



**Food and Agriculture Organization
of the United Nations**

Environmental and Social Management Framework

**Public-Social-Private Partnerships for Ecologically-Sound Agriculture and Resilient Livelihood in Northern Tonle Sap Basin
(PEARL)**



Food and Agriculture Organization of the United Nations
September 2022

TABLE OF CONTENTS

List of Tables	iv
List of Figures.....	v
List of Abbreviations	vi
Executive Summary.....	viii
1 Introduction.....	1
2 Project Description	3
2.1 Project Objective and Outputs	4
2.2 Project location	19
2.3 Project beneficiaries.....	22
2.4 Project implementation arrangements	23
3 Environmental and Socio-Economic Baseline Conditions.....	28
3.1 Environmental conditions	28
3.1.1 Climate	28
3.1.2 Land use	30
3.1.3 Biodiversity, environment and forests:	30
3.1.4 Water resources	31
3.2 Socio-economic conditions.....	32
3.3 Potential future changes foreseen as a result of the planned activities.....	34
3.3.1 Projected impacts of changes introduced through the PEARL project.....	34
3.3.2 Theory of change- how the project supports adaptation and mitigation	35
4 Legal and Institutional Framework.....	36
5 Applicable Safeguard Policies	39
5.1 FAO environmental and social standards	41
5.2 Project risk classification	42
5.3 Green Climate Fund safeguards.....	44
5.4 FAO applicable safeguards.....	45
6 Environmental and Social Risk Management.....	48
6.1 Step 1: Defining Sub-Activities	48
6.2 Step 2: Environmental and Social Risk Screening of Sub-Activities.....	49
6.3 Aggregated results of the environmental and social screening checklists per sub-activity, approved and signed by the ESM Unit in FAO Headquarters. Step 3: Environmental and Social Management Plans, Monitoring and Reporting	50
6.4 Potential environmental and social risk mitigation measures.....	51
7 Stakeholder Consultation and Engagement	57

7.1 Stakeholder identification	59
7.2 Overview of stakeholder consultation and engagement in project design	59
7.3 Stakeholder consultations for project implementation	63
7.4 Disclosure	64
7.5 Grievance redress mechanism	65
7.5.1 FAO grievance mechanism	65
7.5.2 Project-level grievance mechanism.....	66
8 Indigenous Peoples and Social Inclusion Planning Frameworks	72
8.1 Indigenous Peoples’ and Social Inclusion Planning Framework	72
8.1.1 Baseline information	72
8.1.2 Key findings and analyses of impacts, risks and opportunities.....	77
8.2 Gender assessment and action	82
9 Biodiversity Management Framework	89
9.1 Introduction.....	89
9.2 Objectives and biodiversity approach.....	90
9.3 Biodiversity characterization	92
9.4 Target CPA and CF	93
9.4.1 Overview	93
Annexes	104
Annex 1: ESMF Work Plan and Budget	105
Annex 2: Project Exclusion List.....	112
Annex 3: FAO Environmental and Social Screening Checklist.....	113
Annex 4: GRIEVANCE REVIEW MECHANISM OF FAO REPRESENTATION IN CAMBODIA	1

LIST OF TABLES

Table 1: Crop-specific Climate-Resilient and High-value Measures	14
Table 2: Overview of the key crops in the NTSB	21
Table 3: Overview of Environmental and Social Standards of the FAO	41
Table 4: Alignment of IFC Performance Standards and FAO Environmental and Social Standards.....	44
Table 5: FAO safeguards triggered for the PEARL project	45
Table 6: Potential adverse impacts and proposed mitigation measures for Outcome 1: Farmers' capacities are enhanced to manage climate impacts and related risks.....	52
Table 7: Potential adverse impacts and proposed mitigation measures for Outcome 2: Adaptive capacity of smallholder farmers and other local value chain actors, particularly women farmers and value chain actors, is increased through climate-resilient, high-value, and sustainable agriculture.	53
Table 8: Potential adverse impacts and proposed mitigation measures for Outcome 3 .	56
Table 9. Cambodia Grievance and Redress Mechanisms.....	68
Table 10: Overview of grievance review procedure	70
Table 11. Indigenous population in four provinces.....	77
Table 12. Gender based actions.....	86
Table 13: Overview of potential negative impacts on biodiversity from project activities	90
Table 14 Summaries of 20 Selected CPAs and CFs for the PEARL project	97

LIST OF FIGURES

Figure 1: Location of the Northern Tonle Sap Basin in Cambodia.....	3
Figure 2: FARM Stages.....	13
Figure 3: Average temperature maximum (left) and temperature minimum (right) during the rainy season May-October over the period 1987-2016 from the reanalysis dataset W5E5 (FAO analysis).	29
Figure 4: Overview of FAO’s environmental and social (E&S) risk management approach.....	48
Figure 5 Map of 20 selected CPAs and CFs in PEARL Targeted Areas	102

LIST OF ABBREVIATIONS

CBD	Convention on Biological Diversity
CBO	community-based organization
CEDAW	Convention on the Elimination of all Forms of Discrimination Against Women
CF	Community Forest
CPA	Community Protected Area
DRR	Disaster Risk Reduction
ESA	Environmental and Social Analysis
ESCP	Environmental and Social Commitments Plan
ESM	Environmental and Social Management
ESMP	Environmental and Social Management Plan
ESMF	Environmental and Social Management Framework
ESS	Environmental and Social Standards
EWS	Early Warning System
FAO	Food and Agriculture Organization of the United Nations
FARM	Farmer-led Agricultural Resilience Mechanism
FPIC	Free, Prior and Informed Consent
GBV	Gender Based Violence
IFC	International Finance Corporation
ILO	International Labour Organization
IP	Indigenous People
GAP	Gender Action Plan
GCF	Green Climate Fund
GDP	gross domestic product
GESI	Gender Equality and Social Inclusion
HDI	Human Development Index
LAMS	landscape-level agroecology monitoring system
LDC	least developed countries
LRP	Local Resource Person
M&E	Monitoring & Evaluation
MAFF	Ministry Agriculture Forest and Fisheries
MoE	Ministry of Environment
MIS	management information system
NCCD	National Committee for Subnational Democratic Development
NDA	National Designated Authority
NDC	Nationally Determined Contribution
NGO	Non-governmental organization

NPD	National Project Director
NTFP	Non-Timber Forest Product
OHS	Occupational Health and Safety
PCU	Project Coordination Unit
PMC	Project Management Committee
PMSU	Project Management Support Unit
PS	Performance Standard
PSC	Project Steering Committee
NRM	Natural Resource Management
SDG	Sustainable Development Goals
SEAH	Sexual Exploitation, Abuse and Harassment
SME	Small and medium enterprise
SNRM	Sustainable Natural Resource Management
SOP	Standard Operating Procedures
TCM	Technical Committee Meeting
UNCCD	United Nations Convention to Combat Desertification
UNFCC	United Nations Framework Convention on Climate Change

EXECUTIVE SUMMARY

Overview

The Government of Cambodia together with the Food and Agriculture Organization of the United Nations (FAO) developed the ‘ *Public-Social-Private Partnerships for Ecologically-Sound Agriculture and Resilient Livelihood in Northern Tonle Sap Basin*’ (PEARL) Project. The overarching objective of the proposed Green Climate Fund (GCF) project is to “*to enhance the climate change resilience of smallholder farmers and local communities in the Northern Tonle Sap Basin (NTSB) by increasing their access to growing premium market segments while using their improved market access to incentivize their transition to climate-resilient practices, mainly through effective public-social-private partnerships.*” An Environmental and Social Management Framework (ESMF) was elaborated to guide the identification and management of potential adverse environmental and social impacts of the proposed project. The ESMF was prepared in compliance with FAO’s Environmental and Social Management Guidelines, while further considering the congruence between FAO’s Environmental and Social Standards (ESS) and the GCF Interim Environmental and Social Safeguards (i.e. International Finance Corporation (IFC) Performance Standards).

Positive impacts, beneficiaries and alignment with country policies

The PEARL project will deliver the three interdependent outcomes to address barriers to market-informed climate-resilient and sustainable production and processing practices and technologies:

1. Farmers' capacities are enhanced to manage climate impacts and related risks;
2. Adaptive capacity of smallholder farmers and other local value chain actors, particularly women farmers and value chain actors, is increased through climate-resilient, high-value, and sustainable agriculture; and
3. Enabling conditions for climate-resilient agriculture are ensured through a coherent and robust policy, legal, and institutional framework.

The project will directly benefit at least 135,000 smallholder farmers and other local value chain actors and 450,000 farmers to strengthen their market access, thereby improving their resilience to the impacts of climate change. Indirectly the project will benefit over 1 million people living in the PEARL project area. The project is aligned with the country’s national development plans, climate change policy and key sectoral strategies, as well as Cambodia’s international commitments, including its Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC).

Environmental and social risks and mitigation measures

As result of the assessments to prepare this ESMF, the proposed project has been assigned a risk-level of Category B, which suggests that the project contains activities with potential limited adverse environmental and/or social risks and impacts that individually or cumulatively, are few, generally site-specific, largely reversible, and readily

addressed through mitigation measures. The following summary highlights a few notable risks that may have potential diverse environmental and social impacts, which will require specific mitigation plans.

- High risk linked to the undertaking of project activities within Community Protected Areas (CPAs) (less than 10,000 ha) and Community Forest Areas (CFAs) located within National Parks and Wildlife Sanctuaries.
- Moderate risk linked to the transport and provision of seeds and planting materials for both agricultural and forest enrichment planting as well as the establishment of planted forests. – based on support to the provision of improved planting stock to agricultural cooperatives as well as work to rehabilitate Community Protected Areas (CPAs) (less than 10,000 ha) and Community Forest Areas (CFAs)
- All other risks are identified as low, as the project will seek to improve activities linked to agriculture and land management across the target landscapes through adoption of improved practices and provision of improved support and enabling environment and thus will reduce environmental and social risk areas below business-as-usual levels even where linked to a risk area.

Further information on the risk areas identified and assessed as well as responses and risk mitigation measures are provided in the table below, which follows the FAO Environmental and Social Standards (ESS) while also linking these with the IFC Performance Standards, which the GCF provisionally adopted.

FAO Safeguard	Safeguard Triggered?	Justification and mitigating actions
ESMG - General consideration	Yes	
FAO ESS1: Natural Resource Management IFC PS 1. Assessment and management of environmental and social risks and impacts	No	<p>The project promotes sustainable land management to prevent or minimize land degradation through erosion control, integrated nutrient management, management and restoration of soil, water, and biological resources, and maintenance of ecosystem services in close consultation with local land users.</p> <p>The project will also support improved information management and access to finance to support enhanced technologies to improve the efficiency of and reduce impacts of irrigation (including solar irrigation systems and smart irrigation systems (e.g., drip irrigation and ponds as well as rice-fish systems)) and water management systems within production areas (with all systems utilizing dams under 5 m and not targeting areas over 20 ha). All sub-activities proposed that will include specific irrigation actions will also be subject to a risk screening prior to implementation.</p> <p>The project will promote the clarification of usufruct and tenure rights of farmers and households to reduce investment risks in adopting climate-resilient and sustainable technologies and practices. It will not result in a negative change to existing legitimate tenure rights, focusing on locally-based agricultural cooperatives and community-based protected areas and forest management groups who already have defined user rights but may require support in enhancing documentation of these. Any action to revise or change rights will be subject to a full screening and management plan.</p>

FAO Safeguard	Safeguard Triggered?	Justification and mitigating actions
		<p>The project will also work towards strengthening adaptive capacities and resilience of target communities through enhanced information on climate impacts and weather events, as well as improved skills and agricultural practices to respond to changes in climate. Through support to improved land-use practices and enrichment planting and regeneration, the project will also focus on enhancing GHG removals and reducing emissions.</p> <p>The exclusion list in Annex 6 further ensures the project will not finance activities deemed 'high risk.'</p>
<p>FAO ESS2: Biodiversity, Ecosystems and Natural Habitats And IFC PS 6. Biodiversity conservation and sustainable management of living natural resources</p>	Yes	<p>The project will work with 14 CPAs, with three of these located in National Parks, five within Wildlife Sanctuaries, and two within the Northern Biodiversity Conservation Corridor. While actions within protected areas are considered high risk, a number of mitigating factors exist that help to reduce the risk of implementation within these areas. These include:</p> <ul style="list-style-type: none"> • Agricultural production systems in PAs in Cambodia pre-date the establishment of the PAs and the project and are permitted to remain but not expand under Cambodian law. • Proposed activities target both enhancing the sustainability of agricultural production systems and, as such, will support capacity building and support to reduce impacts of agriculture within these areas and the rehabilitation of degraded areas (using native and locally relevant species) of the conservation areas that have previously been impacted by shifting agriculture and or logging. <p>A full ESMP will be prepared for the target areas once specific locations and support actions have been agreed upon during the implementation phase, with this being used to update and strengthen the proposed management responses.</p>
<p>FAO ESS 3: Plant Genetic Resources for Food and Agriculture And IFC PS 6. Biodiversity conservation and sustainable management of living natural resources</p>	Yes	<p>The project will not introduce crops and varieties that are previously not grown in the project area or similar areas within Cambodia.</p> <p>The project will support the rehabilitation of CPA and CFAs with a focus on planting native species as well as small-scale sustainable agroforestry (e.g., woodlots and home-garden systems) to meet the growing household demand for fuelwood and wood products. The project will adopt and closely follow the national REDD+ safeguards framework and other relevant national legislation, including CPA and CFA guidelines, to minimize social and environmental risks through forest restoration activities.</p>
<p>FAO ESS 4: Animal-Livestock and Aquatic – Genetic Resources for Food and Agriculture And IFC PS 6. Biodiversity conservation and sustainable management of living natural resources</p>	No	<p>The project will not introduce non-native or non-locally adapted species, breeds, genotypes, or other genetic material to the project areas. The project's support to improved use of fish ponds linked to rice irrigation will also help to enhance water management systems and reduce environmental impacts while contributing to local food security.</p>
<p>ESS 5: Pest and Pesticide Management And</p>	No	<p>The project will promote the adoption of GI, CamGAP, HACCP, and organic certification compliant production and processing and IPM. The project will thus</p>

FAO Safeguard	Safeguard Triggered?	Justification and mitigating actions
PS 3. Resource efficiency and pollution prevention		develop guidelines and support to farmers to reduce and improve use of pesticides based on international and local best practices. The project will not result in the procurement or direct supply of pesticides or agrochemicals.
FAO ESS 6: Involuntary Resettlement and Displacement And IFC PS 5. Land acquisition and involuntary resettlement	No	<p>The project will not allow any involuntary resettlement or displacement.</p> <p>Although no negative impacts are foreseen in proposed actions, an ESMP will be prepared once specific project intervention sites have been identified. This will ensure that no groups will be displaced from their lands or have tenure rights impacted. These risks are not anticipated as the project design focuses on working with established agricultural cooperatives and unions that have clear and identified production areas as well as with CPAs and CFAs that have demarcated areas and legally recognized rights of use.</p>
FAO ESS 7: Decent Work And IFC PS 2. Labor and working conditions And IFC PS 4. Community health, safety, and security	No	<p>The project will not result in the direct employment of staff. Employment opportunities will likely be generated as a byproduct of the project, but not directly.</p> <p>The project will work within value chains and landscapes that include subsistence producers and those other vulnerable informal agricultural workers, as well as in situations where youth work mostly as unpaid contributing family workers may occur. Project activities are focused on improving the nature of work within these value chains, including action to help reduce incidence of SEAH and GBV and support to enhanced uptake of sustainable and high-value approaches and standards that, in some cases, include improved working requirements and skillsets while enhanced value chain performance will also help to reduce youth migration through improved options for employment. All target groups are also established ACs, FAs, PGs, and unions that have been operational through cooperative arrangements and, as such, provide a level of equity across their production systems. The ESMF provides an assessment of these issues as well as key mitigation measures to address what risks are present.</p> <p>However, due to the risks of action within the value chain, a full ESMP will be prepared once specific beneficiary groups, locations, and target certification systems are agreed upon. This ESMP will also review engagement in PAs as noted under FAO ESS 2 above.</p> <p>Occupational health and safety (OHS) activities will be taken seriously for the implementation of the project activities. While most project activities are low risk, forestry and agricultural activities have a level or pre-existing risk. Project interventions will not increase these risks with improved training and support on CamGAP as well as progress towards global certification standards also seen as helping to reduce these risks – as such, this is seen as a low risk.</p>
FAO ESS 8: Gender Equality And IFC PS 1. Assessment and management of environmental and social risks and impacts	No	The project will support gender empowerment and equality and has been designed to take into account the specific needs and priorities of women and girls and address key considerations linked to SEAH and GBV what action can be taken to address these. A gender assessment and Gender Action Plan have been developed for the project that provides specific actions to be undertaken and an allocated budget..
ESS 9: Indigenous peoples and cultural heritage And	Yes	There are over 40,000 people across 10 IP groups identified as living within the target provinces based on the 2019 survey information. While the specific project locations have yet to be identified and thus their impact on these IP groups cannot yet be fully assessed, a baseline Indigenous Peoples Plan (IPP) has been

FAO Safeguard	Safeguard Triggered?	Justification and mitigating actions
IFC PS 7. Indigenous peoples (IP) IFC PS 8. Cultural heritage		<p>developed for the project that provides the framework to guide action with further development of a specific IPP for target areas being required during project inception should they include IP groups.</p> <p>The plan also notes and ensures that efforts will be made to respect, include and promote IP issues during project implementation, including their right to Free, Prior, and Informed Consent (FPIC) during the final identification of intervention sites.</p>

Through the ESMF, specific risk-based ESMPs at the activity level. Monitoring and reporting on the ESMF and specific sub-plans will be coordinated through the Project Management Unit and National Safeguard Specialist.

Alternatives

The project builds upon best practices and lessons learned through past on and ongoing initiatives to strengthen the climate-resilience and sustainability of small holder farming communities in Cambodia. The project approach is based on consideration of baseline conditions, climate change impact potential in the target regions and possible alternative approaches.

Environmental and Social Safeguard Management Framework (ESMF) Approach

As required by FAO’s Environmental and Social Management Guidelines and the IFC Performance Standards, the project will use an ESMF approach, as the exact beneficiaries will only be known during implementation and the specific sites and communities to which this ESMF will apply are not defined. However, this report contains the findings of an environmental and social impact analysis of the project on the broad target areas in the Northern Tonle Sap Basin. Tools for screening specific sites and communities once they are defined are provided as part of the ESMF to facilitate further risk analysis and define specific management measures in line with the ESMF.

Stakeholder engagement

The project has been designed through extensive stakeholder consultations at the national, regional and local level, including consultations with local community-based organizations, indigenous federations, and women’s groups, among other stakeholders. The National Designated Authority (NDA) has issued a letter of no-objection for the project, and has been closely involved throughout the elaboration of the concept note, funding proposal and supporting documents.

Grievance and Redress Mechanism

The grievance mechanism proposed under the project will follow FAO’s GRM approach and operate within the Grievance Review Mechanism of the FAO in Cambodia which is currently being finalised and will be operationalised in mid-2022 (a draft version is provided in Annex 4). Based on the principles of subsidiarity the project will seek to address any grievances initially at PMU level with the project safeguards officer operating

as the focal point for receiving, compiling, screening, recording and working with other PMU members and partners to identify relevant responses. This approach will build on and link with the country office approach and follow and number of integrated protocols.

Human resources

A National Safeguards Expert and National Gender Expert will work together on the mainstreaming of safeguards into all areas of project work in line with the ESMF and specific ESMPs – which will include baseline assessments, the integration of safeguard considerations into training and awareness raising to both project personnel and broader stakeholders through the implementation process as well as reviewing and ensuring project products and approaches fully integrate gender considerations. An international Safeguards Specialist and National Gender Consultant team, will also provide additional support to the development of focused baseline assessments in key areas, the development of specific ESMPs, and development of focused baseline studies and specific guidance for implementation of safeguards. The application of safeguards will be closely coordinated between the PMU and national implementing partners including MoE.

Budget

The ESMF budget is US\$569,000 with an additional US\$14,999,686 on specific Gender activities in the Gender Action Plan and included as part of the larger project budget.

ESMF report structure

The document is organized into nine main sections beginning with the introduction (Section 1) and project description (Section 2) and a description of the environmental and socio-economic baseline conditions (Section 3). The legal and institutional framework at the international, national and local level is then presented in Section 4, which describes the legal framework in place that ensures social and environmental safeguards are appropriate and in place. This is followed by a description of the applicable safeguard policies from FAO and GCF (Section 5), including the project risk classification process and results. A monitoring and evaluation framework to monitor, evaluate and mitigate potential environmental and social risks and impacts is then provided (Section 6). An overview of the stakeholder consultation and engagement plan and results is integrated into Section 7. An indigenous peoples and social inclusion planning framework is presented within Section 8 that ensures that the rights of indigenous peoples and socio-economically excluded/ marginalized groups are respected, and that the project will not have a negative impact on these communities. Section 9 describes the biodiversity management framework, which presents the approach applied by the project to avoid and mitigate negative impacts on biodiversity, and to further promote measures that enhance biodiversity conservation within the project area. Beyond these core sections of the ESMF, various annexes are provided with detailed supporting information.

1 INTRODUCTION

1. The Government of Cambodia in coordination with the Food and Agriculture Organization of the United Nations (FAO) is developing the project '*Public-Social-Private Partnerships for Ecologically-Sound Agriculture and Resilient Livelihood in Northern Tonle Sap Basin*' (PEARL) as a cross-cutting project to be submitted to the Green Climate Fund (GCF). GCF grant resources, together with government co-financing, will invest in climate-resilient land use planning, as well as the implementation of climate-resilient sustainable natural resource management (SNRM) and disaster risk reduction (DRR) measures in the Northern Tonle Sap Basin, which is vulnerable to climate change.
2. At the implementation level, the project will support cooperatives, associations, producer groups, CPAs, CFs, and agricultural unions in developing and implementing crop-specific and climate-resilient business plans. This will be combined with training beneficiary farmers and other local value chain actors to develop their financial and business literacy and entrepreneurial skills and extension providers to support the roadmap and business plans implementation. The project will also build direct partnerships with champion SMEs and traders/exporters to expedite the transformation process. Also, add-on guidelines and tools will be developed to ensure that the chosen certifications consider climate risks and impacts adequately. This will result in at least 135,000 smallholder farmers and other local value chain actors with improved financial access and accelerated support for adopting climate-resilient practices and technologies; and 450,000 farmers with improved access to tailored agrometeorological advisory services. There will also be more than 1 million farmers and other value chain actors indirectly benefited by the project. The project will directly and indirectly benefit over 1.585 million people (over 9% of the population of Cambodia) through the development of strategies for climate-resilient land use in the Northern Tonle Sap Basin.
3. The Environmental and Social Management Framework (ESMF) ensures that environmental and social management is integrated into the development cycle of projects. The exact locations and interventions will be finalized during the implementation of the project, and thus ESMF was selected as the most suitable instrument.
4. This ESMF for the proposed PEARL Project has been conducted in accordance with FAO's Environmental and Social Safeguards Policy and GCF's Environmental and Social Safeguards. This document has been designed to ensure to support the following key activities (16 total activities):¹
 - a. Identification, management and evaluation of the environmental and social risks and impacts associated with the BRCRN project.
 - b. Adoption of a mitigation hierarchy based on:
 - i. Avoidance of adverse environmental and social impacts as a priority
 - ii. Where avoidance is not possible, minimize or mitigate risks to acceptable levels, and

¹ FAO 2015

iii. Where residual impacts remain, compensate for/ offset them whenever technically and financially feasible

c. Promotion of sustainable agriculture and food systems.

5. Sub-activities where potential significant environmental and social risks have been identified will develop environmental and social management plans (ESMP) that include information on the mitigation measures, indicators, responsibilities and timeframe where the completion of such measures are expected (refer to Chapter 6.1 for more detailed information).

2 PROJECT DESCRIPTION

6. The project focuses on the Northern Tonle Sap Basin region of Cambodia. The Northern Tonle Sap Basin (NTSB) is in the lower Mekong basin as shown in Figure 1. NTSB is defined as the areas north of the Tonle Sap Lake, including Oddar Meanchey, Kampong Thom, Preah Vihear, and Siem Reap provinces. The region is home to about 15% of the country's population. It encompasses a total land area of 2.5 million hectares with evergreen and deciduous forests, covering hilly areas in the north, vast swaths of cropland in the middle (mainly for rice production) and flooded forests and grassland areas along the Tonle Sap Lake in the south. The average annual rainfall in the region varies from 1000 to 1500 mm. There are ten main soil types and five main watersheds, including Stung Sen and Stung Staung, vital sources of water for rice production and livelihoods in the region (Oeurng et al., 2019). Over 20% of the country's aromatic rice production, among others such as cassava (35%) and sugarcane (27%), comes from this region (NIS, 2019).

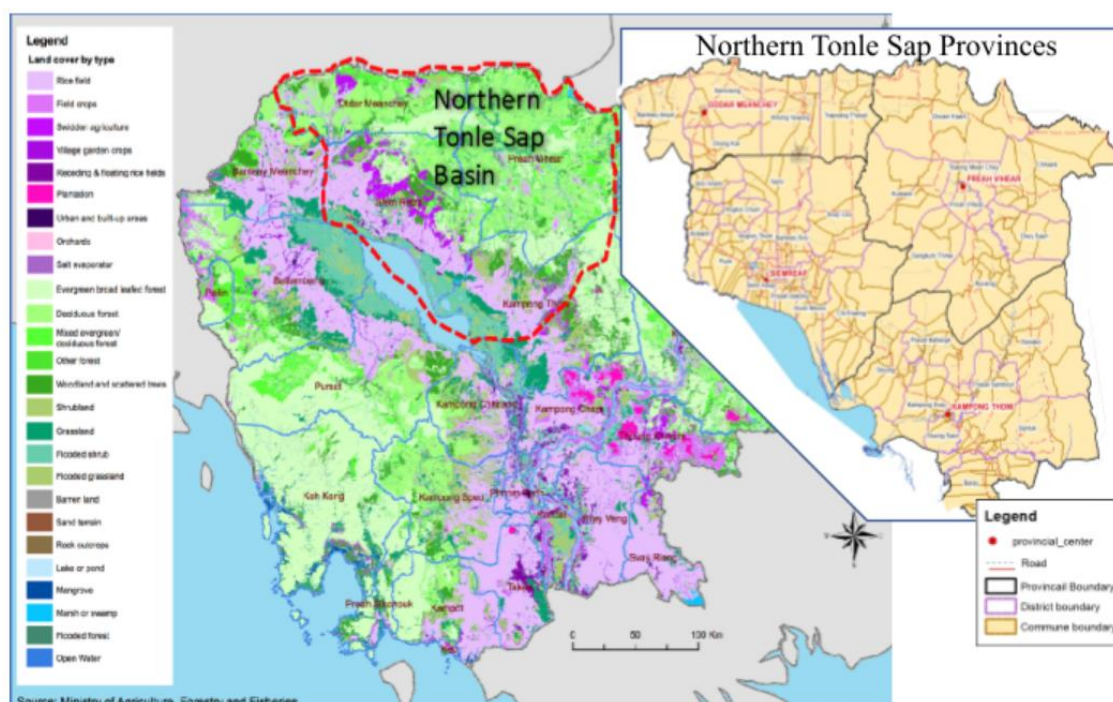


Figure 1: Location of the Northern Tonle Sap Basin in Cambodia

Sources: Ministry of Agriculture, Forestry and Fisheries², 2019

² The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.

2.1 Project Objective and Outputs

7. Unsustainable land use practices exacerbate the exposure to hazards and climate risks, where deforestation, unsustainable agriculture and forestry practices lead to various impacts such as accelerated erosion and sedimentation, river bed rise due to sedimentation, soil degradation, increasing areas of landslide and flood-susceptible areas, ecosystem degradation and habitat loss, reduced water recharge, and reduced availability of forest products (fuelwood, fodder, forage, non-timber forest products), among others). If adaptive measures are not adopted and business as usual practices prevail, the NTSB region of Cambodia will be increasingly exposed to extreme heat, water stress, wildfires, and flooding having detrimental impacts on local people, ecosystems and the country's economy.
8. **Project Objective:** To significantly enhance the adaptive capacity of smallholder farmers and other local value chain actors in the NTSB to cope with the observed and expected impacts of climate change. This will be achieved by improving access to finance, technologies, and knowledge to adopt climate-resilient and higher-value practices to access the premium market segments for cashew, mango, organic rice, and vegetables. With their advanced knowledge and market access affording them the necessary means to address their climate risks and underlying socioeconomic vulnerabilities, and permanently shift towards climate-resilient and diversified agricultural livelihoods.
9. In particular, the PEARL project will focus on:
 - Ensuring that smallholder farmers and other local value chain actors have a solid understanding of climate-related risks and mitigation strategies. The PEARL project will introduce state-of-the-art technologies to provide crop-specific agrometeorological forecasting, warnings, and related farm management and market advisory services to improve local capacity to identify and respond to risks associated with weather and climatic conditions. The project will also develop the necessary institutional arrangements, including the private sector, to effectively disseminate such advisory services to end-users. The increased agrometeorological forecasting and advisory capacities will also directly feed into Outcome Two for adopting climate-resilient techniques and technologies by smallholder farmers and other local value chain actors and promoting risk finance services.
 - Effective public-social-private partnerships (PSPPs) to promote the adoption of climate-resilient, higher-value, inclusive and sustainable practices and technologies by smallholder farmers and other local value chain actors. A PSPP focuses not only on maximizing efficiency by bringing the public and private sectors together but also on creating shared social values and visions by paying closer attention to various public needs and interests. This effort will include developing smallholder farmers' and other local value chain actors' climate-resilient entrepreneurial skills and business and financial literacy and providing tools to make finance available for these beneficiaries, who would otherwise have limited means to adopt climate-resilient and market competitive practices and technologies.
 - Ensuring enabling conditions for the successful delivery of Outcomes 1 and 2 above. As part of this effort, it ensures that the necessary regulatory and institutional conditions

are in place to deploy various certification programs as primary vehicles for adopting agricultural practices of smallholder farmers and other local value chain actors to climate change while promoting effective PSPPs through the existing national and provincial stakeholder coordination mechanisms (Output 3.1, see Figure 1). Such mechanisms include the National Council for Sustainable Development (NCSD), National Committee for Sub-National Democratic Development (NCDD), and public forums at the provincial level. The project will partner with the Agricultural and Rural Development Bank of Cambodia (ARDB) and private financial institutions to develop a lending scorecard system to consider climate resilience, inclusivity, and sustainability as crucial eligibility criteria in screening loan applications. This system would promote not only an overall shift towards climate-resilient agriculture within the sector but also a just transition by increasing smallholder farmers and other local value chain actors' ability to access finance through climate change adaptation.

Expected Outcomes of the project are shown in Figure 2.

Climate Resilience	High-value Agriculture	Enabling Environment
<p>Outcome (Component) 1:</p> <p>Farmers' capacities are enhanced to manage climate impacts and related disaster risks</p>	<p>Outcome (Component) 2:</p> <p>Adaptive capacity of smallholder farmers and local value chain actors is increased through climate-resilient, higher-value, diversified and sustainable agriculture</p>	<p>Outcome (Component) 3:</p> <p>Enabling conditions for climate-resilient agriculture are ensured through a coherent and robust policy, legal, and institutional framework</p>

10. The project will directly support at least 135,000 smallholder farmers and other local value chain actors with improved financial access and accelerated support for adopting climate-resilient practices and technologies; and 450,000 farmers with improved access to tailored agrometeorological advisory services. There will also be more than 1 million farmers and other value chain actors indirectly benefited by the project. The project will directly and indirectly benefit over 1.585 million people (over 9% of the population of Cambodia) through the development of strategies for climate-resilient land use in the Northern Tonle Sap Basin. There will be targeted benefits for women, poor and socially marginalized groups.
11. The project may potentially deliver mitigation impact as an adaptation co-benefit, however, the project does not include an activity to track and report this potential mitigation impact for the following reasons.
 - a. During the project preparation, Cambodia did not have the forest degradation definition or historical baseline for emissions from forest degradation. Therefore, the project would not have been able to a specific reference level for its target restoration areas to measure and report its emission reductions contribution through the country's Biennial Update Report (BUR) technical annex, submitted to the UNFCCC.
 - b. The project restoration activities' carbon stock enhancement would likely be not measurable during the project's lifetime, given the time lag in growth.

12. Based on the above factors, the project will focus its investment exclusively on generating adaptation impacts, as it is considered more cost-effective under the circumstances. Nevertheless, the project will coordinate with Cambodia's REDD+ process, mainly through the national forest monitoring system (NFMS) managed by the MAFF, to ensure its co-benefit in emissions reductions is accurately accounted for as part of Cambodia's commitment under its Nationally Determined Contribution (NDC) (MoE, 2020b).
13. The proposed project is comprised of three complementary Outcomes, seven Outputs and sixteen supporting activities. While the following provides a brief overview of these Outputs and activities, more detailed information can be found in the PEARL GCF funding proposal and feasibility study.
14. The project will support activities focused on increasing adaptive capacity to cope with the observed and expected impacts of climate change by addressing climate and socioeconomic vulnerabilities in the NTSB, based on technical, market-based, and policy and institutional-level interventions. To support the implementation and scaling up of project, activities within Outcome 1 will focus on enhancing farmer's capacity to manage climate impacts and related risks. Outcome 2 will focus on improving adaptive capacity of smallholders and other local value chain actors, particularly vulnerable women farmers and value chain actors through increased climate-resilient, higher-value, diversified, and sustainable agriculture. Outcome 3 will improve the enabling conditions for climate-resilient agriculture through a coherent and robust policy, legal, and institutional framework.
15. Together, these complementary measures will help to overcome barriers to adaptation and mitigation, and will support the desired paradigm shift with a strong enabling environment and the scaling up of interventions that will increase the resilience of both communities and critical ecosystems to climate change.
16. The project objective will be achieved through the following Outcomes (Components):
 - Outcome 1: Climate Resilience.
 - Outcome 2: High-value Agriculture.
 - Outcome 3: Enabling Environment.
17. Under Outcome 1, the project will ensure that smallholder farmers and other local value chain actors have a solid understanding of climate-related risks and mitigation strategies. The PEARL project will introduce state-of-the-art technologies to provide crop-specific agrometeorological forecasting, warnings, and related farm management and market advisory services to improve local capacity to identify and respond to risks associated with weather and climatic conditions. The project will also develop the necessary institutional arrangements, including the private sector, to effectively disseminate such advisory services to end-users. The increased agrometeorological forecasting and advisory capacities will also directly feed into Outcome Two for adopting climate-resilient techniques and technologies by smallholder farmers and other local value chain actors and promoting risk finance services.

18. This outcome will build on several international support initiatives in this area to focus on remaining capacity gaps. While requiring more agriculture-specific climate information, critical capacity gaps are mainly found in providing crop-specific advisory services and getting them to end-users on the ground (see Output 1.1). There are institutional and technical capacity limitations, for instance, translating weather and climate data into specific advisory services for agricultural applications, particularly putting into forms and contexts that are easily digestible by farmers and other local value chain actors. Also, dedicated institutional arrangements within and between the Ministry of Agriculture, Forestry and Fisheries (MAFF) and the Ministry of Water Resources and Meteorology (MoWRM) are necessary to offer consistent and coherent agrometeorological advisory services to end-users. Another area is strengthening extension services and partnerships with private actors and NGOs through local radio and TV stations, social media, and dedicated mobile apps such as Tonle Sap App and EcoKaskur to disseminate harmonized and quality information to aid decision-making in farm management and postharvest practices. Under this outcome, activities will coordinate with the FAO-led LDCF project, to ensure the sustainability and scalability of the project's investment at the landscape level. Improved and highly accessible and tailored agrometeorological advisory services under this outcome will address critical barriers to climate-informed agriculture by developing the capacity of responsible institutions and end-users, with particular focus on women and other minorities, and increasing the awareness of climate risks and options to address such risks (see barrier descriptions below).
19. To support improving high-value agriculture, Outcome 2 draws on effective public-social-private partnerships (PSPPs) to promote the adoption of climate-resilient, higher-value, inclusive and sustainable practices and technologies by smallholder farmers and other local value chains actors. A PSPP focuses not only on maximizing efficiency by bringing the public and private sectors together but also on creating shared social values and visions by paying closer attention to various public needs and interests. This effort will include developing smallholder farmers' and other local value chain actors' climate-resilient entrepreneurial skills and business and financial literacy and providing tools to make finance available for these beneficiaries, who would otherwise have limited means to adopt climate-resilient and market competitive practices and technologies.
20. The primary financial tool is the Farmer-led Agricultural Resilience Mechanism (FARM) (see Output 2.2). Under the FARM, the project will support ACs, FAs, producer groups, and agricultural unions in developing business plans for climate-resilient and higher value agriculture in partnership with public extension services and private sector and NGO partners. The FARM will also support the beneficiary groups with financial management and increase their capacity to govern inclusively, gender-responsively, and equitably. The FARM will thus assist the beneficiary groups in implementing their business plans technically, financially, and operationally (see Section B.3 for further details). As part of the business plan development process, the project will establish partnerships with private partners (i.e.,

value chain leaders) to support the beneficiary groups' transition to climate-resilient and higher-value agriculture from the market perspective. Their business leadership and investment are expected to increase the economic viability of this outcome and establish an avenue through which to crowd in private and public investment. This process will also benefit the private partners in increasing their supply capacity and quality. However, their effective engagement is contingent upon several enabling conditions (i.e., capacities of individual farmers and extension services, collective governance of smallholder farmers and other value chain actors, favourable legal, regulatory, and institutional frameworks).

21. Ensuring these conditions would often go much beyond the business acumen of these private actors alone. Therefore, the PEARL project will create these conditions that require broad and often costly social and institutional capital investment, which are crucial for successful PSPPs but are typically considered non-bankable from the private sector perspective. Through these partnerships, the PEARL project will promote several food safety, sustainability, and worker welfare certification schemes that are either currently operational (e.g., CamGAP, organic certification, GI, HACCP) in Cambodia's food systems or have a potential (e.g., W+) to provide market-based incentives for the transition to climate-resilient, higher-value, inclusive and sustainable agriculture (see Output 2.1). Since these certification schemes focus mainly on ecological, social, and food safety aspects, the project will also support their alignment with climate risk considerations to operate as market enablers for climate-resilient agriculture. Using these certification schemes is timely and strategic, given the increased public interest in Cambodia' safe and sustainably produced food.
22. The project will build on this market trend to establish strategic partnerships between government institutions, private sector entities and producer groups. Underpinned by these market-based incentives, the project will promote the adoption of climate-resilient, high-value and sustainable techniques and technologies, including small-scale infrastructure among smallholder farmers and other local value chain actors to support their transition (Output 2.3).
23. The FARM will directly complement this activity through strategic business planning and providing finance to adopt the technologies and techniques identified in the business plans. Concurrently, the project will also promote an integrated watershed management (IWM) approach to improve agroecological conditions at the site-specific and landscape levels (Output 2.4). IWM activities will support community protected areas (CPAs) and community forests (CFs) in critical catchment areas linked to cashew, mango, organic rice, and vegetable production to strengthen catchment restoration and protection efforts and improve their livelihoods. The activities will promote alternative livelihood options (e.g., apiculture, agroforestry fruits tourism, organic rice production, and value addition to non-timber forest products (NTFPs)). These activities under this outcome will overcome the three fundamental barriers to the adaptation of agriculture to climate change in the NTSB – limited knowledge of adaptive practices, and a lack of access to finance and technologies, as identified in the Climate Change Action Plan for Agriculture, Forestry and Fisheries Sector 2016-2020 (CCPAP-AFF) (MAFF, 2016) (see barrier

descriptions below). Building on the improved agrometeorological advisory services and increased awareness of risks under Outcome One, this outcome will directly enable the beneficiaries' transition to climate-resilient, higher-value and sustainable agriculture by making the necessary knowledge, financial and technological support available and accessible.

24. Outcome 3 focuses on ensuring enabling conditions for the successful delivery of Outcomes 1 and 2 above. As part of this effort, it ensures that the necessary regulatory and institutional conditions are in place to deploy various certification programs as primary vehicles for adopting agricultural practices of smallholder farmers and other local value chain actors to climate change while promoting effective PSPPs through the existing national and provincial stakeholder coordination mechanisms (Output 3.1). Such mechanisms include the National Council for Sustainable Development (NCSD), National Committee for Sub-National Democratic Development (NCDD), and public forums at the provincial level. The project will partner with the Agricultural and Rural Development Bank of Cambodia (ARDB) and private financial institutions to develop a lending scorecard system to consider climate resilience, inclusivity, and sustainability as crucial eligibility criteria in screening loan applications. This system would promote not only an overall shift towards climate-resilient agriculture within the sector but also a just transition by increasing smallholder farmers and other local value chain actors' ability to access finance through climate change adaptation. The project will also establish a gender-responsive, landscape-level agroecology monitoring system (LAMS) to crowd in public and private investments in climate-resilient, higher-value and sustainable agriculture (Output 3.2). This is a climate-informed investment decision support system for public and private investors to funnel investment into a climate-resilient and just transition of the sector. The LAMS will also be linked with other climate data systems such as the national greenhouse gas inventory (NGHGI) and National Forest Monitoring System to support Cambodia's reporting to the UNFCCC through the Enhanced Transparency Framework (ETF) under the Paris Agreement. These outputs under this outcome will remove systemic and institutional barriers that prevent concerted efforts between the public and private actors and levels of government to direct their financial, technological, and human resources to put the agriculture sector on a climate-resilient, inclusive and sustainable pathway to ensure a just transformation.
25. These three outcomes described above have been identified based on an extensive stakeholder consultation process and various feasibility studies, including a review of baseline investments and parallel funding activities to ensure the additionality and complementarity of these outcomes and associated outputs and activities.

Outcome 1: FARMERS' CAPACITIES ARE ENHANCED TO MANAGE CLIMATE IMPACTS AND RELATED RISKS

26. This outcome will provide farmers and local communities with access to tailored and crop-specific agrometeorological advisory services. The component will also increase the awareness of climate risks among farmers and other local value chain actors to enhance their ability to identify and manage climate-related risks and

vulnerabilities concerning their agricultural production, processing, and livelihoods. Generating and disseminating agrometeorological information will foster co-production of services across relevant institutions, particularly the MAFF and MoWRAM, and incorporate various data sets, including weather forecasts, seasonal forecasts, crop calendars, crop production, and harvest information, and pest and disease information. Concurrently, this component will also systematically strengthen the capacity of agricultural extension services in both the public and private sectors and develop effective public and private partnerships to ensure the effective dissemination of agrometeorological advisory information through increased and extended outreach capacities.

27. Climate services involve the production, translation, transfer, and use of climate knowledge and information for climate-informed decision-making, including at the farm level. Key attributes for effective climate services to meet the needs of users include timeliness, accessibility, dependability, usability and equity. Some of the main barriers to the effective and equitable communication of climate services are the lack of national capacity for communication, lack of client-driven tailoring of services, insufficient translation of relevant services into actionable products, and limited engagement with other actors involved in agricultural value chains (private and public).
28. A capacity need assessment based on FAO's Global Outlook on Climate Services in Agriculture (FAO, 2021), and covering four capacity areas – 1) meteorological and hydrometeorological forecasting; 2) agricultural data; 3) pest and disease forecasting; and 4) outreach and agrometeorological information dissemination – was conducted during the project preparation stage (see Annex 2). The assessment findings suggest challenges and recommend actions in seven critical areas under the climate service framework with these areas addressed in the proposed outputs.
29. Output 1.1: Availability and access to agrometeorological advisory services tailored to target value chains improved among smallholder farmers and local value chain actors, particularly women farmers and value chain actors.
30. Based on the above recommendations, this output will deliver an improved system of agrometeorological advisory services that are tailored to the project's target crops in these seven critical areas. Meanwhile, those recommendations that are linked to particular risk mitigation options through farm management practices and resource access will be implemented under Component 2. Activities in the Output will be :
 31. Activity 1.1.1: Increase the spatial scale of agrometeorological data collection and capacity for data processing to produce enhanced agrometeorological forecasts and advisory services tailored for target value chain crops.
 32. Activity 1.1.2: Develop Standard Operating Procedures (SOP(s)) for the production and dissemination of agrometeorological advisory services and data sharing needs and architecture, targeting cashew, mango, rice, and vegetables through a variety of mediums.
 33. Activity 1.1.3: Increase awareness of agrometeorological advisory services and the benefits of the application in farm management and value addition activities to support decision-making and reduce smallholder farmers and other local value

chain actors' vulnerabilities to climate change, particularly women farmers and value chain actors.

Outcome 2 : Support smallholder farmers and SMEs to adopt climate-resilient, higher-value, diversified, and sustainable agriculture through market based mechanisms

34. This component is delivered through four distinct but interdependent Outputs –
- 2.1. Increased premium market access through agricultural certification programs;
 - 2.2. Increased access to finance and climate-resilient and high-value technologies;
 - 2.3. Demonstration and promotion of climate-resilient, high-value and sustainable agricultural practices and technologies; and
 - 2.4. Improved agroecological functions at the landscape level.

Output 2.1: Premium market access opportunities for cashew, mango, organic rice, and vegetable producers and processors increased through climate-resilient and high-value certification programs.

35. The baseline and feasibility studies by IRAM (2018) and ICEM (2020) on agricultural certification programs and climate-resilient value chains identified and examined the economic, social, and ecological opportunities and challenges associated with the high-value crops and their value chains. Informed by these studies (Annex 2 of project submission) and a series of stakeholder consultations (Annex 7 of project submission), the project targets four crops 1) Rice in Preah Vihear; 2) Mango in Oddar Meanchey; 3) Cashew in Kampong Thom and Preah Vihear, and 4) leafy vegetables in Siem Reap as vehicles for promoting climate-resilient and sustainable agriculture through certification programs in the NTSB.
36. The agricultural certification programs that were examined in these studies include Geographical Indications (GIs), Organic Certification, Cambodia Good Agricultural Practices (CamGAP), Hazard Analysis Critical Control Point (HACCP), and ISO 22000. With key opportunities existing for, organic rice in Preah Vihear, organic/CamGAP and value added cashew in Kampong Thom and some parts of Preah Vihear, CamGAP mango in Oddar Meanchey, and leafy vegetables in Siem Reap.
37. However, given the rapidly evolving nature of market trends, the selection of particular certifications, employed under this output, will be made at the project inception based on a crop-specific strategy development process, including a market suitability analysis. Additional certifications may be considered at that stage.
38. Building on these crop-specific and certification opportunities in each province, the project will first form an inter-value chain committee to develop a roadmap at the provincial level to match the target crop with the most timely and relevant certification(s) for promoting high-value and climate-resilient agriculture. Based on the roadmap, the project will support ACs, FAs, PGs, CPAs, CFs, and agricultural unions in developing and implementing crop-specific and climate-resilient business plans. This will be combined with training beneficiary farmers and other local

value chain actors to develop their financial and business literacy and entrepreneurial skills and extension providers to support the roadmap and business plans implementation. The project will also build direct partnerships with champion SMEs and traders/exporters to expedite the transformation process. Also, add-on guidelines and tools will be developed to ensure that the chosen certifications consider climate risks and impacts adequately.

39. Activities will include :

Activities under Output 2.1. (See Section E.6. for sub-activity-level details)

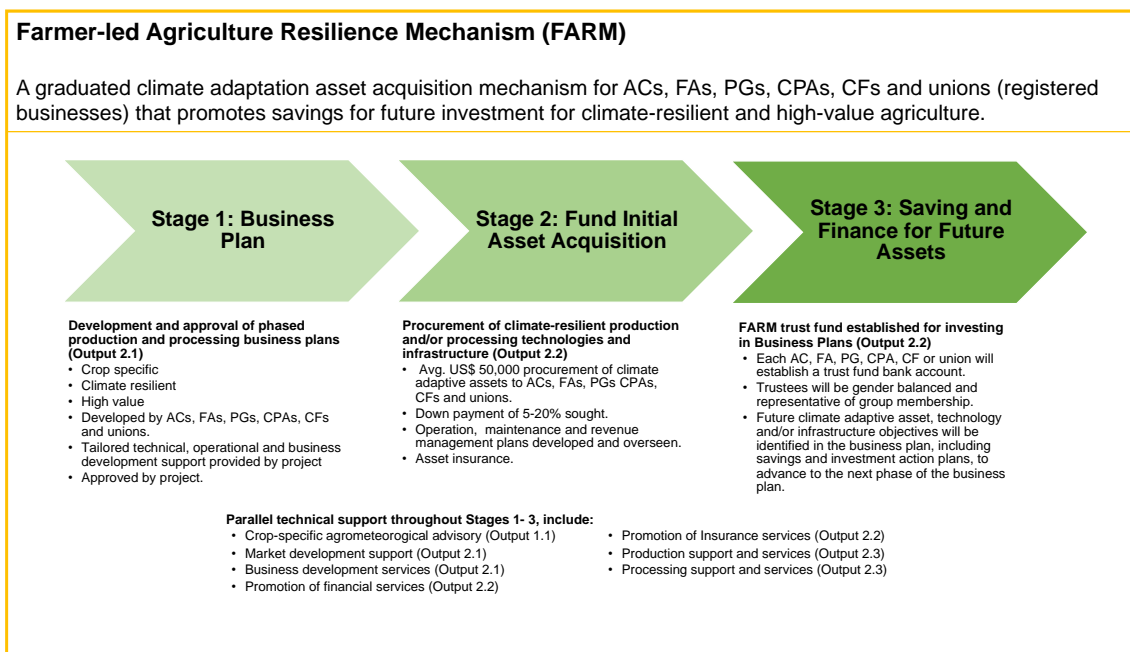
40. Building on these crop-specific and certification opportunities in each province, the project will first form an inter-value chain committee to develop a roadmap at the provincial level to match the target crop with the most timely and relevant certification(s) for promoting high-value and climate-resilient agriculture. Based on the roadmap, the project will support ACs, FAs, PGs, CPAs, CFs, and agricultural unions in developing and implementing crop-specific and climate-resilient business plans. This will be combined with training beneficiary farmers and other local value chain actors to develop their financial and business literacy and entrepreneurial skills and extension providers to support the roadmap and business plans implementation. The project will also build direct partnerships with champion SMEs and traders/exporters to expedite the transformation process. Also, add-on guidelines and tools will be developed to ensure that the chosen certifications consider climate risks and impacts adequately.
41. Activity 2.1.1: Develop and operationalize inter-value-chain-actors roadmaps at the provincial level and action/business plans for climate-resilient, inclusive and gender-responsive premium value chain development and identify specific certification programs as key vehicles.
42. Activity 2.1.2: Develop voluntary add-on supplementary guidelines, tools, and training materials to consider specific climate risks and strategies for the certification programs identified under Activity 2.1.1. (e.g., CamGap, GI and organic for production, and ISO 2200 and HACCP for processing) for the target value chains (linking to Activity 3.1.1. on PLR and institutional arrangements concerning these certification programs).

Output 2.2: Access to finance and technologies for climate-resilient agriculture and value chain development improved among smallholder farmers and other local value chain actors, particularly women farmers and value chain actors.

43. Under FARM, each beneficiary group will establish a FARM Trust Fund account with a local financial institution. The project will seek a partner financial institution(s) for making FARM Trust Fund arrangements with individual beneficiary groups. The repayments made by each beneficiary group will be held in its FARM Trust Fund. A board of trustees will serve every FARM Trust Fund to oversee fund disbursements. As shown in Figure 5, the disbursements will be used to advance

the implementation of their climate-resilient and crop-specific business plans. Disbursement decisions will be made based on quality control/screening criteria established by the PEARL project, including climate resilience, high-value agriculture, gender responsiveness, and equity, to ensure funds would directly support climate change adaptation and related efforts. The beneficiary groups may also use the FARM Trust Funds as collateral to access standard micro-finance and agricultural loan products. The project will also ensure that the FARM and business plan implementation complements Commune Development and Investment Plans (CDPs and CIPs) to support climate resilience building at the local level and leverage increased public spending and private investment.

Figure 2: FARM Stages



44. In addition, the PEARL project will work with the country's leading insurance providers (e.g., Forte Insurance) and National Agricultural Insurance Program, led by MAFF, to explore additional risk insurance options, particularly for cashew, mango, and vegetable producers and related local value chain actors. They currently do not have many opportunities to protect themselves from perils. The project will also increase the beneficiaries' awareness of the available financial support products to improve their financial access.
45. Activity 2.2.1: Establish an innovative financial mechanism, FARM, for ACs, FAs, PGs, CPAs, CFs, and agricultural unions to assist their members' transition to climate-resilient and high-value agriculture in an inclusive and gender-responsive manner.
46. Activity 2.2.2: Assess the feasibility of developing additional risk finance options for cashew, mango, and vegetable producers, particularly women farmers.

47. Activity 2.2.3: Raise awareness of available financial support products and services systematically among smallholder farmers and local value chain actors, particularly women farmers and value chain actors.

Output 2.3: Awareness and knowledge of climate-resilient and sustainable, high-value agriculture increased among farmers and other local value chain actors, particularly women farmers and value chain actors.

48. Table 6 shows the crop-specific adaptive measures, which are further described in Annex 2 and the climate rationale study (cite FAO's analysis). Under this output, the PEARL project will promote these measures in conjunction with the improved agrometeorological advisory services and risk awareness among the beneficiaries under Output 1.1. Many of these measures demonstrated under this output will be fully operationalized as part of business plans under Output 2.1 and financed by the FARM under Output 2.2.

Table 1: Crop-specific Climate-Resilient and High-value Measures

STAGE	RECOMMENDED CLIMATE ADAPTIVE/ RESILIENT MEASURES (non-comprehensive list)			
	ORGANIC RICE	CASHEW	MANGO	LEAFY VEGETABLES
Soil Preparation/ Land Management	<ul style="list-style-type: none"> • Provide accurate and timely weather services before rain events. • Promote minimum soil disturbance practice, minimum tillage, introduction of leguminous crop cover, etc. • Promote laser land levelling where appropriate to reduce water requirements. 	<ul style="list-style-type: none"> • Support CF/CPA management planning to restore primary and secondary forest cover, mixed with sub-sections for agroforestry, agriculture, and other livelihood activities (e.g., NTFPs, apiculture, tourism). • Prevent unsustainable expansion into forested areas. • Most suitable intercropping and cropping schedule methods (e.g., with peanut). 	<ul style="list-style-type: none"> • Support CF/CPA management planning to restore primary and secondary forest cover, mixed with sub-sections for agroforestry, agriculture, and other livelihood activities (e.g., NTFPs, apiculture, tourism). • Prevent unsustainable expansion into forested areas. • Promote climate-informed expansion to reduce flash flooding and landslide risks. 	<ul style="list-style-type: none"> • Promote horticultural operations (e.g., mulching to reduce evaporation, raised beds) to reduce soil moisture loss and flood damage.
Seeds/Variety & Seeding	<ul style="list-style-type: none"> • Promote quality seed supply and seed testing. • Provide crop-specific agro-met information (e.g., climate-informed crop calendar). • Promote stress-tolerance, early maturing, shorter-duration (fragrant) varieties. • Promote mechanization - sowing and transplanting and elements of System of Rice Intensification. 	<ul style="list-style-type: none"> • Promote local varieties that are more resistant to droughts, pests, and diseases. 	<ul style="list-style-type: none"> • Support water management and micro-irrigation infrastructure for nurseries. 	<ul style="list-style-type: none"> • Support production, dissemination, and awareness of climate-resilient seeds/varieties.

<p style="text-align: center;">Production/ Flowering/ Fruiting</p>	<p><u>Wet Season</u></p> <ul style="list-style-type: none"> Invest in broader uptake of water-saving techniques and information on timing of irrigation Support cultivation of short-cycle varieties in the eastern and northern parts (e.g., Preah Vihear). <p><u>Dry Season (optional)</u></p> <ul style="list-style-type: none"> Invest in irrigation needs of dry season rice producers, including advisory support for farmers to grow dry season rice. Develop tailored water use and management advisories linked to agro-met information. 	<p><u>Flowering</u></p> <ul style="list-style-type: none"> Tailor climate services based on calendar and sensitive periods to prevent damage. Develop farm-level training/farmer field school (FSS) on managing pest and disease on mango production (i.e., IPM), incorporating traditional knowledge. 	<p><u>Flowering</u></p> <ul style="list-style-type: none"> Develop farm-level training/farmer field school (FSS) on managing pest and disease on mango production (i.e., IPM). Tailor climate services based on calendar and sensitive periods to prevent damage. <p><u>Fruiting</u></p> <ul style="list-style-type: none"> Tailor climate services based on calendar and sensitive periods to prevent damage. 	<ul style="list-style-type: none"> Promote year-round production based on Aqua-Crop simulations to increase yields and address seasonality issues. Apply salt models for estimating the effect of salinity on plant growth. Promote short-cycle varieties to reduce heat stress at key phenological phases and minimize crop water requirements. Promote agroforestry systems to reduce evaporation from direct sunlight and decrease air and soil surface temperature. Promote shade houses to minimize heat stress.
<p style="text-align: center;">Inputs</p>	<ul style="list-style-type: none"> Strengthen agricultural extension capacity for providing coherent and relevant guidance and training to farmers. Provide fertilizer advisory based on soil type. Increase production capacity, access to and use of appropriate fertilizers, including organic. Increase governance capacity, including quality control, of ACs and unions to ensure enabling conditions for climate-resilient and sustainable practice uptake. 	<ul style="list-style-type: none"> Strengthen agricultural extension capacity for providing coherent and relevant guidance and training to farmers (e.g., appropriate agrochemical application). Establish a public-private sector coordination mechanism to promote controlled agrochemical product labelling appropriate and minimal agrochemical application. 	<ul style="list-style-type: none"> Strengthen agricultural extension capacity for providing coherent and relevant guidance and training to farmers (e.g., appropriate agrochemical application). Establish a public-private sector coordination mechanism to promote controlled agrochemical product labelling appropriate and minimal agrochemical application. 	<ul style="list-style-type: none"> Strengthen agricultural extension capacity for providing coherent and relevant guidance and training to farmers (e.g., appropriate agrochemical application). Increase organic fertilizer production capacity and access, including bio-digesters Establish a public-private sector coordination mechanism to promote controlled agrochemical product labelling appropriate and minimal agrochemical application.

Pest Control	<ul style="list-style-type: none"> • Invest in modelling and R&D of rice pest and diseases to improve understanding of spatial distribution of risks. • Promote IPM linked to provision of tailored agro-met services. • Improve tailored pest and disease warnings and advisories. 	<ul style="list-style-type: none"> • Improve research and data collection on key pest and diseases on cashew production to develop tailored IPM measures. • Strengthen extension services to promote IPM, climate-informed practices, and risk management using agro-met services. • Promote local “traditional” varieties that are resilient to pests and diseases. • Improve tailored pest and disease warnings and advisories. • Use of herbicide alternatives such as stylo grass as cattle fodder. 	<ul style="list-style-type: none"> • Improve research and data collection on key pest and diseases on cashew production to develop tailored IPM measures. • Strengthen extension services to promote IPM, climate-informed practices, and risk management using agro-met services. • Improve tailored pest and disease warnings and advisories. • Use of herbicide alternatives such as stylo grass as cattle fodder. 	<ul style="list-style-type: none"> • Strengthen extension services to promote IPM, climate-informed practices, and risk management using agro-met services. • Improve tailored pest and disease warnings and advisories. • Promote control measures, including long rotation of crops, draining soil, mechanical control, and weed management.
Irrigation	<ul style="list-style-type: none"> • Establish IWM mechanisms to improve water availability and pollution control. • Improve water conservation/ management practices, including use of soil moisture sensors and dry season irrigation options. • Promote fixed-water supply to reduce water losses from direct evaporation. 	<ul style="list-style-type: none"> • Establish IWM mechanisms to improve water availability and pollution control. • Develop natural canal and pond networks. • Monitor water flow and quality and crop water requirements to provide tailored agro-met advisories. • Promote climate-smart irrigation systems and schedules to optimize water resources. 	<ul style="list-style-type: none"> • Promote smart irrigation systems (e.g., drip irrigation and ponds) and schedules to optimize water resources. • Monitor crop water requirements to provide tailored agro-met advisories. 	<ul style="list-style-type: none"> • Develop crop-water models based on AquaCrop simulations to provide tailored agro-met advisories. • Promote low-cost drip irrigation and water storage (e.g., ponds, gravity water tanks) systems.
Harvest	<ul style="list-style-type: none"> • Promote immediate drying after harvest. • Invest in energy-efficient drying facilities. • Increase knowledge of temperature and humidity control measures. 	<ul style="list-style-type: none"> • Provide tailored climate services and early warning systems to inform farmers’ decision to harvest with appropriate timing and methods • Promote immediate drying after harvesting. 	<ul style="list-style-type: none"> • Provide tailored climate services and early warning systems to inform farmers’ decisions to harvest with appropriate timing and methods. • Invest in immediate cold storage capacity. 	<ul style="list-style-type: none"> • Promote early morning harvesting to avoid heat stress and UV light. • Promote the use of bamboo crates and wet cloth covers to minimize water loss.

Post-harvest Storage, Milling, and Processing	<ul style="list-style-type: none"> • Invest in AC and union-level energy-efficient storage facilities (renewable energy sources). • Raise awareness about increased price negotiation power through storage. • Increase knowledge and use of temperature and humidity sensor systems (e.g., ITCs). • Store in aseptic and hermetic bags. • Climate-proof rice storage and processing facilities. 	<ul style="list-style-type: none"> • Promote storing nuts in jute bags to decrease mould. • Increase awareness of optimum thermal processing and storage techniques. • Increase use of fan, dehumidifiers, and ventilators to reduce storage loss. • Increase knowledge and use of temperature and humidity sensor systems (e.g., ITCs). • Promote better use of by-products. 	<ul style="list-style-type: none"> • Invest in post-harvest treatment capacity such as hot water treatment to reduce loss and meet international standards. • Promote quality control and certificated processing measures. • Increase knowledge and use of temperature and humidity sensor systems (e.g., ITCs). • Invest in sustainable and transport damage-proof packaging. 	<ul style="list-style-type: none"> • Invest in energy-efficient cold storage capacity and post-harvest technologies at AC and union levels (e.g., solar-powered storage facilities, cool-bot equipped cool rooms). • Promote best transport practices (e.g., cold chain capacity).
Markets	<ul style="list-style-type: none"> • Market information available as part of services for farmers • Support adoption of CamGAP, GI, organic certification, including Ibis Rice, and other appropriate value-adding certifications. • Establish a close link between target certifications and climate resilience for further value addition. • Build PSPPs to increase collaboration and coordination across value chains. • Raise awareness of climate-resilient and high-value products and their benefits among buyers, exporters, and consumers. • Promote contract farming and direct purchase agreements for increased demand and supply. • Invest in labelling and traceability capacity. 			

49. Activity 2.3.1: Develop a clearinghouse system, consolidating existing knowledge systems, for harmonized knowledge management and systematic dissemination of lessons learned and best practices in climate-resilient, inclusive, gender-responsive, and high-value agriculture for supporting the implementation of the roadmaps and action plans under Activity 2.1.1, and for raising awareness of the practices and technologies under Activity 2.3.2 and associated economic and social benefits.
50. Activity 2.3.2: Provide horizontally and vertically harmonized and targeted extension services, linking the provincial, district, commune, and village levels and public and private extension providers, to promote the adoption of climate-resilient, inclusive, gender-responsive, and high-value practices and technologies relevant for the implementation of roadmaps and action plans developed under Activity 2.1.1 and financed under Activity 2.2.1.

Output 2.4: Upper watershed areas restored and protected to increase agroecological functions for downstream farming activities in the target areas.

51. The PEARL project focuses its activities under this output to support CPAs and CFs in restoring and protecting 7,600 ha of critical catchment forests and other ecologically sensitive riparian zones in the upper watersheds through IWM and agroforestry interventions. The above study's key guidelines and area estimates were adopted to analyse and identify potential CPAs and CFs to engage in the restoration work under the PEARL project.

52. During project formulation, a study was conducted to identify target CPAs and CFs for PEARL restoration interventions. The study report (Seak, 2022) identifies and recommends 14 CPAs and 6 CFs. A large group of these communities is located within the catchment areas of the Stung Sen River, where their catchment restoration and protection activities have a significant bearing on downstream rice-growing regions in Preah Vihear and Kampong Thom provinces.
53. Other CPAs and CFs are located near the Kulen National Park in Siem Reap and Sang Rokha Vorn Wildlife Sanctuary in Oddar Meanchey. The report recommends the PEARL project to support these CPAs and CFs in designing and implementing restoration and protection activities to improve their livelihood options to achieve the restoration target.
54. Activity 2.4.1: Restore and protect critical forest catchments in upper watershed areas where the target crops are produced (this activity will build directly on and extend the existing conservation and catchment protection efforts by MoE, WCS and others).

Outcome 3: Enabling conditions for climate-resilient agriculture are ensured through a coherent and robust policy, legal and institutional framework

55. This component will support the delivery of Components 1 and 2 by ensuring enabling conditions through a conducive regulatory and institutional framework. Through this component, an effective vertical and horizontal integration of efforts and best practices across relevant sectors, stakeholder groups, and levels of government will be ensured to support the project in meeting its objective

Output 3.1: Regulatory and institutional arrangements and capacity relevant to developing certification-based value chains strengthened to provide enabling conditions for adopting climate-resilient, high-value and sustainable agriculture and food security.

56. Institutional support and coordination efforts and mechanisms for supporting the market-based transition of smallholder farmers and other local value chain actors to climate-resilient and high-value agriculture are currently limited. Enabling regulatory and institutional conditions must be ensured to deploy the climate-resilience of the certification standards targeted by the project to achieve its goal. A systematic approach to promoting inclusive and gender-responsive financial access for smallholder farmers and other local value chain actors without collateral or guarantor is necessary to complement FARM under Output 2.2 to accelerate their transition. The PEARL project will also improve public-private partnerships, which are currently limited, and intersectoral coordination mechanisms to support the transition to climate-resilient agriculture.
57. Under this output, the PEARL project will directly assist with the GCF accreditation of ARDB as it will play an essential coordination role for Activity 3.1.2 to design and operationalize a scorecard system for the agricultural finance sector. Upon being accredited by the GCF, the ARDB is expected to build on the scorecard system

to develop a complementary GCF project for scaling up low-cost agricultural finance to support Cambodia's accelerated transition to climate-resilient agriculture.

58. The joint leadership of MAFF and MOE with technical support from FAO Cambodia. Concerning agricultural finance, the ARDB will play a coordinating role.
59. Activity 3.1.1: Upgrade/establish an enabling regulatory and institutional framework for the climate-proofed certification programs under Activity 2.1.2. to operate effectively.
60. Activity 3.1.2: Demonstrate a harmonized sectoral approach to climate-resilient, inclusive, and gender-responsive finance to complement Activity 2.2.1 for rolling out the innovative financial mechanism and low-interest loan program.
61. Activity 3.1.3: Ensure enabling conditions for effective PSPPs and cross-sectoral coordination at national and sub-national levels.

Output 3.2: Gender-responsive landscape-level agroecology monitoring system (LAMS) developed to crowd in public and private investments in climate-resilient, high-value and sustainable agriculture.

62. A systematic approach and process to enable strategic investment by the public and private sectors into climate-resilient and high-value agriculture in a strategic and structured manner are currently absent. This hinders a clear understanding and monitoring of capacity gaps and climate finance investment needs, thus limiting the country's ability to direct public spending and private sector investment into creating bankable projects to ensure incremental outcomes. The PEARL project will establish an integrated decision-support tool for systematically monitoring climate risks and suitability shifts, linking to Output 1.1 and identifying investment gaps and opportunities, and monitoring progress to increase public and private investment. This tool will also support the country's effort towards developing and operationalizing an Enhanced Transparency Framework (ETF) under the Paris Agreement.
63. Activity 3.2.1: Establish a gender-responsive landscape-level agroecology monitoring system (LAMS) with an interactive web platform.
64. Activity 3.2.2: Promote the use of LAMS in public and private investment decision-making, monitoring, and reporting.

2.2 Project location

65. NTSB is defined as the areas north of the Tonle Sap Lake, including Oddar Meanchey, Kampong Thom, Preah Vihear, and Siem Reap provinces. The region is home to about 15% of the country's population. It encompasses a total land area of 2.5 million hectares with evergreen and deciduous forests, covering hilly areas in the north, vast swaths of cropland in the middle (mainly for rice production) and flooded forests and grassland areas along the Tonle Sap Lake in the south (see Annex 16 -maps). The average annual rainfall in the region varies from 1000 to 1500 mm. There are ten main soil types and five main watersheds, including Stung Sen

and Stung Staung, vital sources of water for rice production and livelihoods in the region (Oeurng et al., 2019). Over 20% of the country's aromatic rice production, among others such as cassava (35%) and sugarcane (27%), comes from this region (NIS, 2019).

Table 2: Overview of the key crops in the NTSB

Alternative Crop/ Area Grown	Opportunities	Challenges
Cashew/ Kampong Thom and Preah Vihear	<ul style="list-style-type: none"> • Most cashew farmers grow a variety called M23, which gives a higher yield and market value than traditional varieties. • Most mango farmers grow a variety called Keo Romeat, which is well regarded for its quality. 	<ul style="list-style-type: none"> • Moderate use of pesticides with insufficient control measures. • Most smallholder farmers, agricultural cooperatives (ACs), and farmers associations (FAs) and producer groups (PGs) sell to wholesale buyers with limited value addition opportunities.
Mango/ Oddar Meanchey	<ul style="list-style-type: none"> • Premium price markets exist for quality-controlled products. • Growing market trends offer opportunities to access premium price markets by adopting relevant international quality and production standards. • Perennial nature provides agroforestry potential for rural livelihood diversification, increased fuelwood supply, forest conservation, mitigation, and catchment protection. 	<ul style="list-style-type: none"> • Lower profit margins give little incentive for adopting climate-resilient and sustainable practices, including integrated pest management (IPM). • Smallholder farmers, ACs, FAs, PGs and other local value chain actors lack the necessary resources to access higher-value markets.
Organic Rice/ Preah Vihear	<ul style="list-style-type: none"> • Combination of labour shortages, increased climate variability and market trends have encouraged farmers to adopt the production of short-duration aromatic rice (key organic rice segment), shifting from longer duration non-aromatic rice. • Price gain through organic production could offset the anticipated decline in yield for farmers in these remote hilly areas. • Organic rice in Preah Vihear is certified in the US and EU markets, and further value addition opportunity through GI. • Topography keeps paddy fields small and fragmented with natural buffers to maintain rich agroecosystems. 	<ul style="list-style-type: none"> • Lack of favourable contract farming and direct market access opportunities. • Limited access to finance and quality supplies and extension services. • Lack of IWM to ensure water quality and availability at the landscape level. • Limited integration of agrometeorological and market advisory services to optimize production.
Leafy Vegetables/ Siem Reap and Preah Vihear	<ul style="list-style-type: none"> • Several champion vegetable farmers networks³ with expanding access to local markets (retailers, hotels, and restaurants) in Siem Reap and Phnom Penh. • Growing demand for safe and sustainably produced vegetables offers higher prices. • Horticultural innovations enable climate-resilient production for income generation and household consumption. 	<ul style="list-style-type: none"> • Lack of resources (knowledge, finance, and technologies) to increase product varieties and quality and overcome seasonality.

³ Champion farmers have extensive experience in farming and mastered the knowledge and skills, and diffused them to other farmers.

2.3 Project beneficiaries

66. The beneficiaries of the PEARL project are smallholder farmers and other local value chain actors, including ID poor farmers, women, and other minority groups, in the target areas of the NTSB and private sector actors involved in the target value chains. The beneficiaries are categorized into two groups– direct and indirect.
67. Direct beneficiaries are mainly the members of ACs, FAs, PGs, CPAs, CFs, and unions that the project directly targets in the 24 districts (see the maps in Annex 16) to improve their access to crop-specific agrometeorological information, markets, knowledge, finance, climate-resilient and high-value technologies, restored ecosystem services in upper catchment areas, and improved downstream agroecology. Other direct beneficiaries include a broader range of farmers and other local value chain actors in the target areas and their vicinity who will benefit from improved agrometeorological information, trainings/extension services and other last mile services.
- 135,000 smallholder farmers and other local value chain actors with the improved market and financial access and accelerated support for adopting climate-resilient and high-value practices and technologies;
 - 450,000 farmers with improved access to tailored agrometeorological advisory services to reduce agricultural loss due to climate change;
 - 50,000 downstream farmers with improved ecosystem services and agroecology and 20 CPAs/CFs with improved livelihood options through catchment restoration and protection.
68. Indirect beneficiaries include the general farming population in the NTSB, having access to improved access to agrometeorological information and increased exposure and awareness of alternative practices and technologies through various means, including peer-to-peer learning, extension services, social media platforms, and mobile apps. Also, private sector actors such as agricultural suppliers, collectors, traders/exporters, retailers, hoteliers, and restaurateurs who play critical roles in providing agricultural extension services, the development of market opportunities, and the promotion of climate-resilient and high-value practices, as well as consumers, will benefit from increased supply and sourcing capacities for climate-resilient and sustainable products and related investment opportunities.
69. More than 1 million farmers and other value chain actors in the NTSB

Note on Vulnerability and Exclusion

70. **Vulnerable groups** are defined as “...groups of people whose disadvantage is situational rather than structural. Their deprivations are as a result of a particular situation (in some cases only temporarily) that has reduced their ability to withstand shocks rather than their more deeply embedded social identity”.

71. Local communities, ecosystems and ecosystem services are expecting ever increasing exposure to climate change induced temperature rise and precipitation variability in entire country. The NTSB region is expected to be impacted by substantial crop loss and damage as well as biodiverse loss.
72. **Excluded groups** are defined as "...those who have experienced inter-generational discrimination and have been systematically excluded due to economic [situation], caste, ethnicity, gender, disability, sexual orientation, and geographical reasons". This includes groups including women, poor people, people with disabilities, third-gender and people living in remote areas. Women comprise 40% - 60% of the project beneficiaries.
73. Climate change will have a disproportionate adverse impact on these excluded communities, and thus it will be important that project activities empower and ensure the engagement of these particularly vulnerable groups. While all project beneficiaries can be considered vulnerable, the project has been designed to include activities which can be targeted to diverse beneficiaries, including excluded groups, to ensure that differentiated vulnerabilities, contexts, priorities and needs are taken into consideration to increase people's resilience and adaptive capacities.

74. The main project beneficiary will be local farmers and community-based organizations. In terms of direct beneficiaries, the project will target at least 135,000 small-holder farmers and other local value chain actors with improved financial access and accelerated support for adopting climate-resilient practices and technologies; and 450,000 farmers and indirectly more than 1 million farmers and other value chain actors. At least 40% - 60% of beneficiaries will be women, and the project will promote proportional representation of indigenous peoples and marginalized groups. The whole population of the PEARL project area will indirectly benefit from the project through the elaboration of a climate-resilient strategy for the PEARL area. In addition, local capacities will be built on climate-resilient land use planning and management, which will have a long-term impact to continue to build the resilience of communities within the NTSB region of Cambodia.

2.4 Project implementation arrangements⁴

75. The institutional framework for this project will engage a wide range of stakeholders, ensuring their sustained engagement from project design to implementation, to monitoring and evaluation (M&E) and is shown in Figure 3 below.
76. The PEARL project's proposed management and implementation arrangements are a direct result of ongoing discussions between FAO and relevant national authorities, including MAFF and MOE among others, and further feedback has been provided by provincial and local stakeholders in project consultations.
77. FAO will act as the GCF Accredited Entity (AE) to lead project preparation and appraisal, and oversee implementation, ensuring appropriate fiduciary, operational,

⁴Additional information on the institutional arrangements can be found in the Feasibility Study

and technical standards are adhered to, and monitoring and evaluation responsibilities are fulfilled. Building on its global leadership, country-specific expertise and long track record of supporting the RGC in agriculture, forestry, fisheries, and addressing climate change, FAO is best placed and has comparative advantage to play the AE role in designing and implementing the proposed project, as demonstrated by the NDA no-objection letter (Annex 1 of submission).

78. During the project implementation, the NDA will ensure effective coordination between the PEARL and another GCF-funded CAVS project, led by the ADB, as the two projects comprise integral components of Cambodia's harmonized response to climate change in the agriculture sector, guided by its NDC and CCCSP. Also, under this overarching framework of action, the MoE, the focal institution for the Global Environment Facility (GEF) together with FAO, ensures the complementarity of the PEARL and FAO-led LDCF projects to deliver extended results at the landscape level around the Tonle Sap Lake.

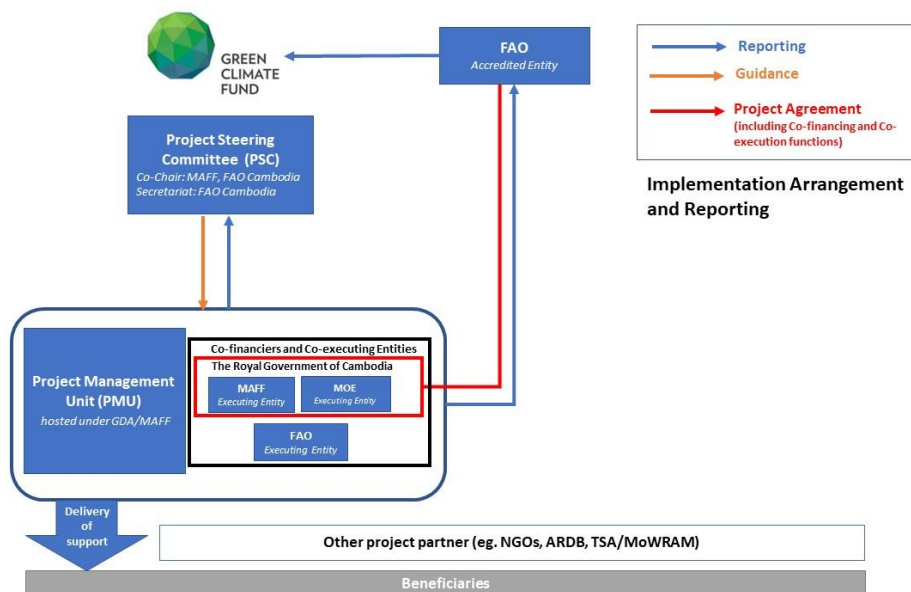
Executing Entities

79. The Executing Entities (EEs) will be the General Directorate of Agriculture within MAFF (GDA/MAFF), the General Directorate of Local Communities, which is within Cambodia's NDA to the GCF, MOE (GDLC/MOE), and the FAO Cambodia office. The project will also collaborate closely with the Ministry of Commerce (MoC), the Ministry of Water Resources and Agrometeorology (MoWRAM), the Agricultural and Rural Development Bank (ARDB), and the NGO partners (e.g., GRET, IRAM and WCS). These collaborating entities are referred to as Implementation Partners in this proposal as described below.
80. The Co-EEs (GDA/MAFF, and GDLC/MOE) have undergone independent assessments (i.e., HACT assessments) to determine their operational, fiduciary, and administrative capacities to manage the responsibilities. These HACT assessments revealed that the three EE partners proposed in the PEARL project all have sufficiently robust systems to serve as reliable partners for the implementation of the proposed activities.
81. As the government Co-EE with the largest share of the grant finance and the most activities to implement in the PEARL project, MAFF will also host the Project Management Unit (PMU), and will ensure support is delivered in close collaboration with key federal, provincial, and local entities. Because the PEARL project aims to work in rural areas these local level relationships are key to the effective delivery and sustainability of this project. All government ministries that are partners in the PEARL project have provincial offices, for instance the Provincial Department of Agriculture, Forests, and Fisheries (PDAFF). These provincial entities have both the local knowledge and the last-mile outreach capacity to effectively implement the relevant aspects of the PEARL project. Each project activity is "owned" by one of the project partners. A detailed breakdown at the sub-activity level and specific roles and responsibilities are presented in Section E.6 and Annex 4.

Implementation Partners

82. The project will also draw on the Implementation Partners (IPs) (i.e., MoWRAM, MoC, ARDB, NGO partners, and others). Such partners typically possess specialized expertise, knowledge, and mandates and can offer insights and services essential to achieving project results. In some cases, project-financed staff will consult and coordinate with the IPs to prepare and inform specific activities to be delivered under the project. In other instances, the IPs will be involved in the project through Letters of Agreement (LoAs) or contracts to provide specific services to the project and intended beneficiaries. Their roles and responsibilities are detailed in the budget plan (Annex 4 of the submission).

Figure 3. Project Implementation Arrangements



Source: Funding Proposal, Version March 2022.

Project Steering Committee

83. MAFF, as the main and largest national beneficiary entity of this project, will establish and co-chair a Project Steering Committee (PSC) with FAO. This committee will be comprised of representative members from relevant ministries, other implementation partners. The PSC will also invite representatives from relevant CSOs, the private sector, and academia as necessary to discuss thematic issues as well as partnership opportunities. The PSC’s main responsibility will be to provide strategic guidance and support coordination among government institutions, and will provide general oversight for the implementation of the project. The PSC will further be responsible for reviewing and approving annual work plans, budgets and progress reports, and providing strategic guidance for addressing risks and issues that could not be handled by the PMU alone. They will approve the Project Implementation Manual (PIM) and Project Reporting Guidelines (PRG), prepared by the PMU during the inception phase. PSC meetings will be held twice a year: prior to annual budget planning and after the closure of fiscal year.

Project Management Unit (PMU)

84. A PMU will be established at the GDA/MAFF. It will be managed by the Project Coordinator, who will be responsible for project implementation and coordination with all stakeholders. The PMU will be responsible for ensuring the implementation and monitoring of day-to-day activities through coordination with the EEs, the technical quality of the project outputs, effective stakeholder engagement, and safeguarding the project and its beneficiaries. The government counterpart to the Project Coordinator will be the Project Director, appointed by the GDA/MAFF.
85. As a high volume of procurement is anticipated in the PEARL project, in particular concerning the proposed FARM accounts set-up under Output 2.2, the PMU will be assisted by additional personnel in addition to the core PMU staff members to support its responsibility for initiating and completing all procurement cases in a timely fashion and providing assistance to the beneficiary groups in making repayments. Furthermore, there will also be a National Safeguard Specialist to lead the project's effort in mitigating negative social and environmental impacts while enhancing positive ones, including those on gender (see Annexes 6 and 8 of the project submission package).
86. The PMU will prepare an annual work plan and budget, including a procurement plan, which the PSC will review and approve. The PMU is also responsible for preparing an inception report, quarterly progress reports, annual performance reports, and expenditure reports, as indicated in Section E.7.
87. Project-recruited staff and staff seconded by the government will collectively comprise a project delivery team that will ensure sound and effective project implementation. The specific roles of critical members of this project delivery team are described in Table 8.

Multi-stakeholder Coordination Units

88. Multi-stakeholder coordination will be established under Output 3.1. Institutional support and coordination efforts and mechanisms for supporting the market-based transition of smallholder farmers and other local value chain actors to climate-resilient and high-value agriculture are currently limited. Enabling regulatory and institutional conditions must be ensured to deploy the climate-resilience of the certification standards targeted by the project to achieve its goal. A systematic approach to promoting inclusive and gender-responsive financial access for smallholder farmers and other local value chain actors without collateral or guarantor is necessary to complement FARM under Output 2.2 to accelerate their transition. The PEARL project will also improve public-private partnerships, which are currently limited, and intersectoral coordination mechanisms to support the transition to climate-resilient agriculture. Under this output, the PEARL project will directly assist with the GCF accreditation of ARDB as it will play an essential coordination role for Activity 3.1.2 to design and operationalize a scorecard system for the agricultural finance sector. Upon being accredited by the GCF, the ARDB is expected to build on the scorecard system to develop a complementary GCF project for scaling up low-cost agricultural finance to support Cambodia's accelerated transition to climate-resilient agriculture.

89. Stakeholder coordination and engagement is also addressed in the project risk management framework. While having the SPC with members from the critical sectoral ministries, NGOs, and private sector at the project oversight level ensures effective coordination and collaboration between these actors, the project will include specific activities to mitigate this risk, including:
- Intersectoral capacity building (e.g., training and awareness-raising) activities at the national and sub-national levels to reduce sector based siloed thinking and practices;
 - Data-sharing agreements (i.e., Activities 1.1.2 and 3.2.1) and MoUs (i.e., Activity 3.1.2) to establish formal coordination and collaboration mechanisms; and
 - Activity 3.1.3 to promote improved intersectoral coordination through NCSD, NCDD, and provincial forums.
90. In coordination with the NDA and the existing workstreams of the EEs and private sector collaborators, FAO will keep all potential beneficiary groups updated between the project submission and inception and monitor changes in market trends, opportunities, and baseline capacities and conditions. During and after the inception, the project will continue to ensure effective two-way communications with beneficiary groups to ensure their interests and needs are well reflected in the project activities for effective stakeholder engagement.

3 ENVIRONMENTAL AND SOCIO-ECONOMIC BASELINE CONDITIONS

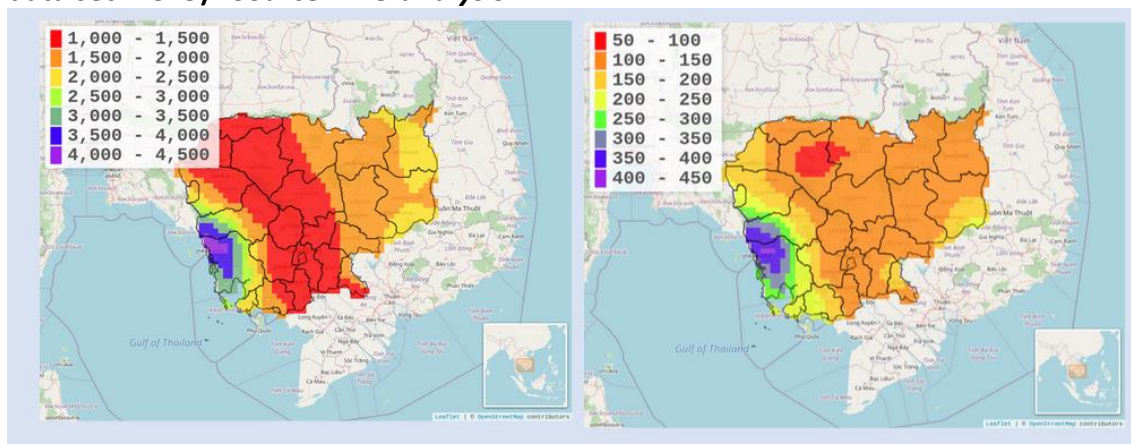
3.1 Environmental conditions

91. The project area in the NTSB region in the Lower Mekong catchment.

3.1.1 Climate

92. In Cambodia, the rainy season, which lasts from May to early October (Figure 4), accounts for 90% of annual precipitation in the basin. The dry season, from November to April, brings drier and cooler air from November to March, and then hotter air in April and early May. The maximum mean temperature in Cambodia is about 28°C and the minimum mean temperature is about 22°C. These trends of warmer temperatures and drier climate are primarily caused by the El Niño Southern Oscillation, whereas colder temperatures are influenced by La Niña events (GFDRR, 2011). FAO's analysis of CORDEX data over the period 1987-2016 shows the average temperature maximum and temperature minimum (Figure 8) across Cambodia.

Figure 4. Total average precipitation (cumulative mm) over rainy season May-October (left) and from Jan-April (right) averaged over period 1989-2016 (from re-analysis data set W5E5). Source: FAO analysis.



Temperature

93. Historical mean annual temperature in Cambodia over the period 1901-2016 is 27°C. This average increased by 0.8°C from 1960 to 2003, particularly in the drier season. However, the rate of increase is slower in the wet season (World Bank Group, 2020). The number of hot days per year (Temperature maximum >35°C y-1) has increased since 1960, reaching an average of 46 hot days by 2016. Mean annual rainfall varies depending on the region, with 1400 mm in the centre and up to 4000 mm in the south-west coast and in “highland areas” (Thoeun, 2015). At a national level, significant changes in annual average precipitation rates have not

been detected from 1901 to 2016, as a result of high frequency and intensity variability which obscure the overall trend (World Bank Group, 2020). However, analysis suggests that the length of the rainy season has decreased over the last century (FAO, 2022).

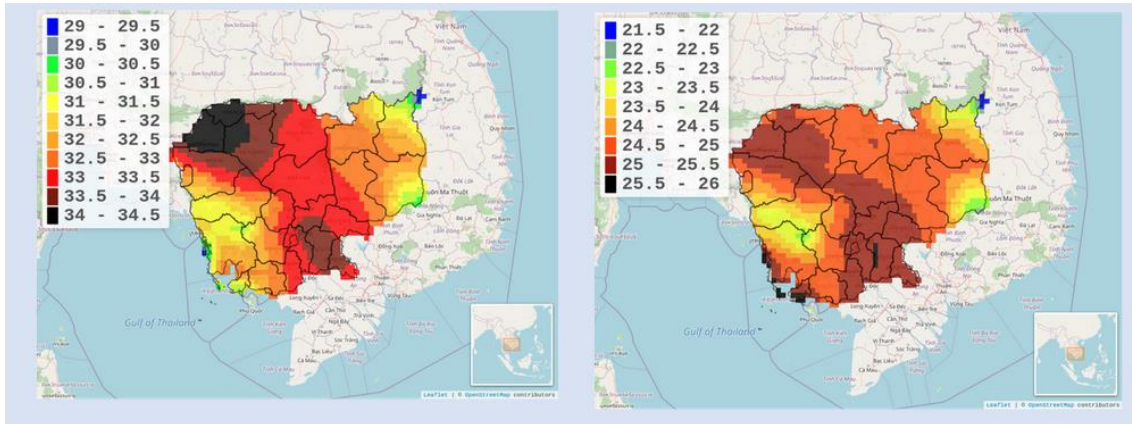


Figure 5: Average temperature maximum (left) and temperature minimum (right) during the rainy season May-October over the period 1987-2016 from the reanalysis dataset W5E5. Source: FAO analysis.

94. The incidence of extreme weather events such as droughts and floods vary geographically throughout the country. The central plains experience seasonal flooding, bringing fertile alluvium soils and majority of water in this region. The frequency of severe floods has increased over the historical period since 1990. Severe floods are documented in the years 1991, 1996, 2000, 2001, 2002 and 2011 (NCDM, 2011). However, floods in Cambodia are not strictly linked to high rainfall, and are often driven by high water levels in the Mekong River and Tonle Sap Lake between early July and early October.
95. Based on data from the past 20 years, losses in rice production were mainly due to flooding (about 62%) and drought (about 36%). During the dry season, rice cultivation is concentrated in the areas with better water availability, in Lower Mekong River basins and around the Tonle Sap Lake.
96. Drought in Cambodia is strongly correlated with El Nino, for example, during the 2015/2016 El Nino event, one of the worst droughts for Southeast Asia in decades, 2.4 million people across 18 provinces in Cambodia were impacted. According to the joint assessment of 2400 households by WFP, FAO and UNICEF in May 2016, 37% of the households reported water shortages; 18% of agricultural households experienced crop failures; household paddy and cassava production declined by 22%; animal morbidity and mortality rates were high especially for poultry; 62% of households reported income loss. Agricultural growth experiences a large dip during the period (Figure 10).

Soils and Geology

97. The average annual rainfall in the region varies from 1000 to 1500 mm. There are 10 main soil types and 5 main watersheds, including Stung Sen and Stung Staung that are vital sources of water for rice production and livelihoods the region

(Oeurng et al., 2019). Over 20% of the country's aromatic rice production, among others such as cassava (35%) and sugarcane (27%), comes from this region (NIS, 2019).

3.1.2 Land use

98. Over 20% of Cambodia's aromatic rice production, among others such as cassava (35%) and sugarcane (27%), comes from the project region (NIS, 2019).
99. The average annual rainfall in the region varies from 1000 to 1500 mm. There are 10 main soil types and 5 main watersheds, including Stung Sen and Stung Staung that are vital sources of water for rice production and livelihoods the region (Oeurng et al., 2019). Over 20% of the country's aromatic rice production, among others such as cassava (35%) and sugarcane (27%), comes from this region (NIS, 2019).
100. Among the main crops produced in Cambodia, rice is the staple and single most important crop in the country, providing nearly 70% of nutritional needs and accounts for almost 80% of Cambodia's crop production (MoE, 2015a; MAFF, 2017). Rice production accounts for nearly 15% of the country's Gross Domestic Product (GDP) and occupies nearly 75% of the total cultivated land area (IFC, 2015). The agricultural expansion, supporting the country's economic growth in the past decades, has also come at the cost of environmental degradation, mainly through deforestation to make way for crop production, particularly for cash crops like cassava.
101. Agriculture is also one of the main drivers of deforestation and forest degradation through encroachment and converting forests into cropland, as described in the National REDD+ Strategy (2017). The issue of deforestation and forest degradation is particularly pronounced in the NTSB due to rapid changes in land use for agricultural expansion through economic land concessions (ELCs) (Forest Trends, 2015).

3.1.3 Biodiversity, environment and forests:

Environmental Conservation and Agriculture

102. The National Biodiversity Strategy and Action Plan (NBSAP) (2016) underscores the uniquely important role of agriculture in the maintenance and restoration of ecosystem services and biological diversity. Agriculture is described as one of the critical vehicles for promoting biodiversity conservation and ecosystems restoration and addressing factors that lead to habitat loss and degradation (ibid.). Agriculture is also one of the main drivers of deforestation and forest degradation through encroachment and converting forests into cropland, as described in the National REDD+ Strategy (2017). The issue of deforestation and forest degradation is particularly pronounced in the NTSB due to rapid changes in land use for agricultural expansion through economic land concessions (ELCs) (Forest Trends, 2015).
103. Given the sector's critical role in the country's economy, actions within the sector require careful consideration, as they have a significant bearing on the sector's ecological sustainability and the socio-economic wellbeing of rural populations, both of which are necessary enabling conditions for successfully adapting the sector to climate change (NCSA, 2016; RGC, 2018c). From this perspective, both the

Agricultural Sector Strategic Development Plan (ASDP) (2015) and CCPAP-AFF call for actions to promote low emission agriculture through sustainable natural resources management at both on-farm and landscape levels and adopt climate-smart practices across value chains to reduce the vulnerability of the country's food systems and rural agricultural communities.

104. Such strategic directions, however, face a number of challenges on the ground. The Law on the Management of Pesticides and Fertilizers (2012) is meant to regulate agrochemicals and ensures that all farmers have access to quality pesticides and fertilizers with labels and instructions in the Khmer language. Nonetheless, counterfeit and poor quality agrochemical products with the labelling and instructions provided in foreign languages flood the market, and neither farmers nor sellers are trained to use these products (Duong and Khin, 2016). This highlights not only the issue of enforcement but also challenges the country face in ensuring intersectoral coordination, for instance, to tighten the import licensing and customs procedures to increase control (ibid.). Furthermore, elevated efforts to institutionalize the National IPM Program and CamGAP across the food systems are needed to increase farmers' and local suppliers' awareness and knowledge of appropriate agrochemical application (e.g., 4Rs -right source, rate, time and place) and agroecological and market benefits of alternative practices such as organic production.
105. In order to build a successful model for climate-resilient and sustainable agriculture, increased efforts and commitments at all levels are needed to improve public awareness, increase public and private investment and technology transfer, and strengthen law enforcement and institutional coordination across the government.

3.1.4 Water resources

106. Drought in Cambodia occurs regularly and is driven by extended dry periods and the level of water resources in the terrestrial water bodies. The frequency of drought varies from province to province with many parts of the NTSB significantly affected according to the drought vulnerability index (Rai et al., 2015).
107. For instance, in Kampong Thom, the 3-month SPEI (standardized precipitation evapotranspiration index) shows an increasing trend over the last 15 years, but very severe droughts continue to occur periodically in recent years. The SPEI takes into account both precipitation and potential evapotranspiration, therefore capturing the impact of increased temperatures on water demand than a simple precipitation index in its estimation of drought. During the 2019 drought, water shortage was reported for most of the provinces cultivating dry season rice.
108. The major rice growing areas of the Mekong-Tonle Sap basin are exposed to flooding every year but in recent years have often been exposed to extreme flooding. Generally, floods in Cambodia are not entirely a local climatic problem as the water level is highly affected by the hydrology in the entire Mekong River Basin. Extended periods of flooding in the Mekong River and Tonle Sap Lake have ruined many deep-water rice crops. In La-Nina years, up to one-fifth of the total cultivation area (0.5 million hectares (ha)) of wet season rice has suffered from flooding.

In agriculture areas where temporary flooding occurs, floods result in severe challenges for germination for some direct-seeded rice and most upland crops, including legumes.

109. From 2000 to 2019, on average, 4.1% and 5.2% of the total rice-cultivated land were affected by drought and flood in the four NTSB provinces, corresponding to about 6,000 ha. While Kampong Thom was the most flood-affected province, farmers in Oddar Meanchey faced yield losses due to drought stress. FAO's assessment of affected and damaged areas due to drought and flooding in the target provinces show that the percentage of damaged areas was higher for flooding compared to drought, indicating that flooding poses a major risk when farmers lack adaptive capacity in the face of major flooding events. This challenge is particularly relevant for rice and cashew production in Kampong Thom province, and also for vegetable production in Siem Reap.

3.2 Socio-economic conditions

Poverty

110. While Cambodia's rural agrarian population plays an essential role in the country's economy, persistent poverty makes many farming communities and households vulnerable to extreme weather events and natural disasters such as droughts and landslides. The environmental degradation resulting from agricultural expansion has also exacerbated the impacts of these extreme weather events.

Agricultural Land

111. Rice production accounts for nearly 15% of the country's Gross Domestic Product (GDP) and occupies nearly 75% of the total cultivated land area (IFC, 2015). The agricultural expansion, supporting the country's economic growth in the past decades, has also come at the cost of environmental degradation, mainly through deforestation to make way for crop production, particularly for cash crops like cassava.

112. Around 80% of rice production originates from local varieties that are cultivated during the rainy season. High-yielding varieties are mainly planted during the dry season, and account for the remaining 20% of the production. Around 50% of the paddy produced in Cambodia is exported to neighbouring countries (primarily Vietnam and Thailand) for milling and further distribution, which represents a huge lost opportunity for Cambodian rice millers.

113. Despite the overall growth and expansion of the agriculture sector, smallholder farmers in rural areas have notably lagged behind this progress due to their limited capacity and access to finance, technologies, and information. Roughly 45% of the country's labour force is directly engaged in agriculture, and over 60% of which is found in rural areas where poverty rates are often higher than 20%, compared to 10% in the country's capital, Phnom Penh (RGC, 2014, 2018b). While

Cambodia's rural agrarian population plays an essential role in the country's economy, persistent poverty makes many farming communities and households vulnerable to extreme weather events and natural disasters such as droughts and landslides. The environmental degradation resulting from agricultural expansion has also exacerbated the impacts of these extreme weather events.

114. Since 80% of the country's cropland (approximately 5.3 million ha.) is used mainly for rain-fed agriculture, and only the remaining 20 % is irrigated, farmers in Cambodia are highly susceptible to droughts (ADB, 2018). Seasonal flooding between July and October due to high water levels in the Mekong River and Tonle Sap Lake is an integral part of local agricultural systems, providing fertile alluvial soils and water to the central plains. However, the increased unpredictability in the extent, timing and duration of seasonal flooding observed in the recent decades has made agriculture, most notably rice production, challenging for many farmers. In addition, relatively low yields, coupled with frequent natural disasters, contribute to temporary food shortages. Seven of Cambodia's 25 provinces (including Phnom Penh), are classified as severely to extremely food insecure, and an additional seven moderately insecure (NIS, 2015).

Forests and Protected Areas

115. Forests remain a critical element of livelihoods for many in rural areas. Actions to conserve forest areas through legal protection under the Protected Areas Law 2008 recognise the continued need for community access to forest areas as well as the need to allow the maintenance of agricultural areas. A number of studies have noted that while PA present some restrictions, improved security of forest access and land tenure have in many cases improved or at least not had a negative impact on the livelihoods of local communities. Equally formation of community groups to establish either community forest or community protected areas have also been identified as delivering societal benefits in terms of improved local governance as well as access to information and improved decision making on land use. Clear evidence of success in the development of forest based enterprises linked to NTFPs and timber have however shown more limited successes linked to broader market challenges.

3.3 Potential future changes foreseen as a result of the planned activities

116. Further to the paradigm shifting potential of the project, the improved agrometeorological advisory services and establishment of climate-resilient, high-value and sustainable market practices are expected to permeate the sector across the NTSB through co-financing efforts of EEs and implementing partners and activities of parallel funding projects. Such effects will directly scale up and replicate the project impacts to benefit farmers and value chain actors in other parts of the country and consumers through increased food security and quality. The project's scalability, replicability and sustainability potentials are discussed below.

117. The project will:

- Increase availability and accessibility to crop-specific climate information and risk mitigation strategies can quickly scale up climate-informed farming, risk awareness, and adaptive options. Farmers and other value chain actors in the NTSB and Cambodia have access to and regularly apply crop-specific agrometeorological advisory information, made accessible through various mediums to take early actions to minimize their loss and damage and increase their productivity by taking adaptive actions. There is also a systematic effort to promote proven adaptive practices and technologies through various mediums at farm and landscape levels to lead their increased awareness of climate risks into action.
- Use market-led examples of success in transitioning to climate-resilient and high-value agriculture provides the most robust business case, as farmers and other value chain actors naturally gravitate towards such trends. Farmers and other value chain actors in the NTSB and Cambodia, facing similar agroecological and socioeconomic limitations, have market-proven examples that provide increased adaptive capacity and livelihood options at the household and community levels. The public and private sectors also strategically invest in these opportunities by providing regulatory and quality control, skills training, and business and market development support. These efforts are coupled with increased access to low-cost finance for farmers and other value chain actors with limited means to replicate the successful examples.
- Implement effective cross-sectoral coordination, PSPPs, and adequate and predictable investment ensure sustainability. Public spending and resource allocations systematically ensure enabling systemic, individual, and institutional conditions to increase the overall bankability of private actors' investments in climate-resilient, high-value and inclusive agriculture. Also, there is a system in place to monitor and report on investment progress and gaps to ensure incremental results across the sector and increase climate finance's overall effectiveness and efficiency from public and private sources.

3.3.1 Projected impacts of changes introduced through the PEARL project

118. Total of 450,000 smallholder farmers, other local value chain actors, and their household members, particularly women farmers and value chain actors (40-60%

women), benefited over the project lifetime directly from adopting climate-resilient and high-value practices and technologies and diversified agricultural livelihoods through alternative value chain development.

119. Total of 90,000 climate vulnerable households, particularly female-headed (40%), directly benefited from increased yields and food security over the project lifetime.
120. Total of 50,000 downstream farmers (40-60% women) benefiting from improved ecosystem services and resilience to climate change, in addition to the 20 CPAs/CFs benefiting directly from improved ecosystem resilience to climate change (7,600 hectares of critical catchment forests and other sensitive ecological zones restored and protected over the project lifetime through agroforestry and other livelihood diversification activities for the improved landscape agroecology of downstream farmers).
121. Over 3,000 active users in the public and private sectors, drawing information from LAMS to aid their investment decision-making in climate-resilient, inclusive, gender-responsive, and high-value agriculture.
122. Total of 24,000 smallholder farmers' and local value chain actors' adaptive capacity (40-60% women) strengthened over the project lifetime with increased income and enhanced agricultural livelihoods, as a direct result of certification-based value chain development (e.g., CamGap, GI and organic, W+, ISO 2200 and HACCP) and strategic capacity support through PSPPs (i.e., regulatory control, input quality control, skills training, contract farming and purchase agreements).
123. FARM accounts established for up to 124 beneficiary cooperatives, associations, producer groups, CPAs, CFs, agricultural unions to provide revolving low-cost finance at 130-165% of the initial investment value (i.e., USD 7 million). At least four (4) existing agricultural certification programs fully supplemented with the necessary policy, regulatory, institutional capacity, and tools to support climate-resilient and high-value production through the target value chains.
124. At least a 200% increase in financial access among smallholder farmers and other local value chain actors in NTSB for adopting climate-responsive and high-value practices and technologies.
125. Total of 24,000 smallholder farmers and other local value chain actors (40- 60% women) successfully adopted over the project lifetime climate-resilient and high-value best practices and technologies through FFS, peer-to-peer learning, private extension support, and social media and mobile interfaces.

3.3.2 Theory of change- how the project supports adaptation and mitigation

126. This project takes a value chain approach targeting premium price markets around cashew, mango, organic rice and vegetables to illuminate a viable pathway towards climate-resilient, higher-value, inclusive and sustainable agriculture. From this perspective, the theory of change for the proposed PEARL project is provided below in Figure 6 and in the narrative description of the project components. Note: the project activities are not discussed in detail in this section as they are discussed in Section B.3.

Figure 6. PEARL Theory of Change



Source: Funding Proposal, Version March 2022.

4 LEGAL AND INSTITUTIONAL FRAMEWORK

Policy Alignment

127. The Government of Cambodia is committed to addressing issues of climate change mitigation and adaptation, especially in line with national priorities and legislation.

128. Cambodia's updated NDC (MoE, 2020b) to the Paris Agreement under the UNFCCC underscores agriculture's essential role in both mitigation and adaptation actions. The NDC brings particular attention to the need to increase the resilience of agriculture as it is one of the most affected and economically essential sectors on which a significant proportion of the country's population directly depends. The NDC highlights the expected negative impact of food systems, increasing the risk

of food insecurity and malnutrition, particularly among vulnerable groups, including the poor, women, children and other socially excluded groups. Concerns over how such impacts disproportionately affect female farmers' labour allocation and workload are emphasized to call for gender-responsive action and the need to collect gender-disaggregated data to better understand the effects of climate change on women in agriculture.

129. Out of the 58 priority adaptation actions identified in the updated NDC, 17 focus on agriculture (ibid.). Among such priority adaptation actions, ten are directly relevant to increasing the adaptive capacity of the NTSB through the promotion of climate-resilient and higher-value production of cashew, mango, organic rice, and leafy vegetables among smallholder farmers. For the agriculture sector, the NDC estimates the cost of climate change adaptation at USD 306 million, much of which is expected to come through international support.
130. These climate change adaptation actions to increase the resilience of crop systems and agricultural livelihoods also deliver mitigation co-benefits, for instance, through the organic fertilizer and biogas production and improved land management practices for increased agroecological functions and crop suitability. The NDC calls for increased public-private partnerships (PPPs) to unlock private sector investment and promote technology transfer and a market-driven transition towards a climate-resilient and sustainable development pathway. The NDC also stresses the need for improved institutional arrangements and capacity among the MAFF, MOE, and MOWRAM through data collection, analysis, management, monitoring and reporting, ensuring an enabling regulatory environment for PPPs, and advancing the above priority adaptation actions (ibid).
131. The NDC contributes directly to the Cambodia Climate Change Strategic Plan (CCCSP) (2014), which builds on the NSDP and Rectangular Strategy IV.

National Adaptation Plan (NAP) Process

132. Cambodia's NAP process builds on the National Adaptation Programme of Action (NAPA) (2006) and identifies a lack of access to financial, technological, and human resources as the primary challenge and sets out medium and long-term adaptation goals in critically affected sectors, including agriculture and water resources and human health. The NAP process begun in 2014 to advance four key elements: 1) laying the groundwork, 2) working preparatory elements, 3) developing implementation strategies, and 4) setting up reporting and monitoring framework to place the adaptation to climate change at the centre of policy agenda (GSSD, 2017). Together with the NDC, the NAP also contributes to NSDP and CCCSP.

Cambodia's GCF Country Programme

133. Building on its NAPA, NAP process, CCCSP and sectoral climate change action plans, Cambodia's GCF Country Programme (2020a) identifies agriculture, water resources, infrastructure, forestry, health and coastal development as its priority investment areas for climate change adaptation. Agriculture and forestry are also considered key sectors for climate change mitigation. The Country Programme ranks the PEARL project as its top priority adaptation project. Establishing effective

PPPs to leverage private investment for supporting adaptation actions is an essential strategy under the Country Programme. Cambodia currently has one Direct Access Entity (DAE), the National Committee for Sub-National Democratic Development Secretariat (NCDD). Increasing the number of DAEs in Cambodia is another priority. In this context, the ARDB is currently considered by the NDA for DAE nomination.

Climate Change Action Plan for Agriculture, Forestry and Fisheries Sector

134. Directly contributing to the CCCSP, the Climate Change Action Plan for Agriculture, Forestry and Fisheries Sector 2016-2020 (CCPAP-AFF) (MAFF, 2016) aims to develop appropriate institutional capacity and human resources in the sector to devise new and innovative technologies and measures. It also aims to increase farmers' awareness of climate-related risks and options and ensure that they have the necessary means to adopt climate-resilient technologies and measures to minimize their crop and livestock damage and loss. The CCPAP-AFF identifies strategic objectives in its sub-sectors - 1) food security and livelihoods; 2) plantation; 3) livestock; 4) forest management; and 5) fisheries – with actions to reduce their greenhouse gas emissions and increase their adaptive capacities to cope with increased floods, droughts, temperatures, and pest and diseases. For food security and livelihoods, priority actions include the promotion of sustainable farming systems and postharvest technologies, development of suitable crop variety and an information system of climate change impacts on agriculture and livelihoods, research and development of climate-smart technologies and techniques, capacity building of agricultural cooperatives and SMEs in climate-smart agriculture.
135. While the CCPAP-AFF sets out a comprehensive plan of action that sets ambitious targets, the less than 50% of the US\$ 246 million required for the full implementation of the CCPAP-AFF was secured at the start of its implementation (ibid.). The sources of finance include the Secretariat Working Group on Agriculture, Forestry and Fisheries (SCAFF), government annual budget allocation, loans and grants from the World Bank, Asian Development Bank and International Fund for Agricultural Development. Although various climate change funds through the United Nations and bilateral agencies also provide additional support, much more is still needed to close the current financial gap.

Cambodian Sustainable Development Goals (CSDGs) Framework (2016-2030)

136. Guided by the NSDP and Rectangular Strategy IV, the CSDGs Framework (2018a) sets out the country-specific targets and indicators to track and monitor its progress towards its 18 goals, adapted from the Global Sustainable Development Goals to meet specific national circumstances. The CSDGs particularly relevant to the proposed project include Goal 1 (no poverty), Goal 2 (zero hunger), Goal 5 (gender equality), Goal 13 (climate action), and Goal 15 (life on land). According to the Framework, the average rural poverty rate will be halved, the value of agricultural production per capita will be doubled, and public expenditure on climate actions will also be increased by one percentage point by 2030.

137. PEARL's activities will thus strengthen and reinforce Cambodia's regulatory and legal frameworks, promote the development of additional low-emission policies, and improve climate-responsive planning and development in the region. The PEARL project is well-aligned with the various national public policies that support sustainable development in the NTSB region of Cambodia.

Social and Environmental Policies

138. To support project implementation, a risk assessment addressing social and environmental risks is needed to ensure that livelihoods and the environment are safeguarded from potential negative impacts. A summary of these risks is below.

139. Several social and environmental risks have been identified in the ESMF (see Pro-Doc and Annex 6 of project submission). These risks can negatively impact the livelihoods of the project's beneficiaries and the surrounding environment they depend on for its various agroecological functions. Especially, since the project employs the value chain approach, combined with FARM (i.e., a financial mechanism), as its primary vehicle of transformation, the project must ensure that its effort towards the market and financial inclusion does not result in the opposite effect on specific groups of people and individuals, especially women and other vulnerable and or socially excluded.

140. As described in the next section, the project's ESMF (Annex 6 of project submission) lays out the overall strategies to mitigate/minimize any harmful social and environmental risks. In particular, the gender action plan (Annex 8), stakeholder engagement plan (Annex 7 of project submission), and Indigenous Peoples Plan (also under Annex 6 of project submission) will prescribe specific measures. These strategies and efforts will be further contextualized into ESMPs at the project's inception to implement targeted mitigation actions.

5 APPLICABLE SAFEGUARD POLICIES

141. This ESMF has been prepared to support the proposed project 'Public-Social-Private Partnerships for Ecologically-Sound Agriculture and Resilient Livelihood in Northern Tonle Sap Basin (PEARL)', developed by the Government of Cambodia and submitted to the GCF. The project is further supported by the Food and Agriculture Organization of the United Nations (FAO), in their role as the GCF Accredited Entity. Thus, the project has been screened against FAO's Environmental and Social Safeguard Policy⁵, as well as the GCF Environmental and Social Safeguards and other relevant policies noted below:

142. *FAO Accountability Policy (2014)*. FAO is committed to designing and operating its approach to accountability, based on FAO's core values of commitment, respect

5

for all, integrity and transparency, and according to the following principles: (i) Focus on FAO's purpose and outcomes for beneficiaries and partners; (ii) Define clear roles and responsibilities; (iii) Take informed and transparent decisions and communicate clearly, providing the basis for acting with a focus on outcomes and within clearly defined roles; (iv) Put FAO's values into practice through consistent application of a shared ethos and culture in the development of policy and the behaviour of employees; (v) Engage with stakeholders to make accountability real; (vi) Establish a culture of consequences - to be meaningful, accountability must be felt.

143. *FAO whistleblower protection policy (administrative circular N°2019/06)* applying to any FAO personnel when internal or external reporting according to the consideration of the circular.
144. *GCF Policy on the Protection of Whistleblowers and Witnesses (2018)* aims to empower GCF-project related persons to report suspicions of wrongdoing in good faith and without fear of retaliation so that the GCF can effectively protect its interests, resources, and mission.
145. *FAO Policy on Gender Equality 2020-2030* strives to achieve equality between women and men in sustainable agriculture and rural development for the elimination of hunger and poverty.
146. *GCF Gender Policy (2019)* reinforces the responsiveness of GCF to the culturally diverse context of gender equality to better address and account for the links between gender equality and climate change.
147. *FAO Protection from sexual exploitation and sexual abuse (PSAE) N° 2013/27*. The principles of integrity, professionalism, respect for human rights and the dignity of all peoples underpin FAO's commitment to preventing and addressing acts of sexual exploitation and abuse (SEA)
148. *FAO Policy on the prevention of harassment, sexual harassment and abuse of authority N° 2015/03 (2015)* and FAO policy on sexual harassment (13 February 2019) which states Sexual Harassment in all its forms is contrary to the United Nations Charter, the Staff Regulations and Staff Rules of the Organization and the Standards of Conduct for the International Civil Service.
149. *GCF Revised Policy on the Prevention and Protection from Sexual Exploitation, Sexual Abuse, and Sexual Harassment (2021)* sets clear obligations for GCF-project related persons to prevent and respond to SEAH and to refrain from condoning, encouraging, participating in, or engaging in SEAH.
150. *FAO Policy against fraud and other corrupt practices N° 2015/08 (2015)* Fraud and other corrupt practices pose a grave threat to the effective implementation of the Organization's policies and objectives
151. *GCF Policy on Prohibited Activities (2019)* prohibits GCF-project related persons to engage in: corrupt, fraudulent, coercive, collusive, or obstructive practices; or abuse, etc. to maintain the highest levels of integrity, accountability and efficiency.
152. *GCF Revised Environmental and Social Policy (2021)* - Revises the environmental and social policy to reaffirm the Fund's commitment to addressing Sexual Exploitation, Sexual Abuse, and Sexual Harassment in addition to environmental and social considerations in its funded activities.

153. It should also be noted that as per the GFC requirements, FAO has been requested to confirm if the GCF Prevention of Sexual Exploitation, Abuse and Harassment (PSEAH) are being applied to the GCF/FAO funded projects. FAO is developing a new policy that will supersede [the existing 2015 policy](#) – FAO’s Framework for Environmental and Social Management (FESM) – that is expected to be endorsed in 2022. FESM has explicit reference to SEAH, and will be accompanied by relevant operational guidance. In the meantime, FAO confirms that sufficient technical resources and capacities to ensure compliance with GCF requirements regarding SEAH are available. It is also our understanding from [GCF’s SEAH Action Plan](#) is that GCF will develop a SEAH risk screening tool in October that would be taken into account when developing SEAH operational guidance.

5.1 FAO environmental and social standards

154. FAO has nine Environmental and Social Standards (ESS) that have been established to help manage and improve FAO environmental and social performance through a risk and outcome based approach (Table 3):

Table 3: Overview of Environmental and Social Standards of the FAO

Standard	Description
ESS 1: Natural Resource Management	Impact of the proposed project on the degradation of natural resources, and loss of ecosystem services resulting from the escalating competition over natural resources (including land, water, biodiversity, landscapes, and water bodies). ESS1 focuses on the abiotic environment (e.g. soils, land, water, security of tenure and climate).
ESS 2: Biodiversity, ecosystems and natural habitats	Risks associated with the variety and variability of animals, plants and microorganisms at the genetic, species and ecosystem levels that are essential to support the structure and function of productive ecosystems.
ESS 3: Plant Genetic Resources for Food and Agriculture	Prevention of genetic diversity loss and unintended environmental and social consequences through promoting sustainable crop improvements and production. ESS3 calls for the assurance that transfer of Plant Genetic Resources for Food and Agriculture (PGRFA) respects farmers’ rights and equal access to benefit sharing.
ESS 4: Animal – Livestock and Aquatic- Genetic Resources for Food and Agriculture	Risks associated with the sustainable management of animal and aquatic resources, including loss of genetic diversity and unintended environmental and social consequences. Animal Genetic for Food and Agriculture (AnGR) includes any animal species that are used or may be used for the production of food and agriculture.
ESS 5: Pest and Pesticide Management	Risks regarding adverse impacts of pesticides on the health and safety of communities, consumers, and the environment. ESS5 encourages Integrated Pest Management (IPM) and recognizes the contribution of pesticides to effective crop and food production but promotes the reduction of pesticides reliance.
ESS 6: Involuntary Resettlement and Displacement	Protection of households from forced eviction and minimization of any social and economic impacts from land restriction or resources use restrictions that may arise. ESS6 encourages the inclusion of measures to improve/restore living conditions, productive assets, and tenure security of any persons displaced, either physically or economically.
ESS 7: Decent Work	Recognition of the need for full and productive employment to reach food security and poverty reduction. In order to fulfil ESS7 this project must promote

Standard	Description
	access to rural employment, ensure fair non-discriminatory and equal opportunities, support workers including disadvantaged and vulnerable categories of workers, and apply the international labour standards, including the prevention and elimination of child labour. The project will have zero tolerance for sexual exploitation, abuse and harassment (SEAH). ⁶
ESS 8: Gender Equality	Proposed project impact on gender roles and opportunities and gender mainstreaming, along with project contribution to achieve gender equality for sustainable interventions in the agriculture and rural sectors. The project also commits to avoid and where avoidance is not possible, mitigate the risk of SEAH. The Project's GRM should include a SEAH procedure that is gender-responsive and survivor-centered.
ESS 9: Indigenous People and Cultural Heritage	Risks to indigenous knowledge, cultures and traditional practices, right to self-determination and tangible and intangible cultural heritage for current and future generations. ESS9 ensure the project follows Free, Prior and Informed Consent (FPIC).

Source: FAO, 2015.

5.2 Project risk classification

155. Early screening of the project combined with further analysis has identified the proposed project as Category B, which suggests that the project contains activities with potential limited adverse environmental and/or social risks and impacts that individually or cumulatively, are few, generally site-specific, largely reversible, and readily addressed through mitigation measures. A summary of this assessment is provided below:

156. The following summary highlights a few notable risks that may have potential diverse environmental and social impacts, which will require specific mitigation plans.

There are identified potential diverse environmental and social impacts these include:

- High risks, based on FAO's ESS Screening due to project actions being undertaken within legally designated Community Protected Areas (CPAs) (less than 10,000 ha) and Community Forest Areas (CFAs) located within National Parks and Wildlife Sanctuaries and thus presenting a risk to impacting biodiversity that has been identified of national significance. Based on this a Biodiversity Management plan has been developed and a full environmental and social impact assessment of target sites will be undertaken and corresponding management plans developed (that address both environmental and social impacts including those on IP groups in the areas).

⁶ Note : FAO has recently developed a new policy that supersedes the existing 2015 policy – FAO's Framework for Environmental and Social Management (FESM) – has just been endorsed in June 2022. FESM has explicit reference to SEAH, and will be accompanied by relevant operational guidance. In the meantime, FAO confirms that sufficient technical resources and capacities to ensure compliance with GCF requirements regarding SEAH are available (see also the FAO Annual Report on Corporate Policy, Processes and Measures on the Prevention of Harassment, Sexual Harassment and Sexual Exploitation and Abuse, <https://www.fao.org/3/ng643en/ng643en.pdf>). It is also our understanding from GCF's SEAH Action Plan is that GCF will develop a SEAH risk screening tool in October that would be taken into account when developing SEAH operational guidance.

- Moderate risk linked to the transport and provision of seeds and planting materials for both agricultural and forest enrichment planting as well as the establishment of planted forests. – based on support to the provision of improved planting stock to agricultural cooperatives as well as work to rehabilitate Community Protected Areas (CPAs) (less than 10,000 ha) and Community Forest Areas (CFAs)
157. All other risks are identified as low with the exception of ESS 9: Indigenous peoples (IP) and cultural heritage, where Moderate Risks have been identified based on the presence of indigenous peoples. The nature of the project objectives, activities (seeking to improve activities linked to agriculture and land management across the target landscapes through adoption of improved practices and provision of improved support and enabling environment) are however identified as reducing environmental and social risk areas below business as usual levels even where linked to a risk area and risk mitigation strategies are sufficient to ensure no significant risks across areas including with relation to IP groups.
- 158. Potential impacts are not unprecedented in the project area**
159. The identified potential impacts are not unprecedented but are linked to the existing activities and impacts that are occurring across the project landscape – including agricultural expansion and efforts to rehabilitate degraded forest areas. Indeed in all areas project activities are targeting a reduction in the levels of impact that would occur in a business as usual scenario and are supported by provision of information, training and operational and institutional tools and systems that are designed to help reduced levels of environmental and social impacts.
- 160. Potential impacts are limited to the project footprint**
161. The identified impacts link directly to actions being implemented by the project. These impacts are thus limited to the project footprint. Thus while the project is intended to support systemic change that can be scaled up any failures in implementation that could result in additional negative impacts are not identified as having a risk of spreading beyond the project areas.
- 162. Potential impacts are neither irreversible or cumulative**
163. Impacts identified are at their most significant where there is a risk of impacts within conservation areas and where planting for both forest rehabilitation and agricultural production occur. In these as well as all other assessed cases identified impacts are not identified as cumulative or having the potential to drive compound changes. Neither are they identified as irreversible when scale of impacts is considered with potential for any small areas of forest loss to be mitigated through rehabilitation actions. In addition they are seen as fully avoidable through the use of recognized and well practiced management techniques (see below).
- 164. Potential adverse impacts can be addressed by the use of recognized good management practices**
165. The most significant risks identified linked to use of planting stock can be effectively managed through well utilized management practices including considered species selection and effective planning of agricultural and forest rehabilitation activities. All other risks can also be effectively managed through a standardized project management structure as outlined in the current document.

166. Further information on the risk areas identified and assessed as well as responses to them is also provided in the table below, which follows the FAO Environmental and Social Standards (ESS) while also linking these with the IFC Performance Standards, which the GCF provisionally adopted. The project’s risk management approach will also be based around FAO’s three-phase approach of identifying activities, screening, and developing management plans (i.e., Environmental and Social Management Plans (ESMPs)). While the ESMF outlines the overall risk mitigation framework, more detailed assessments and ESMPs will be prepared at the activity level once specific beneficiary groups, locations, and standards are identified at the project inception stage.

167. An exclusion list of the activities the project will not finance can be found in Annex 2 of the current document.

5.3 Green Climate Fund safeguards

168. The GCF has provisionally adopted the Performance Standards and directives of implementation of the International Financial Corporation (IFC).⁷ There are eight IFC Performance Standards that include the main environmental and social considerations that must be taken into account when designing and implementing a project. The IFC standards are congruent with the FAO Environmental and Social Standards (Table 4).

Table 4: Alignment of IFC Performance Standards and FAO Environmental and Social Standards

IFC Performance Standards (PS)	FAO Environmental and Social Standards (ESS)
PS 1. Assessment and management of environmental and social risks and impacts	ESS 1. Natural resource management ESS 8. Gender equality
PS 2. Labour and working conditions	ESS 7. Decent work
PS 3. Resource efficiency and pollution prevention	ESS 5: Pests and pesticide management
PS 4. Community health, safety and security	ESS 7. Decent work (partially)
PS 5. Land acquisition and involuntary resettlement	ESS 6. Involuntary resettlement and displacement
PS 6. Biodiversity conservation and sustainable management of living natural resources	ESS 2. Biodiversity, ecosystems and natural habitats ESS 3. Plant genetic resources for food and agriculture ESS 4. Animal – livestock and aquatic – genetic resources for food and agriculture
PS 7. Indigenous peoples	ESS 9. Indigenous peoples and cultural heritage
PS 8. Cultural heritage	

Sources: GCF/B.07/11; FAO 2015

⁷ GCF/B.07/11

5.4 FAO applicable safeguards

169. Table 5 provides an overview of the FAO safeguards triggered within the FAO Environmental and Social Screening Checklist:

Table 5: FAO safeguards triggered for the PEARL project

FAO Safeguard	Safeguard Triggered?	Justification
ESS1: Natural Resource Management	No	<p>The project promotes sustainable land management to prevent or minimize land degradation, through erosion control, integrated nutrient management, management and restoration of soil, water, and biological resources, and maintenance of ecosystem services in close consultation with local land users.</p> <p>The project will also support improved information management and access to finance to support enhanced technologies to improve the efficiency of and reduce impacts of irrigation (including solar irrigation systems and smart irrigation systems (e.g., drip irrigation and ponds as well as rice -fish systems)) and water management systems within production areas (with all systems utilizing dams under 5m5 m and not targeting areas over 20ha20 ha). All sub-activities proposed that will include specific irrigation actions will also be subject to a risk screening prior to implementation.</p> <p>The project while supporting increases in rice production do not see large scale increases in emissions linked to these expansions that are beyond the business as usual scenario.</p> <p>The project will promote the clarification of usufruct and tenure rights of farmers and households to reduce investment risks in adopting climate-resilient and sustainable technologies and practices. It will not result in a negative change to existing legitimate tenure rights with focus, focusing on locally -based agricultural co-operatives and community -based protected areas and forest management groups who already have defined user rights but may require support in enhancing documentation of these. Any action to revise or change rights will be subject to a full screening and management plan.</p> <p>The project will also work towards strengthening adaptive capacities and resilience of target communities through enhanced information on climate impacts and weather events, as well as improved skills and agricultural practices to respond to changes in climate. Through support to improved land -use practices and enrichment planting and regeneration, the project will also focus on enhancing GHG removals and reducing emissions.</p> <p>The project will not result in a negative change to existing legitimate tenure rights. The main beneficiary is locally based agricultural co-operatives and community based protected areas and forest management groups, with the project helping to strengthen and clarify their tenure rights and documentation to support these.</p> <p>The exclusion list in Annex 2 (of the current document) further ensures the project will not finance activities deemed 'high risk'.</p>
ESS2: Biodiversity, Ecosystems and Natural Habitats	Yes	<p>The project will work with 14 CPAs, with three of these located in National Parks, five within Wildlife Sanctuaries, and two within the Northern Biodiversity Conservation Corridor. While actions within protected areas are considered high risk, a number of mitigating factors exist that help to reduce the risk of implementation within these areas. These include:</p>

FAO Safeguard	Safeguard Triggered?	Justification
		<ul style="list-style-type: none"> • Agricultural production systems in PAs in Cambodia pre-date the establishment of the PAs and the project and are permitted to remain but not expand under Cambodian law (PA Law 2008). • Proposed activities target both enhancing the sustainability of agricultural production systems and, as such, will support capacity building and support to reduce impacts of agriculture within these areas and the rehabilitation of degraded areas (using native and locally relevant species) of the conservation areas that have previously been impacted by shifting agriculture and or logging. <p>A full ESMP will be prepared for the target areas within PAs once specific locations and support actions have been agreed upon during the inception implementation phase, with this being used to update and strengthen the proposed management responses.</p>
ESS 3: Plant Genetic Resources for Food and Agriculture	Yes	<p>While the project will work to provide planting material in some areas it will not introduce crops and varieties that are previously not grown in the project area or similar areas within Cambodia.</p> <p>The project will support the rehabilitation of CPA and CFAs with a focus on planting native species as well as small-scale sustainable agroforestry (e.g., woodlots and home-garden systems) to meet the growing household demand for fuelwood and wood products. The project will adopt and closely follow the national REDD+ safeguards framework and other relevant national legislation, including CPA and CFA guidelines, to minimize social and environmental risks through forest restoration activities</p>
ESS 4: Animal-Livestock and Aquatic – Genetic Resources for Food and Agriculture	No	<p>The project will not introduce non-native or non-locally adapted species, breeds, genotypes, or other genetic material to the project areas. The project's support to improved use of fish ponds linked to rice irrigation will also help to enhance water management systems and reduce environmental impacts while contributing to local food security.</p>
ESS 5: Pest and Pesticide Management	No	<p>The project will promote the adoption of GI, CamGAP, HACCP, and organic certification compliant production and processing and IPM. The project will thus develop guidelines and support to farmers to reduce and improve use of pesticides based on international and local best practices. The project will not result in the procurement or direct supply of pesticides or agrochemicals.</p>
ESS 6: Involuntary Resettlement and Displacement	No	<p>The project will not allow any involuntary resettlement or displacement.</p> <p>Although no negative impacts are foreseen in proposed actions, an ESMP will be prepared once specific project intervention sites have been identified. This will ensure that no groups will be displaced from their lands or have tenure rights impacted. These risks are not anticipated as the project design focuses on working with established agricultural cooperatives and unions that have clear and identified production areas as well as with CPAs and CFAs that have demarcated areas and legally recognized rights of use</p>

FAO Safeguard	Safeguard Triggered?	Justification
ESS 7: Decent Work	No	<p>The project will not result in the direct employment of staff. Employment opportunities will likely be generated as a by product of the project, but not directly.</p> <p>The project will work within value chains and landscapes that include subsistence producers and those other vulnerable informal agricultural workers, as well as in situations where youth work mostly as unpaid contributing family workers may occur. Project activities are focused on improving the nature of work within these value chains, including action to help reduce incidence of SEAH and GBV and support to enhanced uptake of sustainable and high-value approaches and standards that, in some cases, include improved working requirements and skillsets while enhanced value chain performance will also help to reduce youth migration through improved options for employment. All target groups are also established. The current ESMF provides an assessment of these issues as well as key mitigation measures to address what risks are present.</p>
ESS 8: Gender Equality	No	<p>The project will support gender empowerment and equality and has been designed to take into account the specific needs and priorities of women and girls and address key considerations linked to SEAH and GBV what action can be taken to address these. A gender assessment and Gender Action Plan have been developed for the project (Annex 8 of project submission) that provides specific actions to be undertaken and an allocated budget.</p>
ESS 9: Indigenous peoples and cultural heritage	Yes	<p>There are close to 40,000 IPs identifying across 10 IP groups identified as living within the target provinces based on Cambodia's 2019 census⁸. While the specific project locations have yet to be identified and thus their impact on these IP groups cannot yet be fully assessed, a baseline Indigenous Peoples Plan (IPP) has been developed for the project that provides the framework to guide action with further development of a specific IPP for target areas being required during project inception should they include IP groups.</p> <p>The plan also notes and ensures that efforts will be made to respect, include and promote IP issues during project implementation, including their right to Free, Prior, and Informed Consent (FPIC) during the identification of intervention sites.</p>

Source: Funding Proposal, Version March 2022.

⁸ Government of Cambodia 2019 Census – available at <http://nis.gov.kh/index.php/en/15-gpc/79-press-release-of-the-2019-cambodia-general-population-census>

6 ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT

170. The following Figure provides an overview of FAO's environmental and social risk management approach:

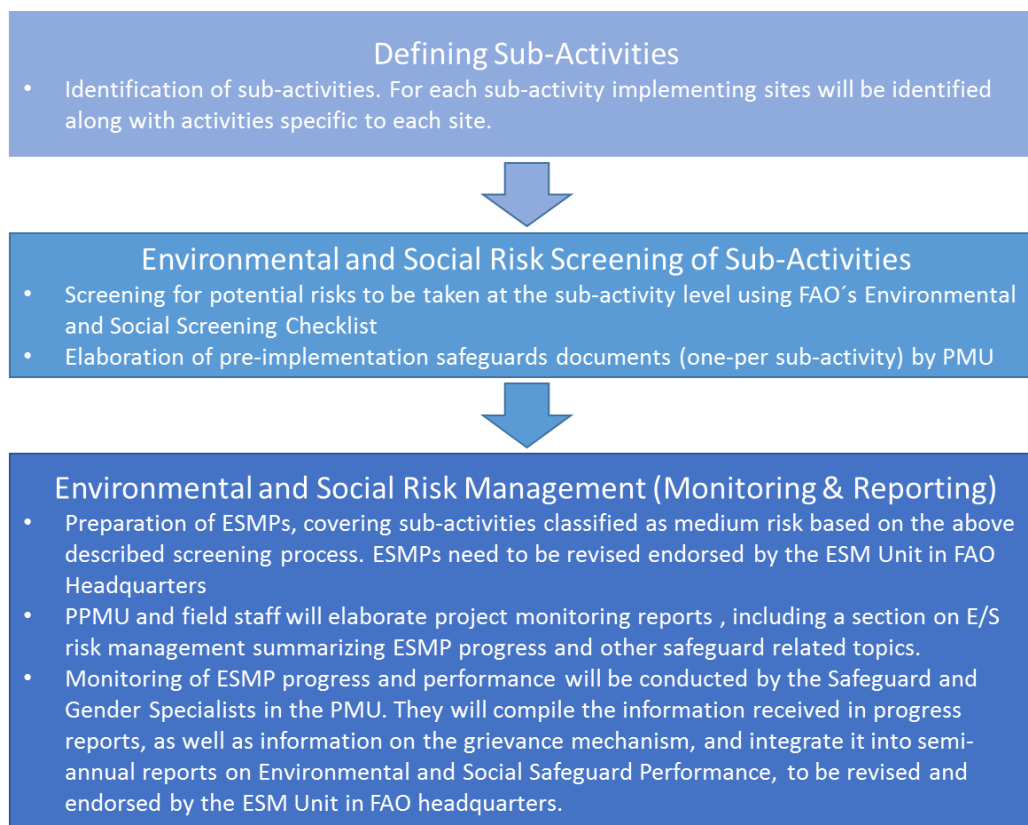


Figure 7: Overview of FAO's environmental and social (E&S) risk management approach

Source: Funding Proposal, Version March 2022.

6.1 Step 1: Defining Sub-Activities

171. The PEARL project is expected to have far greater environmental and social benefits than adverse impacts. The potential adverse impacts from the project are likely to be small and site-specific particularly linked to actions undertaken by specific cooperatives and farmers groups that are prioritized by and engage with the project. As such it is key that any impacts are identified early during the planning cycle and mitigation measures integrated into project planning and implementation. It is recommended that screening for risks are undertaken at the sub-activity level when target cooperatives and CPAs and the specific sub-activities they will be supported with (under Outcome 2 in particular) are identified. These will be identified during years 1 and 2 of the project (through early actions to support implementation of Outputs 2.1, 2.2. and 2.4) For each sub-activity, implementing sites

will be identified along with activities, including capacity building, training, and stakeholder engagement information specific to each site.

6.2 Step 2: Environmental and Social Risk Screening of Sub-Activities

172. Each activity will be screened using FAO's environmental and social screening checklist (included in Annex 3 of the current document). Once the implementation sites, beneficiaries and sub-activities are identified (step 1), a screening checklist will be completed per activity and signed off by the Safeguards and Gender Specialists within the Project Management Unit (PMU). This will include points related to SEAH which will be addressed under ESS7 and ESS8 of FAO safeguards. The screening process and broader implementation will also be in line with all relevant GCF and FAO policies noted at the beginning of Section with the Safeguards and Gender Specialists being responsible for initial assessment and ensuring that considerations linked to SEAH as covered by FAO's policies on the prevention of harassment, sexual harassment and abuse of authority N° 2015/03 (2015) and F sexual harassment (13 February 2019) as well as the GCF Revised Policy on the Prevention and Protection from Sexual Exploitation, Sexual Abuse, and Sexual Harassment (2021). The two officers will receive training on the inclusion of these elements, including use of FAO and GCF guidance documents (noted above as being under development) from FAO HQ and findings from the assessments will be reviewed by the PMU and FAO CO as well as FAO HQ which holds final responsibility for the application of these policies. Teams from FAO HQ will also make periodic visits to the project during start up and implementation to review progress against a range of indicators including those linked to application of safeguards and the above noted policies.
173. It is important to note that ESMP screening will begin in year 1, and it will be a gradual and ongoing process in year 2 and perhaps part of year 3, as different CPAs and AC are consulted and engaged in the planning and implementation process. The results of the screening checklists will be aggregated by the safeguards specialist. This will be sent to the FAO ESM Unit for endorsement. Screening will ensure that:
- The activity is permissible and in line with Cambodia's legal framework and regulatory requirements of the project
 - An appropriate level of environmental assessment is conducted, based on the level of expected impacts.
174. While the nature, magnitude, reversibility and location of impacts are main elements in the screening of sub-activities, expert judgment will be a central factor in deciding whether a sub-activity should be included in the environmental and social management plan (see following Sub-section).
175. The environmental and social screening checklist cross-checked by Safeguard and Gender Specialists (as necessary) will result in the following screening outcomes: (i) determination of the category for further assessment; and (ii) determination of which environmental assessment instrument should be applied.

176. Pre-implementation safeguards documents (one per sub-activity) will be prepared by the Safeguards and Gender Specialists within the PMU prior to the implementation of activities within Outcome 2. The following documents and information will be provided for the specific project interventions:

- Description of activities to be carried out in all sites
- Description of each implementing site:
 - Geography and specificities in terms of activities
 - Beneficiaries and stakeholders
 - GPS coordinates and map of the site
- For all interventions within protected areas coordinates of beneficiary intervention sites will be assessed prior to the implementation of investments to ensure that they are located within pre-agreed areas for agricultural activity or action on rehabilitation to ensure that no actions contribute to further degradation of the protected areas. (see Chapter 9 for more information on the project's Biodiversity Management Framework).
- Description of the stakeholder engagement process that was carried out in the inception phase and the stakeholder engagement plan to be carried out during implementation
- Breakdown of information by site about the grievance mechanism and disclosure
- Aggregated results of the environmental and social screening checklists per sub-activity, approved and signed by the ESM Unit in FAO Headquarters.

6.3 Step 3: Environmental and Social Management Plans, Monitoring and Reporting

177. Sub-components where possible environmental and social risks have been identified will develop environmental and social management plans (ESMP) that include information on the mitigation measures, indicators, responsibilities and timeframe where the completion of such measures are expected. An ESMP will be developed for sub-activity, which will be informed by the described activity screening process.

178. While the nature, magnitude, reversibility and location of impacts are main elements in the screening of sub-activities, expert judgement, by the project safeguards officer and FAO regional team, will be a main factor in deciding whether an ESMP is required for an Activity and/or site or not.

179. The ESMP should include:

- **Mitigation measures:** Based on the environmental and social impacts identified from the checklist, the ESMP should describe with technical details, each mitigation measure, together with designs, equipment descriptions and operating procedures as appropriate.
- **Monitoring:** Environmental and social monitoring during the implementation of the activities, in order to measure the success of mitigation measures. Specifically, the monitoring section of the ESMP provides:

A specific description and technical details of monitoring measures that include the parameters to be measured, the methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions.

Monitoring and reporting procedures to ensure early detection of impacts that necessitate particular mitigation measures and to provide information on the progress and results of mitigation (e.g. by annual audits and surveys to monitor overall effectiveness of this ESMF).

- **Institutional Arrangements for M&E:** The ESMP should also provide a specific description of institutional arrangements, i.e. who is responsible for carrying out mitigation and monitoring measures for operation, supervision, enforcement, monitoring of implementation, remedial actions, financing, reporting and staff training). Additionally, the ESMP should include an estimate of the costs of the measures and activities recommended so that necessary funds are included with this forming part of work planning during year 1 and 2 of project. The mitigation and monitoring measures recommended in the ESMP should be developed in consultation with all affected groups to incorporate their concerns and views in the design of the ESMP.

180. Once the pre-site specific implementation documents with ESMPs are endorsed by the ESM unit in FAO, the safeguard specialist will ensure ESMPs are included and reported upon, along with stakeholder engagement in the context of the monitoring plan. In this context, field staff (PMU staff in coordination with provincial and local authorities and extension agents) will be responsible for monitoring the progress as relevant in the monitoring plan, as well as to identify any potential risks that may emerge through the implementation phase. This information will be compiled in progress reports and templates, including a section on environmental and social risk management.

181. Information from progress reports will be received by the safeguard and gender specialist in the PMU who will compile the information received in the progress reports, as well as information related to grievances in a semi-annual report on the Environmental and Social Safeguards Performance to be endorsed by the ESM Unit in FAO.

6.4 Potential environmental and social risk mitigation measures

182. Potential negative impacts and proposed mitigation measures have been identified for each of the three project Outcomes and will serve as a basis to prepare the ESMPs developed by outcome with a number of cross cutting mitigation measures including the application of FPIC used across project actions:

Table 6: Potential adverse impacts and proposed mitigation measures for Outcome 1: Farmers’ capacities are enhanced to manage climate impacts and related risks

Potential Adverse Impacts	Mitigation Measure(s)
<ul style="list-style-type: none"> ▪ Enhancement in training and provision of information disproportionately benefits some farmers increasing inequalities between groups and / or across genders. 	<ul style="list-style-type: none"> ▪ All elements of the Outcome’s design focus on the development of inclusive and gender responsive materials and systems, that are also appropriate for engagement if IP groups and include those that help to reduce risks of SEAH, with the mainstreaming of these concepts within the project design providing a central mitigation measure which will be monitored through the PMU. Specific actions to facilitate this will also include: <ul style="list-style-type: none"> - Design of improved data collection and prediction systems will consider different farming approaches and the varying needs of larger producers and small-scale producers. - Development of SOP(s) for the production and dissemination of agrometeorological advisory services and data sharing needs and architecture, targeting cashew, mango, rice, and vegetables will be done through a participatory processes that engaged a range of stakeholders to ensure that proposed approaches consider the varied needs of different farming groups and do not reinforce existing imbalances linked to capacity to access information. - Support to increasing awareness of agrometeorological advisory services and materials will be tailored to consider different existing levels of awareness with target actions to reduce existing information asymmetries across groups. - Inclusion of gender based targets for training facilitators and participation in trainings as well as targeted engagement with producer groups will support broad based engagement as well as facilitating transfer of information and skills to those more vulnerable in the community.

Source: Funding Proposal, Version March 2022.

Table 7: Potential adverse impacts and proposed mitigation measures for Outcome 2: Adaptive capacity of smallholder farmers and other local value chain actors, particularly women farmers and value chain actors, is increased through climate-resilient, high-value, and sustainable agriculture.

Potential Adverse Impacts	Mitigation Measure(s)
<ul style="list-style-type: none"> ▪ Enhancement in training and support, including access to finance towards climate-resilient and high-value certification programs disproportionately benefits some farmers increasing inequalities between groups and / or across genders. ▪ 	<ul style="list-style-type: none"> ▪ All elements of the Outcome’s design focus on the development of inclusive and gender responsive materials and systems, that are also appropriate for engagement if IP groups and include those that help to reduce risks of SEAH, with the mainstreaming of these concepts within the project design providing a central mitigation measure which will be monitored through the PMU. Specific actions to facilitate this will also include: <ul style="list-style-type: none"> - Selection of certification schemes will be based on criteria that include the accessibility of the scheme to farmers at different levels of capacity. - Development of value chain roadmaps will be done through a participatory process and will include a focus on how to support those most vulnerable and least able to enhance production techniques. - Development of criteria, and guidance documents as well as training for government and AC members and private sector to help strengthen design of contract farming agreements to ensure they provide support to all farmers and are able to enhance abilities of those most vulnerable. - Development of training materials that are accessible to a wide range of stakeholders and utilise a range of mediums to ensure access for those with lower levels of literacy and or access to technology. - Participatory development of financial products to ensure that meet the needs of and are accessible to range of stakeholders. - Mapping and planning of training locations and actions to ensure that there is good coverage of areas where vulnerable farmers are based and to ensure they have access to both training and future support on certification. - Inclusion of gender based targets for participation in trainings as well as targeted engagement with producer groups will support broad based engagement as well as facilitating transfer of information and skills to those more vulnerable in the community.
<ul style="list-style-type: none"> ▪ Site-specific impacts due to adoption of climate resilient technologies including small scale irrigation systems. 	<ul style="list-style-type: none"> ▪ Specific lists of proposed technologies will be developed for site specific interventions based on assessment during early project implementation based on this a number of risk mitigation approaches can be developed including: <ul style="list-style-type: none"> - Development of base line ES screening of proposed interventions to assess risks - Development of guiding criteria to assess the viability of sites for those interventions including identification of ‘no-go’ areas. - Development of baseline guidance for the implementation of technologies that will include key mitigation elements (e.g. undertaking of groundworks to be conducted in dry season to avoid high levels of sediment run off). - Identification of key domestic legislation as well as international good practice and training to groups on these to facilitate best practice for implementation.

Potential Adverse Impacts	Mitigation Measure(s)
<ul style="list-style-type: none"> ▪ Site-specific impacts due to the inappropriate planting of tree species based on site conditions. ▪ Exotic tree species could lead to biodiversity loss and non-locally adapted species could be invasive. 	<ul style="list-style-type: none"> ▪ Guidance on site-species matching will be developed for specific CPA locations which will provide information on key tree species that are adapted to the area and their ideal site-conditions. It will further identify areas where certain tree species should not be planted based on site-conditions. In addition to native species, the project will only promote tree species which are already locally adapted and do not pose a risk to the local biodiversity⁹. ▪ All activities will comply with Cambodia’s legal framework, as described in Section 4 (e.g. Forest Policy, Environmental Protection Act and Environmental Protection Regulations, among others). ▪ Technical assistance will be provided for the preparation of plans, and once approved further assistance will be provided to support community-based organizations with the implementation of these plans. Local resource persons will be provided trainings in good practices, and will maintain communication with local authorities. ▪ The project will not permit the clearing forests, wetlands or other critical ecosystems for rehabilitation activities. Site-visits will be conducted by local authorities during the management plan preparation process to ensure that the site is adequate, and to collect information to support monitoring activities (GPS coordinates, baseline data, etc.). Tree-planting activities will be permitted based on approved plans (CPA plans that have been approved by MoE and other relevant authorities).
<ul style="list-style-type: none"> ▪ Occupational health risks (injuries) due to the use of inappropriate agricultural practices and / or forest management practices without appropriate safety equipment 	<ul style="list-style-type: none"> ▪ All training materials and support activities will include information on OH&S as well as information on how to gain further information in these areas. ▪ Trainers/ extension staff supporting the implementation of activities will be trained on OHS good practices, protocols and equipment, who will then train project beneficiaries involved with the establishment of forest rehabilitation, agroforestry systems, and sustainable agricultural activities.
<ul style="list-style-type: none"> ▪ Discrimination against women creating difficulties in accessing project activities or receiving SEAH or GBV due to efforts to change roles or increase empowerment of women. 	<ul style="list-style-type: none"> ▪ At least 50% of project beneficiaries will be women, including proportional representation from indigenous groups and marginalized communities if present with final project activity sites. ▪ Gender Action Plan includes measures to promote women’s empowerment and gender equality as well as reduce risks of SEAH and GBV through enhanced awareness and training around gender roles as well as improvements in GRM systems to improve access for SEAH and GBV related grievances within the framework of the PEARL project.
<ul style="list-style-type: none"> ▪ Enhanced risk of SEAH due to increased mobility of women and other 	<ul style="list-style-type: none"> ▪ Ensuring of full screening of proposed actions and changes in mobility levels with work to ensure that there are measures in place to reduce vulnerability (group travel etc) as well as training to participants linked to SEAH risks. ▪ Strong support to development of contract farming arrangements to ensure clear and transparent processes.

⁹ Based on available literature and national and international experience.

Potential Adverse Impacts	Mitigation Measure(s)
<p>beneficiaries as well as creation of contract farming agreements that may present power imbalances and vulnerabilities for farmers if not protected</p>	
<ul style="list-style-type: none"> ▪ Discrimination or limited engagement of Indigenous Peoples. 	<ul style="list-style-type: none"> ▪ Indigenous peoples and social inclusion planning Framework includes measures to the engagement and participation of indigenous peoples within the framework of the PEARL project. ▪ Specific IP plans will form part of site specific ES risk screening that will be undertaken (as noted above) when details of target locations and groups engaged are confirmed. ▪ Targeted measures for social inclusion are cross-cutting and mainstreamed into project activities (e.g. trainings for CSOs representing marginalized groups, targets for trainers to come from marginalized groups, business literacy trainings for members of marginalized or highly vulnerable groups) ▪ Knowledge and communication focused activities (Output3) will include information from national experiences, international best practices as well as local and indigenous knowledge (including Activities3.1.1 and 3.2.2 with a strong focus on improving awareness of local and indigenous knowledge for climate change adaptation). The integration of knowledge from diverse actors into extension and knowledge sharing platforms will promote social inclusion, and also allow diverse groups to build on local experiences and knowledge. ▪ Training of trainers for the for the implementation of project activities should include men and women from indigenous groups. ▪ Development of agriculture roadmaps will include consideration of how IP groups are engaged as well as the engagement of other vulnerable groups.
<ul style="list-style-type: none"> ▪ Anticipated private sector investments may not be realized in a timely manner to support implementation. 	<ul style="list-style-type: none"> ▪ Cooperation and coordination with the private sector will begin from project inception, and the project will implement awareness raising programs to help engage private sector actors. ▪ Additional support will be provided to help producers organize, and build their capacities to coordinate and negotiate with the private sector. Business training workshops will be conducted for members of community-based organizations, which will help to build their capacities to interact and coordinate with the private sector, and efforts will support these actors to make professional business plans for climate-resilient investments.
<ul style="list-style-type: none"> ▪ Project activities could have a negative impact on Protected Areas within project target area. 	<ul style="list-style-type: none"> ▪ Biodiversity Management Planning Framework has been elaborated in Section 8 to avoid, mitigate and manage risks. Project activities are expected to have a positive impact on the protected area. ▪ Full environmental and social assessment will be undertaken on project implementation and specific management plans developed for target areas including impacts on IPs residing within and around areas as part of an IPP plan to include consideration on pressures on land and access to land.
<ul style="list-style-type: none"> ▪ Potential conflicts within local community-based user groups over land use boundaries 	<ul style="list-style-type: none"> ▪ While almost all target areas have confirmed land title a small number of areas of agriculture, in particular cashew production occurs on lands without legal title. Support to clarifying title and access rights to these areas has the potential to cause conflict. These challenges will be addressed through: <ul style="list-style-type: none"> - Clear engagement with groups facing legal title challenges

	<ul style="list-style-type: none"> - Support to engagement of land title clarification through relevant authorities - Support to a participatory process to improve clarification of title. ▪ Actions to support farmers to achieve higher returns on their land areas may create additional pressures on land and thus generate conflict: <ul style="list-style-type: none"> - Clear process for engaging with cooperatives and other producers based on criteria and commitments to maintain production areas and not seek to expand into other areas that are not under production or relevant for production (including for environmental and social reasons). - Support to engagement with buyers and certification schemes that focus on sustainable production systems and do not encourage rapid expansion activities.
<ul style="list-style-type: none"> ▪ Potential conflicts over the selection of priority intervention areas. 	<ul style="list-style-type: none"> ▪ Decision making is transparent and supporting studies and information (reports, minutes from consultations and workshops) are made publicly available ▪ Support targeted through recognised cooperatives and in CPAs based on clear criteria and in conjunction with a range of project stakeholders will support understanding and agreement across stakeholders. ▪ In the case where any household/ person feels discriminated against or has a problem with the project, they are able to access the project's grievance redress mechanism.

Source: Funding Proposal, Version March 2022.

Table 8: Potential adverse impacts and proposed mitigation measures for Outcome 3

Potential Adverse Impacts	Mitigation Measure(s)
<ul style="list-style-type: none"> ▪ Enhancement policy and enabling environment and information systems disproportionately benefits some farmers increasing inequalities between groups and / or across genders. 	<ul style="list-style-type: none"> ▪ All elements of the Outcome's design focus on the development of inclusive and gender responsive materials and systems, that are also appropriate for engagement if IP groups, and include those that help to reduce risks of SEAH, with the mainstreaming of these concepts within the project design providing a central mitigation measure which will be monitored through the PMU. Specific actions to facilitate this will also include: <ul style="list-style-type: none"> - Ensure equitable participation of groups in key decision making bodies, committees and multi-stakeholder forums, to enhance consideration of range of needs. - Action to ensure improved guidelines for certification bodies to not act as an enhanced barrier to entry for those more vulnerable and or socially excluded farmer groups. - Gender balance within targets for those who are trained on use of new systems. - SOPs are developed that fully mainstream gender as well as considerations of vulnerable groups and those more vulnerable and or socially excluded within production systems.

183. In addition, a number of potential SEAH based risks were also identified that linked to the overall nature of project implementation that will create elements of power imbalances across project personal as well as between project personnel and target beneficiaries. Key issues are highlighted in the table below. These points (and those identified within the tables above) will be further updated based on the guidance provided through FAO's recently endorsed Framework for Environmental and Social Management (FESM) which has explicit reference to SEAH, and will be accompanied by relevant operational guidance in the coming months. As well as GCF's a SEAH risk screening tool that is anticipated to be available in advance of project start up.

Mitigation Measures in the Prevention of Sexual Exploitation, Abuse and Harassment	
Common risks	Mitigation measures
<ul style="list-style-type: none"> -The Programme doesn't have a common approach to identifying, preventing and responding to SEAH. -There is a lack of clarity on how to identify and address Programme SEAH risks, including staff recruitment, whistleblowing, case management and handling. -There is a lack of capacities about gender approach and prevention of violence based on gender. 	<ul style="list-style-type: none"> -A PSEAH Plan is approved by developed based on operational guidance from FAO's new FESM and GCF SEAH operational guidance with the measures that will realize that commitment. -The PSEAH Plan meets relevant standards and reflects local laws.
<ul style="list-style-type: none"> -The PMU is not clear on their role and responsibility for safeguarding PSEAH Plan. -Programme Steering Committee does not allocate responsibilities and resourcing for safeguarding in the PMU. -The implementation plan for safeguarding PSEAH is properly funded. -Safeguarding PSEAH measures are not included in the Programme reviews or monitoring processes. 	<ul style="list-style-type: none"> -Safeguarding is a regular agenda item at Programme Steering Committee. -The Gender Specialist is the safeguarding PSEAH focal point. -The PMU is skilled in managing tensions that arise from implementing safeguarding standards in local contexts. -Existing Programme reviews and monitoring processes include progress with implementing safeguarding measures.
<ul style="list-style-type: none"> -Many consultants of the Programme don't recognize that PSEAH is their responsibility. -EE staff of the Programme do not understand that their conduct must meet expectations in both their professional and personal life. -There is a lack of knowledge about protocols and regulations for gender-based violence referrals 	<ul style="list-style-type: none"> -A Code of Conduct for all staff of the Programme that defines appropriate behavior and identifies consequences for breaches. -A Code of Conduct is translated into appropriate local languages. -A referral manual is carried out for the Programme

<p>-Recruitment processes under the Programme are weak and allow candidates with a previous record of SEAH violations to join the Programme or not consider equal treatment and prevention of any way of intimidation for women and men</p>	<p>-The Executing Entities Policies for recruitment include PSEAH course and professional ethics.</p>
<p>-Staff, consultants, volunteers and associates are not aware of their safeguarding responsibilities.</p>	<p>-Safeguarding induction training is delivered to new staff, consultants, volunteers and associates.</p> <p>-Regular meetings are used to continuously raise awareness on safeguarding as part of the PSEAH Plan.</p> <p>-Refresher trainings are conducted annually.</p>
<p>-PSEAH activities are poorly designed and/or underfunded, which exacerbates the risk of SEAH.</p> <p>-There are no clear standard operating procedures for particularly risky activities like cash programming, distribution activities or interaction with adolescents.</p> <p>-Programme risk registers do not exist or do not include safeguarding.</p>	<p>-Regular context analyses to inform PSEAH activities design and implementation. -Robust PSEAH activities management processes which encourage Programme coordination to assess and mitigate the risks of SEAH.</p> <p>-SEAH risks and mitigation actions are included the PSEAH Plan activities risk register.</p>
<p>-Staff, consultants, volunteers and associates don't report concerns.</p> <p>-Periodic monitoring is not performed, the grievance mechanism is not adequately used, reports and follow-ups are not performed</p>	<p>-A formal Complaint and Grievance Mechanism – Annex H is designed within the Programme.</p> <p>-Clear and confidential mechanism in place. -Regular communications for staff, consultants, volunteers and associates on reporting channels is available.</p>
<p>-Programme beneficiaries don't report concerns.</p>	<p>-The GRM is strengthened in line with operational guidance from FAO's new FESM and GCF SEAH operational guidance to fully address SEAH with staff trained within this as well as options for direct complaints to the OIG.</p> <p>-Clear and confidential mechanism in place. -Regular communications with beneficiaries on reporting channels is available.</p>
<p>-Poor handling of cases.</p>	<p>-A formal Complaint and Grievance Mechanism –is designed within the Programme.</p>

7 STAKEHOLDER CONSULTATION AND ENGAGEMENT

7.1 Stakeholder identification

184. Stakeholder consultation and engagement is at the core of the project. Close cooperation with project partners and extensive stakeholder consultation during project design has provided valuable feedback and shaped the project into its current form. The continuous engagement of stakeholders in project implementation is also envisioned, as described in Chapter 7.3.
185. Stakeholders are defined as actors within the following groups of actors: government, local communities, community-based organizations, civil society organizations/ NGOs, private sector, international development cooperation and international organizations.
186. Key project stakeholders were initially identified through discussions with the MAFF and MoE during the initial concept design phase with engagement then following a number of phases linked to the development of feasibility studies and project formulation actions with these outlined in section 7.2 below.

7.2 Overview of stakeholder consultation and engagement in project design¹⁰

187. Through the process of project development approximately 1,102 individual stakeholders, representing over 600 private and public entities and institutions, have been consulted (this includes 143 women and 966 men). The types of entities and institutions consulted include:
- Government line ministries,
 - Provincial line departments,
 - Financing institutions,
 - NGOs and development partners,
 - Community-based organization (mainly CFs and CPAs)
 - ACs, farmers' associations, producer group, and unions,
 - Private sector (agricultural product suppliers, input supplier, wholesalers, millers, retailers, processors, etc.)
188. The following paragraphs provide a brief summary of the consultations conducted, however more detailed meeting summaries, photos and attendance sheets are available in Annex 7 of the project submission package.
189. Feasibility study of agricultural certification Schemes in the Northern Tonle Sap Basin (2018)

¹⁰ Note: Meeting and workshop agendas, minutes and attendance sheets are available in Annex 7 of the project submission package.

190. The FAO-commissioned study by the Institut de Recherche et d'Application des Méthodes de Développement (IRAM) examined the project's target commodities' climate-resilient and high-value market development potential: organic rice in Preah Vihear and Oddar Meanchey, cashew in Kampong Thom and Preah Vihear and mango in Oddar Meanchey. Several certification options were explored for these value chains (GI, organic farming, GAP, etc.). The study involved 129 individuals (31 females) through interviews and questionnaires, including 20 from NGOs and development partners, 22 from government agencies, 28 from the private sector, ten from agricultural associations/unions, and 49 from ACs and producer groups.

Project formulation mission (2019)

191. During the first project formulation mission from 21 October to 1 November 2019, the formulation team met with various stakeholders, including the representatives of relevant line ministries and their provincial departments, development partners, NGOs, ACs, agriculture associations/unions, input suppliers, traders and exporters, financing institutions, and insurance companies. A total of approximately 72 individuals (20 females) representing 27 entities in Kampong Thom, Preah Vihear, Siem Reap, Oddar Meanchey, and Phnom Penh were consulted on the project's value change and integrated landscape approaches, including issues such as agricultural certification options, financial and technological access, agricultural extension capacity, and observed climate impacts around the four target crops - cashew, mango, organic rice, and vegetables.

COVID -19 impact assessment on agriculture and food security (2020)

192. FAO conducted the study in collaboration with the MAFF and the Council for Agricultural and Rural Development (CARD) in 2020. The objectives of the study were to 1) analyse critical challenges, issues, and concerns for the agriculture sector and food security during and after the COVID-19 crisis, b) evaluate the impacts of the COVID-19 pandemic on the agriculture sector and food security under key themes and c) offer immediate, medium- and long-term policy responses for the agriculture sector and food security during and after the COVID-19 outbreak.

193. The study involved 378 stakeholders across 14 provinces (29 government representatives, 21 development partner representatives, 66 private sector representatives, 19 local authority representatives, and 243 farmers).

Feasibility study on value-driven agricultural resilience study (2020)

194. This FAO-commissioned study by the International Centre for Environmental Management (ICEM) examined current knowledge gaps and market-driven opportunities along the PEARL project's target value chains, with an aim to identify public and private investment gaps and needs for improved agricultural production and distribution systems to develop a reliable supply of safe, climate-resilient agricultural products in Cambodia.

195. The study involved 65 individuals through interviews and questionnaires, including 16 government representatives, one private sector representative, four wholesalers/middlemen, 39 farmers, one agricultural association representative, and four input supplier representatives.

196. Feasibility study on climate rationale, crop-specific modelling, agrometeorological services capacity assessment, and adaptive action recommendations (2021)

197. The objectives of this study were to 1) examine and identify the observed and forecasted impacts of climate change on the project's four target value chains and 2) assess the existing capacity gaps and needs for providing highly tailored and crop-specific agrometeorological information and the last mile services. The study facilitated technical discussions with MoWRAM and GDA/MAFF (approximately eight experts) on crop modelling to establish specific parameters for rice and vegetables. Also, two separate surveys were conducted. The first survey focused on the MoWRAM and its provincial department's capacity gaps and needs, and the second survey focused on climate change impacts along the four value chains and opportunities for enhanced resilience to climate change. Participants were selected according to their involvement in specific value chain activities. About 118 individuals (17 females), representing 63 entities, participated in the survey. They represented government line ministries, provincial line departments, NGOs, development partners, ACs, inputs suppliers, wholesalers, financing institutions, etc.

Feasibility study on innovative financing mechanism: Farmer-led Agricultural Resilience Mechanism (FARM) (2021)

198. This study examined and identified options and specifications for the Farmer-led Agricultural Resilience Mechanism (FARM). The objective of FARM is to provide interest-free credits to legally registered ACs, associations, unions, and producer groups, including CFs and CPAs in the NTSB, for procuring technologies and infrastructure assets essential for adopting climate-resilient and high-value agriculture. The FARM will also ensure that such technologies and assets are chosen and used in a gender-responsive, inclusive and equitable manner. The study consulted approximately 20 individuals (5 females), including ten representatives from the ARDB and private financial institutions and ten from ACs and SMEs.

Feasibility study on catchment restoration planning (2021)

199. This study identified suitable forest restoration areas and specific types of restoration activities in different land-use categories, including potential CPAs and CFs to be engaged by the project based on their catchment restoration potential and governance capacity.

200. The study team conducted a series of consultations with key stakeholders, including the Provincial Department of Environment (PDoE), Forestry Cantonment (FC) officers, CPA and CF committee members, and NGOs, to shortlist CPAs and CFs in the NTSB provinces. The study team analysed the potential CPAs and CFs by taking into consideration: i) demographic information (population, percentage of ethnic people, ID poor, income level, occupation); ii) forest cover information (category, riparian, biodiversity corridor, upper catchment); iii) potential restoration areas; and iv) governance capacity (e.g., management plans). A total of 48 individuals were consulted, and they represented CPAs and CFs, MAFF and MOE and their provincial departments, and NGOs like the Wildlife Conservation Society (WCS).

Feasibility study on Integrated Finance and Economic Analysis (IFEA)

201. The study examined the project's feasibility from the financial and economic perspectives by providing a sensitivity analysis of critical elements. The study involved 37 farmers (18 females) from Tbong Khom, Bantey Meanchey, Battambang, Kampong Thom, Preah Vihear, Prey Veng, Tbong Khmum, Kampong Cham, Siem Reap, Prey Veng and Kandal provinces through interviews and surveys.

PEARL Project Working Group (PWG) (2021)

202. The PWG was established to provide strategic guidance and directions to the project formulation team under the leadership of the NDA. The PWG is co-chaired by representatives of the NDA and FAO Cambodia. The PWG comprises technical focal points from key government and non-government institutions. The members of the PWG represent:

- Ministry of Agriculture, Forestry, and Fisheries (MAFF)
- Ministry of Environment (MoE)
- Ministry of Water Resources and Meteorology (MWRM)
- Ministry of Commerce (MoC)
- Agriculture and Rural Development Bank (ARDB)
- Ministry of Women's Affairs (MoWA)
- Others - non-state executing partners (i.e., WCS and GRET).

203. The PWG met on 25 August, 2 September, and 22 September 2021. Several technical discussions concerning implementation arrangements and co-financing were held with individual members on a bilateral basis as a follow-up to the decision of the third PWG meeting.

204. Other meetings include:

205. Bilateral meeting on implementation arrangement and co-financing with the MAFF in November 2021 (10 participants from MAFF, project formulation team, and FAO Country Office);

206. Bilateral meeting on co-financing with the MoE in November 2021 (9 participants (one female) MoE, project formulation team, and FAO Country Office); and

207. Bilateral meeting on co-financing with the MoWRAM in December 2021 (9 participants (one female) MoWRAM, project formulation team, and FAO Country Office).

2nd Project Formulation mission 2021

208. The 2nd project formulation mission took place between 7 -21 December 2021.

209. The objectives of the mission were to 1) finalize the project's key design elements through the stakeholder validation of the funding proposal, including its climate rationale, logical framework, budget, co-finance, implementation arrangements, and innovative financial mechanism, and 2) consult with the intended local beneficiaries, MoE, MAFF, MoWRAM, MoC, ARDB, NGO partners, and other relevant stakeholders to solicit final input to the project design.

210. The project formulation team met and discussed with a total of 105 representatives (20 females) from 51 institutions and entities, including 15 from financial institutions, 21 from

provincial line departments, nine from line ministries, nine from NGOs, seven from development partners, 31 from ACs/associations/unions, 13 from other private sector entities. Table 3 provides a list of stakeholder groups consulted and key discussion summaries.

ESMF and Gender Assessment Activities (2022)

211. During early 2022 14 key informant interviews at national and provincial level and four provincial level focus group discussions (FGDs) were undertaken to inform the assessment. These meetings included representatives from national government, private sector, development partners as well as agricultural cooperatives, NGOs and community groups.

7.3 Stakeholder consultations for project implementation

212. As described above, the PEARL project has been designed based on extensive consultations with diverse stakeholders at the national, provincial and local level since 2018. It is anticipated that regular stakeholder consultations will continue during project implementation to inform stakeholders of the project's progress, support capacity building and awareness raising, validate findings and present results, among other topics.

213. FAO and MAFF will provide regular updates, including on their website and through the use of other forms of media including print, radio, reports and presentations. Information will be presented in Khmer and English.

214. A telephone number will also be communicated to project beneficiaries and stakeholder where they are able to discuss inquiries related to the project, raise concerns or file a complaint.

215. At the national level, stakeholders will be invited to participate in PSC meetings, bi-annually, to discuss pertinent topics. Participation will be invitation-based, and with a focus on key discussion topics of the meeting.

216. Stakeholders will also be engaged through the PCU which will operate at the national level.

217. Annual project reporting will further provide an overview of consultations and workshops conducted, and provide insight into upcoming events for the following year. A communication and information dissemination plan will be elaborated by the third year of project implementation.

218. Participation within the PEARL project is voluntary, and FPIC will be a core underlying principle the principles utilised with all community-based organizations while a full and formal FPIC process will be used when IP groups are engaged. In order to participate in the project FPIC principles will be followed in consultations with all AC and CPA groups. It will follow the FAO FPIC Manual for Project Practitioners (see Section 8.5.3 for more detailed information). Once ACs and CPAs are finalised within Outcome 2, consultations will occur to review and develop activities within a participatory way and to ensure that all stake and rights holders are fully informed of project activities. This process will ensure full information is provided in a timely manner before project implementation, emphasizing that participation in the project is completely voluntary and that in case of non-compliance with the concurred arrangements, indigenous peoples have the right to withdraw their consent

following the procedure established and mutually agreed upon according to FPIC principles. Information on the project's grievance redress mechanism will also be circulated at that time (see Chapter 7.5 and 8.9).

219. Each Activity planned for the PEARL project further has their own stakeholder engagement events, and activities targeted towards awareness raising. Examples of stakeholder engagement include:

- Consultations and workshops on development of harmonized processes and procedures for providing agro-meteorological advisory services through public and private extension providers,
- Consultations and workshops on development of inter-value-chain-actors roadmaps, identifying target certification programs and strategies, prepared at the provincial level for developing climate-resilient, inclusive, and gender-responsive premium value chains through certification programs. Inter-value-chain actors include input suppliers, farmers, millers, collectors, traders/exporters, local retailers, hoteliers, and restaurateurs. Consultations and workshops on local traditional knowledge for climate change adaptation.
- Consultations on development of sustainable financing tool for smallholder farmers and other local value chain actors developed.
- Consultations on CPAs and CFs participating in catchment protection and restoration through agroforestry and contract work.
- Annex 1 of the current document, provides a more detailed overview of planned stakeholder consultation events and workshops during the ESMF work plan.

7.4 Disclosure

220. Disclosure of relevant project information helps stakeholders effectively participate. The FAO will disclose information in a timely manner, that is accessible and culturally appropriate, placing due attention to the specific needs of community groups which may be affected by project implementation (such as gender, literacy, differences in language or accessibility of technical information or connectivity).

221. For moderate risk projects, the FAO will release the applicable information as early as possible, yet no later than 30 days prior to project approval. The 30 day period commences only when all relevant information requested from the project has been provided and is available to the public.

222. FAO will undertake disclosure for all moderate risk projects. For this, a disclosure portal has been established to publicly disclose projects' documentation related to environmental and social safeguards (environmental and social analyses, environmental and social impact assessments, Environmental and Social management frameworks, Indigenous peoples and social inclusion plans and other relevant documents). The website is:

<http://www.fao.org/environmental-social-standards/en/>.

223. In order to ensure the widest dissemination and disclosure of project information, including any details related to applicable environmental and social safeguards, local and accessible disclosure tools including audio-visual materials such as flyers, brochures, videos and community radio broadcasts will be utilized in addition to other tools. Furthermore, particular attention will be paid to women, indigenous peoples, marginalized minority groups,

illiterate or technologically illiterate people, and people with hearing or visual disabilities, people with limited or no access to internet and other groups with special needs. The dissemination of information among these groups will be carried out with the project counterparts and local actors such as municipalities, producers' associations, indigenous federations, organizations representing marginalized minority groups, women's organizations, government and other regional actors.

7.5 Grievance redress mechanism

7.5.1 FAO grievance mechanism

224. The grievance redress mechanism is designed to ensure that no individual or group are financially impacted by making a grievance or complaint. Any cost that may be associated with the preparation or issuance of a legitimate complaint or grievance (e.g. engaging a qualified person to assist the complainant) will be covered by the grievance mechanism. Special efforts will be made to ensure the grievance redress mechanism is available for all people, and that women, indigenous, marginalized and other vulnerable and or socially excluded groups have equal access and bear no negative repercussions for filing any complaints or grievances.
225. The FAO is committed to ensuring that its programs are implemented in accordance with the organization's environmental and social standards. In order to better achieve these goals, and to ensure that beneficiaries of FAO programs have access to an effective and timely mechanism to address their concerns about non-compliance with these obligations, the organization, in order to supplement measures for receiving, reviewing and acting as appropriate on these concerns at the program management level, has entrusted the Office of the Inspector-General (OIG) with the mandate to independently review the complaints that cannot be resolved at that level.
226. The FAO will facilitate the resolution of concerns of beneficiaries of FAO programs regarding alleged or potential violations of FAO's social and environmental commitments. For this purpose, concerns may be communicated in accordance with the eligibility criteria of the Guidelines for Compliance Reviews Following Complaints Related to the Organization's Environmental and Social Standards, which applies to all FAO programs and projects (Guidelines for Compliance Reviews Following Complaints Related to the Organization's Environmental and Social Standards).
227. Concerns must be addressed at the closest appropriate level, i.e. at the project management/ technical level, and if necessary at the Regional Office level. If a concern or grievance cannot be resolved through consultations and measures at the project management level, a complaint requesting a Compliance Review may be filed with the OIG in accordance with the Guidelines. Project managers will have the responsibility to address concerns brought to the attention of the focal point.
228. The principles to be followed during the complaint resolution process include: impartiality, respect for human rights, including those pertaining to indigenous peoples, compliance of national norms, coherence with the norms, equality, transparency, honesty and mutual respect.

229. This approach is outlined in more detail for Cambodia within the draft Grievance Review Mechanism of the FAO in Cambodia which is currently being finalised and will be operationalised mid 2022 (draft version included in Annex 4).

7.5.2 Project-level grievance mechanism

230. A grievance mechanism has been devised to acknowledge and address any negative impacts of complaints that arise as a result of the project. Any grievances should be analysed and mitigated as quickly as possible to avoid any tensions or conflicts.

231. The objectives of the grievance redress mechanism are to:

- Provide affected people an avenue through which they can voice their concerns and dissatisfactions;
- Create a platform in which stakeholders and community members can freely raise concerns and complaints to be effectively addressed;
- Demonstrate to project stakeholders and communities that they play an important role in project design and implementation;
- Follow up and report on efforts to take corrective action.

232. The grievance mechanism proposed will follow FAO's GRM approach as outlined above and within the Grievance Review Mechanism of the FAO in Cambodia which is currently being finalised and will be operationalised mid 2022 (see draft version in Annex 4). Based on the principles of subsidiarity the project will seek to address any grievances initially at PMU level with the project safeguards officer operating as the focal point for receiving, compiling, screening, recording and working with other PMU members and partners to identify relevant responses. This approach will build on and link with the country office approach and follow and number of integrated protocols including:

- a. Means of receipts of grievance - Multiple mechanisms including email, phone (including range of messaging apps), in writing, as well as in person will be provided with clear information provided to project stakeholders on these means as well as means to contact the FAO CO Grievance Officer and or OIG as well as guidance on when that may be necessary.
- b. Documentation of grievance – the approach will follow the same format as that of FAO CO to ensure clarity and integration of systems.
- c. Timelines for review and response to grievances – all grievances will be reviewed and acknowledged within one week of receipt with further action identified based on nature of grievances.
- d. Screening – All grievances will be screened based on the Categorisation of the FAO GRM approach into Category A (low) B (medium) and C (High) with all high risk grievances being reported immediately to FAO CO and to be raised further with Office of the Inspector General (OIG). It is also noted that the current system focuses primarily on grievances relating to ESS. Allegations of financial fraud, abuse of authority, corruption and other types of misconduct by FAO personnel or by associated third parties will be forwarded directly to OIG for review.
- e. Processing – based on the classification the project will take action to resolve the grievance.

- f. Feedback – actions taken / proposed to be taken will be communicated to the complainant with opportunity provided for further engagement and resolution should these be identified as insufficient. Should the complainant not see these as sufficient they may raise the complaint directly with FAO CO (through processes outlined in Annex 4) or further to the OIG.
 - g. Conclusion – upon conclusion of the action records will be made of all steps taken and outcomes in line with the FAO Cambodia GRM approach.
233. The Safeguards Officer and PMU will also provide regular (quarterly) updates to the Country Officer Grievance Review Operator of all grievances raised and actions taken to resolve them.
234. It is noted that the current draft GRM system outlined in Annex does not include specific SEAH, related grievance management and GBV referral pathways. As such during inception phase the project will work with FAO Cambodia to integrate these elements into the system through assignment of focal officers (including the national gender expert in the current project) and their training in SEAH and GBV issues as well as development of an immediate reporting protocol for such issues to ensure that grievances raised are passed up the reporting chain and actions taken in an immediate fashion and that grievances are managed with an inclusive, survivor-centred and gender responsive approach and mandatory involvement of the FAO E&S and Gender specialist in monitoring the process.
235. Upon project inception a review will be undertaken to assess whether the above approach can be integrated with Cambodia's own national systems (as detailed below) to help support the strengthening of these systems and further simplify the GRM system for users. Regardless of the outcome of this review the project will work closely with these systems to ensure that any relevant grievance raised within them is registered by the project and action taken.

National Grievance Systems

236. The formal legal system in Cambodia gives government agencies, the local government, quasi-judicial and juridical agencies and local communities the responsibility to accept feedback and grievances. These systems have been assessed as part of the REDD+ development process (as shown in Table 9) with the National Committee for Subnational Democratic Development (NCCD) "accountability box" system being noted as the most relevant.
237. This leading GRM mechanism literally includes a physical box located in each commune throughout the country. Citizens may anonymously deposit complaints about any topic at all into the box.
238. Under NCCD supervision, a special Provincial Accountability Working Group (PAWG) operates on a province by province basis to receive all complaints collected through the box and to take appropriate action. The PAWG operates as a two-step complaint resolution referral entity within each province. First, it reviews each complaint received itself. Then, it refers the complaint to the provincial/local level entity with jurisdiction and tracks the matter through resolution.
239. While complaints typically regard such matters as project-related issues, complaints against government staff or commune councillors and other service delivery issues, the Accountability Box's mandate is comprehensive and can include project actions.

240. Statistics regarding the volume of complaints received and more specific information about the nature of complaints received is available through the NCDD.

241. The current system is also being updated with the rolling out a new “one window service” for provincial and district level services, as part of an overall effort to streamline local level services.

Table 9. Cambodia Grievance and Redress Mechanisms

Existing GRM Within PLRs	Current Status	Status and potential for application
National Committee for Conflict Resolution on Protected Area Management	Established under 2008 Protected Area Law; not currently operational.	Potentially strong jurisdictional link and technical focus; however, not currently operationalized.
National Authority for Land Dispute Resolution	Established under Sub-Decree on the Composition of the National Authority for Land Dispute Resolution, No. 168 (2006); sporadically utilized for several years, but recently not operational.	Jurisdiction focussed on land disputes – potential for use in project but not prioritised
Government-run legal aid services	The Cambodian Bar Association (BAKC) operates legal aid services, providing fees to selected lawyers for casework on behalf of indigent clients. Overall annual budget is limited, and casework tends toward family matters, small disputes and criminal matters.	Limited reach and scope of service makes legal aid program incompatible with REDD+ needs
NGO-led legal aid programs	Various local NGO and donor-driven efforts support legal services on issues ranging from human rights defence to criminal defendant representation to selected land rights and indigenous peoples rights. Dependence on external funding makes long term availability uncertain.	Variable funding levels and shifting donor priorities make viability uncertain. Lessons learned and collaboration possibilities could be explored.
Forest Administration dispute resolution procedures	Forestry offenses specifically may be submitted to the Forestry Administration. Judicial police officers at the Forestry Administration have jurisdiction to investigate such offenses and file documents and cases with the court, which then rules on the issue. ⁶⁸	Relevant for actions within CF

	The Forestry Law (2002) also identifies an appeal process where persons can appeal to the Head of Forestry Administration and, if a decision is still not agreeable, can then appeal to the court system. ⁶⁹	
Cadastral Commission system	242. The Land Law (2001) addresses disputes over immovable property. Disputes involving land that does not have a formal title are resolved by the Cadastral Commission, created by the Ministry of Land Management, Urban Planning, and Construction, while the courts hear land dispute matters on formally registered land.	Potential use for project within specific sub-activities
IP Indigenous Community Committees	National Policy on the Development of Indigenous Peoples (2009) establishes the community committees as a mechanism for dispute resolution of any land dispute that has occurred within the community ⁷⁰ , mandating that it shall be resolved by the community committee and the community decision-making mechanism. If another community is involved in the dispute, then the legal procedures are stipulated in the sub-decree on the land registry committee. ⁷¹ If a dispute cannot be reconciled by the community committee ⁷² , the committee is required to forward it to another dispute resolution mechanism or to the court. ⁷³ The Policy also provides that the relevant institution provides translation services if a dispute is submitted to it from the community committee and a party to the dispute cannot speak Khmer. ⁷⁴ However, in general, for disputes arising within IP communities, the parties to the dispute generally are able to seek full resolution within the traditional village leadership and dispute resolution mechanisms.	Traditional indigenous community dispute resolution mechanisms are highly effective for resolving matters occurring fully within the IP community context. However, they are of quite limited utility for resolving disputes involving parties outside IP communities, with the project potentially acting as one such entity.

Table adapted from Cambodia Statement of Information on REDD+ Safeguards submitted to UNFCCC

Grievance Review Dissemination

243. As the grievance mechanism is instated in order to provide a platform for concerns to be voiced by any party, it is important that the method in which grievances can be made is effectively distributed to all stakeholders and community members within the project area. Information regarding the grievance redress mechanism will be distributed to all stakeholders and communities through:

- Inception workshop for PEARL Project at the national level, and in each of the three project provinces.
- Information sessions and community meetings, including the provision of information both orally and through informative materials
- Brochures regarding PEARL grievance redress mechanism (produced in Khmer), distributed to diverse stakeholders including local and provincial CSOs
- FAO Cambodia webpage
- Included as part of any other communication material that is designed and distributed during project implementation

Table 10: Overview of grievance review procedure

Steps	Procedures
1. Receive and register	<ul style="list-style-type: none"> ▪ Community organizations, households, individuals or other stakeholders, including through Accountability Box system, submit their grievances to the PMU safeguard officer and supporting officers within PPMUs. ▪ Safeguard Officers will receive grievances or feedback through telephone/SMS, email, feedback/complaint box or other written or oral formats.
2. Acknowledge, screen, assess and assign	<ul style="list-style-type: none"> ▪ PMU-M&R specialist will screen each grievance to ensure eligibility and either will assign staff to assess and investigate the grievance or forwards the grievance to higher institutional levels if too complicated to be addressed at the respective level ▪ Officers responsible for the investigation and addressing the grievance prepares and presents report on grievance with potential resolution options
3. Respond and address	<ul style="list-style-type: none"> ▪ PMU-M&R specialist proposes options to address the grievance to the complainant and any other related parties to reach an agreement
4. Implement and monitor	<ul style="list-style-type: none"> ▪ PMU-M&R specialist requests to implement the agreed upon redress option and, along with input from other PMU officers, assigns a relevant officer to monitor the progress and effectiveness of implementation
5. Report	<ul style="list-style-type: none"> ▪ PMUM&R specialist prepares a report, based on a standardized template, on the status of all grievances. This report is then submitted to the National Project Director (NPD) and the PMU’s Safeguard Officer. ▪ The report will be available on the official website for public access

Source: Funding Proposal, Version March 2022.

Informal and Customary Grievance Review

244. Customary practices of different community, ethnic and religious groups to manage conflicts will also be integrated into the formal grievance mechanism. In many instances grievance cases have been addressed in an informal manner by local communities under the direction of community or traditional leaders. The M&R specialist will consider the opinions or recommendations of leaders from any informal redress mechanisms before making any decisions.

Resolution

245. Once a grievance has been addressed and the party that filed the grievance has accepted the solution, an agreement should be signed by all involved parties. Records of all grievances made and addressed should be preserved in order to ensure continued compliance and a transparent grievance review mechanism.

8 INDIGENOUS PEOPLES AND SOCIAL INCLUSION PLANNING FRAMEWORKS

8.1 Indigenous Peoples' and Social Inclusion Planning Framework

246. The Indigenous Peoples' and Social Inclusion Planning Framework (IPSIPF) will be applied in all locations within the project area.

247. Within the project area, target groups including agricultural cooperative, CPA and CF groups are comprised of men and women from diverse ethnic and socio-cultural backgrounds, including members from different indigenous groups¹¹. Thus, social inclusion and safeguarding the rights of indigenous peoples and other marginalized/excluded communities must be cross-cutting throughout the project's activities, and monitored in a responsive and proactive manner.

248. In line with the relevant international legal framework, the FAO Policy on Indigenous and Tribal Peoples, and the FAO Environmental and Social Management Guidelines, as well as the GCF policy on indigenous peoples the following Indigenous Peoples and Social Inclusion Planning Framework has been developed to ensure that all due efforts will be made to respect, include and promote issues important to Indigenous Peoples and other vulnerable and or socially excluded groups during project implementation, including their right to Free, Prior and Informed Consent (FPIC). The framework will constitute the basis for the engagement of Indigenous Peoples and other vulnerable and or socially excluded groups as project stakeholders, promote ongoing consultations and communication throughout the project's lifespan, develop a feedback and grievance mechanism, clarify monitoring and evaluation arrangements, promote measures to minimize and mitigate any potential adverse effects and ensure project activities are implemented in a culturally-appropriate manner.

8.1.1 Baseline information

8.1.1.1 Indigenous Peoples in Cambodia

249. The vast majority (over 90%) of Cambodia's population are ethnic Khmer with the remainder being constituted of Vietnamese (5%), with the balance being Chinese, Cham (mostly a Muslim people) and indigenous ethnic groups sometimes called Khmer Loeu.

250. A total of 24 IP groups are generally recognised as present in Cambodia although many distinctions are not clear cut. These IP groups are estimated to comprise around 184,000 persons and constitute about 1.25 percent of the Cambodian total population. The IP group populations range from under 100 to 19,000 members include Phnong, Kouy, Mil, Kraol, Thmorn,

¹¹ The project will utilise the guidance within the GCF policy on IP along with national protocols to clarify the identification of IP groups within the target areas during early project implementation.

Khaonh, Tompoun, Jarai, Kreoung, Kavet, Saouch, Lun, Kachok, Proav, Souy (Sa'ong), Stieng, and Kavet.

251. Hill tribes mainly inhabit the isolated north-east mountainous regions of Ratanakiri and Monduliri provinces, and the mountainous areas of Koh Kong Province in the south-west. There are two main language groups: Mon-Khmer and Malayo-Polynesian languages. The largest Indigenous communities in the country are the Kuy, Mnong, Stieng, Brao, Tampuan, Pear, Jarai, and Rade. Many of these groups practise swidden-subsistence farming and most have retained their local animist religions

252. Livelihoods of remote and Indigenous peoples in Cambodia are largely connected to land and natural resource use, though exact practices vary among groups. These can include logging, burning of forest and wetland vegetation, subsistence cultivation, fishing (both subsistence and commercial), wildlife hunting, livestock grazing, charcoal production, non-timber forest product collection, and driftwood collection. Indigenous communities have substantial local knowledge and practices that may not be readily apparent to outsiders.

253. IP and other ethnic groups have in many areas been most heavily impacted by both environmental change and shifts in land use. Many groups do not have secure tenure and have faced challenges linked to development activities such as economic land concessions (ELCs).

254. While most groups speak Khmer this may be a secondary or tertiary language and linked with challenges in access to schooling in rural areas IP and other minority groups have also been most excluded due to gaps in access to information and or capacity to challenge inequalities or illegal actions within their lands.

8.1.1.2 Relevant Legislation on Indigenous Peoples in Cambodia

255. A number of key pieces of legislation have also been enacted that recognise the rights of IP and other vulnerable groups. These include¹²:

256. **National Policy on the Development of Indigenous People:** Approved by the Council of Ministers April 24, 2009 and sets out government policies related to indigenous peoples in the fields of culture, education, vocational training, health, environment, land, agriculture, water resources, infrastructure, justice, tourism and industry, mines and energy. Together with the Land Law (2001) this policy gives recognition to the rights of indigenous peoples to traditional lands, culture and traditions.

257. **Policy on Registration and Right to Use of Indigenous Communities** in Cambodia was approved by the Council of Ministers on April 24, 2009, and a Sub-Decree on procedures of registration of Land of Indigenous communities was signed on June 9, 2009 by the Prime Minister.

¹² Text adapted from – Cambodia Sustainable Landscape and Eco-tourism project (CSLEP), Indigenous Peoples Planning Framework (2019)– available at <https://documents1.worldbank.org/curated/fr/100851548911249934/Indigenous-Peoples-Planning-Framework.pdf>

This policy takes as its basis the recognition in the Land Law of 2001, of the right of indigenous communities to possess and use land as their collective ownership.

258. **Cambodia Constitution (1993)** supports the right to education, Education for All and 9 years basic education (Article 65, 66, 67 and 68). Article 48 states “the State shall protect the rights of children as stipulated in the Convention on Children, in particular, the right to life, education, protection during wartime, and from economic or sexual exploitation.” Article 46 states “the state and society shall provide opportunities to women, especially to those living in rural areas without adequate social support, so they can get employment, medical care, and send their children to area, and to have decent living conditions.” Article 31.2 stipulates that “Khmer citizens shall be equal before the laws and shall enjoy the same rights, freedom and duties, regardless of their race, color, sex, language, beliefs, religions, political tendencies, birth of origin, social status, resources, and any position”. Article 44 guarantees the legal right to own land equally for all Khmer citizens: “All persons, individually or collectively, shall have the right to ownership. Only Khmer legal entities and citizens of Khmer nationality shall have the right to own land”.

259. **Law on Education** was enacted by the National Assembly on the 19th of October 2007. The objective of this law is to develop human resources of the nation by providing lifelong education for the learners to acquire knowledge, skills, capacities, dignity, good moral behaviours and characteristics, in order to encourage learners to know, love and protect the national identity, cultures and language.

260. **The Land Law 2001** recognizes the right of indigenous communities in Cambodia to own immovable property - their land - with collective title. Article 23 in the law defines an indigenous community as:

- A group of people who manifest ethnic, social, cultural and economic unity,
- Who practice a traditional lifestyle, and
- Who cultivate the lands in their possession according to customary rules of collective use

261. Article 25 in the law defines indigenous community lands: “The lands of indigenous communities are those lands where the said communities have established their residencies and where they carry out their traditional agriculture”, and these lands “include not only lands actually cultivated but also includes reserves necessary for the shifting cultivation which is required by the agricultural methods they currently practice”. Article 25 also states “the measurement and demarcation of boundaries of immovable properties of indigenous communities shall be determined according to the factual situations as asserted by the communities, in agreement with their neighbours”. Article 26 states that “ownership of the immovable properties described in Article 25 is granted by the State to indigenous communities as collective property. This collective property includes all the rights and protections of ownership as are enjoyed by private owners”.

262. While this provides a strong basis for IP community title it should be noted that it is reported that of over 455 IP communities in Cambodia only 33 have been granted such titles in the 20 years since the land law was approved¹³.

263. **The Forest Law 2002** (Article 11, 15, 16, 40) guarantees and recognizes the right of indigenous peoples to continue the use and access to certain forest areas which these groups traditionally use and to practice their way of living in term of enjoyment of benefits from the forest. While the Forest Law provides a legal basis for community forests, the [2003 Sub-decree on Community Forest Management](#) set out rules for the establishment, management and use of these forests in Cambodia.

264. **The Protected Area Law (2008)** defines the framework of management, conservation and development of protected areas. The purpose of the law is to ensure the management, conservation of biodiversity, and sustainable use of natural resources in protected areas. It recognises the right of forest dependent and indigenous peoples to sustainably use the natural resources and reside within protected areas. It divides the protected area into four zones, which defines land-use and management for that particular zone. The zones are: core zone; conservation zone; sustainable use zone; community zone. This law is under the jurisdiction of the Ministry of Environment. Amendments in 2017 also provide for the establishment of Community Protected Areas which provide another mechanism through which communities can safeguard their access to land and resources and maintain a role in its governance.

265. Across these different pieces of legislation there are also a range of definitions for IP groups. The Land Law (2001), defines an indigenous community as “a group of people that resides in the territory of the Kingdom of Cambodia whose members manifest ethnic, social, cultural, and economic unity and who practice a traditional lifestyle, and who cultivate the lands in their possession according to customary rules of collective use.” Forestry Law (2002) also provides a definition for local communities: Community tribe or a group of people whose home residence is inside or nearby the State forest and having their custom, religious belief and culture that depend on Forest Products and by-products for their subsistence. This law also defines “community” as: A group of people living in one or more villages, in the living in one or more villages, in the Kingdom of Cambodia, interested in social, culture, custom and economic issues in using sustainable natural resources within or nearby their area for their subsistence and livelihood improvement. The Protected Area Law (2008) defines an “indigenous people” as original ethnic people living in mountainous areas, most of whom make their living by practicing shifting agriculture and other additional livelihoods, such as hunting, fishing, and collection of forest products/by-products. The National Policy on the Development of Indigenous Peoples (2009) also states that indigenous peoples are genetically distinct groups of people who are living in Cambodia and who have their own distinctive languages, cultures, traditions, and customs, and are different from those of the Khmer people who are the core nationals.

¹³ Data from Open Development Mekong - https://data.opendevlopmentmekong.net/library_record/access-to-collective-land-titles-for-indigenous-communities-in-cambodia - accessed March 2022

266. At an international level, Cambodia is party to eight of the nine core human rights treaties¹⁴:

- International Covenant on Economic, Social and Cultural Rights (ICESCR)
- International Covenant on Civil and Political Rights (ICCPR)
- International Convention on the Elimination of All Forms of Racial Discrimination (ICERD)
- Convention on the Elimination of Discrimination against Women (CEDAW)
- Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT)
- Convention on the Rights of the Child (CRC)
- Convention on the Rights of Persons with Disabilities (CRDP)
- Convention for the Protection of All Persons from Enforced Disappearance (CED).

267. Cambodia has also ratified a number of optional protocols to these treaties, which impose additional obligations on the Government: the Optional Protocol to the Convention against Torture (OPCAT); the Optional Protocol to CEDAW (OP-CEDAW); and the two Optional Protocols to the Convention on the Rights of the Child dealing with child soldiers and with child exploitation (CRC-OPAC and CRC-OPSC).

268. The application of these treaties in Cambodia is guaranteed under article 31 of the Cambodian Constitution. In 2007, after a petition from child rights NGOs supported by OHCHR, the Cambodian Constitutional Council issued a ruling clarifying that the human rights treaties ratified by Cambodia are part of domestic Cambodian law and should be applied by judges in the courts.

269. Cambodia also voted in 2007 to adopt the UN Declaration on the Rights of Indigenous Peoples without reservation, and has ratified the CERD, CEDAW, and CRC. It has however not assented to ILO Convention 169.

8.1.1.3 Indigenous Peoples within the project area

270. Consultation with and participation of Indigenous and vulnerable and or socially excluded is a vital cornerstone of the PEARL project and in ensuring project objectives. Among four target provinces in the PEARL project area, there are more than 11 Indigenous Peoples groups, totalling nearly a 40,0000 people, with the highest number and percentage of total population being within Preah Vihear province (see Table 11)

¹⁴ Cambodia has also signed but not ratified the [International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families](#).

Table 11. Indigenous population in four provinces¹⁵

IP Group	Siem Reap		Odor Meanchey		Kampong Thom		Preah Vihea	
	No. of HH	No. of People	No. of HH	No. of People	No. of HH	No. of People	No. of HH	No. of People
Phnong	0	0	45	235	0	0	183	659
Khouy	98	387	167	803	3,000	13,403	4,991	20,654
Stieng	0	0	2	14	0	0	4	20
Kraul	0	0	1	14	0	0	0	0
Thmorn	0	0	1	5	0	0	0	0
Tomphuon	0	0	3	19	0	0	1	5
Jaray	0	0	3	17	0	0		
Kachok	0	0	0	0	0	0		
Chhoung	0	0	0	0	0	0	0	0
Poar	0	0	0	0	0	0	420	1,520
Su-uy	0	0	4	15	0	0	0	0
Others	28	106	19	27	0	0	19	63
Total	126	493	245	1,149	3,000	13,403	5,618	22,921
Total IP population								37,966
Total population of provinces		1,094,000		276,039		681,549		254,827
Percentage Population		0.04%		0.4%		2%		9%

8.1.2 Key findings and analyses of impacts, risks and opportunities

271. Climate change will have a disproportionate adverse impact on IP. These groups are often more vulnerable to climate change and climate-induced natural disasters due to inter-generational discrimination (social and economic exclusion), they are usually heavily dependent on natural resources to maintain their livelihoods, and they often live in high risk areas that are often along river beds or in susceptible landslide or erosion areas. Therefore, the project is in their direct interest as it will strengthen the resilience of IPs living in vulnerable areas.

¹⁵ Data from Royal Government of Cambodia 2009 Census – available at <http://mail.nis.gov.kh/nis/CSES/Final%20Report%20CSES%202009.pdf>

8.1.2.1 Potential impacts of the PEARL project on Indigenous Peoples and other vulnerable and or socially excluded

272. The ESMF has noted a series of potential impacts that can occur as well as potential management mechanisms to address these. These risks focus primarily on:

- The project enhancing existing social and economic inequalities through benefiting those more well off and failing to reach those more vulnerable and or socially excluded groups including IPs.
- Project activities resulting in enhanced pressure on IP or other vulnerable and or socially excluded group's land areas and potential displacement of land use activities through agricultural activities or forest rehabilitation actions.
- Exclusion or limited influence of IP or vulnerable and or socially excluded groups within community-based organizations

273. It seeks to address these through the noted management approaches as well as identifying the need for further specific risk screening to be undertaken and management plans developed based on more detailed assessment of specific project locations and the target beneficiaries, during early project implementation (See section 6.4 of ESMF).

274. It also notes a number of key elements within the project design that ensure the mainstreaming of key risk mitigation measures and indeed that proposed actions are focused on supporting vulnerable and or socially excluded groups and helping to increase resilience to the impact of climate change within rural areas. A number of key elements of this are:

- a. Participation in the project is voluntary, and FPIC will be a cross-cutting principle applied to ensure that free, prior and informed consent is provided prior to the implementation of any activities with a formal and fully recorded FPIC process applied in all contexts where IPs are present¹⁶.
- b. Project targets increasing awareness of rural communities of the future impacts of climate change and providing them with tools to respond to a changing climate – helping to support the resilience of rural communities
- c. Project supports adoption of GAP and other enhanced agricultural practices that will increase quality and value of production while also enhancing resilience to shocks, through a combination of improved farming, enhanced income and improved capacity and governance systems to response to shocks.
- d. The project will help to restore degraded forest areas helping to improve availability of forest resources as well as key environmental and watershed services.

¹⁶ The procedure for implementing FPIC will be based on guidance provided through both FAO and GCF as well as other international and national best practice with this knowledge being utilised to design the most appropriate system for the local context and community practices.

- e. The project is based on a participatory approach in line with the principles of FPIC, so that Indigenous Peoples are able to adopt measures that are well suited to their local context and differentiated vulnerabilities.
- f. Project target site selection and proposed ACs and interventions are based on extensive consultation and engagement and focus on agricultural cooperatives that have a wide reach to rural communities as well as CPA and CF groups that living in rural areas. As such it is focusing on groups that have historically been vulnerable and or socially excluded and will be working to build their capacity and enhance well-being.
- g. Project has identified sustainable agricultural standards that will be targeted for AC engagement all of which include requirements for production to not results in enhanced environmental degradation and forest clearance or displacement of rural communities.
- h. Project has committed to all reforestation and forest rehabilitation being done in line with international best practice including no displacement of communities.

275. In addition to these actions the project will adopt approaches to engagement that will focus on the full and effective engagement of IP and vulnerable and or socially excluded groups including:

- a. production of information in a range of mediums to facilitate access through a range of stakeholders including IP groups
- b. where relevant production of information and capacity building materials in IP languages to enhance access across groups and facilitate peer to peer learning.
- c. development of specific IP plans will form part of site specific ES risk screening and ESMP that will be undertaken (as noted above) when details of target locations and groups engaged are confirmed.
- d. targeted measures for social inclusion are cross-cutting and mainstreamed into project activities (e.g. trainings for CSOs representing vulnerable and or socially excluded groups, targets for trainers to come from vulnerable and or socially excluded groups, business literacy trainings for members of vulnerable and or socially excluded groups)
- e. Knowledge and communication focused activities (Output3) will include information from national experiences, international best practices as well as local and indigenous knowledge (including Activities3.1.1 and 3.2.2 with a strong focus on improving awareness of local and indigenous knowledge for climate change adaptation). The integration of knowledge from diverse actors into extension and knowledge sharing platforms will promote social inclusion, and also allow diverse groups to build on local experiences and knowledge.
- f. Training of trainers for the for the implementation of project activities should include men and women from indigenous groups.

- g. Development of agriculture roadmaps will include consideration of how IP groups are engaged as well as the engagement of other vulnerable groups.

276. The project aims to cause no harm to IP, including through loss of livelihood or impacts on their cultural identity and a number of exclusionary activities are also noted in Annex 2 of the current document including compulsory resettlement or displacement from lands or economic, social or cultural opportunities. IPs consulted identified that the project addresses many issues that affect their livelihoods including climate change, climate-induced natural hazards, and land degradation trends in the area. They noted that water scarcity and extreme heat already impact their agricultural production, and that flooding and landslides further negatively impact IP within the project area. Forest and land degradation also further negatively impact their livelihoods through reducing the abundance and quality of forest products, including medicinal herbs and NTFPs. As such project interventions are anticipated to have a significantly positive impact on IP groups and other vulnerable and or socially excluded groups within the project area.

277. The project also includes a GRM that will be reviewed during the inception phase to ensure that it fully meets the needs of IP groups within project areas based on their potential level of engagement and specific needs.

8.1.2.2 Consultations with Indigenous Peoples

278. Through the process of project development approximately 1,102 individual stakeholders, representing over 600 private and public entities and institutions, have been consulted (this includes 143 women and 966 men) as well as representatives of IP and other vulnerable and or socially excluded groups. The main types of entities and institutions consulted include:

- Government line ministries,
- Provincial line departments,
- Financing institutions,
- NGOs and development partners,
- Community-based organization (mainly CFs and CPAs)
- ACs, farmers' associations, producer group, and unions,
- Private sector (agricultural product suppliers, input supplier, wholesalers, millers, retailers, processors, etc.)

279. It should be noted that within these provinces there is no well established and fully representative IP networks rather IP individuals, households or communities participate in and are integrated within other networks linked to agricultural production, or community protected area management. As such the views of IP groups were recorded within consultations with these other groups.

280. Key issues of note linked to IP groups that were raised in these consultations have been summarised in the IP plan with a focus on maintaining access to land and traditional land use patterns as well as ability for ongoing community based governance of land use. In addition desire to be able to more effectively engage with agricultural markets and high value supply chains were seen as important.

281. Through this development process which spanned over four years the project development team has ensured that IPs and other vulnerable and or socially excluded groups were duly informed, in a transparent and impartial way, about the project activities being proposed. Iterative discussions based on target area feasibility studies and engagement on the proposed project activities were conducted from 2018 to March 2022 with the related outcomes being documented and made available to all parties (meeting summaries and attendance sheets available in Annex 7 of project submission).

8.1.2.3 Summary of elements for inclusion in IPP

282. Once further assessment of target areas has been completed and further action is undertaken to identify relevant locations and groups for project activities and in line with screening procedures outlined within the ESMF and this current IPP – more detailed IPP documents for target areas will be developed in collaboration with IP groups within these areas. These should be developed in line with guidance provided within the GCF IP policy and include information on:

- a) Baseline information (from independent and participatory environmental and social risks and impacts assessment processes);
- b) Key findings and analyses of impacts, risks and opportunities;
- c) Measures to avoid, minimize and mitigate negative impacts, and enhance positive impacts and opportunities;
- d) Community-based natural resource management;
- e) Results of consultations (during environmental and social risks and impacts assessment processes), including a list of people and organizations that participated, a timetable, who was responsible for each activity, the free, prior and informed consent, and future engagement plans;
- f) Gender assessment and action plans;
- g) Benefit sharing plans;
- h) Tenure arrangements;
- i) Grievance redress mechanisms;
- j) Costs, budgets, timetables, organizational responsibilities; and
- k) Monitoring, evaluation and reporting.

283. While actions within this plan may fall to project partners FAO as the accredited entity will require and ensure that the executing entity and other intermediaries apply and fulfil the requirements of the plan in line with the GCF IP policy. Implementation and monitoring of this will fall initially with project personnel including the safeguards specialist and PMU but will be overseen by FAO CO and regional centres through quarterly reporting processes and periodic monitoring visits.

8.2 Gender assessment and action

284. As part of development of the ESMF a focused gender assessment was conducted and action plan developed. The assessment was conducted through engagement of different stakeholders including relevant national, sub-national institutions, communities, and private sector actors in project-identified provinces and was based around a number of key approaches:

- a. **Desk review**—project’s proposal and feasibility studies, national and sectorial policies and strategies were collected and reviewed. Relevant aspects from the existing studies, strategies and policies are being incorporated in the report of this gender assessment.
- b. **Key informant interview**— in-depth interviews were undertaken with various national, sub-national institution, private sector actor and community representatives to assess their views related to gender gaps in agriculture sector and within specific scope of the proposed project. Total of 14 in-depth interviews with total of 30 participants (of whom 8 participants are women) were conducted with representatives of (1). MAFF; (2). Ministry of Environment (MoE); (3). Ministry of Water Resources and Meteorology (MoWRAM); (4), Ministry of Women’s Affairs (MoWA); (5). Agriculture & Rural Development Bank (ARDB); (6). Food and Agriculture Organization (FAO); (7 & 8). Provincial Department of Agriculture, Forestry, and Fisheries (PDAFF) at Siem Reap and Kampong Thom; (9 & 10). Provincial Department of Environment (PDE) at Siem Reap and Kampong Thom; (11 & 12). Provincial Department of Women’s Affairs (PDoWA) at Siem Reap and Kampong Thom; (13). Echo-farm at Siem Reap; and (14). Preah Vihear Meanchey Union of Agricultural Cooperative (PMUAC). To minimize risk of COVID-19 and travel time, the interviews were conducted virtually and face-to-face. The list of persons met is available in Annex 3 of project submission.
- c. **Focus Group discussion**—A total of 4 Focus Group Discussions (FDGs) were organized at different communities in Siem Reap and Kampong Thom. FDGs were organized with the same arrangements at Siem Reap and Kampong Thom. At Siem Reap, 10 (5 women) committee members and members of Community Protected area (CPA) living on top of Kulen mountain (national park), at Svay Lue district, Siem Reap province were invited to participate in FGD. A total of 18 participants (11 women), of whom are the committee members and members of Agriculture Cooperative (AC) were invited to participate the FGD organized at Sot Nikum district, Siem Reap province. At Kampong Thom, 12 (4 women) committee members and members of CPA

living in Prasat Sombo district were engaged in the FGD, and 19 (12 women) committee members and members of AC were also engaged for FGD at Santuk district. Engagement of these participants was combined between community leaders, small-holder farmers, value chain actors, and producers. The FGDs took between 60 to 90 minutes, organized at open spaces to avoid risk of COVID-19 transmission. The FGDs were moderated by national gender consultant expert and supported by an assistant. All participants were requested consent to discuss on the assessment's topics as well as recording.

285. The assessment has noted a number of key considerations and potential recommendations based on reviews of existing literature and past project development actions as well as consultations carried out as part of the assessment. The below section summarises these and links them with the points included within the gender action plan and main funding proposal. It is also noted that at present many of these interventions remain broad with more specific and targeted interventions to be developed as part of project implementation once specific target agricultural cooperatives and CPAs have been identified as well as through development of key project products (e.g. commodity strategic plan development), many of these elements will be coordinated by the National Gender Specialist with Support from FAO HQ and other consultants as outlined in the funding proposal. Key element of the central approach however include:

Agricultural system specific:

286. *Access to agrometeorological services* – there are significant limitation in womens' capacity to access effective agrometeorological information due to a number of factors with main elements of this outlined below:

- *Capacity* – existing gender disparities (linked to lower access to education and training) as well as access to technology such as mobile phones has limited the capacity of women to fully access and understand agrometeorological information as well as other market information.
- *Quality of systems* – existing agrometeorological information systems are limited in their scope and level of details as well as accuracy and as such are not as useful to any farmer, including women, as they are needed to be.
- *Coverage of systems* – the system currently does not cover areas in sufficient detail nor provide information tailored to different production systems with small scale systems, often women led, such as vegetable farming that have high needs for such systems often being poorly catered for.

287. *Recommendations* – in the development of the agrometeorological systems it is critical that consideration be given to a range of different needs with this including both information production and how that information is disseminated.

288. These recommendations have been considered and are included within the gender action plan and mainstreamed into the project document.

289. *Access to information and market opportunities* – as noted within the agrometeorological systems points above and the content of this report, women face a number of challenges linked to gender norms and systemic gender issues. A number of these key issues are noted below along with recommendations on steps to address them and links with how these are considered within the gender action plan and main project document.

- Access to information – women often have more limited access to information due to a number of reasons that are both due to structural inequalities (e.g. lower access to education) as well as gender norms (e.g. limited roles in decision making bodies as well as lower access to technology).
- Mobility – across all interviews lower levels of mobility for women (whether it be in terms of taking product to market, accessing more remote farm areas or being engaged in community PA patrols) was noted as a barrier to addressing a number of gender gaps.
- Gender norms within family – it was widely noted that women continue to full-fill many of the domestic roles within households and as such have less time available to undertake other activities linked to agricultural development of leadership roles.
- Access to finance – access to finance was also noted as a challenge across genders with the specific gender based issues linked to women often undertaking enterprises that were ‘new’ to the market or with which financial service providers had less experience and were less well adapted to service.

290. *Recommendations* – Addressing these challenges requires a combination of elements with the overall approach needing to target a wholistic approach to addressing gender disparities. Key elements of this include:

- Improved access to training – it is critical that female headed house-holds and other relevant women gain access to training through the project with elements of this being women focused and catering to their specific needs.
- Awareness raising and training on gender issues – it is critical that there is broad action to support enhanced gender awareness across key project stakeholders to enhance understanding of the different challenges and needs faced across genders and how these can be responded to.
- Mainstreaming of gender based approaches into key sector and business plans as well as all elements of project implementation – building on the above elements gender elements but be mainstreamed into key project outputs in terms of strategic plans and agrometeorological and financial services products to ensure that these are able to both meet the needs of and help address disparities between genders.

- Development of gender aware products across the project – all project products from information and awareness raising materials to specific technical products should be gender aware to support improved access to them and that they are able to functionally support reductions in gender disparities.

Cross cutting

291. *Effective quantification of the impacts of the project and changes in agricultural systems for women* - the project is seeking to demonstrate tangible improvements in the lives of women with many women within the farming community facing additional challenges linked to gender norms, including demands linked to domestic jobs within the household, as well as restrictions on mobility and access to information on improved agricultural techniques.

- *Recommendations - Adoption of W+ approach* – the W+ standard is the first women-specific standard that measures women’s empowerment in a transparent and quantifiable manner, gives a monetary value to results and creates a new channel to direct financial resources to women. The standard would thus provide the dual benefit of providing both a mechanism for the project to monitor impact and a means by which beneficiaries can gain increased market access as well as direct financial support.

The potential of this approach has been noted within Sub-activity 2.1.2.4: Explore the possibility of adopting and operationalizing W+ Standards to empower women farmers, particularly in the vegetable sector.

292. *Violence against women (VAW), and Sexual Exploitation, Abuse and Harassment (SEAH)*, – these elements were not widely reported with consultations but remain a risk, but remain a risk, given the prevalence of violence against women in rural areas (with 33% of women reporting experiencing violence¹⁷) as well as the changing power and operational dynamics that project interventions will bring (as noted in Section 3.9 of the Gender Assessment) and as such these risks must be addressed within the project implementation.

- *Recommendations* – the project must ensure that there are appropriate measures in place to raises awareness and understanding of VAW and SEAH and support education to reduce its risk. This must also be done in collaboration with an effective grievance and redress mechanism.

293. *Grievance and redress (GRMs)* – detailed information on the functioning of existing GRMs was not available as part of the assessment.

- *Recommendations* – as noted within the ESMF the project will utilize FAO’s CO national GRM that will be under implementation when project starts. This mechanism will be further

¹⁷ National Institute of Statistics, Directorate General for Health, and ICF International, 2015. Cambodia Demographic and Health Survey 2014. Phnom Penh, Cambodia, and Rockville, Maryland, USA: National Institute of Statistics, Directorate General for Health, and ICF International. Available at <https://dhsprogram.com/pubs/pdf/FR312/FR312.pdf>

strengthened, to ensure there is a localised mechanism to be able to address issues of SEAH and VAW, with training provided to staff and expert guidance on how to ensure the system provides a gender responsive and survivor centered approach. This process will be supported through the project and through expertise of the National Gender Expert as well as FAO’s global team.

294. *Sustainability* – the sustainability of gender based interventions is critical with impacts needed to continue well beyond the project lifetime.

- *Recommendations* – the current project has sustainability built into its design using a model of public private social partnerships as a means to drive change, with actions to develop business plans and strategies that are then supported by improved access to finance, agrometeorological information and high value markets. These objectives are fully in line with key agricultural strategies and plans within Cambodia including the Climate Change Action Plan for Agriculture, Forestry and Fisheries Sector 2016-2020 (CCPAP-AFF) and Nationally Determined Contribution (NDC). From a gender perspective the project also aligns with the Neary Rattanak (NR) Phase V, as well as the *Gender and Climate Change Strategic Plan (GCCSP) 2014–2023* and second *Gender and Climate Change Action Plan (GCCAP) 2019–2023*, as well as the *master plan for gender and climate change (2018-2030)* that have been prepared and used as a roadmap for formulating the projects and programs by MoWA.

Based on these recommendations the following action areas were developed as part of the gender action plan with further information being provided in the table below.

Table 12. Gender based actions

Gender focused Activities
Impact statement: Female smallholder farmers and other local value chain actors are economically empowered through improved of accesses that are expected to impact growing premium market segments while using their improved market access to incentivize their transition to climate-resilient practices, mainly through effective public-social-private partnerships.
Outcome 1: Farmers’ capacities are enhanced to manage climate impacts and related risks
Output 1.1. Availability and access to agrometeorological advisory services tailored to target value chains improved among smallholder farmers and value chain actors, particularly women.
<ul style="list-style-type: none"> • Support integration of gender considerations in baseline conditions and capacity and data gaps of existing stations and areas of need. • Support the development of criteria that include gender considerations for assessment of • priority stations for additional sensor upgrades, strategic locations for adding new agrometeorological stations, and training needs for station managers, data analysts and system administrators • Provide capacity building to TWG-AW, led by MAFF and MoWRAM, with additional experts from other relevant entities, on gender considerations linked to development process and mobilise them to enhanced integration of gender considerations within station design and information provision. • Ongoing review and input into development of TOT materials and other tools as well as information on awareness raising of them to ensure that they are accessible for women and other minority farmers and local value chain actors.

Outcome 2: Adaptive capacity of smallholder farmers and other local value chain actors, particularly vulnerable women farmers, is increased through market incentives that promote climate-resilient, higher-value, diversified, and sustainable production and processing

Output 2.1: Premium market access opportunities for cashew, mango, organic rice, and vegetable producers and processors increased through climate-resilient and high-value certification programs (linking to Sub-components 2.2. and 2.3 for financing and technical capacity building).

- Provision of training to key stakeholders on key gender considerations as part of roadmap development.
- Support integration of gender into roadmaps through review and inputs to process and documents.
- Develop participatory baseline gender assessment of target cooperatives, CPAs and CFs with members.
- Assist cooperatives, associations, producer groups, CPAs, CFs, and agricultural unions in preparing crop-specific action plans/business plans for operationalizing their respective roadmaps in an inclusive and gender-responsive manner.
- Support to review and development of supplementary guidelines, tools, and training materials to consider gender in the context of climate risks and strategies for the certification programs identified under Activity 2.1.1.

Output 2.2: Access to technologies for climate-resilient agriculture and value chain development improved among smallholder farmers and other value chain actors, particularly women (linking to Sub-component 2.1 to support the business plans of cooperatives, associations, producer groups, CPAs, CFs and agricultural unions).

- Support to review and development of risk finance options based on gender considerations.
- Support development of awareness raising materials and strategies to ensure that they are fully gender responsive.

Output 2.3: Awareness and knowledge of climate-resilient and sustainable, high-value agriculture increased among farmers and other local value chain actors, particularly women farmers and value chain actors (linking to Sub-component 2.1 to support the operationalization of business plans by the cooperatives, associations, producer groups, CPAs, CFs and agricultural unions)

- Input into development of clearing house mechanism to ensure that it effectively captures gender based information and provides fully gender responsive information.
- Support to development of training for extension officers, retailers, hoteliers, restaurateurs, and traders/exporters that increases understanding of gender considerations within farming groups and improves quality of service delivery.

Output 2.4: Improved agro-ecological conditions and connectivity.

See support under activity 2.1.

Outcome 3: Regulatory and institutional frameworks and capacities for climate-resilient agricultural certification, cross-sectoral coordination for increased PSPPs and smallholder financing, and climate-informed investment support are strengthened

Output 3.1: Regulatory and institutional arrangements and capacity relevant to developing certification-based value chains strengthened to provide enabling conditions for adopting climate-resilient, high-value and sustainable agriculture and food security.

- Baseline review of gender considerations within existing policy and enabling environment
- Input into development of revised regulatory environment.

Output 3.2: Gender-responsive landscape-level agroecology monitoring system (LAMS) developed to crowd in public and private investments in climate-resilient, high-value and sustainable agriculture.

- Baseline review of gender needs in development of LAMS
- Input into development of LAMS and SOP
- Inclusion of gender considerations in awareness raising and training materials

9 BIODIVERSITY MANAGEMENT FRAMEWORK

9.1 Introduction

295. The risk to biodiversity from the PEARL project has been identified as high within the initial FAO risk screening, due to the undertaking of project activities within protected areas.

296. The project design and risk management framework (including current document) however are seen as sufficient to ensure that the projects interventions do not present an unacceptable level of risk to biodiversity. This is achieved through:

- a. The overall project design which focuses on building capacity of communities to respond to climate change, thus increasing their resilience and reducing likelihood of enhanced impacts on forest areas.
- b. Site selection of CPA and CF areas being based on sites where there is either a strong community management committee in place that are able to implement plans in line with project goals and/or are areas that are in significant need of rehabilitation and support and thus project interventions will mark a considerable improvement above baseline conditions.
- c. Actions on forest rehabilitation being undertaken in line with management plans for the target areas with approaches based on Restoration Opportunities Assessment Methodology (ROAM) (Bernacki *et al.*, 2018) under FAO and IUCN as well as national best practice approaches to forest restoration.
- d. Support to agriculture focusing on engagement with sustainability standards that promote / require deforestation free produce.
- e. Use of clear guidance and risk management activities – including site specific ESIA's, mapping of agricultural and rehabilitation areas and continual engagement with community groups (see Table 13 for more information on potential impacts and management strategies).

297. More broadly the project is also identified as able to provide substantial benefits with appropriate safeguards in place. The project will result in benefits such as carbon sequestration from planting mango and cashew trees on fields previously used for annual crops such as cassava. The PEARL project will also prevent the expansion of these orchards into existing forests. Additionally the project will restore and protect 7,600 ha of critical catchment forests and other ecologically sensitive riparian zones in the upper watersheds through IWM and agroforestry interventions.

298. The project is further expected to improve awareness of climate change and climate-resilient sustainable natural resource management, which is expected to increase awareness on the importance of mainstreaming climate change mitigation and adaptation measures in their forest and farm management

9.2 Objectives and biodiversity approach

299. The objective of this Biodiversity Management Framework is to describe the planned approach taken by the PEARL project to safeguard biodiversity resources, and to manage and mitigate potential impacts that could arise during project implementation.

300. Biodiversity is seen as a cross-cutting additional benefit of project activities, and the project is aligned with Cambodia’s National Biodiversity Strategy and Action Plan (2016-2020) which includes priorities on community based action and action on climate change. It is also in line with the country’s National Protected Areas Strategy (2017) which includes a focus on: strengthening conservation and restoration of PAs (under Strategic Objective 1), increasing community participation in management of PAs and enhancing livelihoods of communities (Strategic Objective 4 Expanding Community Participation and Benefit).

301. Thus, the project will provide a unique approach that’s based on not only direct investments to enhance the resilience of local communities and ecosystems, but will also strengthen institutional capacities at the provincial, local (rural municipality) and community-based organization level, and will improve awareness, knowledge and communication. Together, these measures will help to support a transformation towards climate-resilient agricultural practices in the land use sector.

302. In the context of the ESMF, once the project beneficiaries (agricultural cooperatives, community forest group and community protected areas groups) and specific interventions within specific locations (e.g. restoration plans and agricultural support activities, as well as agricultural certification standards) are identified an environmental and social screening exercise will be carried out using FAO’s environmental and social screening checklist. This tool will help identify sub activities that require mitigation measures, including those discussed in Section 6 of this document. For sub-activities that require mitigation measures, and environmental and social management plan will be developed to be monitored thought the implementation phase.

Identified Risks and Mitigation Measures

303. As part of the development phase a number of risks have already been identified along with their potential risk level and mitigation measures. These are outlined in the table below:

Table 13: Overview of potential negative impacts on biodiversity from project activities

Negative Impact	Likelihood	Impact	Risk Level	Mitigation measures
Forest clearance driven by desire to increase agricultural areas.	Possible ¹⁸	Low	Low	A number of mitigation measures are in place and will be implemented to help address this including: <ul style="list-style-type: none"> - Site selection and ongoing support – CPA and CFA areas have been selected based on their capacity to manage their areas. As such these

¹⁸Through actions to increase the value of agriculture and level of productivity per ha there is a risk that this will contribute to increasing pressure to expand land area under production. Conversely such increases may also help to mitigate this threat as communities require less land for subsistence production and to meet their income needs.

				<p>communities are well placed implement management plans and manage any local conflicts linked to risks of expansion</p> <ul style="list-style-type: none"> - Site monitoring – agricultural areas will be mapped and monitored to ensure no additional expansion within PAs - Screening of all proposed activities to be implemented within PAs - Deforestation free agricultural certification schemes - Focus on support to engagement with agricultural certification standards that require deforestation free approaches and conservation of biodiversity.
Site-specific impacts linked to agricultural actions (e.g. enhanced sediment run off from agricultural activities)	Possible	Low	Low	<p>A number of mitigation measures are in place and will be implemented to help address this including:</p> <ul style="list-style-type: none"> - Site selection and ongoing support – CPA and CFA areas have been selected based on their capacity to manage their areas. As such these communities are well placed implement management plans and follow good practice guidelines - Provision of training and development of guidelines – a number of guidelines and trainings will be developed with these focusing on the adoption of good agricultural practices that will help to prevent any negative impacts from production areas. - Screening of all proposed activities to be implemented within PAs - Promotion of good agricultural practice based certification schemes – Promotion of these schemes will help focus producers in adopting good practices to maintain market access.
Invasive species introduced into target areas	Possible	Medium	Low	<p>A number of mitigation measures are in place and will be implemented to help address this including:</p> <ul style="list-style-type: none"> - All reforestation and rehabilitation activities will be done in line with best practice for restoration as outlined by Restoration Opportunities Assessment Methodology (ROAM) (Bernacki <i>et al.</i>, 2018) under FAO and IUCN as well as national best practice approaches to forest restoration. This will include species selection that is based on native or fully adapted species.

				<ul style="list-style-type: none"> - All planting stock will also be sourced from recognized suppliers in areas that are not vulnerable to invasive species to ensure that there is no accidental transfer of invasive species.
--	--	--	--	--

304. A detailed analysis of potential negative impacts will be carried out with the elaboration of the biodiversity management plan during project inception and early implementation.

305. Further information on the characteristics of Cambodia’s biodiversity, protected areas and the process of site selection and nature of target CPA and CF areas is also provided below to provide further information on initial mitigation approaches and to contextualise the risks presented.

9.3 Biodiversity characterization

306. Cambodia is one of the most biodiverse countries in Southeast Asia, with around 8,260 plant species, more than 250 species of amphibians and reptiles, 874 fish species and over 500 bird species¹⁹. There are eight ecoregions across Cambodia, including Southern Annamites montane rain forests, Cardamom Mountains rain forests, Tonle Sap freshwater swamp forests, Tonle Sap-Mekong peat swamp forests, tropical and subtropical dry broadleaf forests, Central Indochina dry forests, Southeastern Indochina dry evergreen forests, Indochina mangroves, and Mekong freshwater²⁰. Cambodia is also home to numerous charismatic species such as elephants, bears, and guar (also known as the “Indian bison”, which is the world’s largest bovine).

307. Conserving biodiversity and promoting sustainable development are key priority areas for Cambodia. There is an extensive protected area system in place that includes community protected areas and community forest areas. These are vital for conserving biodiversity and represent about 39% of Cambodia, which is one of the highest concentrations of national protected areas in the world. Due to this high biodiversity, the Tonle Sap region in the proposed project area is designated as a UNESCO biosphere reserve, which a number of protected areas are also present in the north of the project target area which cover upper areas of the Tonle Sap catchment and are thus important to the functioning of the whole system.

308. Despite the protected status of much of Cambodia, these areas are under threat from unsustainable practices such as forest conversion for agriculture. The country faces the significant challenge of economic development and poverty reduction without exploiting unique natural resources, which is made more difficult by restricted financial and technical capacity for sustainable environmental management. Forest cover in Cambodia has fallen by 20% since 1990, and overfishing practices of the marine environment have resulted in significant decline in environmental assets. The driver of these unsustainable practices are primarily related to the need to enable income and food security, usually through agricultural expansion.

¹⁹ <https://www.fauna-flora.org/countries/cambodia/>

²⁰ World Wildlife Fund (WWF) Ecoregions by country.

309. The foundation of laws protecting Cambodia's land resources has long been in the making. In 1993, the Royal Government of Cambodia issued a Royal Decree designating 23 areas covering about 3.3 million ha (18.3 % of total land area) as PAs (which has now grown to 39%). A definition for a "Protected Area" was also established as "a space given extra protection to support long-term conservation of wildlife, nature, ecosystems and cultures."

310. There has been significant progress in legislation for biodiversity conservation and sustainable management of protected areas in recent years. In 2015, the Cambodia's Ministry of Environment began drafting a suite of new environmental laws aimed at overhauling the country's environmental governance, which are in their final stages of development. The Environment and Natural Resources Code (ENR Code) established in this overhaul is one of Cambodia's longest laws covering a large variety of areas and providing higher levels of environmental protection, openness and accountability than previously was the case in nearly all of Cambodia's environmental laws. The law includes provisions for sustainable management of natural resources, specifically protecting biodiversity and ecosystems by practices such as implementing wildlife corridors and protecting vital species.

311. To improve forest management in protected areas, the Royal Government of Cambodia has transformed forest jurisdiction between the Ministry of Agriculture, Forestry and Fisheries and the Ministry of the Environment in 2016, to ensure clear division on forest functions, allocation and management responsibility. By 2018, the Royal Government of Cambodia has increased its total number of protected areas up to 55 protected areas (from 23 in 1993) and three Biodiversity Conservation Corridors covering area of approximately 7.2 million ha under the jurisdiction of the Ministry of the Environment. These areas are governed by a legal framework that includes the Constitution of Cambodia (1993), the Protected Area Law (2008), and the Law on Environmental Protection and Natural Resources Development (1996). The Protected Areas Law (2008) provides legal basis for the to establish Community Protected Areas (CPA) in existing Protected Areas, thus allowing local communities management and user rights of natural resources. By 2018, 153 CPA had been established within Protected Areas boundary that covered a total area of 246,630 hectares.

9.4 Target CPA and CF

9.4.1 Overview

312. The PEARL under Output 2.4 aims to restore 7,600 hectares (ha) of critical catchment forests and other ecologically sensitive zones in the upper watersheds through IWM and agroforestry interventions by CPAs and CFs. Site selection of these areas was conducted by a national expert team which utilised guidelines on the Restoration Opportunities Assessment Methodology (ROAM) (Bernacki et al., 2018) as well as project design information to develop criteria for site selection. This was then coupled with extensive engagement with government officials and NGO staff, and interactive discussions with the local community representatives.

313. The resulting assessment identified and recommended 20 CPAs and CFs to engage under PEARL. Among the 20 identified, 14 are CPAs, and 6 are CFs. A large group of these communities is located within the catchment areas of Stung Sen River (see Figure), where their catchment restoration and protection activities have a significant bearing on downstream rice-growing regions in Kampong Thom and Preah Vihear provinces. Other CPAs and CFs are located near the Kulen National Park in Siem Reap and Sang Rokha Vorn Wildlife Sanctuary in Oddar Meanchey.

314. Each selected CPA/CF has many strengths. These include clear demarcation of boundaries, by-laws with active committee members and active participation of community members, the agreement signed with relevant government ministries, a management plan, and support from national and international development partners. These strengths are present in all 14 CPAs and 6 CFs selected by this study, although to varying degrees, and these strengths will be solid factors contributing to the successful implementation of the PEARL project.

8.6.1. Suitable CPAs and CFs for Forest Land Restoration Initiatives

315. The study conducted resulted in a long list of 43 CPAs and CFs through consultations with the designated government officials, NGO staff, local authorities, and representatives of CPAs and CFs in the NTSB. From the long list, 20 suitable CPAs and CFs were identified. The shortlist consists of 14 CPAs and 6 CFs. Detailed information on each CPA /CF is presented in Appendix 7 of the full study. The shortlisted CPAs and CFs are briefly described below.

Kampong Thom

316. Four CPAs selected, largely based on the recommendations from the government officials. The main artery of organic rice production in the region, cuts through the province. These CPAs are located close to each other and all four CPAs share their boundaries which have big positive impacts for conservation and protection of biodiversity, livelihood improvement of local communities as CPA members and project implementation. These CPAs include:

- 1) Kaki Brahoang is in Sraeveal Khang Lech and Sampour Touch villages, Dang Kambet commune, Sandan District;
- 2) Skor Krouch is situated in Dang Het, Prasat Andet, Krasaing, Pro Kaki, and Khmer villages, Sandan commune, and District;
- 3) Chhoam Thlork is in Vieng, Dang Totoeng, Kraing Deum, Svay, Ngan, Veal Brinh Leu, and Sralao villages; Ngan commune; Sandan district. The first three CPAs are located in Boeng Per Wildlife Sanctuary; and,
- 4) Kbal Daun Krei is in Boeng village, Mean Rith commune, Sandan district, located in Prey Lang Biodiversity Conservation Corridor.

317. Three CFs have been proposed for the PEARL project, because they meet the PEARL project criteria, proximity, and recommendations given by the government officials and NGO staff. In addition, the CPAs and CFs mentioned above will play important roles to provide the ecological services for downstream organic rice and horticulture producers. These CFs includes:

- 1) Prey Tatei is located in Kanthy village, Mean Rith commune, Sandan district;

- 2) Prey O'Kranhoung is in Chhoam Svay village, Mean Rith commune, Sandan district. The first two CFs borders one another and are in the same commune, suitable for project implementation; and,
- 3) O'Soam is in O'Soam village, Sala Visey commune, Prasat Balangk district, close to Boeng Per wildlife sanctuary.

Siem Reap

318. Three CPAs have been selected in areas in the Kulen National Park, in Khnang Phnom commune, Svay Leu district. They are villages located in the Kulen mountain and are adjacent to one another, separated by forests borders. Their catchment areas are critical for ensuring ecosystems services, particularly the provisioning of water and agroecological conditions, not just for themselves but also downstream areas where the project targets vegetable producers. These CPAs have also been highly recommended by MOE, and supported by various projects of development partners through MOE, thus possessing the relevant capacity to implement restoration and protection activities. These include:

- 1) Chup Tasok situated in Khla Khmum village, Khnang Phnom commune, Svay Leu district);
- 2) Prey Thom Anlung Thom located in Anlung Thom village, Khnang Phnom Commune, Svay Leu District); and,
- 3) Prey Thom Popel located in Popel village, Khnang Phnom Commune, Svay Leu District).

Oddar Meanchey

319. Four CPAs have been selected in the province. These CPAs were initially established as CFs when their forest areas were under the FA's management, and later they were transformed into CPAs when they were declared protected areas under the jurisdiction of MoE around 2016. Two CPAs are located in Sang Rokha Vorn Wildlife Sanctuary, and the other two CPAs are situated in the Northern Biodiversity Conservation Corridor. These CPAs have been strongly recommended by MoE to be included in the PEARL project, as they are critical for mainlining and restoring ecosystem services for local farming activities and contend with limited resources and livelihood opportunities due to their remoteness. These four CPAs/CFs include:

- 1) Sang Sahakum Rokha Vorn comprises five villages of Srah Keo, Sambou, Tumnuh Thmey, Char Chas and Char Thmey, Trapeang Tav Commune, Anlong Veng district;
- 2) Ratanak Rokha consists of seventeen villages of Kaun Damrei, Bak Nim, Chha'Eup, Kouk Chress, O'Russey, O'Kanseng, Daun Keo, Chhouk, Polr, Trapeang Veng, Khtum, Taman, Champa Sok, Chheu Krom, Kiri Vorn, Boss, and Banteay, in Samrong and Koun Kriel communes, Samrong municipality [district];
- 3) Samaki composes of one village O'Samrong, Trapeang Tav Commune, Anlong Veng district; and,
- 4) Thmorda O'Toek Khiev is located in Thnal Keaeng, O'Beng, Chroak, O'Chik, and Preah Chambok villages, Ph'av commune, Trapeang Prasat district.

Preah Vihear

320. Three CPAs have been selected for the PEARL project in this province. They are located in Kulen Promtep Wildlife Sanctuary with high conservation value and a significant livelihood source for local people. Given their adjacent locations, their connectivity and proximity to the

organic rice-growing areas downstream provide significant impact potential through the project interventions. These CPAs include:

- 1) Akphivoat Prey Veng is located in Prey Veng village, Srayang commune, Kulen district;
- 2) Sambo Akphivoat is in Sambou village, Srayang commune, Kulen district; and,
- 3) Pourieng is located in Pourieng village, Kulen Chheung commune, Kulen district.

321. Additionally, three CFs have been selected in the same district of Kulen. These CFs were strongly recommended by the Provincial Forestry Cantonment of Preah Vihear, given their active management and protection efforts to prevent encroachment and destruction. Together with the CPAs described above, the PEARL project's support for these CFs will significantly enhance its impact potential through achieving greater catchment connectivity and concerted efforts at the landscape level. These CFs include:

- 1) Prey Mloun is situated in Srayang Tboung village, Srayang commune, Kulen district;
- 2) Koh Ker Rik Chamroeun is in Koh Ker village, Srayang commune, Kulen district; and,
- 3) Prey Pou Mek Boun is located in Pyou Chhrouk village, Kulen Chheung commune, Kulen district.

322. Table 13 below summarizes the 14 CPAs and 6 CFs selected through this study, based on the shortlisting criteria, including having a CPA/CF management plan, robust governance structure, proximity to the project' target areas (impact), crops and cropping systems, and livelihood improvement potential through, for example, ecotourism development. Furthermore, it is critical to note here that CPAs and CFs are not allowed to expand their crop production areas beyond their original cropland areas before becoming CPAs and CFs.

Figure (map) below shows locations of selected CPAs and CFs.

Table 14 Summaries of 20 Selected CPAs and CFs for the PEARL project

#	CPA/ CF Name	Location (Province/PA)	Management Plan	Governance	Impacts (proximity)	Cropping (target crops: mango, cashew, organic rice, horticulture)
1	CPA-Kaki Brahoang (Boeng Per Wildlife Sanctuary)	Dang Kam-bet commune, Sandan District, Kampong Thom	Management plan is under development. The CPA covers a forest area of 1,524 ha, and registered with MOE in 2010 with support from the Adaptation Fund project of MOE.	By-law prepared since 2010 and updated in 2019, with support from USAID funded Prey Lang project. Committee members are so active, CPA patrolling.	This CPA borders with Skor Krouch and Kbal Daun Krei CPAs.	Mix orchard plantations, producing mango, cashew, and cassava, covering more than 28% (427 ha). Rice and horticultural crops are also grown outside the CPA area.
2	CPA-Skor Krouch (Boeng Per Wildlife Sanctuary)	Sandan commune and District, Kampong Thom	5 years management plan (2016-2020) over 3,449 ha was prepared in 2015 with support from the Adaptation Fund project of MOE. It was approved in 2016	By-law with clear committee member structure approved by MOE in 2010, and then updated in 2020 with support USAID funded Prey Lang project. Committee members are so active	This CPA borders Kaki Brahoang and Chhoam Thlork CPAs.	Mix orchard plantations producing mango, cashew, casava, and rice and horticulture cover more than 3,000 ha. Other rice and horticultural crops are also grown outside the CPA area.
3	CPA-Chhoam Thlork (Boeng Per Wildlife Sanctuary)	Ngan commune, Sandan district, Kampong Thom	5 years management plan (2016-2020) was prepared in 2015, and it covers 5,204 ha (approved by MOE in 2010 as with by-law), with support from the Adaptation Fund project of MOE. The Management plan was approved in early 2016.	By-law prepared in 2010 and registered with MOE the same year with support from MOE's adaptation fund project. It was updated in 2020 with support from the USAID-funded Prey Lang project. Committee members are so active.	This CPA borders to Skor Kroch CPA.	Mix orchard plantations with key crops like cashew and cassava, covering an area of 4,076 ha. Upland rice and fruit trees are also grown inside the CPA area.
4	CPA-Kbal Daun Krei (Prey Lang Biodiversity Conservation Corridor)	Mean Rith commune, Sandan district, Kampong Thom	Management plan was approved in 2021. It covers 1,803 ha, and the Management Plan was prepared since 2019 with support from the Adaptation Fund project of MOE. It was approved in 2019.	By-law approved by MOE in 2021, with support from USAID funded Prey Lang project since 2020 and FA cantonment funded in 2019.	This CPA borders Prey Tatei and Prey O'Kran-houng CFs.	Mix orchard plantations, producing rubber, cashew, and cassava, covering over 540 ha (20%). Other crops like rice and horticultural crops are grown in a few places in the CPA area.

5	CF-Prey Tatei	Mean Rith commune, Sandan district, Kampong Thom	15-year management plan (2015-2029) was approved in 2015. It covers 1,395.44 ha, which was registered with MAFF in 2008. An agreement was made in 2009	By-law prepared since 2002 and approved by MAFF in 2008 with support by RECOFTC through Mlup Baitong, a local NGO. Committee members are so active.	This CF is close to Prey O'Kranhoun CF and Chhoam Thlorck CPA.	Mix orchard plantations, producing cashew and cassava, cover more than 119 ha. No other crops like rice and organic rice are grown in the CF area.
6	CF-Prey O'Kranhoun	Mean Rith commune, Sandan district, Kampong Thom	15-year management plan (2015-2029) was prepared in 2015 and approved in 2016 with support from MAFF line departments and NGO partners. It covers 1,131 ha and was registered in 2010 with MAFF.	By-law prepared since 2002 with support from local NGO RPF (Rural Partnership for Development) and MAFF line departments, registered with MAFF 2010. By-law and committee members were updated and reviewed in 2014 with support from Mlup Baitong, and the MAFF line departments. CF is still supported by the USAID Greening Prey Lang project.	This CF is close to Prey Tatei CF and Kbal Daun Krei CPA.	Mix orchard plantations, producing cashew and cassava, cover more than 150 ha inside the CF area. Some other crops like rice grown over 5 ha and no organic rice are grown in the CF area.
7	CF-O'Soam	Sala Visai commune, Prasat Balangk district, Kampong Thom	15 years management plan (2016-2030) was prepared and approved in 2016 over 307.69 ha, registered in 2004 with MAFF. An agreement was made in 2015	By-law prepared in 2004 with support from MAFF line departments and local NGO BFDK (Buddhism for Development Kampong Thom). Registered with MAFF in 2014. By-law and committee members were updated and renewed in 2013. Current support of COW (Cows for Cambodia), a local NGO since 2021 for forest protection patrolling and another saving group.	This CF is close to Boeng Per wildlife sanctuary.	Mix orchard plantations, producing cashew, cover more than 18 ha inside CF. No other crops like rice and organic rice are grown in the CF area.
8	CPA-Chup Tasok	Khnanng Phnom commune,	Management plan was developed in 2008. CPA covers 259 ha. It	By-law approved by MOE in 2008 with support from LLP	This CPA borders	There are two cash crops - cashew and

	(Kulen National Park)	SvayLeu district, Siem Reap	was created in 2003 with support from the UNDP's BESD project (Building an Enabling Environment for Sustainable Development in Cambodia) implemented by MOE for supporting reforestation on approximately 13 ha.	from 2017-2020 for CPA patrolling and CPA committee monthly meeting. The Committee members are very active.	Prey Anlong Thom and Prey Thom Popel CPAs	mango – grown on approximately 25 ha. 24 ha is for ecotourism site. There are no other crops like regular rice and organic rice grown in the CPA area.
9	CPA-Prey Thom Anlung Thom (Kulen National Park)	Khnanng Phnom Commune, Svay Leu District, Siem Reap	5-year management plan (2021-2025) was prepared in 2020, over 365 ha, which was registered in 2001 with MOE, with support from the of UNDP's BESD project (Building an Enabling Environment for Sustainable Development in Cambodia) implemented by MOE.	By-law prepared in 2001 with technical support from FAO and MOE line departments. Registered under MOE in 2003. By-law was updated in 2008 and 2020 with support from FAO and numerous local NGOs since 2016 for forest protection, patrolling, and livelihood support.	This CPA borders with Prey Thom Popel CPA and Chup Tasok CPA.	No plantation or rice production in this CPA area. But it was delineated into production zone -to use forest resources within in regulations (27 ha), Eco-tourism (24 ha), and restoration (77 ha that used to be the Chamkar like mixed orchard).
10	CPA-Prey Thom Popel (Kulen National Park)	Khnanng Phnom Commune, Svay Leu District, Siem Reap	5-year management plan (2021-2025) was prepared in 2020 over 798 ha, registered with MOE in 2003 with support from the of UNDP's BESD project (Building an Enabling Environment for Sustainable Development in Cambodia), implemented by MOE.	By-law was prepared in 2003 with support from FAO and MOE line departments and registered with MOE the same year. By-law was updated in 2008 and 2020 with a clear governance structure of committee members with support from UNDP and various local NGOs since 2016 for forest protection, patrolling, and livelihood support.	This CPA borders Chup Tasok and Prey Thom Anlung Thom CPAs.	There are 50 cashew orchard plantations, covering an area of approximately 100 ha in this CPA. The ecotourism (128 ha), use and development (58 ha), and restoration zone (46 ha).
11	CPA/CF-Sang Sahakum Rokha Vorn (Sang Rokha Vorn Wildlife	Trapeang Tav and Koun Kriel Communes, Anlong Veng district, Oddar Meanchey	5-year management plan (2018-2022) was established in 2018 under MAFF over 18,261 ha and then integrated under MOE jurisdiction in 2020 with support from the	By-law approved in 2018 and agreement in 2019 by MAFF with support from Dan Mission (international NGO) since 2020 for help-	This CF/CPA borders with CPA/CF Ratanak Rokha.	Mix orchard plantations, producing mango, cashew, and cassava, covering more than 913 ha (5%). About 1,800 ha

	Sanctuary)		Adaptation Fund project of MOE. It was approved in 2020.	ing such as committee meeting, by-law awareness, fire break road, ecotourism area, and CPA patrolling. It is so active.		(10%) for ecotourism development. There are no other crops like regular rice grown in the CPA area
12	CPA/CF-Ratanak Rokha (Sang Rokha Vorn Wildlife Sanctuary)	Samrong and Koun Kriel communes, Samrong municipality [district], Oddar Meanchey	Management plan has not yet been prepared, and it is being legalized into CPA. The CF was initially registered under MAFF in 2005 with support from the REDD+ project through the Adaptation Fund project of MAFF over a forest area of 12,872 ha.	By-law and an agreement were established in 2009 with support from CDA (Children Development Association, a local NGO). Members are very active.	This CF borders with CPA/CF-Sang Saha-kum Rokha Vorn.	About 1,500 ha are allocated for ecotourism activities, including agroforestry and mixed orchard, and organic rice farming
13	CPA/CF-Samaki (Northern Biodiversity Conservation Corridor)	Trapeang Tav Commune, Anlong Veng district, Oddar Meanchey	Management plan is under development with support from the REDD+ project through Adaptation Fund project of MAFF. CF covers an area of 1,079 ha, and it was created in 2005 under MAFF.	It is still a draft by-law with support from Sovanna Phumi (local NGO) and UNDP since 2017 on registration.	This CF/CPA borders Ratanak Rokha CPA/CF.	There are no orchard plantations or rice production in the CF area, and it is located in mountainous, forested areas. 11 ha allocated for ecotourism site with beautiful waterfall.
14	CPA/CF-Thmorda O'Toek Khiev (Northern Biodiversity Conservation Corridor)	Ph'av commune, Trapeang Prasat district, Oddar Meanchey	Management plan was established in 2014 with support from the REDD+ project through Adaptation Fund project of MAFF. It covers 2,025 ha, and it was created in 2004 by MAFF.	By-law was established in 2004 by MAFF, and it is being updated with support from WCS and USAID-Greening Prey Lang on CF patrolling and ecotourism site management.	This CF borders with Samaki CPA/CF.	There are no mixed orchard plantations or rice production in the CF area, and it is located in mountainous, forested areas. About 500 ha allocated for ecotourism site.
15	CPA-Akphivoat Prey Veng (Kulen Promtep Wildlife Sanctuary)	Srayang commune, Kulen district, Preah Vihear	Management plan is under development with support from WCS and MOE. CPA covers 1,048 ha.	By-law was established in 2014. Committee members are active. CPA is currently supported by WCS and USAID-Greening Prey Lang on CPA patrolling and saving group in 2021.	This CPA borders Sambo Akpivoat and Pourieng CPAs	There are no mixed orchard plantations, but rice/organic rice production on more than 50 ha in the CPA area including ecotourism site. These crops are allowed outside the CPA area.

16	CPA-Sambo Akphivoat (Kulen Promtep Wildlife Sanctuary)	Srayang commune, Kulen district, Preah Vihear	Management plan is under development with support from WCS and MOE line departments. CPA covers an area of 1,071ha.	By-law was prepared in 2013 with support from WCS and MOE line departments. Committee members are active and supported by WCS, and USAID-Greening Prey Lang on CPA patrolling, check dam repairing, and organic rice production since 2021.	This CPA borders with Akphivoat Prey Veng CPA	There is only a cashew plantation, approximately 4 ha inside the CPA. While normal rice field or organic rice field outside of the CPA area. 15% proposed for replantation including agro-forestry and organic farming of rice. 5% for promoting ecotourism sites
17	CPA-Pourieng (Kulen Promtep Wildlife Sanctuary)	Kulen Chheung commune, Kulen district, Preah Vihear	Management plan has been under development with support from the Adaptation Fund project of MOE. CPA covers an area of 567.22 ha.	By-law was established in 2019 with support from FAO's Life and Nature project, MOE line departments.	This CPA borders Akphivoat Prey Veng CPA and close to Sambo Akphivoat CPA	There is no mixed orchard plantation. Organic rice (Ibis rice) is produced outside the CPA area. 15% for replantation with human assisted approaches (including agro-forestry and organic farming of rice), and 5% for promoting ecotourism sites.
18	CF-Prey Mloug	Srayang commune, Kulen district, Preah Vihear	The management plan is under development, and an agreement was made in 2018. This CF covers a forest area of 1,740 ha.	By-law was established in 2008 with support from the MAFF line departments. It registered with MAFF in 2020. The committee members are active	This CF does not border other CF nor CPA, but it is close to Prey Pou Mek Boun and Koh Ker Rik Chamroeun CF in the same commune.	There are some plantations (35 ha) producing cashew and mango: no rice or organic rice production in the CF.
19	CF-Koh Ker Rik Chamroeun	Srayang commune, Kulen district, Preah Vihear	The 15 years management Plan (2017-2031) was prepared in 2016 and approved in 2017. The agreement was made in 2017 with Preah Vihear Forestry Cantonment. This CF covers a forest area of 1,864 ha.	By-law was created in 2017 and registered with MAFF the same year. The committee members are active.	This CF borders Prey Pou Mek Boun CF.	There are some plantations (8 ha) producing cashew and cassava. There is no rice or organic rice (Ibis rice) production in the CF.

- Limited data accessibility and availability on CPAs and CFs, especially the official lists and data sources: Information regarding by-laws, registration status and dates, agreements of CPA and CF with the MOE and MAFF line departments, and management plans are not centralized.
- Data discrepancy and resultant deviation: Different sources of data and information with data discrepancies made the analysis and selection of suitable CPAs and CFs challenging.
- Selection criteria proposed by FAO: Officials from the Provincial Departments of Environment and Forestry Cantonments and representatives of the NGOs and communities were not supportive of the selection criteria, as they did not match their choices of CPAs and CFs. For instance, the government officials wanted the PEARL project to include communities they have worked for a long time, and those communities are more easily accessible. While the NGOs preferred the communities supported by their projects, as they had invested in their conservation activities. The community people claimed that their communities had little support from the government and NGOs. Therefore, this opportunity should be given to their communities.

325. The physical challenges were due to:

- COVID-19 pandemic: Travel and social gathering restrictions make it difficult for the National Expert to face-to-face meetings with the government officials, NGOs, and other relevant stakeholders. Completing the assignment required face-to-face meetings, but due to the official ban on physical gatherings, some major delays were experienced.
- Poor road access, coupled with the rainy season road conditions: These conditions hindered the field visits to some of the CPAs and CFs recommended by the government officials and the NGO field staff. The National Expert instead conducted interviews with the CPAs and CFs over the phone and other possible online mediums.

ANNEXES

Annex 1: ESMF Work Plan

Annex 2: Project Exclusion List

Annex 3: FAO Environmental and Social Screening Checklist

ANNEX 1: ESMF WORK PLAN AND BUDGET

The table below provides the workplan and budget for the PEARL ESMF including Biodiversity Action Plan, Indigenous Peoples and Social Inclusion Plan and Gender Action Plan. The project log-frame and design integrates and fully mainstreams gender, biodiversity and IP and social inclusion considerations within its targets with these elements providing an important guide for project implementation. As such the current document includes these targets (last two columns) to indicate where they have been integrated. All project activities are also included (first column) to also illustrate the level of ESMF mainstreaming which has allowed for a more streamlined set of actions to be integrated within the existing plan.

In line with this approach the workplan and budget are focused around the work of the National Safeguards Expert and National Gender Expert who will work together on the mainstreaming of safeguards into all areas of project work in line with the ESMF and specific ESMPs – which will include baseline assessments, the integration of safeguard considerations into training and awareness raising to both project personnel and broader stakeholders through the implementation process as well as reviewing and ensuring project products and approaches fully integrate gender considerations. It also includes the work of an international Safeguards Specialist and National Gender Consultant team, who will provide additional support to the development of focused baseline assessments in key areas, the development of specific ESMPs, and development of focused baseline studies and specific guidance for implementation of safeguards.

The application of safeguards will also occur in close coordination between the PMU and national implementing partners including MoE which will take a lead in engagement with CPA and CF areas, which pose one of the most significant safeguards risks due to their location in Protected Areas, and the higher likelihood of the presence of IP and other vulnerable groups.

Main Project Activities	Safeguard focused Activities	Indicators and targets	Time-lines	Budget	Responsibilities	Link to main project targets	
						Mid-term	Final
Impact statement: Female smallholder farmers and other local value chain actors are economically empowered through improved of accesses that are expected to impact growing premium market segments while using their improved market access to incentivize their transition to climate-resilient practices, mainly through effective public-social-private partnerships.							
Outcome 1: Farmers' capacities are enhanced to manage climate impacts and related risks							
Output 1.1. Availability and access to agrometeorological advisory services tailored to target value chains improved among smallholder farmers and value chain actors, particularly women.							
<p>Activity 1.1.1: Increase the spatial scale of agrometeorological data collection and capacity for data processing to produce enhanced agrometeorological forecasts and gender responsive advisory services, tailored for target value chain crops.</p> <p>Activity 1.1.2: Develop SOP(s) for the production and dissemination of agrometeorological advisory services that are gender responsive and informed by sex disaggregated data sharing needs and architecture, targeting cashew, mango, rice, and vegetables through a variety of mediums.</p> <p>Activity 1.1.3: Increase awareness of agrometeorological advisory services and the benefits of the application in farm management and value addition activities to support decision-making and reduce the vulnerabilities to climate change of smallholder farmers, particularly women, and other value chain actors, especially women.</p>	<p>Support integration of safeguard considerations in baseline conditions and capacity and data gaps of existing stations and areas of need and input into the development of criteria that include safeguard considerations for assessment of priority stations, and training needs for station managers, data analysts and system administrators</p> <p>Provide capacity building to TWG-AW, led by MAFF and MoWRAM, with additional experts from other relevant entities, on safeguard considerations linked to development process and mobilise them to enhanced integration of safeguard considerations within station design and information provision.</p> <p>Ongoing review and input into development of TOT materials and other tools as well as information on awareness raising of them to ensure that they are accessible for all groups minority farmers and local value chain actors.</p>	<p>Criteria for review of proposed stations and training locations includes safeguards considerations and summary report on selection process available.</p> <p>Number of key stakeholders sensitized on safeguard issues.</p> <p>Assessment review as part of development process completed.</p> <p>Safeguards considerations fully integrated into ToT materials as well as other tools and awareness information.</p>	Y1-5	See 2.4 National Safeguards expert	National safeguards expert	<p>SOPs for the four (4) target crops fully developed and agreed upon among public and private partners and practically operational.</p> <p>15 % of targeted smallholder farmers and other local value chain actors (50% women).</p>	<p>Crop-specific agrometeorological information for the four (4) target crops is fully available and accessible through operationalization of SOPs.</p> <p>Over 40 % of targeted smallholder farmers and other local value chain actors (50% women).</p>

Map service providers and assess to what extent services are gender sensitive or responsive and provide recommendations for addressing gaps and strengthening their capacity to respond to the needs of both men and women	Support integration of gender considerations in baseline conditions and capacity and data gaps of existing stations and areas of need.	Criteria for review of proposed stations and training locations includes gender and summary report on selection process available.					
	Support the development of criteria that include gender considerations for assessment of priority stations for additional sensor upgrades, strategic locations for adding new agrometeorological stations, and training needs for station managers, data analysts and system administrators	Number of key stakeholders sensitized on gender-based inequalities in the context of climate and agroecology data access and use as well as the use of sex-disaggregated data to aid decision making.	Years 1 to 5	40,500	PMU – National gender expert, National gender consultant team.		
	Provide capacity building to TWG-AW, led by MAFF and MoWRAM, with additional experts from other relevant entities, on gender considerations linked to development process and mobilise them to enhanced integration of gender considerations within station design and information provision.	Assessment review as part of development process completed.					
	Ongoing review and input into development of TOT materials and other tools as well as information on awareness raising of them to ensure that they are accessible for women and other minority farmers and local value chain actors.	Gender considerations fully integrated into ToT materials as well as other tools and awareness information.	Years 2 - 5	99,000	National gender consultant team		
Outcome 2: Adaptive capacity of smallholder farmers and other local value chain actors, particularly vulnerable women farmers, is increased through market incentives that promote climate-resilient, higher-value, diversified, and sustainable production and processing							
Output 2.1: Premium market access opportunities for cashew, mango, organic rice, and vegetable producers and processors increased through climate-resilient and high-value certification programs (linking to Sub-components 2.2. and 2.3 for financing and technical capacity building).							
Activity 2.1.1: Develop and operationalize gender responsive inter-value-chain-actors roadmaps at the provincial level and action/business plans for climate-resilient, inclusive and gender-responsive premium value	Provision of training to key stakeholders on key safeguard considerations as part of roadmap development.	Number of target stakeholders trained.	Y1-4	Budget held under Output 2.4.	National safeguards specialist, International safeguards specialist, PMU	100 ACs, FAs, PGs, CPAs, CFs, and agricultural unions with fully developed action/business plans, and at least 60% of them are fully operational.	More than a 30 % increase in contract farming arrangements and direct purchase agreements against the inception baseline. 124 ACs, FAs, PGs, CPAs, CFs, and agricultural unions supported through FARM to acquire technologies/assets and establish trust
	Support integration of safeguard considerations into roadmaps through review and inputs to process and documents.	Safeguard considerations included within roadmaps					

<p>chain development and identify specific certification programs as key vehicles.</p> <p>Activity 2.1.2: Develop voluntary add-on supplementary guidelines, tools, and training materials to consider gender in the context of climate risks and strategies for the certification programs identified under Activity 2.1.1. (e.g., CamGap, GI and organic for production, and ISO 2200 and HACCP for processing) for the target value chains (linking to Activity 3.1.1. on PLR and institutional arrangements concerning these certification programs).</p>	<p>Develop participatory baseline safeguards assessment of target cooperatives, CPAs and CFs with members. (linked with work on ESMP development and with focus on biodiversity within CPA and CF areas as well as broader considerations linked potential agri expansion and adoption of new practices)</p> <p>Assist cooperatives, associations, producer groups, CPAs, CFs, and agricultural unions in preparing crop-specific action plans/business plans for operationalizing their respective roadmaps in an inclusive and safeguards -responsive manner.</p> <p>Support to review and development of supplementary guidelines, tools, and training materials to consider safeguards in the context of climate risks and strategies for the certification programs identified under Activity 2.1.1.</p>	<p>Baseline assessment completed</p> <p>Safeguard considerations included within action/business plans.</p> <p>Inputs made into guidelines</p>				<p>At least a 15 % increase in contract farming arrangements and direct purchase agreements against the inception baseline.</p>	<p>fund accounts with increased access to lending and insurance.</p>
---	---	--	--	--	--	---	--

	<p>Provision of training to key stakeholders on key gender considerations as part of roadmap development.</p> <p>Support integration of gender into roadmaps through review and inputs to process and documents.</p> <p>Develop participatory baseline gender assessment of target cooperatives, CPAs and CFs with members.</p> <p>Assist cooperatives, associations, producer groups, CPAs, CFs, and agricultural unions in preparing crop-specific action plans/business plans for operationalizing their respective roadmaps in an inclusive and gender-responsive manner.</p> <p>Support to review and development of supplementary guidelines, tools, and training materials to consider gender in the context of climate risks and strategies for the certification programs identified under Activity 2.1.1.</p>	<p>Number of target stakeholders trained.</p> <p>Inputs into roadmaps</p> <p>Baseline assessment completed</p> <p>Inputs into action/business plans.</p>	Y1-4	23,625	National gender expert, Gender consultant team		
Output 2.2: Access technologies for climate-resilient agriculture and value chain development improved among smallholder farmers and other value chain actors, particularly women (linking to Sub-component 2.1 to finance the business plans of cooperatives, associations, producer groups, CPAs, CFs and agricultural unions).							
<p>Activity 2.2.1. Establish an innovative financial mechanism, FARM</p> <p>Activity 2.2.2: Assess the feasibility of developing additional risk finance options</p>	<p>Support to review and development of risk finance options based on safeguard considerations.</p> <p>Support development of awareness raising materials and strategies to ensure that they include safeguard considerations.</p>	<p>Review document</p> <p>Inclusion of safeguard consideration in awareness raising materials.</p>	Y1-5	See 2.4.	National safeguard specialist, PMU	60 ACs, FAs, PGs, CPAs, CFs, and agricultural unions supported through FARM to acquire technologies/assets and establish trust fund accounts with increased access to lending and insurance.	124 ACs, FAs, PGs, CPAs, CFs, and agricultural unions supported through FARM to acquire technologies/assets and establish trust fund accounts with increased access to lending and insurance.

Activity 2.2.3: Raise awareness of financial support products and services	<p>Support to review and development of risk finance options based on gender considerations.</p> <p>Support development of awareness raising materials and strategies to ensure that they are fully gender responsive.</p>	<p>Review document</p> <p>Inclusion of gender consideration in awareness raising materials.</p> <p>Number of women informed on the available options and services for farmers and local value chain actors.</p>	Y1-5	23,625	National gender specialist, PMU		
Output 2.3: Awareness and knowledge of climate-resilient and sustainable, high-value agriculture increased among farmers and other local value chain actors, particularly women farmers and value chain actors (linking to Sub-component 2.1 to support the operationalization of business plans by the cooperatives, associations, producer groups, CPAs, CFs and agricultural unions)							
<p>Activity 2.3.1: Develop a clearing-house system, consolidating existing knowledge systems, for harmonized knowledge management and systematic dissemination of lessons learned and best practices in climate-resilient, inclusive, gender-responsive, and high-value agriculture for supporting the implementation of the roadmaps and action plans under Activity 2.1.1, and for raising awareness of the practices and technologies under Activity 2.3.2 and associated economic and social benefits.</p> <p>Activity 2.3.2: Provide horizontally and vertically harmonized and targeted extension services, linking the provincial, district, commune, and village levels and public and private extension providers, to promote the adoption of climate-resilient, inclusive, gender-responsive, and high-value practices and technologies relevant for the implementation of roadmaps and action plans developed under Activity 2.1.1 and financed under Activity 2.2.1.</p>	<p>Input into development of clearing house mechanism to ensure that it effectively captures safeguard information and provides safeguard relevant information.</p> <p>Support to development of training for extension officers, retailers, hoteliers, restaurateurs, and traders/exporters that increases understanding of safeguard considerations within farming groups and improves quality of service delivery.</p> <p>Input into development of clearing house mechanism to ensure that it effectively captures gender based information and provides fully gender responsive information.</p> <p>Support to development of training for extension officers, retailers, hoteliers, restaurateurs, and traders/exporters that increases understanding of gender considerations within farming groups and improves quality of service delivery.</p>	<p>Provision of inputs into mechanism.</p> <p>Inclusion of safeguard elements in trainings.</p> <p>Provision of inputs into mechanism.</p> <p>Inclusion of gender elements in trainings.</p>	Y1-5	Budget included under 2.4	National safeguard specialist, PMU	<p>40 % of targeted smallholder farmers and other local value chain actors (50% women) with increased knowledge, and a 20 % increase in the uptake of practices against the inception baseline.</p> <p>At least 15 % of promoted practices especially tailored for women farmers and value chain actors against the inception baseline.</p>	<p>85 % of targeted smallholder farmers and other local value chain actors (50% women) with increased knowledge, and a 60 % increase in the uptake of practices against the inception baseline.</p> <p>Over 25 % of promoted practices especially tailored for women farmers and value chain actors against the inception baseline.</p>
Output 2.4: Improved agro-ecological conditions and connectivity.							

Activity 2.4.1: Restore and protect critical forest catchments in upper watershed areas where the target crops are produced (this activity will build directly on and extend the existing conservation and catchment protection efforts by MoE, WCS and others).	Development of site specific ESMPs within target CPA and CF areas with focus on biodiversity considerations, including consultations on ESMP process.	ESMP in place and implemented	Y1-3	144,000	International consultant and PMU team	2,500 hectares of catchment restored and protected by a network of 20 CPAs and CFs	7,600 hectares of catchment restored and protected by a network of 20 CPAs and CFs.
	Development of consultation and engagement guidelines that follow FPIC principles and allows for full engagement of CFs and CPAs as well as relevant ACs in decision making on development and implementation of project activities	Guidelines in place Consultations and engagement held Summary reports on FPIC process and decision making.	Y1-5	164,000	MoE, National Safeguards consultant, PMU		
	See support under activity 2.1.	Number of CPAs and CFs with women's participation higher than 25%, 50% and 75% participating in catchment protection and restoration through agroforestry and contract work.	Y1-7	23,625	National gender specialist, PMU		
Outcome 3. Outcome 3: Regulatory and institutional frameworks and capacities for climate-resilient agricultural certification, cross-sectoral coordination for increased PSPPs and smallholder financing, and climate-informed investment support are strengthened							
Output 3.1: Regulatory and institutional arrangements and capacity relevant to developing certification-based value chains strengthened to provide enabling conditions for adopting climate-resilient, high-value and sustainable agriculture and food security.							
Activity 3.1.1: Upgrade/establish an enabling regulatory and institutional framework for the climate-proofed certification programs that include gender considerations under Activity 2.1.2. to operate effectively.	Baseline review of safeguard considerations within existing policy and enabling environment Input into development of revised regulatory environment.	Baseline review No of key decision makers provided with awareness raising on its findings Revised regulatory framework integrated safeguard considerations	Y1-6	Budgeted under 2.4	PMU, National safeguard specialist	Two (2) targeted production-focused certification standards with officially adopted supplementary guidelines/tools, establishing online certification registration, and traceability tools At least one (1) commercial bank with memorandums of understanding (MoUs) signed to operationalize the scorecard.	Two (2) targeted processing-focused certification standards with officially adopted supplementary guidelines/tools, establishing online certification registration, and traceability tools. At least three (3) commercial banks with memorandums of understanding (MoUs) signed to operationalize the scorecard.
Activity 3.1.2: Demonstrate a harmonized sectoral approach to climate-resilient, inclusive, and gender-responsive finance to complement Activity 2.2.1 for rolling out the innovative financial mechanism and low-interest loan program.	Baseline review of gender considerations within existing policy and enabling environment Input into development of revised regulatory environment.	Baseline review No of key decision makers provided with awareness raising on its findings Revised regulatory framework integrated gender considerations	Y1-6	13,500	PMU, National Gender specialist		
Activity 3.1.3: Increase private sector engagement in sub-national planning for improved PSPPs							
Output 3.2: Gender-responsive landscape-level agroecology monitoring system (LAMS) developed to crowd in public and private investments in climate-resilient, high-value and sustainable agriculture.							
Activity 3.2.1: Establish a gender-responsive landscape-level agroecology monitoring system (LAMS) with an interactive web platform.	Baseline review of safeguard needs in development of LAMS Input into development of LAMS and SOP Inclusion of safeguard considerations in awareness raising and training materials	Baseline review No of decision makers provided with awareness raising on its findings Safeguard elements integrated in training design and delivery.	Y1-6	Budget in 2.4	PMU, National safeguard specialist	1,000 users (50% women) regularly using LAMS for planning and investment decision-making.	2,500 users (50% women) regularly using LAMS for planning and investment decision-making.

<p>Activity 3.2.2: Promote the use of LAMS in public and private investment decision-making, monitoring, and reporting.</p>	<p>Baseline review of gender needs in development of LAMS</p> <p>Input into development of LAMS and SOP</p> <p>Inclusion of gender considerations in awareness raising and training materials</p>	<p>Baseline review</p> <p>No of decision makers provided with awareness raising on its findings</p> <p>Gender elements integrated in training design and delivery.</p>	<p>Y1-6</p>	<p>13,500</p>	<p>PMU, National Gender specialist</p>		
---	---	--	-------------	---------------	--	--	--

ANNEX 2: PROJECT EXCLUSION LIST

The following is the Project Exclusion List, a list of activities that the PEARL project will not support:

- The project will not support activities that result in a negative change to existing legitimate tenure rights
- The project will not involve the involuntary resettlement of households or activities that may involve physical displacement (i.e. relocation, including relocation needed as a result of loss of shelter), whether full or partial and permanent or temporary, or economic and occupational displacement (i.e. loss of assets or access to assets that leads to loss of income sources or means of livelihood) as a result of the activities.
- Activities that may increase greenhouse gas emissions substantially are excluded
- The project will not result in increases in areas under cultivation within protected areas
- The project will not support the direct supply of agro-chemicals
- The project will not support the clearing of native forests
- The project will not use non-locally adapted species.

ANNEX 3: FAO ENVIRONMENTAL AND SOCIAL SCREENING CHECKLIST

Every sub-activity will must undergo an initial screening, utilizing FAO's Safeguards Screening Checklist, found at the end of this annex and completed based on the initial project assessment. Based on the screening, sub-activities will be categorized as low, moderate, or high risk. Based on the screening, sub-activities will either be approved for implementation, or will be amended to meet the requirements detailed within this ESMF (specifically, all sub-activities must have low to-moderate impact; high risk sub-activities will not be allowed under the project, nor will sub-activities which involve elements listed in the Annex 1 Non-Eligibility List of this document).

Guidance and Examples for Sub-Activity Categorization

Categorization: To ensure that the extent of the review is commensurate with the nature of risk, categorization is a useful step in procedures where based on basic information about a project such as sector and scale, the level of E&S risk the project could pose is determined. This also enables the PMU Safeguards and Gender Specialists to determine the extent and sophistication of the E&S review required. Categorization may be low, moderate or high. For the purposes of this project, all sub-activities are expected to be Category B (Medium) or Category C (Low) risk.

High Risk (Category A) Sub-Activity

The location of the farmers/project enterprise or activity may be:

- Near sensitive and valuable ecosystems, protected areas and habitat of endangered species;
- Near sensitive receptor such as hospital, school, temple, etc.;
- Near areas with archaeological and/or historic sites or existing cultural and social institutions;
- Near or in areas occupied by vulnerable ethnic minorities or indigenous peoples, or lands to which they are collectively attached, where negative impacts are expected and/or have not involved prior
- consultation;
- In densely populated areas, where resettlement may be required or potential pollution impacts and other disturbances may significantly affect communities;
- In regions where there are conflicts in natural resources allocation;
- Near watercourses, aquifer recharge areas or in reservoirs used for potable water supply; or in close proximity to lands or waters containing valuable resources.

Examples of sensitivity issues are those where the sub-activity can:

- Cause adverse global or regional environmental impacts;
- Concern the rights of indigenous people or vulnerable ethnic minorities;
- Require large scale land acquisition or subsequent change in land use that produces loss or damage of assets or income for local residents;
- Lead to involuntary settlements or displacement of people from their livelihoods;
- Impact protected or otherwise recognized areas of high biodiversity or cultural value; or
- Lead to toxic waste disposal.

- Acquisition of small parcels of land, even if obtained on a negotiated basis with property owners or those with recognized rights to the land, should be considered as sensitive if expropriation or other compulsory measures would have resulted upon the failure of negotiation.

Examples where the nature of the sub-activity may:

- Cause irreversible degradation or unsustainable exploitation of natural resources; or
- Pose serious risks of significant harm to human health and safety.

Examples of the magnitude of the sub-activity where:

- A high amount of scarce resources may be put at risk;
- The timing and duration of the negative impacts are long; or
- The cumulative effects of many similar, but individually small transactions together lead to serious impacts.

Category A sub-activities are perceived to have significant adverse environmental and/or social impacts, and are not permitted to form part of the target portfolio.

Medium Risk (Category B) Sub-Activity

Transactions with a limited number of potentially adverse environmental or social impacts that are generally site-specific, largely reversible, and readily addressed through mitigation measures that reduce the risk to moderate or low levels are normally classified as Category B.

The following characteristics indicate a Category B sub-activity:

- Environmental and social risks for the most part are mostly limited to and readily mitigated through application of good industry practice as described in relevant Environmental, Health and Safety

Guidelines;

- Labour and working conditions will not include harmful child labour, involuntary or compulsory labour, or significant occupational health and safety issues;
- Significant land acquisition or significant land use change is not expected, nor is there expectation of displacement of people or significant loss of livelihoods due to project activities; and
- Socially or economically disadvantaged groups, such as tribal or ethnic groups or similar communities, are not known to occur in the project's area of direct impact, nor does the activity involve use of lands to which they are collectively attached, or where those communities are present but consultation has indicated Free Prior and Informed Consent (FPIC).

Low Risk (Category C) Sub-Activity:

Sub-activity proposals that are perceived to have minimal or no adverse environmental or social impacts are classified as Category C, and no further environmental or social assessment work needs to be done after initial screening and categorization.

Environmental and Social Risk Identification – Screening Checklist

	Question	YES	NO
1	<p>Would this project:</p> <ul style="list-style-type: none"> • result in the degradation (biological or physical) of soils or undermine sustainable land management practices; or • include the development of a large irrigation scheme, dam construction, use of waste water or affect the quality of water; or • reduce the adaptive capacity to climate change or increase GHG emissions significantly; or • result in any changes to existing tenure rights²² (formal and informal²³) of individuals, communities or others to land, fishery and forest resources? 		X
2	Would this project be executed in or around protected areas or natural habitats, decrease the biodiversity or alter the ecosystem functionality, use alien species, or use genetic resources?	X	
3	<p>Would this project:</p> <ul style="list-style-type: none"> • Introduce crops and varieties previously not grown, and/or; • Provide seeds/planting material for cultivation, and/or; • Involve the importing or transfer of seeds and or planting material for cultivation <u>or</u> research and development; • Supply or use modern biotechnologies or their products in crop production, and/or • Establish or manage planted forests? 	X	
4	Would this project introduce non-native or non-locally adapted species, breeds, genotypes or other genetic material to an area or production system, or modify in any way the surrounding habitat or production system used by existing genetic resources?		X
5	<p>Would this project:</p> <ul style="list-style-type: none"> • result in the direct or indirect procurement, supply or use of pesticides²⁴: <ul style="list-style-type: none"> ▪ on crops, livestock, aquaculture, forestry, household; or ▪ as seed/crop treatment in field or storage; or 		X

²² Tenure rights are rights to own, use or benefit from natural resources such as land, water bodies or forests

²³ Socially or traditionally recognized tenure rights that are not defined in law may still be considered to be ‘legitimate tenure rights’.

²⁴ Pesticide means any substance, or mixture of substances of chemical or biological ingredients intended for repelling, destroying or controlling any pest, or regulating plant growth.

	<ul style="list-style-type: none"> ▪ through input supply programmes including voucher schemes; or ▪ for small demonstration and research purposes; or ▪ for strategic stocks (locust) and emergencies; or ▪ causing adverse effects to health and/or environment; or • result in an increased use of pesticides in the project area as a result of production intensification; or • result in the management or disposal of pesticide waste and pesticide contaminated materials; or • result in violations of the Code of Conduct? 		
6	Would this project permanently or temporarily remove people from their homes or means of production/livelihood or restrict their access to their means of livelihood?		X
7	Would this project affect the current or future employment situation of the rural poor, and in particular the labour productivity, employability, labour conditions and rights at work of self-employed rural producers and other rural workers?		X
8	Could this project risk overlooking existing gender inequalities in access to productive resources, goods, services, markets, decent employment and decision-making? For example, by not addressing existing discrimination against women and girls, or by not taking into account the different needs of men and women.		X
9	<p>Would this project:</p> <ul style="list-style-type: none"> • have indigenous peoples* living outside the project area¹ where activities will take place; or • have indigenous peoples living in the project area where activities will take place; or • adversely or seriously affect on indigenous peoples' rights, lands, natural resources, territories, livelihoods, knowledge, social fabric, traditions, governance systems, and culture or heritage (physical² and non-physical or intangible³) inside and/or outside the project area; or • be located in an area where cultural resources exist? <p>* FAO considers the following criteria to identify indigenous peoples: priority in time with respect to occupation and use of a specific territory; the voluntary perpetuation of cultural distinctiveness (e.g. languages, laws and institutions); self-identification; an experience of subjugation, marginalization, dispossession, exclusion or discrimination (whether or not these conditions persist).</p> <p>¹The phrase "Outside the project area" should be read taking into consideration the likelihood of project activities to influence the livelihoods, land access and/or rights of Indigenous Peoples' irrespective of physical distance. In example: If an indigenous community is living 100 km away from a project area where fishing activities will affect the river yield which is also accessed by this community, then the user should answer "YES" to the question.</p>	X	

	² Physical defined as movable or immovable objects, sites, structures, group of structures, natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic or other cultural significance located in urban or rural settings, ground, underground or underwater.		
	³ Non-physical or intangible defined as "the practices, representations, expressions, knowledge and skills as well as the instruments, objects, artifacts and cultural spaces associated therewith that communities, groups, and in some cases individuals, recognize as part of their spiritual and/or cultural heritage"		

Second Level Questions

SAFEGUARD 1 NATURAL RESOURCES MANAGEMENT

Question	Management of soil and land resources	No	Yes	Comments
1.1	Would this project result in the degradation (biological or physical) of soils	LOW RISK	MODERATE RISK Demonstrate how the project applies and adheres to the principles of the World Soil Charter	The project promotes sustainable land management to prevent or minimize land degradation, through erosion control, integrated nutrient management, management and restoration of soil, water and biological resources and maintenance of ecosystem services in close consultation with local land users.
1.2	Would this project undermine sustainable land management practices?	LOW RISK	HIGH RISK A full environmental and social impact assessment is required. Please contact the ESM unit for further guidance.	The proposed project actions are fully congruent with SLM principles.

	Management of water resources and small dams	No	Yes	Comments
1.3	Would this project develop an irrigation scheme that is more than 20 hectares or withdraws more than 1000 m3/day of water?	LOW RISK	MODERATE RISK Specify the following information:	The project might introduce micro-irrigation and drip irrigation technologies on a pilot basis but no large-scale irrigation infrastructure.

		<ul style="list-style-type: none"> a) implementation of appropriate efficiency principles and options to enhance productivity, b) technically feasible water conservation measures, c) alternative water supplies, d) resource contamination mitigation or/and avoidance, e) potential impact on water users downstream, f) water use offsets and demand management options to maintain total demand for water resources within the available supply. g) The <u>ICID-checklist</u> will be included, as well as appropriate action within the project to mitigate identified potential negative impacts. h) Projects aiming at improving water efficiency <u>will carry out thorough water accounting</u> in order to 	
--	--	--	--

			avoid possible negative impacts such as waterlogging, salinity or reduction of water availability downstream.	
1.4	Would this project develop an irrigation scheme that is more than 100 hectares or withdraws more than 5000 m³/day of water?	LOW RISK	HIGH RISK A full environmental and social impact assessment is required. Please contact the ESM unit for further guidance.	
1.5	Would this project aim at improving an irrigation scheme (without expansion)?	LOW RISK	MODERATE RISK The ICID-checklist will be included, as well as appropriate action within the project to mitigate identified potential negative impacts. Projects aiming at improving water efficiency will carry out thorough water accounting in order to avoid possible negative impacts such as waterlogging, salinity or reduction of water availability downstream.	The project activities may include the development of rice-fish systems, community fish refuges management techniques and fish-ponds/water harvesting ponds. These activities may be linked to existing irrigation systems. A proper risk assessment would be carried out.
1.6	Would this project affect the quality of water either by the release	LOW RISK	HIGH RISK A full environmental and social impact assessment is required.	The project will promote integrated production, pest and pollution management, and increased product traceability to control and

	of pollutants or by its use, thus affecting its characteristics (such as temperature, pH, DO, TSS or any other?		Please contact the ESM unit for further guidance.	monitor pollution through PSPPs (e.g., product labeling, consumer access to testing/verification results through a smartphone application).
1.7	Would this project include the usage of wastewater?	LOW RISK	MODERATE RISK Demonstrate how the project applies and adheres to applicable national guidelines or, if not available, the WHO/FAO/UNEP Guidelines on Safe Usage of Waste Water in Agriculture	The project activities may involve organic fertilizer production and integrated livestock waste management. A proper risk assessment would be carried out.
1.8	Would this project involve the construction or financing of a dam that is more than 15 m. in height?	LOW RISK	CANNOT PROCEED	
1.9	Would this project involve the construction or financing of a dam that is more than 5 m. in height?	LOW RISK	HIGH RISK A full environmental and social impact assessment is required. Please contact the ESM unit for further guidance.	

	Tenure	No	Yes	Comments
1.10	Would this project permanently or temporarily deny or restrict access to natural resources to which they have rights of access or use Could this project result in any changes to existing <i>tenure</i>	LOW RISK	PROCEED TO NEXT Q	The project will promote the clarification of usufruct and tenure rights of farmers and households to reduce investment risks in

	<p><i>rights¹ (formal and informal²) of individuals, communities or others to land, fishery and forest resources?</i></p> <p>¹Tenure rights are rights to own, use or benefit from natural resources such as land, water bodies or forests</p> <p>²Socially or traditionally recognized tenure rights that are not defined in law may still be considered to be 'legitimate tenure rights'.</p>			adopting climate-resilient and sustainable technologies and practices.
	<p>1.10.1</p> <p>Could this project result in a negative change to existing legitimate tenure rights?</p>	<p>MODERATE RISK</p> <p>Demonstrate how the project applies and adheres to the principles/framework of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT)</p>	<p>HIGH RISK</p> <p>A full environmental and social impact assessment is required. Please contact the ESM unit for further guidance.</p>	<p>In clarifying usufruct and tenure rights, the project will adhere to the principles of VGGT.</p> <p>An environmental and social impact assessment will be carried out as part of the project development process.</p>
	Climate	No	Yes	Comments
1.11	<p>Could this project result in a reduction of the adaptive capacity to climate change for any stakeholders in the project area?</p>	<p>LOW RISK</p>	<p>HIGH RISK</p> <p>A full environmental and social impact assessment is required.</p>	<p>Farmers, cooperatives and communities are not expected to participate uniformly in the project activities. The project's focus on value chains and accessing higher value market might unintentionally favor elite farmers and</p>

			Please contact the ESM unit for further guidance.	community elites disproportionately through some activities. An environmental and social impact assessment will be carried out as part of the project development process.
1.12	Could this project result in a reduction of resilience against extreme weather events?	LOW RISK	HIGH RISK A full environmental and social impact assessment is required. Please contact the ESM unit for further guidance.	
1.13	could this project result in a net increase of GHG emissions beyond those expected from increased production?	LOW RISK	PROCEED TO NEXT Q	The project will carry out forest landscape restoration of critical catchment areas and other sensitive ecological zones in upper watersheds (up to 10,000 ha) . Expected results will also contribute to the ongoing work on REDD+ and be measured against the national forest reference level (FRL) and monitored through the national forest monitoring system (NFMS).
1.13.1	Is the expected increase below the level specified by FAO guidance or national policy/law (whichever is more stringent)?	HIGH RISK A full environmental and social impact assessment is required.	LOW RISK	

			Please contact the ESM unit for further guidance.		
	1.13.2	Is the expected increase above the level specified by FAO guidance or national policy/law (whichever is more stringent)?	LOW RISK	HIGH RISK A full environmental and social impact assessment is required. Please contact the ESM unit for further guidance.	

SAFEGUARD 2 BIODIVERSITY, ECOSYSTEMS AND NATURAL HABITATS


	Protected areas, buffer zones or natural habitats	No	Yes	Comments
2.1	Would this project be implemented within a legally designated protected area or its buffer zone?	LOW RISK	<p>HIGH RISK</p> <p>A full environmental and social impact assessment is required. Please contact the ESM unit for further guidance.</p>	<p>The project will work with 14 CPAs, with three of these located in National Parks, five within Wildlife Sanctuaries, and two within the Northern Biodiversity Conservation Corridor. While actions within protected areas are considered high risk, a number of mitigating factors exist that help to reduce the risk of implementation within these areas. These include:</p> <ul style="list-style-type: none"> • Agricultural production systems in PAs in Cambodia pre-date the establishment of the PAs and the project and are permitted to remain but not expand under Cambodian law. • Proposed activities target both enhancing the sustainability of agricultural production systems and, as such, will support capacity building and support to reduce impacts of agriculture within these areas and the rehabilitation of degraded areas (using native and locally relevant species) of the conservation areas that have previously been impacted by shifting agriculture and or logging. <p>A full ESMP will be prepared for the target areas once specific locations and support actions have been agreed upon during the implementation phase, with this being used to update and strengthen the proposed management responses.</p>

Biodiversity Conservation	No	Yes	Comments
---------------------------	----	-----	----------

2.2	Would this project change a natural ecosystem to an agricultural/aquacultural/forestry production unit with a reduced diversity of flora and fauna?	LOW RISK	<p>HIGH RISK</p> <p>A full environmental and social impact assessment is required.</p> <p>Please contact the ESM unit for further guidance.</p>	The project will not promote nor support conversion of natural systems. Engagement with agricultural certification systems targeting zero deforestation and sustainable production will also help to create broader market trends that discourage such actions.
2.3	Would this project increase the current impact on the surrounding environment for example by using more water, chemicals or machinery than previously?	LOW RISK	<p>MODERATE RISK</p> <p>Demonstrate in the project document what measures will be taken to minimize adverse impacts on the environment and ensure that implementation of these measures is reported in the risk log during progress reports.</p>	The project targets the adoption of GAP as well as sustainable certification standards that will help to minimise the impacts of agriculture, including through reduced use of agricultural inputs. Enhanced information on climate and weather patterns will also help to support farmers to adapt to changing climate and reduce reliance on agricultural inputs.

	Use of alien species	No	Yes	Comments
2.4	<p>Would this project use an alien species which has exhibited an invasive* behavior in the country or in other parts of the world or a species with unknown behavior?</p> <p>*An invasive alien species is defined by the Convention on Biological Diversity as “an alien species whose introduction and/or spread threaten biological diversity” (see https://www.cbd.int/invasive/terms.shtml).</p>	LOW RISK	<p>HIGH RISK</p> <p>A full environmental and social impact assessment is required.</p> <p>Please contact the ESM unit for further guidance.</p>	The project will promote climate-resilient intercropping, crop rotation, soil enrichment, and terracing and conservation tillage techniques, and stress-tolerant and ecologically appropriate crop varieties.

--	--	--	--	--

	Access and benefit sharing for genetic resources	No	Yes	Comments
2.5	Would this project involve access to genetic resources for their utilization and/or access to traditional knowledge associated with genetic resources that is held by indigenous, local communities and/or farmers?	 LOW RISK	<p>MODERATE RISK</p> <p>Ensure that the following issues are considered and appropriate action is taken. The issues identified and the action taken to address them must be included in the project document and reported on in progress reports.</p> <p>For plant genetic resources for food and agriculture (PGRFA) falling under the Multilateral System of Access and Benefit-sharing (MLS) of the International Treaty on Plant Genetic Resources for Food and Agriculture (Treaty), ensure that Standard Material Transfer Agreement (SMTA) has been</p>	No actions linked to this risk area will be undertaken.

			<p>signed and comply with SMTA provisions.</p> <p>For genetic resources, other than PGRFA falling under the MLS of the Treaty:</p> <ol style="list-style-type: none"> 1. Ensure that, subject to domestic access and benefit-sharing legislation or other regulatory requirements, prior informed consent has been granted by the country providing the genetic resources that is the country of origin of the resources or that has acquired the resources in accordance with the Convention on Biological Diversity, unless otherwise determined by that country; and 2. Ensure that benefits arising from the utilization of the genetic resources as well as subsequent appli- 	
--	--	--	---	--

			<p>cations and commercialization are shared in a fair and equitable way with the country providing the genetic resources that is the country of origin of the resources or that has acquired the resources in accordance with the Convention on Biological Diversity; and</p> <p>3. Ensure that, in accordance with domestic law, prior informed consent or approval and involvements of indigenous and local communities is obtained for access to genetic resources where the indigenous and local communities have the established right to grant such resources; and</p> <p>4. Ensure that, in accordance with domestic legislation regarding the established rights of these indigenous and local</p>	
--	--	--	--	--

			<p>communities over the genetic resources, are shared in a fair and equitable way with the communities concerned, based on mutually agreed terms.</p> <p>For traditional knowledge associated with genetic resources that is held by indigenous and local communities:</p> <ol style="list-style-type: none"> 1. Ensure, in accordance with applicable domestic law, that knowledge is accessed with the prior and informed consent or approval and involvement of these indigenous and local communities, and that mutually agreed terms have been established; and 2. Ensure that, in accordance with domestic law, benefits arising from the utilization of traditional knowledge associated with genetic resources are shared, upon mutually 	
--	--	--	---	--

			<p>agreed terms, in a fair and equitable way with indigenous and local communities holding such knowledge.</p> <p>Ensure that the project is aligned with the Elements to Facilitate Domestic Implementation of Access and Benefit Sharing for Different Subsectors of Genetic Resources for Food and Agriculture when it is the case</p>	
--	--	--	---	--

SAFEGUARD 3 PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

	Introduce new crops and varieties	No	Yes	Comments
3.1	Would this project Introduce crops and varieties previously not grown?	LOW RISK	<p>MODERATE RISK</p> <ul style="list-style-type: none"> • Follow appropriate phytosanitary protocols in accordance with IPPC • Take measures to ensure that displaced varieties and/or crops, if any, are included in the national or international <i>ex situ</i> conservation programmes 	<p>The project may introduce stress-tolerant and ecologically appropriate crop varieties that are currently not grown locally.</p> <p>The project would undertake due diligence by consulting with the authority and best available science to determine their risks and mitigation measures.</p>

	Provision of seeds and planting materials	No	Yes	Comments
3.2	Would this project provide seeds/planting material for cultivation?	LOW RISK	PROCEED TO NEXT Q	
3.2.1	Would this project involve the importing or transfer of seeds and/or planting materials for cultivation?	LOW RISK	<p>MODERATE RISK</p> <ul style="list-style-type: none"> • Avoid undermining local seed & planting material production and supply systems through the use of seed voucher schemes, for instance • Ensure that the seeds and planting materials are from locally adapted crops and varieties that are accepted by farmers and consumers 	<p>The project will only source planting stock from locally adapted stock and will ensure that seeds and planting materials are free from pests and disease.</p>

				<ul style="list-style-type: none"> • Ensure that the seeds and planting materials are free from pests and diseases according to agreed norms, especially the IPPC • Internal clearance from AGPMG is required for all procurement of seeds and planting materials. Clearance from AG-PMC is required for chemical treatment of seeds and planting materials • Clarify that the seed or planting material can be legally used in the country to which it is being imported • Clarify whether seed saving is permitted under the country's existing laws and/or regulations and advise the counterparts accordingly. • Ensure, according to applicable national laws and/or regulations, that farmers' rights to PGRFA and over associated traditional knowledge are respected in the access to PGRFA and the sharing of the benefits accruing from their use. Refer to ESS9: Indigenous peoples and cultural heritage. 	
	3.2.2	Would this project involve the importing or transfer of seeds	LOW RISK	<p style="text-align: center;">MODERATE RISK</p> <p>Ensure compliance with Access and Benefit Sharing norms as stipulated in the International Treaty on Plant Genetic Resources for</p>	The project will not import or transfer of seeds and/or planting materials for research and development

	and/or planting materials for research and development?		Food and Agriculture and the Nagoya Protocol of the Convention on Biodiversity as may be applicable. Refer also to ESS2: Biodiversity, Ecosystems and Natural Habitats.	
--	---	--	---	--

	Modern biotechnologies and the deployment of their products in crop production	No	Yes	Comments
3.3	Would this project supply or use modern plant biotechnologies and their products?	LOW RISK	<p>MODERATE RISK</p> <ul style="list-style-type: none"> Adhere to the Cartagena Protocol on Biosafety of the Convention on Biological Diversity to ensure the safe handling, transport and use of Living Modified Organisms (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health. Adhere to biosafety requirements in the handling of Genetically Modified Organisms (GMOs) or Living Modified Organisms (LMOs) according to national legislation or²⁵ 	The project will not use modern plant biotechnologies.

²⁵Food and Agriculture Organization of the United Nations. 2011. Biosafety Resource Book. Rome, <http://www.fao.org/docrep/014/i1905e/i1905e00.htm>

			<ul style="list-style-type: none"> • Take measures to prevent gene flow from the introduced varieties to existing ones and/or wild relatives 	
--	--	--	---	--

	Planted forests	No	Yes	Comments
3.4	Would this project establish or manage planted forests?	LOW RISK	<p>MODERATE RISK</p> <ul style="list-style-type: none"> • Adhere to existing national forest policies, forest programmes or equivalent strategies. • The observance of principles 9, 10, 11 and 12 of the Voluntary Guidelines on Planted Forests suffice for indigenous forests but must be read in full compliance with ESS 9- Indigenous People and Cultural Heritage. • Planners and managers must incorporate conservation of biological diversity as fundamental in their planning, management, utilization and monitoring of planted forest resources. • In order to reduce the environmental risk, incidence and impact of abiotic and biotic damaging agents and to maintain and improve planted forest health and productivity, FAO will work together with stakeholders to develop and derive appropriate and efficient response options in planted forest management. 	The project will support the rehabilitation of CPA and CFAs with a focus on planting native species as well as small-scale sustainable agroforestry (e.g., woodlots and home-garden systems) to meet the growing household demand for fuelwood and wood products. The project will adopt and closely follow the national REDD+ safeguards framework and other relevant national legislation, including CPA and CFA guidelines, to minimize social and environmental risks through forest restoration activities.

SAFEGUARD 4 ANIMAL (LIVESTOCK AND AQUATIC) GENETIC RESOURCES FOR FOOD AND AGRICULTURE

		Introduce new species/breeds and change in the production system of locally adapted breeds	No	Yes	Comments
4.1		Would this project introduce non-native or non-locally adapted species, breeds, genotypes or other genetic material to an area or production system?	LOW RISK	PROCEED TO NEXT Q	The project will not be engaged with introducing livestock.
4.1.1		Would this project foresee an increase in production by at least 30% (due to the introduction) relative to currently available locally adapted breeds and can monitor production performance?	CANNOT PROCEED	LOW RISK	

	4.1.2	Would this project introduce genetically altered organisms, e.g. through selective breeding, chromosome set manipulation, hybridization, genome editing or gene transfer and/or introduce or use experimental genetic technologies, e.g. genetic engineering and gene transfer, or the products of those technologies?	LOW RISK	<p style="text-align: center;">HIGH RISK</p> <p>A full environmental and social impact assessment is required. Please contact the ESM unit for further guidance.</p>	
4.2		Would this project introduce a non-native or non-locally adapted species or breed for the	LOW RISK	<p style="text-align: center;">MODERATE RISK</p> <p>A genetic impact assessment should be conducted prior to granting permission to import (cover the animal identification,</p>	

	first time into a country or production system?		<p>performance recording and capacity development that allow monitoring of the introduced species/ breeds' productivity, health and economic sustainability over several production cycles)</p> <ul style="list-style-type: none"> • http://www.fao.org/docrep/012/i0970e/i0970e00.htm • ftp://ftp.fao.org/docrep/fao/012/i0970e/i0970e03.pdf 	
4.3	Would this project introduce a non-native or non-locally adapted species or breed, independent whether it already exists in the country?	LOW RISK	<p>MODERATE RISK</p> <ul style="list-style-type: none"> • If the project imports or promotes species/breeds with higher performance than locally adapted ones, ensure: feed resources, health management, farm management capacity, input supply and farmer organization to allow the new species/breeds to express their genetic potential • Follow the OIE terrestrial or aquatic code to ensure the introduced species/breed does not carry different diseases than the local ones • Include a health risk assessment and farmer/veterinary capacity development in the project to ensure the introduced species/breed do not have 	

			different susceptibility to local diseases including ecto-and endo-parasites than the locally adapted/native species/breeds.	
4.4	Would this project ensure there is no spread of the introduced genetic material into other production systems (i.e. indiscriminate crossbreeding with locally adapted species/breeds)?	MODERATE RISK Introduce a) animal identification and recording mechanism in the project and b) develop new or amend existing livestock policy and National Strategy	LOW RISK	

		and Action Plan for AnGR		
--	--	--------------------------	--	--

	Collection of wild genetic resources for farming systems	No	Yes	Comments
4.5	Would this project collect living material from the wild, e.g. for breeding, or juveniles and eggs for on-growing?	LOW RISK	MODERATE RISK Guidance to be provided	The project will not engage in any collection of living material from the wild.

	Modification of habitats	No	Yes	Comments
4.6	Would this project modify the surrounding habitat or production system used by existing genetic resources?	LOW RISK	MODERATE RISK Guidance to be provided	No relevant activities
4.7	Would this project be located in or near an internationally recognized conservation area e.g. Ramsar or World Heritage Site, or other nationally important habitat, e.g. national park or high nature value farmland?	LOW RISK	MODERATE RISK Guidance to be provided	The project will work with Community Protected Areas and Community Forest groups which are located within nationally important habitat contained within protected areas. All actions within these areas will focus on rehabilitation of natural habitat and support to pre-existing and legally permitted agriculture within areas to enhance sustainability and reduce impacts.

4.8	AQGR	Would this project block or create migration routes for aquatic species?	LOW RISK	MODERATE RISK Guidance to be provided	No relevant activities
4.9		Would this project change the water quality and quantity in the project area or areas connected to it?	LOW RISK	MODERATE RISK Guidance to be provided	No relevant activities
4.10		Would this project cause major habitat / production system changes that promote new or unknown chances for gene flow, e.g. connecting geographically distinct ecosystems or water bodies; or would it disrupt habitats or migration routes and the genetic structure of valuable or locally adapted species/stocks/breeds?	LOW RISK	HIGH RISK A full environmental and social impact assessment is required. Please contact the ESM unit for further guidance.	No relevant activities

4.11	Would this project involve the intensification of production systems that leads to land- use changes (e.g. deforestation), higher nutrient inputs leading to soil or water pollution, changes of water regimes (drainage, irrigation)?	LOW RISK	MODERATE RISK Guidance to be provided	The project will support enhanced agricultural productivity but this will be done on existing agricultural foot prints and will focus on adoption of GAP as well as enhancing quality of production to meet nationally and or globally recognised sustainability standards.
------	--	-----------------	---	---

SAFEGUARD 5 PEST AND PESTICIDES MANAGEMENT

	Supply of pesticides by FAO	No	Yes	Comments
5.1	Would this project procure, supply and/or result in the use of pesticides on crops, livestock, aquaculture or forestry?	LOW RISK	<p style="text-align: center;">MODERATE RISK</p> <ul style="list-style-type: none"> Preference must always be given to sustainable pest management approaches such as Integrated Pest Management (IPM), the use of ecological pest management approaches and the use of mechanical/cultural/physical or biological pest control tools in favour of synthetic chemicals; and preventive measures and monitoring, 	The project will promote the adoption of GI, CamGAP, HACCP, and organic certification compliant production and processing and IPM. The project will thus develop guidelines and support to farmers to reduce and improve pre-existing use of pesticides based on international and local best practices. The project will not result in the procurement or direct supply of pesticides or agrochemicals.

			<ul style="list-style-type: none"> • When no viable alternative to the use of chemical pesticides exists, the selection and procurement of pesticides is subject to an internal clearance procedure http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/Code/E_SS5_pesticide_checklist.pdf • The criteria specified in FAO's ESM Guidelines under ESS5 must be adhered to and should be included or referenced in the project document. • If large volumes (above 1,000 litres of kg) of pesticides will be supplied or used throughout the duration of the project, a Pest Management Plan must be prepared to demonstrate how IPM will be promoted to reduce reliance on pesticides, and what measures will be taken to minimize risks of pesticide use. • It must be clarified, which person(s) within (executing) involved institution/s, will be responsible and liable for the proper storage, transport, distribution and use of the products 	
--	--	--	--	--

			concerned in compliance with the requirements.	
5.2	Would this project provide seeds or other materials treated with pesticides (in the field and/or in storage) ?	LOW RISK	<p>MODERATE RISK</p> <p>The use of chemical pesticides for seed treatment or storage of harvested produce is subject to an internal clearance procedure [http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/Code/E_SS5_pesticide_checklist.pdf]. The criteria specified in FAO's ESM Guidelines under ESS5 for both pesticide supply and seed treatment must be adhered to and should be included or referenced in the project document.</p>	No relevant activities
5.3	Would this project provide inputs to farmers directly or through voucher schemes?	LOW RISK	<p>MODERATE RISK</p> <ul style="list-style-type: none"> FAO projects must not be responsible for exposing people or the environment to risks from pesticides. The types and quantities of pesticides and the associated application and protective equipment that users of a voucher scheme are provided with must always comply with the conditions laid out in ESS5 and be subject to the internal clearance procedure 	No relevant activities

			<p>[link]. These must be included or referenced in the project document.</p> <ul style="list-style-type: none"> • Preference must always be given to sustainable pest management approaches such as Integrated Pest Management (IPM), the use of ecological pest management approaches and the use of mechanical or biological pest control tools in favour of synthetic chemicals 	
5.4	Would this project lead to increased use of pesticides through intensification or expansion of production?	LOW RISK	<p>MODERATE RISK</p> <p>Encourage stakeholders to develop a Pest Management Plan to demonstrate how IPM will be promoted to reduce reliance on pesticides, and what measures will be taken to minimize risks of pesticide use. This should be part of the sustainability plan for the project to prevent or mitigate other adverse environmental and social impacts resulting from production intensification.</p>	The project will promote the adoption of GI, CamGAP, HACCP, and organic certification compliant production and processing and IPM. The project will thus develop guidelines and support to farmers to reduce and improve use of pesticides based on international and local best practices. The project will not result in the procurement or direct supply of pesticides or agrochemicals
5.5	Would this project manage or dispose of waste pesticides, obsolete pesticides or pesticide contaminated waste materials?	LOW RISK	<p>HIGH RISK</p> <p>A full environmental and social impact assessment is required. Please contact the ESM unit for further guidance.</p>	No relevant activities

SAFEGUARD 6 INVOLUNTARY RESETTLEMENT AND DISPLACEMENT

		No	Yes	Comments
6.1	<p>Would this removal* be voluntary?</p> <p>*temporary or permanent removal of people from their homes or means of production/livelihood or restrict their access to their means of livelihoods</p>	<p>CANNOT PROCEED</p>	<p>HIGH RISK</p> <p>A full environmental and social impact assessment is required.</p> <p>Please contact the ESM unit for further guidance.</p>	<p>The project will not allow any involuntary resettlement or displacement.</p>

SAFEGUARD 7 DECENT WORK

		No	Yes	Comments
7.1	Would this project displace jobs? (e.g. because of sectoral restructuring or occupational shifts)	LOW RISK	HIGH RISK A full environmental and social impact assessment is required. Please contact the ESM unit for further guidance.	Although no negative impacts are projected, an environmental and social impact assessment will be carried out to ensure this.
7.2	Would this project operate in sectors or value chains that are dominated by subsistence producers and other vulnerable informal agricultural workers, and more generally characterized by high levels “working poverty”?	LOW RISK	MODERATE RISK Take action to anticipate the likely risk of perpetuating poverty and inequality in socially unsustainable agriculture and food systems. Decent work and productive employment should appear among the priorities of the project or, alternatively, the project should establish synergies with specific employment and social protection programmes e.g. favouring access to some social protection scheme or form of social insurance. Specific measures and mechanisms should be introduced to empower in particular the most vulnerable /disadvantaged categories of rural workers such as small-scale producers, contributing family workers, subsistence farmers, agricultural informal wage workers, with a special attention to women and youth who are predominantly found in these employment statuses. An age- and gender-sensitive	Although not intended, an environmental and social impact assessment will be carried out to ensure that there are no such risks and if there are, appropriate strategies will be proposed.

			social value chain analysis or livelihoods/employment assessment is needed for large-scale projects.	
7.3	Would this project operate in situations where youth work mostly as unpaid contributing family workers, lack access to decent jobs and are increasingly abandoning agriculture and rural areas?	LOW RISK	<p>MODERATE RISK</p> <p>Take action to anticipate likely risk of unsustainably ageing agriculture and food systems by integrating specific measures to support youth empowerment and employment in agriculture. A youth livelihoods/employment assessment is needed.</p> <p>Complementary measures should be included aiming at training youth, engaging them and their associations in the value chain, facilitating their access to productive resources, credit and markets, and stimulating youth- friendly business development services.</p>	Project activities will focus on engagement with existing agricultural cooperatives and will support adoption of market sustainability standards that promote fair work.
7.4	Would this project operate in situations where major gender inequality in the labour market prevails? (e.g. where women tend to work predominantly as unpaid contributing family members or subsistence farmers, have	LOW RISK	<p>MODERATE RISK</p> <p>Take action to anticipate likely risk of socially unsustainable agriculture and food systems by integrating specific measures to reduce gender inequalities and promote rural women's social and economic empowerment. A specific social value chain analysis or livelihoods/employment assessment is needed for large-scale projects.</p>	Risks are low. However, as part of the environmental and social impact assessment, a gender analysis of the project will be conducted and a gender action plan will be prepared during the project development phase.

	lower skills and qualifications, lower productivity and wages, less representation and voice in producers' and workers' organizations, more precarious contracts and higher informality rates, etc.)		Facilitation should be provided for women of all ages to access productive resources (including land), credit, markets and marketing channels, education and TVET, technology, collective action or mentorship. Provisions for maternity protection, including child care facilities, should be foreseen to favour women participation and anticipate potential negative effects on child labour, increased workloads for women, and health related risks for pregnant and breastfeeding women.	
7.5	Would this project operate in areas or value chains with presence of labour migrants or that could potentially attract labour migrants?	LOW RISK	MODERATE RISK Take action to anticipate potential discrimination against migrant workers, and to ensure their rights are adequately protected, with specific attention to different groups like youth, women and men.	No relevant activities.

		No	Yes	Comments
7.6	Would this project directly employ workers?	LOW RISK	MODERATE RISK FAO projects will supposedly guarantee employees' rights as per UN/FAO standards as regards information on workers' rights, regularity of payments, etc. Decisions relating to the recruitment of project workers are supposed to follow standard UN practices and	The project will not result in the direct employment of staff. Employment opportunities will likely be generated as a by-product of the project, but not directly.

			<p>therefore not be made on the basis of personal characteristics unrelated to inherent job requirements. The employment of project workers will be based on the principle of equal opportunity and fair treatment, and there will be no discrimination with respect to any aspects of the employment relationship, such as recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, etc.</p>	
7.7	Would this project involve sub-contracting?	<p>LOW RISK</p>	<p>MODERATE RISK</p> <p>Take action to anticipate likely risk of perpetuating inequality and labour rights violations by introducing complementary measures. FAO projects involving sub-contracting should promote, to the extent possible, sub-contracting to local entrepreneurs – particularly to rural women and youth – to maximize employment creation under decent working conditions. Also, FAO should monitor and eventually support contractors to fulfil the standards of performance and quality, taking into account national and international social and labour standards.</p>	No relevant actions.



Food and Agriculture
Organization of the
United Nations

ANNEX 4: GRIEVANCE REVIEW MECHANISM OF FAO REPRESENTATION IN CAMBODIA

Table of Contents

I. Definitions.....	2
II. Background	2
Purpose	2
Scope.....	2
III. Grievance Review Mechanism Structure.....	3
IV. Ensuring Awareness of the Mechanism	3
V. Grievance Review Process.....	4
Communicating Grievances	4
Registering the Grievances	4
Screening Grievances for Eligibility.....	6
Processing Eligible Grievances.....	8
Feedback	9
Conclusion of the Grievance Review	9
VI. Reporting and Lessons Learned	9
Annex I: Grievance Redress Mechanism Process Flow	11
Annex II: Grievance Submission Form.....	12
Annex III: Terms of reference	14

Grievance Review Mechanism (GRM) of FAO – Cambodia – Guidelines

This note is building on FAO's guidelines at the corporate level including: the Environmental and Social Management Guidelines,¹ Compliance Reviews Following Complaints Related to FAO's Environmental and Social Standards (ESS) Guideline,² as well as FAO's Guidance Note on Accountability to Affected Populations (AAP) (specifically commitment 3 on "Feedback and Complaints").³

I. DEFINITIONS

- Grievances:** any concerns raised by beneficiaries to FAO through designated channels regarding FAO's programming or projects as set out in FAO's Accountability to Affected Populations (AAP) commitment 3⁴, as well as alleged and or potential violations of FAO's Environmental and Social Standards (ESS) and Code of Ethics and International Standards for the Professional Practice of Internal Auditing published by the Institute of Internal Auditors (IIA).
- Complainant:** a party, person or entity raising a concern/submitting a grievance to FAO.
- FAO programme:** any technical or emergency assistance project activity carried out in Cambodia either directly by the Organization or by an implementing partner on FAO's behalf or as part of a joint project with FAO.

II. BACKGROUND

PURPOSE

- FAO is committed to ensuring that its programmes are implemented in accordance with the Organization's list relevant FAO policies on fraud and other corrupt practices, FAO Vendor Sanctions Policy (Admin circular 2014/27), FAO Whistleblower Protection Policy (Admin Circular 2011/05) and Protection from Sexual Exploitation and Sexual Abuse and others listed here: <http://intranet.fao.org/departments/oig/investigations/> including those of the Office of the Inspector General (OIG), FAO's ESS⁵ policies as well as AAP commitments⁶.
- The FAO Representation in Cambodia (FAOR in Cambodia) has established this Grievance Review Mechanism (GRM) to provide beneficiaries of FAO programme with a transparent, effective and timely mechanism to provide feedback and voice their concerns. It also provides them with a means to have these concerns resolved and to keep them informed of what is being done to address their concerns throughout the grievance review process. The GRM sets out the procedure for receiving and processing these grievances and concerns in order to formulate recommendations and take action for their resolution.

SCOPE

¹FAO 2015. "Environmental and Social Management Guidelines" <http://www.fao.org/3/a-i4413e.pdf>

²FAO 2015. "Compliance Reviews Following Complaints Related to the Organization's Environmental and Social Standards" <http://www.fao.org/aud/42564-03173af392b352dc16b6cec72fa7ab27f.pdf>

³FAO. (n. d.). FAO in Emergencies, Guidance Note "Accountability to Affected Populations" http://www.fao.org/fileadmin/user_upload/emergencies/docs/Guidance%20Note_Accountability_Publi.pdf

⁴For more information please refer to FAO's Guidance Note on Accountability to Affected Populations (AAP): http://www.fao.org/fileadmin/user_upload/emergencies/docs/Guidance%20Note_Accountability_Publi.pdf

⁵See <http://www.fao.org/environmental-social-standards/en/>

⁶See http://www.fao.org/fileadmin/user_upload/emergencies/docs/Guidance%20Note_Accountability_Publi.pdf

The GRM guidelines apply to the Country Office for reviewing grievances and concerns related to FAO's ESS and AAP commitments and are meant to define actions for their resolution at the programme and project management level when relevant. Complaints of misconduct or other wrongdoings, and other unethical behaviors raised by beneficiaries and stakeholders of FAO programmes in Cambodia should be referred to the appropriate office as indicated in the relevant policies.

The proposed GRM will apply to all projects and programmes implemented directly by FAO. The GRM is meant to address violations to Environmental and Social Standards (ESS). The GRM is not intended to resolve complaints of sexual abuse, conflicts of interest, fraud, corruption, etc. Recent discussions between the Office Inspector General (OIG), the Ethics Office, Emergency and Resilience Division (PSE), Environmental and Social Management Unit (ESMU), and Programme Support and Technical Cooperation Department (PS) suggest that rather than separate mechanisms for different types of grievances, there should be one single point of contact to sort and direct all grievances made towards FAO programmes. Complaints related to other offices would be forwarded to the proper office (e.g., OIG or the Ethics Office) for resolution. Allegations of fraud, corruption or other types of misconduct by FAO personnel or by third parties⁷ should be made directly to OIG-FAO, for investigation if required. If a grievance creates a reasonable suspicion or indication of fraudulent, corrupt, coercive or collusive practices, or improper use of FAO resources, it must be immediately reported to OIG according to FAO's rules and regulations⁸.

III. GRIEVANCE REVIEW MECHANISM STRUCTURE

5. A full map of the GRM, highlighting responsibilities and procedural flow is detailed in Annex-1.

I. The main composition of the GRM structure is as follows:

- i. **Grievance Review Officer (GRO):** a staff member fluent in Khmer language with no associations to Project Management tasks is appointed as the focal point in the FAO Representation to receive and process grievances and concerns of stakeholders. The FAOR in Cambodia should appoint an RGO alternate who should handle grievances and concerns in the absence of the RGO. These staff member(s) receive, register, and file grievances, and inform the FAOR discussing eligibility, suggest follow-up actions, and recommend the composition of the Grievance Review Committee when and if necessary. The GRO is responsible for monitoring and recording the complaint handling process from beginning to end, ensuring compliance with these guidelines.
- ii. **Grievance Verification Officer (GVO):** the FAO staff member assigned to record and conduct the verification following the methodology endorsed by the GRC.

IV. ENSURING AWARENESS OF THE MECHANISM

⁷ Third party entities include suppliers and service providers bidding for or contracted in commercial relationships with the Organization, or partner organizations receiving, under Letters of Agreement, financial or other resources from the Organization in respect of its programmes and operations, as well as employees of such entities.

⁸ See FAO Administrative Circular 2015/08 *Policy Against Fraud and Other Corrupt Practices*: <http://www.fao.org/aud/43301-0e63753e918fd9395cfa276ffbd275f03.pdf>

6. All FAO programmes and projects are required to publicize the GRM at the local level. To ensure that stakeholders are aware of the GRM, the following measures will be put in place during project implementation:

- i. Beneficiaries will be informed of the mechanism by project staff as well as implementing partners and service providers engaged by FAO during beneficiary selection, distribution processes and post-distribution monitoring.
- ii. Implementing partners and service providers involved in implementation of the FAO project will be made aware of the mechanism and will be required to promote awareness on the GRM among beneficiaries as part of their contractual arrangement with FAO.
- iii. Any FAO personnel, who is approached for a grievance or concern, should refer the Complainant to the designated channels for submission of grievances (see Section V below).

V. GRIEVANCE REVIEW PROCESS

COMMUNICATING GRIEVANCES

7. Any person, group, or representative of a person or a group who is directly engaged in or affected by an FAO activity in Cambodia can submit a grievance. A grievance can be received by the FAO office *in writing* using the form provided in Annex-2 through one of the following official channels:

- through an email to: FAO-KH@fao.org, entitled “Grievance re: XXXX”;
- through a phone call (or SMS) to a dedicate mobile number (the phone is held and monitored by the GRO);
- Through messaging apps:
 - a) Telegram
 - b) WhatsApp
 - c) Any other similar messaging platforms where complaints can be received in writing.

If programme beneficiaries or stakeholders are not able to use the preceding technologies due to inability to write or to access the technologies, they can seek the assistance of the GRO in filing a grievance form, who will then submit it through one of the above-mentioned channels.

8. In cases when government counterparts or resource partners bring beneficiaries’ concerns to FAO’s attention, the GRO will follow up with the concerned beneficiaries and when appropriate, encourage submission through the designated channels.

REGISTERING GRIEVANCES

9. Upon receipt of the grievance, the GRO will create an entry in the grievance registry. For all grievances falling within the scope of the mechanism, and are not otherwise referred to another office, the GRO will inform the FOAR and conduct a preliminary screening of the grievance to ensure that sufficient information is provided to proceed with eligibility screening

and follow-up. If crucial information for the Grievance Submission Form (Annex-2) is missing, the GRO will contact the Complainant to fill in the necessary information.

The following information must be recorded in the grievance registry⁹:

1. Date of grievance;
 2. Dedicated reference number (serial number of the grievance followed by the year of submission);
 3. Code of the project or programme to which the grievance is referring;
 4. Geographical location of the related programme or project activities;
 5. Name of Complainant;
 6. Gender of Complainant;
 7. Description of affected individual(s)/group(s) in relation to FAO programme;
 8. Brief description of the grievance.
10. Anonymous grievances are discouraged by the GRO, they will be registered but not screened. The Complainant's name will be kept confidential upon request.
 11. Grievances should be as specific as possible, describing actual or potential adverse impacts that have a plausible causal link to the FAO programme.
 12. The Complainant may revise or complete the grievance submitted providing additional information or new instances of concern at any time before the eligibility of the grievance is determined and communicated.
 13. The GRO will acknowledge the receipt of the grievances within a week to the complainant based on the below classification of grievances/complaints into low, medium, and high to ensure there is prioritization when dealing with certain types of complaint.

<p>Category A</p> <p>LOW</p>	<p>Low</p> <ul style="list-style-type: none"> – Inquiries; – Request for assistance; – False calls;
<p>Category B</p> <p>Medium</p>	<p>Moderate</p> <ul style="list-style-type: none"> – Operational (late delivery of inputs and services, etc.); – Out of beneficiaries list; – Distribution of less amount than envisaged; – Criteria for selection is unclear or not applied; – Quality of items and services provided;

⁹ Two copies of the registry will be created. One file will contain hard copies of all submitted and reviewed documents, the verification report and a summary of the case. A duplicate soft file will be saved in the registry of FAO Representation in Cambodia.

– Dissatisfaction with FAO activities.

High/Critical

Category C

-Breach of Environmental Standards

High

– Misconduct by FAO or IPs staff;

– Bribery, Corruption;

– Sexual Abuse and Exploitation

SCREENING GRIEVANCES FOR ELIGIBILITY

14. The GRO informs, discusses and screens with the FAOR the grievance and the available documentation in order to determine the eligibility for review and determine the appropriate channel for review by FAO. In the event the complaint is addressing issues regarding the FAOR, the GRO will consult with the Head of Operations. Eligibility is assessed on the following basis:
- a) **Non-grievances:** requests for information and other project related queries by beneficiaries, partners and suppliers. The GRO will directly forward these to the concerned FAO personnel for follow-up.
 - b) **Non-eligible grievances:** are grievances that do not meet the eligibility criteria for review (see paragraph 17.d) including grievances relating to projects or programmes that are not supported by FAO or for which FAO's support has ended and FAO actions can no longer reasonably be considered cause of the concerns raised. The GRO will ensure that the justification for the ineligibility of the grievance is communicated to the Complainant.
 - c) Matters to be referred to Office of the Inspector General (OIG): Only grievances relating to ESS will be primarily dealt with by FAOR in Cambodia. Allegations of financial fraud, abuse of authority, corruption and other types of misconduct by FAO personnel or by associated third parties¹⁰ will be forwarded directly to OIG for review¹¹.
 - d) Bearing in mind the local context; it is recommended to report any concerns regarding possible sexual exploitation or abuse, contact the Office of the Inspector General directly at:

Email: investigations-hotline@fao.org Con-

fidential hotline: (+ 39) 06 570 52333.

e. Eligible Grievances¹²:

¹⁰ Third party entities include suppliers and service providers bidding for or contracted in commercial relationships with the Organization, or partner organizations receiving, under Letters of Agreement, financial or other resources from the Organization in respect of its programmes and operation, as well as employees of such entities.

¹¹ Such complaints need not include firm evidence of the alleged unsatisfactory conduct and/or wrongdoing, however, they should include a reasonable level of information, as stated in the *Guidelines for internal administrative investigations by the OIG* (2016): <http://www.fao.org/aud/45778-04d41508f251e4fe747356ac586656463.pdf>

i. Alleged or potential violations of FAO's Environmental and Social policies and standards under an FAO Cambodia programme. This refers specifically to the Organization's nine ESS as defined in the *Environmental and Social Management Guidelines*¹³. These guidelines are designed to ensure that no environmental or biological damage is caused – directly or indirectly - by any FAO projects, and that no project impacts negatively on people's well-being, livelihood, assets and skills. This includes ensuring that no project exacerbates existing social tensions, puts project beneficiaries or stakeholders in danger, and that all stakeholders are treated equitably:

- **ESS 1: Natural Resource Management** (including management of soil and land resources, management of water resources and small dams, land tenure, and climate)
- **ESS 2: Biodiversity, Ecosystems and Critical Habitats** (including protected areas, buffer zones or natural habitats, biodiversity conservation, use of alien or non-native species, access and benefit sharing for genetic resources, and living natural resources)
- **ESS 3: Plant Genetic Resources for Food and Agriculture** (including introduction of new crops and varieties, provision of seeds and planting materials, modern biotechnologies and the deployment of their products in crop production, and planted forests)
- **ESS 4: Animal - Livestock and Aquatic - Genetic Resources for Food and Agriculture** (including introduction of breeds into new production environments, change in the production systems of locally-adapted breeds, introduction of new species, collection of wild genetic resources for farming systems, and modification of habitat)
- **ESS 5: Pest and Pesticide Management** (including pest management, selection of pesticides, supply of pesticides by FAO, disposal, and responsibility)
- **ESS 6: Involuntary Resettlement and Displacement** (including prohibition of forced evictions, avoiding and mitigating physical and economic displacement, and developing plans for physical or economic displacement)
- **ESS 7: Decent Work** (including creation of more and better employment opportunities, especially for youth and women, non-discrimination and equal employment, occupational safety and health, child labour prevention and reduction, forced labour, and workers' and producers' organizations)
- **ESS 8: Gender Equality** (combatting discriminatory practices, equal opportunities for men and women to participate)
- **ESS 9: Indigenous Peoples and Cultural Heritage** (identification of indigenous peoples, rights over land, territories and natural resources, prior assessment of the impact on indigenous peoples, free, prior and informed consent, indigenous peoples' plan, cultural heritage);

ii. Concerns regarding FAO's programming in each phase of the project cycle as set out in FAO's Accountability to Affected Populations (AAP) commitment 3¹⁴ including (among other issues) whether project aims and beneficiary targets were correct, whether programmes are being implemented appropriately, and whether there are perceived potential negative impacts that programmes are having on participants.

iii. If at any stage of the grievance review process, a received grievance creates a reasonable suspicion or indication of fraudulent, corrupt, coercive or collusive practices or any other

¹³ FAO 2015. "Environmental and Social Management Guidelines" <http://www.fao.org/3/a-i4413e.pdf>

¹⁴ For more information please refer to FAO's Guidance Note on Accountability to Affected Populations (AAP): http://www.fao.org/fileadmin/user_upload/emergencies/docs/Guidance%20Note_Accountability_Publi.pdf

misconduct by FAO personnel or third parties engaged by the Organization, the matter must be immediately reported to OIG.

All complaints must indicate what steps the complainant has taken to try to resolve their complaints with the programme management, and the results of those attempts. Complaints filed by those who have not attempted in good faith to resolve their concerns with the project management or have not demonstrated a good reason for not approaching the project management (e.g., fears about their safety), will be inadmissible.

PROCESSING ELIGIBLE GRIEVANCES

15. When a grievance is found eligible during the screening stage, the GRO in consultation with the FAOR suggests the appropriate grievance review process, on a case by case basis.

FEEDBACK

16. Results of the grievance review and follow-up actions will be communicated to the Complainant by the GRO.
17. Should the complainant consider the response unsatisfactory, s/he may file a complaint requesting a Compliance Review to OIG in accordance with the Guidelines for Compliance Reviews¹⁵.

CONCLUSION OF THE GRIEVANCE REVIEW

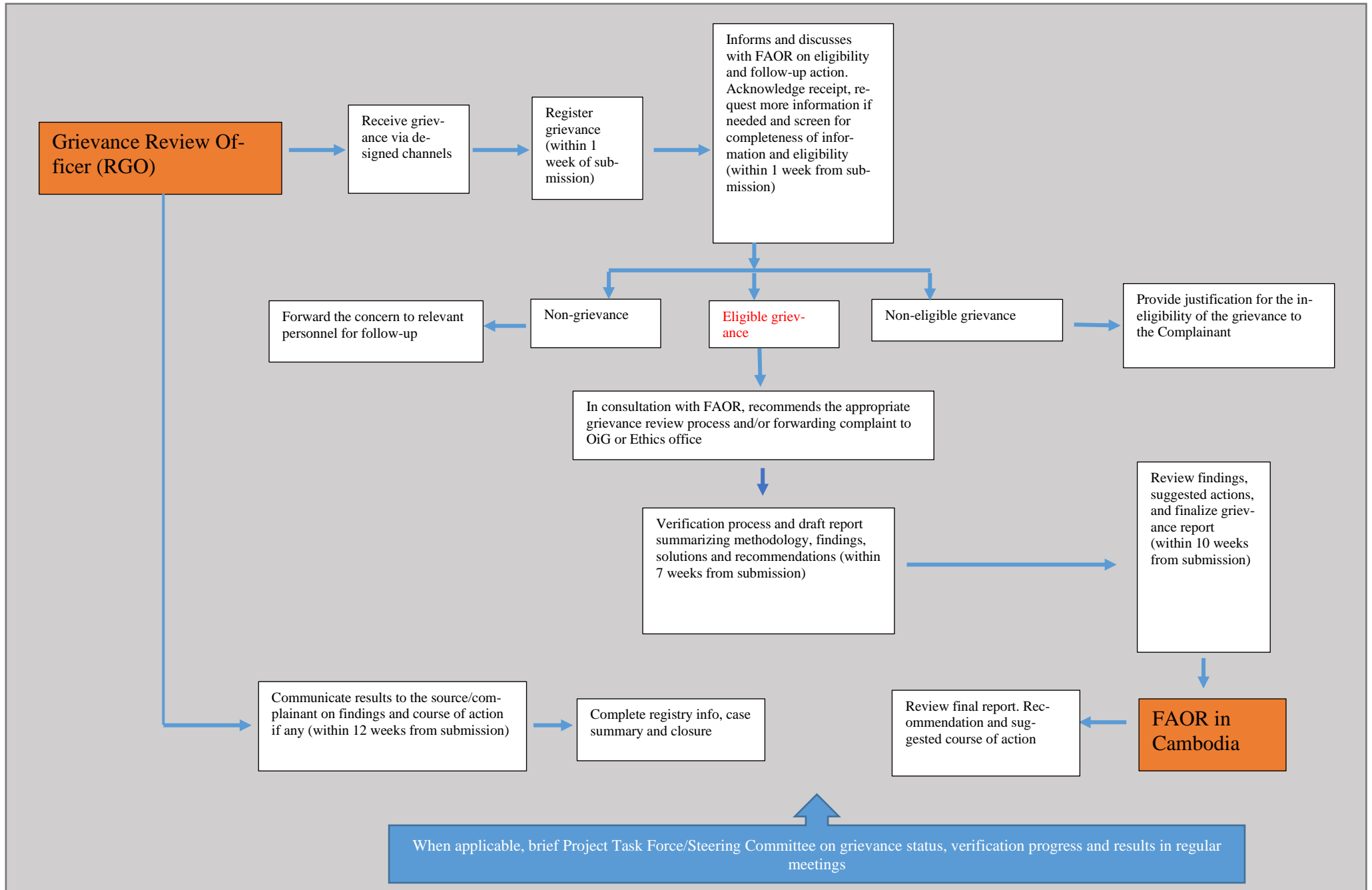
18. Upon the conclusion of the grievance review process, the GRO will ensure that the following information is recorded in the grievance registry (in addition to those recorded as per paragraph 9, above):
- e) Result of the grievance eligibility screening;
 - f) GRC composition;
 - g) Name of GVO;
 - h) Verification method followed;
 - i) The final grievance review report;
 - j) Summary of follow up action taken or to be taken;
 - k) Documentation of the communication to the complainant at the conclusion of the review process and follow up actions;
 - l) Resulting satisfaction, dissatisfaction or other reactions of the Complainant;
 - m) Any other relevant documentation.

VI. REPORTING AND LESSONS LEARNED

¹⁵ FAO 2015. "Compliance Reviews Following Complaints Related to the Organization's Environmental and Social Standards" <http://www.fao.org/aud/42564-03173af392b352dc16b6cec72fa7ab27f.pdf>

19. Information on results of each grievance review (either at the screening for eligibility stage or at the closing stage of the grievance review) will be presented to the FAOR and FAO senior staff with a focus on drawing lessons for future activities.
20. Grievances related to ESS, fraud, and ethics will be reported to the appropriate units in RAP and HQ on a bi-annual basis. It may be necessary to report other types of grievances to other units as required.
21. Briefings will be provided to the relevant Project Steering Committees (PSC) or other relevant project coordination or governing bodies to inform them about grievances received and results of the screening and verification process.
22. In the future, the log of grievances will be available online at FAOCMB website and also shared with the ESM-Unit for posting at FAO corporate website.
23. These GRM guidelines will be updated as needed based on lessons learned.

ANNEX-1: GRIEVANCE REDRESS MECHANISM PROCESS FLOW



ANNEX-2: GRIEVANCE SUBMISSION FORM

The Office of the FAOR in Cambodia has established a Grievance Review Mechanism (GRM) to provide beneficiaries of FAO projects with a transparent mechanism to provide feedback and voice concerns, trigger appropriate corrective actions and receive feedback on actions taken.

Any person, group, or representative of a person or a group, who is directly engaged in or affected by an FAO activity in the country can submit a grievance in writing using this form and transmitting it through email (FAO-KH@FAO.org), WhatsApp, Telegram (xxxxxxxxxx) Website or in person to the FAO office House #5, Street 370, Beoung Keng Kang I, Chamkar Mon, Phnom Penh, Cambodia. P.O. Box 53.

Information concerning the Complainant

1. Full Name ¹⁶	.....
2. Date of birth /..... /.....
3. Place of birth	.....
4. Nationality	.....
5. ID number	.....
6. Sex	£Male £Female
7. Occupation	.....
8. Present address	.....
9. Mobile number	.....
10. Status of Complainant	£ affected person, £ on behalf of affected person Have you obtained the consent of the person on behalf of whom you are submitting this complaint? £Yes £No

I. Information concerning the affected person/group if other than the Complainant

1. Full Name	.....
2. Date of birth /..... /.....
3. Place of birth	.....
4. Nationality	.....
5. ID number	.....
6. Sex	£ Male £ Female
7. Occupation	.....
8. Present address	.....
9. Mobile number	.....

¹⁶ Anonymous grievances are discouraged. However, the Complainant's name will be kept confidential upon request

- III. List of documents attached (no originals, just copies, if relevant)1.
2.
3.
4.