions and fuel. The Solid Waste Management Act (2011) provides for the management of the solid waste in a systematic and effective way by reducing at its source, re-use of materials, recycling and discharge. There is a National Ambient Air Quality Standards (NAAQS) which was passed in 2003. The Water Resource Act (1992) is a comprehensive law on the development, use and conservation of water resources in Nepal. It requires the conduct of IEE& before granting license to use water resources for any purpose. The law also requires compliance to quality standards in making use of water resources and prohibits the pollution of water resources. Under the Act are two regulations for drinking water purposes: (i) Water Resources Regulation, 1993, setting out the implementation procedures for the Act; and (ii) the Drinking Water Regulation, 1998, which specifies compliance with the drinking water quality standards and control of water pollution as it affects drinking water. Two guidelines have been issued: the Nepal Water Quality

Guidelines for the Protection of Aquatic Ecosystem and Nepal's Drinking Water Quality Standards. There also nine (9) individual industry's effluent standards, and one generic (1) standard. The key gaps include lack of legislation on resource use efficiency. In September 2018, the GoN approved National Energy Efficiency Strategy. However, there is currently no law which compels or encourages by way of incentives, project proponents to implement measures for energy or water consumption efficiency.

c. Laws Pertaining to Community Health and Safety in Development Projects

The EPA/EPR (1997) provides for the coverage of direct and indirect impact of projects to human health (EPA Section 7 and EPR Schedule 5–See Box 2 below). The inclusion of health statistics and profile of the population in the baseline characterization of the project areas has been standard practice in every EIA. Other related legislations include: The Explosive Material Act (1961) which regulates the use and handling of explosive materials and requires license for any procurement, storage, use and transport of explosives including for construction purposes. However, the law does not specifically require the assessment and mitigation of physical safety of project communities.

d. Laws on Land Acquisition

The Land Acquisition Act of 1977 is key legislation applicable to the acquisition of land and other physical assets law of Nepal. The Act guides the compulsory acquisition of land in the country and enables the Government to acquire land for public purposes and provides for fair and just compensation to private landowners. The Land Acquisition Guidelines (1989) together with the guidelines pursuant to Sections 16 and 17 of the Land Acquisition Act provide a detailed process for the acquisition of land for use in government projects which has most of the elements of ESS5, including provisions for the compensation of loses of assets and grievance redress. The laws and guidelines have the following features: (i) assessment of the impacted assets and businesses (ii) valuation of land and asset lost based on market values and (iii) compensation for temporary use of lands by the project which is limited to damage of assets only.

The main gaps of the Nepal land acquisition acts, regulations and policies process vis-á-vis World Bank ESS5 is that Nepal's the former does not mandate the preparation of a land acquisition and compensation plan specific to the affected area such as the RAP. It does not allow for consultations with PAPs, in consideration of compensation and arrangements which may be reached during consultations and negotiations with project affected people. Another critical gap is the lack of provision for resettlement as a preferred mode of compensation whenever the affected family or persons lose their homes or lose a significant portion of their source of livelihoods or would be

uprooted from their traditional homeland (in the case of large infrastructure projects).), such as land-for-land and replacement homes Other gaps include the following:

- National law makes provision for compensation to the titled landholder only and, by default, omits all other PAP, including non-registered tenant farmers, landless farmers, squatters, agricultural laborers, shopkeepers, artisan groups and *Dalits*. There are also no provisions to protect the interests of vulnerable groups.
- National law does not make any provision for encroachers or squatters regarding to the entitlement for compensation, nor rehabilitation assistance
- When the GoN requires assets, national law does not specify about the provision of mandatory replacement cost. Further, valuation of lost assets considers depreciation and hence not at replacement cost. Land Acquisition Act, 1977 does not emphasize transparency and stakeholder participation for various decisions that directly affect the long-term wellbeing of PAPs.
- Leasing of land is not allowed for temporary easements.

e. Nepal Laws on Biodiversity Conservation

Aquatic Animals Protection Act (1961), National Parks and Wildlife Conservation Act (1973), Soil and Watershed Conservation Act (1982), National Trust for Nature Conservation Act (1983), Forest Act (2019/1993), and Plant Protection Act (2007) that are further elaborated through relevant rules/regulations are the key legislations for the biodiversity conservation and management of natural resources in Nepal. Apart from these, there are specific guidelines and policies especially for carrying out development activities in the protected areas and national forests.

The Aquatic Animals Protection Act (1961) is one of Nepal's oldest piece of legislation, which recognizes the value of wetlands and aquatic animals. The Act provides legislative protection for the habitats of aquatic species. The National Park and wildlife Conservation Act (1973) supported by National Park and Wildlife Conservation Regulations (1974), Himalayan National Park Regulation (1979), Conservation Area Management Rules (1996), and Buffer Zone Management Rules (1996) provides the legal basis for the management of Protected Areas and protection of biodiversity. It prohibits entry into, and the undertaking of a range of development and other activities inside the national parks without permission or prior approval of the concerned authority.

Soil and Watershed Conservation Act (1982) was enacted as an expedient to make legal provisions on the land and watershed conservation by controlling natural calamities such as flood, landslide and soil erosion and maintain convenience and economic interests of the general public. The Forest Act elaborated by Forest Regulations emphasizes the protection and conservation of the forest resources and prohibits any activities within the forest area without prior approval of the forest

authorities. It empowers the government to permit use of any part of government-managed forest, leasehold forest or community forest, if there is no alternative for the implementation of a plan or project of national priority without significantly affecting the environment.

Related to these laws are policy issuances: The Forest Policy (2015) reemphasizes avoidance of forest destruction or tree cutting while constructing infrastructures during implementation of project other than for forest sector. The policy has prioritized the protection of Siwalik, the geologically vulnerable area, with a view to ensure watershed conservation, and maintenance of water recharge. The policy also stresses conservation of endangered species. It has reiterated that forest area will not be used for any activities other than prescribed in Operational Forest Management Plan. The forest policy emphasizes the implementation of community and private forestry development programs, national parks and conservation areas management programs, soil and watershed conservation program, management and development of medicinal plants, and conservation of biological diversity. These laws basically require project proposals to be cleared by the concerned competent authorities.

The critical gaps vis-á-vis ESS6 is that Nepal's EIA system rely mainly on government declarations of protected areas, land classifications and the decision of authorities. It does not specifically require assessment of the impacts on natural habitats and biodiversity and, where impacts are found to be potentially significant, require the preparation of Biodiversity Management Plan.

f. Nepal Laws on Indigenous People

The Local Government Operation Act, 2017 prescribes municipalities for the promotion, preservation, and protection of language, religion, culture of indigenous people and their welfare in the municipal area. The Act prescribes municipalities to formulate and implement periodical and annual plans within their own jurisdiction. Periodic plans integrate different thematic plans according to social, economic, environment, physical, financial, and institutional aspects. In 2002, the Nepal Parliament passed a bill for the establishment of an autonomous foundation named "National Foundation for Upliftment/Development of Indigenous Nationalities (NFDIN)," which came into existence in 2003. The NFDIN Act 2002 established the first comprehensive policy and institutional framework pertaining to Adivasis/Janajatis. The act defines indigenous groups or Adivasi Janajati in Nepali as "a group or community having its own territory, own mother tongue, traditional rites and customs, distinct cultural identity, distinct social structure and written or unwritten history". The government, through NFDIN, has identified and officially recognized 59 such indigenous communities. Nepal is also signatory to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) 2007 and party to the International Labor Organization

(ILO) Convention (169) of 1989. The ILO Convention no. 169 is the most comprehensive and legally binding treaty on the rights of indigenous peoples. The Convention includes provisions on cultural integrity, land and resource rights and non-discrimination, and instructs states to consult indigenous peoples in all decisions affecting them. Articles 1 to 4 of the UNDRIP ensures the individual and collective rights of indigenous peoples, as well as their rights to culture, identity, language, employment, health, education and other issues while implementing any development activities in the traditional territory of the IP. The Convention on the Elimination of All Forms of Racial Discrimination (ICERD) to which Nepal is party to also recognize IPs' right to selfdetermination, meaning their free will to decide on development activities. Article 1 of the International Covenant on Civil and Political Rights, 1966 (ICCPR) which mentions the right to self-determination and Article 27 of the same instrument which provides rights to the people belonging to ethnic, religious and linguistic minorities, the right to enjoy their own culture, to profess and practice their own religion, or to use their own language are also relevant while discussing rights of indigenous people. Article 1 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) also mentions the right to self-determination. Nepal is party to both these two covenants.

g. Laws against caste-based discrimination

The Constitution of Nepal (2015) provides the right to equality to all citizen and made specific mentions of the Dalits. Specifically, Article 18 (Right to Equality) strongly asserts that all citizen shall be equal before the law and that no discrimination shall be made in the application of general laws on grounds of caste, or on grounds of many others specific social, demographic and cultural groupings and categorizations. It also clearly provides that while the strong mandate for non-discrimination applies also to the State in its treatment of the citizens, it should not prevent the State from making special provisions by law for the protection, empowerment or development of the certain citizen groups such as the Dalit and including the socially or culturally oppressed women, indigenous people, persons with disabilities, and other oppressed groups. Moreover, Article 255 of the Constitution provides for the establishment of a National Dalit Commission, and the National Inclusion Commission⁹.

There have been a number of legislations against discrimination among people on the basis of caste. The Caste Based Discrimination and Untouchability (Offence and Punishment) Act, 2011 (first amendment, 2017) is the specific Act. The Legal Aid Act, 1997 and Local Government Operation Act, 2017 are also relevant while discussing the rights of *Dalit* people.

-

⁹ Constitution of Nepal (2015), Article 258.

In 2011, the Caste Based Discrimination and Untouchability (Offence and Punishment) Act, 2011 which criminalizes caste-based discrimination was passed. The Act got its first amendment in 2017. This law prescribes that 'every person has the right against untouchability and discrimination.' The first amendment of the Act provided everyone the rights to 11: (i) equal treatment from the court and other judicial bodies; (ii) equal protection in services and facilities provided by government; (iii) equal access to public services; (iv) make movement and reside within and outside Nepal; (v) equal participation in cultural activities; (vi) marry and choose spouse; (vi) peaceful assembly and association; (vii) select employment and to work; (viii) equal salary for an equal work; (ix) equal access to public places; (x) get prompt judicial remedies and appropriate compensation against untouchability and discrimination.

More importantly the Act specifies the prohibited acts and provides for punishments for violations. The list of prohibited acts is very comprehensive and includes the acts of preventing, controlling, depriving anyone on the ground of custom, tradition, religion, culture, rituals, origin, caste, race, descent, community, occupation or business or physical condition, from: (a) participating in or organizing a public place activity/occasion; (b) using or enjoying public services; (c) organizing public event; (d) carrying on a profession or a business; (e) performing any religious act; (f) producing selling or distributing any goods, services or facilities. The following is also prohibited: (i) producing, selling or distributing any goods, services or facilities only to the person belonging to a particular caste or race; (ii) excluding any member of family or preventing him or her from entering into the house or evicting him or her from the house or village; (iii) preventing a person from getting inter-caste marriage; (xi) denoting hierarchical supremacy of any person or community; and, (xii) denying, or causing to be denied, anyone to provide employment; (v) discriminating workers in terms of remuneration.

The Legal Aid Act 1997 seeks to apply the principle of equal justice for the socially and economically underprivileged and other disadvantaged groups such as *Dalits*, women and ethnic groups by providing necessary legal aid for these people.

Local Governmental Operations Act, 2017) aims to institutionalize the process of development through wider participation, including that of the Dalit communities. It requires local bodies to undertake activities for the benefit of women, less developed communities and groups.

h. Management of Impacts on Cultural Heritage

The EPA/EPR provides that Protection of National Heritage and mandates concerned agencies to prepare and maintain an inventory of objects or places listed in the World Heritage list available

 $^{^{10}}$ Caste-based Discrimination and Untouchability Act, 201, Section 3(1)

¹¹¹¹ *Ibid*. Sec. 3(2a).

within Nepal which shall be protected by prohibiting activities that will remove, alter or take any action which may cause any damage to any object, site, plant, animal etc., among others. The Act also provides for the declaration as an Environmental Protection Area, an area containing natural heritage or aesthetic, rare wildlife, biological diversity, plant, and places of historical and cultural importance. Meanwhile, the Ancient Monument Protection Act of 1956 provides for the protection and conservation of the ancient monuments, temples, arts, paintings, etc. of age older than 100 years. The Act empowers the government to declare any such artifacts, temples, etc. under protection category by giving public notification. The act stipulates that any such artifacts, temples etc. declared under protection lists should not be disturbed or removed from their places without the consent of the government. Nepal is also a signatory to the Convention: Convention for the Protection of the World Cultural and Natural Heritage which came into force in 1978.

i. Stakeholder Engagements in Development Projects

The EPA/EPR provides for the involvement of the project communities in the IEE and EIA preparation and approval process. For projects requiring EIA, public involvement is sought during scoping phase through a public notice requesting written suggestions concerning possible impacts. The comments and suggestions received will then be used to determine the scope of the EIA study. Then during the preparation of the EIA, a public hearing is conducted where comments and suggestions are considered in the approval of the EIA. In the case of projects requiring IEE, the proponent shall affix a notice in the concerned Rural Municipality or Municipality, Office of the District Coordination Committee, school, hospital and health post, requesting for their written opinion and suggestions which shall be included in the IEE report. A public hearing is not required for projects requiring IEE.

The key difference between the country system and the World Bank ESS10 is that the country system specifies a timing/period and manner for stakeholder engagements while the World Bank ESS10 requires an inclusive process of consultation and engagement conducted throughout the project lifecycle, commencing such engagement as early as possible in the project development process and in a timeframe that enables meaningful consultation with stakeholders on project design. Under ESS10, a stakeholder engagement plan (SEP) needs to be developed and implemented, proportionate to the nature and scale of the project and its potential risks The SEP includes a stakeholder identification and analysis, a plan for carrying out engagement, and incorporates a grievance redress mechanisms (GRM) to respond to grievances of project-affected parties. The public engagement laws, regulations and policies under the country system do not require stakeholder analysis and preparation of a stakeholder engagement plan, nor does it require or provide for consultations/engagement beyond the EIA process, for example, through construction and operation phases.

Annex 10: Guidance note for preparing Pest Management Plan/sample template for IPM

Pest Management Plan (PMP). A PMP should be prepared in all cases of significant direct purchasing and usage of pesticides or if significant pest management issues are anticipated in individual subprojects that are to be financed under the Access to Credit component of the project. Credit applicants will be required to complete a pest management screening checklist (Annex 2, Form 1 Section 3.1) along with the credit application. This screening checklist will require information on the (i) significance of the pest management issues to be addressed (ii) type, amount and anticipated extent of usage of pesticides: (iii) proposed storage, disposal and usage practices to be employed; and (iv) potential environmental impacts. Based on a scoring scheme that is defined in this document, a determination would be made if a full blown PMP would be needed. The content of the PMP should apply to all the activities and individuals working. It should be emphasized also that non-chemical control efforts will be used to the maximum extent possible before pesticides are used.

The PMP should be a framework through which pest management is defined and accomplished. The Plan should identify elements of the program to include health and environmental safety, pest identification, and pest management, as well as pesticide storage, transportation, use and disposal. The PMP is to be used as a tool to reduce reliance on pesticides, to enhance environmental protection, and to maximize the use of integrated pest management techniques. The PMP shall typically contain pest management requirements, outlines the resources necessary for surveillance and control, and describes the administrative, safety and environmental requirements. The Plan should provide guidance for operating and maintaining an effective pest management program/activity. Pests considering in the Plan may be weeds and other unwanted vegetation, crawling insects and other vertebrate pests. Without control, these pests provoke plants' deceases. Adherence to the Plan will ensure effective, economical and environmentally acceptable pest management and will maintain compliance with pertinent laws and regulations.

Reviewing and approving PMP. As handling and usage of pesticides and other chemicals might cause harm to the environment and to the farmers' health, in the case of such types of subprojects the beneficiaries have to prepare a PMP that is attached to the subproject proposal, including the following information: (a) types of pesticides and fertilizers and its amount; (b) storage conditions; (c) ways of field usage; (d) measures to be undertaken to control possible hazard scenarios; and (e) responsible person. The subproject proposal along with the PMP will be reviewed by the Environment Specialist who will provide his approval. These documents are also subject to World Bank prior review. It is anticipated that the use of pesticides and pest management in terms of individual credits would not be significant and could be addressed through training, extension and technical support to improve farmer awareness on the safe application, storage and disposal of

pesticides and the pest management through extension, training and demonstration in IPM approaches.

Sample for Integrated Pest Management (IPM)

The key approach for pest management is IPM, involving cultural, physical, biological and chemical approaches, following the principles of economic threshold limit (ETL). Ranging from the use of seed pre-treatment to fixing of bird perches on the farmland, a range of low-cost and easily implementable IPM approaches would be deployed. Several available and off the shelf IPM package will be promoted in project areas.

Objectives and Components of IPM

Key crops for	IPM package cost	Key	Area currently	Potential for
which IPM		recommendations	covered under	scaling up area
package available			IPM (crop-wise)	under IPM

Section 3 Project Indicators and Targets

Indicator	Target	Timeline
Awareness building	No. of blocks covered	Add year-wise or month-wise
		targets
No. of IPM demonstrations	Year 1	Year 1
	Year 2	Year 2
	Year 3	Year 3
No. of Farmers/Farmer Groups	Year 1	Year 1
covered	Year 2	Year 2
	Year 3	Year 3
Area to be brought under IPM	Year 1	Year 1
	Year 2	Year 2
	Year 3	Year 3
Trainings on IPM delivered	Year 1	Year 1
	Year 2	Year 2
	Year 3	Year 3
Use of organic inputs/bio-	Give total project target	List year-wise targets until
fertilizers		project end
Reduction in use of fertilizers	Starting from year 3	Year 3 onwards
Reduction in use of pesticides	Starting from year 3	Year 3 onwards

Integrated Pest Management Checklist

A. Checklist for FGD (WUG/ farmers/IPM groups)

- 1) Use of pesticides and chemical fertilizers; their effect in plant and soil health and consequent impact on human health.
- 2) Use of plant hormones and growth regulators
- 3) Farm irrigation methods and water use (on-farm water management practice)
- 4) Farm machinery use-type and intensity
- 5) Soil amendments (agriculture lime, micronutrients use)
- 6) Preparation and use of organic manure

B. Checklist for Key Informants

- 7) Agronomic practices of major crops
- 8) Cropping pattern/Crop rotation
- 9) Productivity status of major crops
- 10) Resilience of farming systems to the effects of climate change
- 11) Post-harvest processing and storage practices
- 12) Marketing channels and markets
- 13) Fisheries/Livestock raising practices
- 14) Limiting factors and possible mitigation measures of more intensive cultivation
- 15) Soil erosion, flooding, drainage.

C. Checklist for NGO/CBO and Local Government

- 16) Available processing and storage facilities
- 17) Availability of road and electricity within the sub-project command area
- 18) Agr-input and output marketing facilities (Agrovet, collection center, hat bazar, retail market, wholesale market etc.)
- 19) Market information

Sample Integrated Pest Management (IPM) Plan Template for Use by Farmers

1. Background Information	
Name of farmer	•••••
Type of Farming Activity	
Year/Time of the Year	
2. Integrated Pest Management	Practices

Tick $(\sqrt{\ })$ only the appropriate options currently practiced on your farm

A. The prevention and/or suppression of harmful organisms

Crop rotation

Use of optimal sowing date

Minimum cultivation

Management of crop residues
Soil structure and compaction
Certified seed/tested home saved seed
Choose disease resistant varieties
Irrigation (applied to schedule)
Soil testing (pH, nutrients, organic matter)
Liming
Clean machinery and equipment
Clean crop storage areas
Protect beneficial organisms
Other (specify)
B. Monitoring of harmful organisms
Use early warning/weather forecasting systems
Monitor crops for pests/diseases
Use weather forecast to aid decisions
Adviser monitors crops
Accurate pest and disease identification
Use traps/sticky pads/lures
Other (specify)
C. Application of appropriate plant protection measures
Preventative treatments
Decision making with technical person
Pest threshold decisions
Other (specify)
D. Use of biological, physical or other non-chemical methods
Use natural plants/enemies
Use crop fleeces
Use micro-organism plant protection products
Use crop netting
Use manual methods
Other (specify)
E. Use of pesticides that are specific for the pest/disease
Applications usually for multiple pests
Resistance development is considered

Broad spectrum products avoided

Different modes of action considered
Different products considered
Consider subsequent crops
Familiar with different product labels
Other (specify)
F. Use of pesticides at required levels
Use appropriate application rates as per the direction
Use biological control method to reduce pesticide use
Reduce frequency of application
Partially treat/spot spray fields
Other (specify)
G. Checking and recording the success of the applied crop
protection measures
Success or failure of intervention measured
Success or failure of intervention recorded
Crop yields /disease and pest incidences recorded
Results discussed with adviser
Member of discussion group
Other (specify)

Annex 11: ESF/safeguards Interim Note

COVID-19 considerations in construction/civil works projects

This interim note is intended to provide guidance to teams on how to support Borrowers in addressing key issues associated with COVID-19 in construction activities. Projects involving construction/civil works frequently involve a large work force, together with suppliers and supporting functions and services. Given the complexity and the concentrated number of workers, the potential for the spread of infectious disease in projects involving construction is extremely serious, as are the implications of such a spread. Depending on what kind of contract exists (between the Borrower and the main contractor; between the main contractors and the subcontractors) the Contractor will be responsible for health and safety of workers.

The PIU (borrowers) should confirm that projects (i) are taking adequate precautions to prevent or minimize an outbreak of COVID-19, and (ii) have identified what to do in the event of an outbreak. Addressing COVID-19 at a project site goes beyond occupational health and safety and is a broader project issue which will require the involvement of different members of a project management team. In many cases, the most effective approach will be to establish procedures to address the issues, and then to ensure that these procedures are implemented systematically. The issues especially pertinent in preparing the project response procedures to COVID-19 include:

- (a) Assessing workforce characteristics
- (b) Entry/exit to the work site and checks on commencement of work
- (c) General hygiene
- (d) Cleaning and waste disposal
- (e) Adjusting work practices
- (f) Project medical services
- (g) Local medical and other services
- (h) Instances or spread of the virus
- (i) Continuity of supplies and project activities
- (j) Training and communication with workers
- (k) Communication and contact with the community