ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

Project:

Ecosystem-based Adaptation to increase climate resilience in the Central American Dry Corridor and the Arid Zones of the Dominican Republic

Main author and compilator: Adriana Pinto Brun, MSc. Sustainable Management of Natural Resources

Collaborators:

Chapter 4. Legal Framework: Mariano Castro, Project Legal Specialist

Chapter 5. Environmental and Social Baselines

Columba Sagastume – Guatemala

Dalila Sierra – Honduras

Margarita Meléndez – El Salvador

German Quezada – Nicaragua

Olman Varela – Costa Rica

Yuriza Guerrero – Panamá

Pablo Ovalles – Dominican Republic

Jaime Valverde – Local Technicians Coordinator

Reviewers:

Ruth Martínez, Senior Adaptation Specialist, United Nations Environment Programme

Marta Moneo, Programme Officer, United Nations Environment Programme

Ana Cristina Becerra, Adaptation Specialist, United Nations Environment Programme

Table of Contents

List of tables

List of figures

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AE	Accredited Entity
AGT	Agreement
CABEI	Central American Bank for Economic Integration
CCAD	Central American Commission for Environment and Development
D.	Decree
EbA	Ecosystems based Adaptation
EE	Executing Entities
ESMF	Environmental and Social Management Framework
ESS	Environmental and Social Standards of the Green Climate Fund
GCF	Green Climate Fund
GHG	Greenhouse gases
IFI	Intermediary Financial Institutions
IPP	Indigenous Peoples Planning Framework
NAC	National Advisory Committee
PEUs	Project Execution Units
PFIs	Partner Financial Institutions
PM	Project Manager
R.	Resolution
RPSC	Regional Project Steering Committee
RPMU	Regional Project Management Unit
UBN	Unsatisfied Basic Needs
UNEP	United Nations Environment Programme

1 EXECUTIVE SUMMARY

The Environmental and Social Management Framework (ESMF) for the programme "Ecosystem-based adaptation to increase climate resilience in the Central American Dry Corridor and Arid Zones of the Dominican Republic" was developed as part of the requirements of the Green Climate Fund (FVC) for applying to funding, and to guarantee that the carried out activities incorporate measures that may be considered necessary and sufficient to prevent, minimize, reduce and, when appropriate, compensate any adverse impact on people and the environment. CABEI will be the accredited entity for the programme and will also oversee the execution of some activities. FAO and CCAD will be the executing entities for the remaining outputs.

The project will provide significant benefits for the inhabitants of the targeted sites at the Dry Corridor of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama, and the Arid Zones of the Dominican Republic by increasing the resilience of their livelihoods to future extreme weather events, especially for populations that generally lack economic resources and knowledge to achieve this. It will also improve ecosystem services in the area.

Safeguard mechanisms guidelines has been established for each activity, even though 6 activities were classified category B - medium risk, 5 evaluated in category C - low risk, and a risk-free activity. Additionally, since the project involves intermediary financial institutions (IFIs and PFIs), it is classified as Medium level of intermediation, I-2 for the GCF. It will be necessary to follow the guidelines set out in the Mitigation Measures chapter as well as develop the instruments proposed in order to mitigate, reduce or eliminate these potential risks, or when not possible, to compensate them.

The guidelines for the development of Project Indigenous Peoples Plan described in this document constitute an initial analysis basis, as indigenous people have only been identified in the targeted sites of Guatemala. During the operational phase, the information, analysis and safeguard mechanisms for IPP should be complemented much more thoroughly. Additionally, during the implementation phase, a specific Stakeholder Engagement Plan should be developed for each country, so specific actions and strategies can be designed and appropriately involve the stakeholders related to each activity. Similarly, indicators and guidelines set out in the Monitoring and Evaluation Arrangements chapter should be applied to each country.

2 INTRODUCTION

The Project "Ecosystem-based Adaptation to increase climate resilience in the Central America Dry Corridor and Arid Zones of the Dominican Republic", is a regional initiative of Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama and the Dominican Republic, created to response to the Region's climate change impacts, including rising temperatures, droughts and extreme precipitation that threaten the livelihoods of vulnerable communities in the Central America Dry Corridor and the Arid Zones of the Dominican Republic.

The project proposes to address these impacts at landscape and household level in priority catchments by promoting Ecosystem-based Adaptation strategies (EbA) grounded on improving forest conditions and agroforestry systems and developing efficient technologies for water and energy use in rural communities. In order to achieve these objectives, the Project will implement actions to build and strengthen the capacity of local governments, financial institutions and communities, provide financial mechanisms as loans and microfinance for EbA activities, promote the development of small businesses based on natural resources, integration of EbA into policies and incentive creation.

The seven beneficiary countries are highly vulnerable to climate change, mainly due to the high poverty rates in the region. Consequently, the communities of targeted countries do not have financial resources and knowledge base or technical capacity to develop, implement and maintain EbA or any other adaptation measures. Therefore, the resources required to achieve a paradigm shift in the resource management approach exceed those that can be supplied through public sector funding.

Therefore, through the Central American Bank for Economic Integration (CABEI), the Project has been nominated to access the Green Climate Fund's (GCF) resources, foreseeing the importance of contributing to the achievement of national and regional goals related to climate change adaptation, and the development priorities that each country expresses in its policies and strategies.

In turn, the GCF requires all institutions to assess and manage the environmental and social risks that may arise from Project activities implementation, demonstrate the ability to identify risks and impacts, proper management to eliminate, reduce or mitigate, and effectively monitor them (WRI, 2015). Consequently, the GCF have recently published a Sustainable Guidance Note to evaluate Project activities (GCF, 2019a), to ensure that accredited entities establish a system that contains measures to manage and mitigate the identified risks and impacts, in accordance with the GCF Environmental and Social Safeguard Standards and its Environmental and Social Policy (GCF, 2019a)

The Environmental and Social Standards (ESS) aim to avoid, minimise, mitigate or compensate environmental risks, impacts and adverse social issues of projects, generate guidelines to manage these risks and impacts and improve environmental and social performance. The 8 ESS of the Green Climate Fund are:

ESS 1: Assessment and Management of Environmental and Social Risks and Impacts.

ESS 2: Labour and Working Conditions.

ESS 3: Resource Efficiency and Pollution Prevention.

ESS 4: Community Health, Safety and Security.

ESS 5: Land Acquisition and Involuntary Resettlement.

ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

ESS 7: Indigenous People.

ESS 8: Cultural Heritage.

In line with ESS1 and the Environmental and Social Policy of the GCF, this document presents the Project's Environmental and Social Management Framework (ESMF), in order to identify and assess social and environmental risks and impacts associated with Project activities,and generate mitigation measures and actions to improve decision-making and thus achieve environmental and social outcomes consistent with the Environmental and Social Safeguard of the Fund.

Therefore, this ESMF presents a brief description of the Project, the Regulatory Framework applicable to the Fund's Environmental and Social Safeguard Standards of each Project countries, as well as the Project Institutional Framework. In addition, the Baseline chapter presents a summary of the main environmental and social characteristics of each country in order to understand initial conditions of the population and ecosystems in which the Project plans its implementation, and thus generate a better analysis of the risks, impacts and also benefits generated by the proposed activities.

Then, a chapter of social and environmental risks and impacts analysis is presented, as well as the analysis of the environmental and social benefits associated to the Project activities implementation. Based on the impact and risk analysis of each Project activity, guidelines and measures were established to mitigate, reduce or eliminate environmental and social risks and impacts, which must be adopted and developed by the Project Team during the next phase. Similarly, an initial Indigenous Peoples Plan was established based on Green Climate Fund Guidelines and its Indigenous Peoples Policy.

Additionally, the Grievance Redress Mechanism was established in order to address both the complaints and inquiries of the general public, as well as those that may be presented by the Project workers. A chapter was also developed on Project Monitoring and Evaluation Arrangements, which show the main indicators that should be periodically measured by the Project to assess the Safeguards compliance, and the procedures that will allow them to be monitored.

The Preliminary Stakeholder Participation Plan was also created, following the guidelines established by the Green Climate Fund, where based on the risk analysis and proposed mitigation measures, the mechanisms are proposed to guarantee full, comprehensive and effective participation of all Project stakeholders, especially the vulnerable ones. Finally, a chapter is presented with the main Conclusions and Recommendations of the Environmental Management Plan, and the documents that support this instrument are attached.

3 OBJECTIVES AND SCOPE OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

General Objective:

The ESMF's general objective is to ensure that the "Ecosystem-based Adaptation to increase climate resilience in the Central American Dry Corridor and the Arid Zones of the Dominican Republic " Project activities, consider an adequate management of the environmental and social aspects linked to the Project, and comply with national legislation guidelines of the countries involved, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama and the Dominican Republic, and with the Environmental and Social Standards of the Green Climate Fund.

Specific objectives:

1. Establish the Project´s baseline, including the environmental and social aspects, legislation of the seven countries, and the institutional framework of the Project.

2. Develop an analysis of environmental and social risks and impacts of the activities to be done.

3. Establish mitigation measures, guidelines and criteria that must be applied to mitigate, reduce or eliminate the identified risks and impacts.

Scope:

The Environmental and Social Management Framework will guide the operation of the institutions and those responsible for implementing the Project's activities, where the environment, communities located in implementation areas, and Project workers are the direct beneficiaries.

4 PROJECT DESCRIPTION

The project is based on an innovative approach to support and finance the implementation of ecosystem-based adaptation (EbA) strategies to enhance the climate resilience of vulnerable communities in the Dry Corridor of Central America and the Arid Zones of the Dominican Republic. Targeted interventions will be carried out on three different scales, namely landscapes, companies and communities, and three interrelated financing mechanisms: a grant fund, a guarantee fund and a credit line will be established.

At the landscape level, the project plans to protect and restore forests, wetlands and agroforestry systems, using grant finances to identify and implement locally appropriate EbA solutions. This will also be supported by the establishment of water funds to promote long-term sustainability for landscape-level restoration. At the company level, the project will promote climate-resilient agricultural practices by establishing accessible credit lines for EbA, supported by a guarantee fund. At the community level, the project will the forested regions the utilisation of water-efficient technologies using a combination of grant financing and EbA credit lines supported by guarantees.

The project will harness the growing body of knowledge on effective EbA solutions in the region, with impactful EbA strategies and water-efficient technologies being sourced from ongoing projects such as inter alia CABEI's CAMBio II, UN Environment's MEbA II and IDB's EcoMicro among others. This sourcing from current projects in the region will provide integrated finance and technical advice that will foster EbA at a large scale in the Dry Corridor and Arid Zones.

The restoration of ecosystems through EbA will improve water security conditions in the presence of future climatic variability by improving hydrological flow and the infiltration of rainwater into groundwater reserves, while the use of innovative and efficient technologies will reduce the demand for water. This will be supported by the strong financial mechanisms established by the project. To facilitate the sustainability and upscaling of the proposed interventions, the project will support policy development at a regional, national and municipal level, especially for the establishment of financial mechanisms such as water funds or tax subsidy schemes. The knowledge generated through the project will be collected within a regional knowledge hub and disseminated across the region to inform decision-making.

4.1 Project Components

The Project has 2 components and 4 outputs brought together into 12 main activities and a set of sub-activities. The details of the steps to be done in each activity are described in the Project's Log framework. The following table summarises each component information:

Table 1. Activities and outputs of the Project

Activity	Sub-activities
Output 1: Strengthened technical capacity of local government, farmers and rural communities to implement EbA and other adaptation measures.	
1.1. Develop site-specific intervention plans for the 7 target catchments to integrate EbA measures through a participatory process with municipal authorities, local communities, and other stakeholders.	1.1.1 Establish a community-level monitoring and evaluation committee in each municipality and build the capacity of these committees to monitor the biophysical, social and economic conditions in their local catchment areas as well as to assess the level of climate vulnerability, risks and opportunities. 1.1.2 Hold community engagement workshops in each municipality to develop a framework for site-specific intervention plans in each of the seven targeted catchments. 1.1.3 Draft site-specific intervention plans for each of the seven targeted catchments. 1.1.4 Hold a stakeholder workshop to validate and get stakeholder buy-in for site-specific intervention plans in each of the seven targeted catchments.
1.2. Provide technical assistance to municipal authorities, farmers and rural communities for the implementation of EbA practices as well as water- and resource-efficient technologies	1.2.1 Develop cooperation agreements with commercial farmers for forest restoration and sustainable land management. 1.2.2 Train commercial farmers on sustainable EbA practices, including silvopasture, agroforestry and SLM. 1.2.3 Develop protocols for the implementation of sustainable EbA practices, including the: i) conservation and restoration of forested areas; ii) establishment existing agroforestry systems; and iii) development of sustainable fuelwood source. 1.2.4 Develop protocols for the adoption of water-efficient technologies by households (e.g. rainwater harvesting systems), by communities (e.g. water intakes) and by smallholder and commercial farmers (e.g. (drip irrigation, solar water pumping) 1.2.5 Develop protocols for the adoption of resource-efficient technologies that reduce fuelwood demand, (e.g. efficient charcoal kilns, fuelwood drying, efficient biomass stoves). 1.2.6 Establish a training of trainers programme for representatives of local departments of environment, CBOs, water committees, women's organisations and local cooperatives within each target country for EbA and water-efficient technologies based on the protocols developed under sub-activities 1.2.3–1.2.5. 1.2.7 Organise training workshops linked to community meetings within each target municipality to train local communities on EbA and water-efficient technologies, including visits to demonstration sites to facilitate farmer to farmer knowledge exchange.
1.3. Provide technical assistance to farmers and rural communities for the development of natural resource-based businesses and alternative climate-resilient livelihoods.	1.3.1 Conduct a livelihood assessment within each of the seven target catchments, focusing on climate risks and alternative options. 1.3.2 Conduct community engagement workshops to develop livelihood action plans for each target community based on the assessments conducted in 1.3.1. 1.3.3 Establish livelihood training programmes in each municipality for farmers and rural communities on locally appropriate natural resource-based businesses and climate-resilient livelihoods as identified in the livelihood action plans.
Output 2: Demonstration adaptation interventions implemented in rural communities across seven target catchments in the Dry Corridor and Arid Zones.	
2.1. Implement landscape EbA interventions within rural communities across the seven target catchments.	2.1.1 Establish tree nurseries focused on native species. 2.1.2 Establish forest protection zones. 2.1.3 Protect and restore natural forest in major recharge areas and riparian zones. 2.1.4 Restore forested areas across seven catchments. 2.1.5 Restore pine forests in Guatemala, Honduras and Nicaragua. 2.1.6 Establish agroforestry systems using diversified living fence arrangements in basic grains crops. 2.1.7 Establish agroforestry systems for natural shade in coffee plantations. 2.1.8 Establish silvopasture systems using diversified living fence arrangements. 2.1.9 Establish silvopasture systems using individual trees. 2.1.10 Establish sustainable fuelwood and timber plantations. 2.1.11 Establish firebreaks for forests and plantations.

Activity	Sub-activities
	2.1.12 Construct living barriers for soil conservation. 2.1.13 Construct superficial drainage for soil conservation. 2.1.14 Technical design and guidance for the implementation of Forestry Measures.
2.2. Implement demonstration water- and resource-efficient technologies within rural communities across the seven target catchments.	2.2.1 Install rainwater harvesting systems on public or community buildings using rooftop capture and plastic or geomembrane deposits for storage (25 m3) to supply water for 8-12 families. 2.2.2 Install community-level rainwater reservoirs (500 m3). 2.2.3 Install half-orange kilns for efficient charcoal production to be administered by existing local cooperatives. 2.2.4 Install community-level water pumping systems by solar panels. 2.2.5 Technical design and guidance for the implementation of Water & Resource Measures.
2.3. Establish the grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing and start operations	2.3.1 Define eligibility criteria from Steering Committee guidelines and align to national and municipal adaptation policies and initiatives, define final operability of the grant facility, including the definition of a competitive selection model. 2.3.2 Raise awareness on grant availability for EbA investment in conjunction with community engagement workshops under 1.1.1. 2.3.3 Monitor success of selected projects, including definition and documentation of underlying economics (knowledge gained to be disseminated to inform scale-up finance) 2.3.4 Communicate results via specific events and media initiatives. 2.3.5 Secure initial set-up and running cost of grant facility.
Output 3: Information on climate change adaptation and its financing disseminated across the region and mainstreamed into local and national policies.	
3.1. Establish regional knowledge hub for the dissemination of information on EbA in the Dry Corridor and Arid Zones.	3.1.1 Establish a knowledge management hub linked to the Environmental Observatory to disseminate best practices and lessons learned from the project, to support decision-making related to EbA implementation. The hub will incorporate specific modules for engagement with universities, research centers and private sector in the region for EbA Measures. 3.1.2 Develop knowledge products to be disseminated through the knowledge hub, including sustainable landscape management standards and procedures, opportunities for access to financing and women's economic empowerment as well as technical assistance, business opportunities, technical guidelines for the assessment of ecosystem services and their contribution to human well-being. 3.1.3 Train policy- and decision-makers at the municipal level on climate change impacts, including the impacts of gender inequality, and the role of EbA in mitigating climate change impacts to support political and technical decision-making for climate resilience in the Dry Corridor and Arid Zones. 3.1.4 Strengthen the technical capacity of community organisations, including women's groups, and local champions in developing, revising and disseminating information products to support the adoption of EbA and other resilient practices.
3.2. Raise awareness of financial mechanisms for the implementation of CCA interventions.	3.2.1 Train public officers/agencies at the municipal level to facilitate the uptake of financial mechanisms in their communities. 3.2.2 Train medium–large scale private organisations/ farmers to access loans through the EbA credit line. 3.2.3 Raise awareness among vulnerable communities and their organisations, including women's groups, about available financial mechanisms, including the EbA Credit Line and Trust Fund.
3.3. Enhance capacity of national and local-level policy-makers, in partnership with knowledge network of universities, research centers and private sector, to integrate climate change adaptation and the valuation of natural capital	3.3.1 Build an evidence base, using both in-country research and findings from comparable ecological zones in other countries, to clearly demonstrate the value and effectiveness of proposed adaptation activities to municipal-level policy-makers. 3.3.2 Develop or adjust a methodology to value ecosystems services to develop accounts profiles of natural capital so that it is integrated into development plans in the Dry Corridor. 3.3.3 Develop guidelines for local governments outlining protocols and criteria for implementation of economic incentives for SLM (e.g. water funds, payments for

Activity	Sub-activities
into local policies.	environmental services). 3.3.4 Train local governments to make policy changes, including the use of protocols and criteria for the adoption of EbA and implementation of economic incentives for SLM (e.g. water funds, payments for environmental services). 3.3.5 Organise workshops targeting municipalities within the Dry Corridor and Arid Zones to disseminate the evidence resulting from local government experiences to promote the integration of climate resilience in broader policies and actions across the region.
Output 4. Financial products and services to finance EbA investments are offered by Partner Financial Institutions (PFI), including PFI access to EbA on-lending funds and support mechanisms.	
4.1. Set-up and establish the financial structure for the lending and guarantee facilities	4.1.1 Set-up relevant fiscal, legal and regulatory compliance structures for the Lending facility's double trust structure and Guarantee facility. 4.1.2 Create legal agreements, including regulatory, legal and fiscal approvals for the lending and guarantee facilities. 4.1.3 Develop Steering Committee statutes and operational guidelines for the two facilities including eligibility criteria and processes for the blended EbA lending facility. 4.1.4 Define investment criteria from Steering Committee guidelines and align with national laws and regulations, responsible banking principles, national and municipal adaptation policies and initiatives, define final operability of the blended EbA lending facility. 4.1.5 Establish the guarantee facility to support EbA finance via the lending facility - define guarantee coverage criteria. Based on Regional Project Steering Committee guidelines and aligned with national laws and regulations, responsible banking principles, national and municipal adaptation policies and initiatives, the final operability of the EbA Guarantee Facility will be defined.
4.2. Financial mechanism of the EbA lending facility and guarantee facility	4.2.1 Deployment of the lending facility 4.2.2 Deployment of the guarantee facility
4.3. Technical assistance (TA) facility to strengthen technical capacity of accredited and non-regulated financial institutions to access and channel funds for small- and large-scale EbA investments	4.3.1 Develop or adjust training curriculums and technical assistance methodology targeted to fill gaps identified during initial due diligence based on ToT or online course methodologies and targeting certification financial institution personnel 4.3.2 Initiate and execute tailormade technical assistance programme for PFIs based on gaps identified during initial due diligence 4.3.3 Periodic monitoring of TA and training success via reassessment based on scorecard used during initial due diligence 4.3.4 Adjust TA methodology and training curriculum according to periodic reassessment 4.3.5 Promote the blended EbA lending facility with potential network institutions and non-network institutions in each of the 7 countries

Source: The Project

5 LEGAL AND INSTITUTIONAL FRAMEWORKS

The legislation of the Project members countries Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama and Dominican Republic project, which addresses compliance with the Environmental and Social Performance Standards of the Green Climate Fund related to the project "Ecosystem-based adaptation to increase climate resilience in the Central American Dry Corridor and Arid Zones of the Dominican Republic" is presented below. Likewise, the Institutional Framework that will monitor and guarantee the compliance of environmental and social considerations set in this Environmental and Social Management Framework is shown.

5.1 Legal Framework

The following section presents the legal framework of each country part of the project:

5.1.1 Guatemala

Norm or Policy	General description	Relevant institutions
ESS1. Assessment and Management of Environmental and Social Risks and Impacts		
Regulation of Environmental Evaluation, Control and Monitoring (AGT 137-2016)	Establishes rules for the use of instruments and guides that facilitate evaluation, control and monitoring of environmental projects, works, industries or activities	Ministry of Environment and Natural Resources
Law of protection and improvement of the environment (Decree 68-86)	General framework for the prevention of environmental deterioration	Ministry of Environment and Natural Resources
ESS2. Labour and Working Conditions		
Annual Bonus Law for Private and Public Sector Workers (Decree 42-92)	It is established as a mandatory labour benefit for all employers, both private and public sector, the payment to its workers of an annual bonus equivalent to an ordinary salary or salary accrued by the worker	N/A
Labour Code (Decree 1441)	Regulates labour relations by establishing the minimum rights and duties of employers and workers	Ministry of Labour and Social Welfare
Minimum wages for Agricultural, Non-Agricultural and Export and Maquila Activities	Establishes minimum wage	Ministry of Labour and Social Welfare
ESS3. Resource Efficiency and Pollution Prevention		
National policy for an integral waste management (AGT 111-05)	Implement and strengthen the integral management of waste and with the actors and sectors involved through social participation to promote sustainable development	Ministry of Environment and Natural Resources Municipalities
Law of incentives for the development of renewable energy projects (Decree 52-03)	Declares of national urgency the rational development of energetic renewable resources and facilitates the adequate conditions to promote investments in this field	Ministry of Energy and Mine
National Plan for Cleaner Production (AGT 258-2010)	Seeks to prevent pollution from the productive sectors and foment clean production as a competitive tool	Ministry of Environment and Natural Resources
ESS4. Community Health, Safety and Security		
Law of the National System of Food and Nutritional Security (Decree 32-05)	Establishes an institutional framework for the organisation and coordination of actions and plans	National Council of Food and Nutritional Security
Social Development Act (Decree 42-01)	creation of a legal framework that allow to implement legal and public policy procedures to carry out the promotion, planning, coordination, execution, monitoring and evaluation of actions aimed at the development of the human person in	Secretary of Planning and Programming of Presidency

Norm or Policy	General description	Relevant institutions
	aspects such as social, family, human and its surroundings	
Framework Law to Regulate Vulnerability Reduction, Compulsory Adaptation to the Effects of Climate Change and Mitigation of Greenhouse Gases (Decree 7-2013)	Establishes the necessary measures to prevent, plan and respond to the impacts of climate change	Ministry of Environment and Natural Resources
Law of the National Coordinator for the Reduction of Natural or Caused Disasters (Decree 109-96)	Creates the National Coordinator for the Reduction of Natural or Provoked Disasters, with the purpose of preventing, mitigating, attending and participating in the rehabilitation and reconstruction due to the damages derived from the effects of disasters	National Coordinator for the Reduction of Natural or Caused Disasters
Health Code (Decree 90-97)	Codifies the policies, strategies and competences related to public health in the country	Ministry of Public Health and Social Assistance
National Policy for Water and Sanitation	The objective is to ensure the contribution of water to the achievement of national development goals and objectives	Ministry of Environment and Natural Resources. Water Secretariat attached to the Ministry of Presidency
Plan for the Zero hunger Pact	Has the objective to face hunger and reduce malnutrition	Secretary of Food and Nutritional Security
Criminal Code (Decree 17-73)	General jurisdiction on criminal law	Judicial Branch
ESS5. Land Acquisition and Involuntary Resettlement		
Land Fund Law (Decree 24-1999)	Facilitates access to land and generate conditions for integral and sustainable rural development, through productive, agricultural, forestry and hydrobiological projects	N/A
Regularization of tenure of land provided by the State (AGT 386-01)	General and specific procedures of the regularization process	Ministry of Agriculture, Livestock and Food. Land Fund.
Specific regulation for recognition and declaration of communal lands	Establish the procedure to recognize and declare the existence of communal lands in an area declared in cadastral process, or registered	Office of Social Support from Municipal Directorates
Cadastral Information Registry Law (Decree 41-05)	Creates the Registry of Cadastral Information as the competent authority in cadastral matters, which aims to establish, maintain and update the national cadastre	Registry of Cadastral Information
Civil Code (Decree 106)	Deals with the main areas of private law	N/A
Law on the adjudication, sale or usufruct of real estate owned by the State of Guatemala, or its autonomous, decentralized entities and municipalities, with housing purposes for families without housing (Decree 26-07).	adjudication requests for sale or usufruct of properties owned by the State of Guatemala for housing purposes.	(Ministry of Communications, Infrastructure and Housing
Expropriation Act (Decree 529-48)	Provides that due to public utility or necessity, for social interest, all kinds of goods, whether or not they are commercial, can be expropriated	State - Central Government. Municipalities). University of San Carlos
Creates the Institutional Commission for the Development and Strengthening of Land Tenure (Decree 307-03)	The Commission will be a coordinating body for the actions to be carried out within the commitments acquired in the Peace Agreements related to the issue of land tenure	Institutional Commission for the Development and Strengthening of Land Tenure. Ministry of Agriculture, Livestock and Food
ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources		
Environmental Protection and Improvement Act (Decree 68-86)	Aims to ensure the maintenance of the ecological balance and the quality of the environment by providing a general framework for the State to develop specific regulations and establish sanctions to prevent environmental deterioration	Ministry of Environment and Natural Resources
Protected Areas Act and its regulation (Decree 4-89. AGT 759-90)	Regulations for the creation and protection of protected areas	Ministry of Environment and Natural Resources
Regulation of Environmental Management Framework Policy (AGT 791-2003)	Frame of reference to guide plans, programs and projects regarding the environmental sustainability of natural resources and biodiversity	Ministry of Environment and Natural Resources
(National Biodiversity Strategy and its Action Plan 2012 – 2022 (AGT 220-2011)	Promotes the sustainable use of biological diversity	Ministry of Environment and Natural Resources
Policy for the Conservation, Protection and	Constitutes a guiding document for all the actions that	Ministry of Environment and Natural

Norm or Policy	General description	Relevant institutions
Improvement of the Environment and Natural Resources (AGT 63-2007)	the different sectors shall adopt to contribute to a sustainable development for a 20 years period	Resources
IPP. GCF's Indigenous Peoples Policy		
Law of the Councils for Urban and Rural Development (Decree 11-02)	Development Councils are the main means of participation of the Mayan, Xinca, Garifuna and non-indigenous population, in public management to carry out the process of democratic development planning, taking into account principles of national, multi-ethnic, multicultural unity and multilingual. Also establishes that consultations shall be done through the representatives of the Councils.	Development Councils
Creation of the Unit for Mayan Policies on the Environment and Natural Resources (AGT 124-02)	Support the work of the General Direction of Environmental Policies and Strategies by promoting the values, practices and knowledge of the Mayan communities	Ministry of Environment and Natural Resources
Creates the fund for indigenous development (AGT 435-94)	Strengthen the sustained and self-managed human development process of indigenous communities	Guatemalan Fund for Indigenous Development
ESS8. Cultural Heritage		
Law that declares corn (Zea Mays L) as an intangible cultural heritage of the Nation (Decree 13-2014)	Recognizes corn as one of the most valuable symbols for Guatemalan culture	Ministry of Environment and Natural Resources. Ministry of Agriculture, Livestock and Food. Ministry of Culture and Sports
Law for the protection of the nation's cultural heritage (Decree 26-97)	Regulates the protection, defence, investigation, conservation and recovery of the assets that integrate the cultural heritage of the Nation	Ministry of Culture and Sports

5.1.2 El Salvador

Norm or Policy	General description	Relevant institutions
ESS1. Assessment and Management of Environmental and Social Risks and Impacts		
Social Development and Protection Act (Decree 647-14)	Legal framework for the promotion of human development and social inclusion	Presidency of the Nation
Environmental Act (Decree 233-98)	Develops provisions for the protection, conservation and recovery of the environment and the sustainable use of natural resources. Includes provisions regarding environmental impact assessment	Ministry of Environment and Natural Resources
ESS2. Labour and Working Conditions		
Work code	Regulates labour relations by establishing the minimum rights and duties of employers and workers	Ministry of Labour and Social Welfare
Law on Organisation and Functions of the Labour and Social Welfare Sector (Decree 682-96)	Determines the scope and composition of the labour and social security sector; the competences, functions and organisational structure of the Ministry of Labour and Social Welfare	Ministry of Labour and Social Welfare
Social Security Law (Decree 1263)	Social security will cover risks due to illness, common accident, occupational disease, work accident, maternity, age, death and involuntary censorship	Salvadoran Institute of Social Security
General Law of Risk Prevention in Workplaces (Decree 254)	Establish occupational health and safety requirements which should be applied in the workplace, in order to establish the basic framework of guarantees and responsibilities	Ministry of Labour and Social Welfare
ESS3. Resource Efficiency and Pollution Prevention		
National Environmental Sanitation Strategy	Strategic guidelines for environmental sanitation	Ministry of Environment and Natural Resources
Special regulation on hazardous wastes (Decree 41-00)	Regulates the provisions from the Environmental Act regarding hazardous wastes	Ministry of Environment and Natural Resources
ESS4. Community Health, Safety and Security		
Health Code	General regulations concerning public health	Ministry of Health
Creates the National Commission for Food and Nutrition (Law 723-81)	Establishes actions and executes programs and projects to address the deficiencies in the food system	National Commission for Food and Nutrition

Norm or Policy	General description	Relevant institutions
Criminal Code (Decree 1030)	General jurisdiction on criminal law	Judicial Branch
Civil Protection, Disaster Prevention and Mitigation Law (Decree 777-05)	Aims to prevent, mitigate and respond to natural disasters	National Commission for Civil Protection, Disaster Prevention and Mitigation
ESS5. Land Acquisition and Involuntary Resettlement		
Law on the special land regime owned by cooperative associations, communal and community farmers and beneficiaries of land reform (Decree 719-96)	Regulations for landowners that benefitted from the Agrarian reform	Ministry of Agriculture and Livestock
Land Use and Development Act (Decree 644-11)	Provides regulations, establishes guiding principles and defines institutional competencies for land use	National Council for Land Use Development
Land Transfer Program	Rules and procedures for the Salvadoran Institute of Agrarian Transformation to carry out a transparent process of land transfer	Salvadoran Institute of Agrarian Transformation
Cadastre Law (Decree 638-70)	The national cadastre intends to provide the correct location, characteristics and nature of real estate in the country	National Institute of Geography and Cadastre
ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources		
Environmental Act (Decree 233-98)	Develops provisions for the protection, conservation and recovery of the environment and the sustainable use of natural resources	Ministry of Environment and Natural Resources
Wildlife Conservation Act (Decree 844-94)	Protection restoration, management, exploitation and conservation of wildlife.	Ministry of Environment and Natural Resources
National Environmental Policy	Aims to revert environmental degradation and reduce climate vulnerability	Ministry of Environment and Natural Resources
Protected Areas Act (Decree 579 -05)	Regulates the establishment and management of protected areas	Ministry of Environment and Natural Resources
IPP. GCF's Indigenous Peoples Policy		
Reforms the Constitution, incorporating a subsection of article 63 recognizing indigenous peoples	Recognition of indigenous peoples and the adoption of policies to maintain and develop their ethnic, cultural, worldview, values and spiritual identity	N/A
Policy for Indigenous Peoples	Public policy for indigenous peoples, based on their rights and worldview	Central government
Culture Act (Decree 442-16)	Establish the legal regime that develops, protects and promotes culture, as well as the principles, definitions, legal and institutional framework. Guarantees their right to participate in the adoption of decisions that may affect their rights	Ministry of Culture
ESS8. Cultural Heritage		
Special Law for the Protection of the Cultural Heritage	Regulate, rescue, research, conserve, protect, promote, develop and value the cultural heritage	Ministry of Education
Culture Act (Decree 442-16)	Establish the legal regime that develops, protects and promotes culture, as well as the principles, definitions, legal and institutional framework	Ministry of Culture

5.1.3 Honduras

Norm or Policy	General description	Relevant institutions
ESS1. Assessment and Management of Environmental and Social Risks and Impacts		
Regulations for the National System of Environmental Impact Assessment	Guarantees that every plan, project, policy, activity or project is subject of an environmental impact assessment process to avoid the degradation of the environment	Environment and Natural Resources Secretariat
Regulations of the National System of Environmental Impact Assessment (AGT 189-09)	Organize, coordinate and regulate the National System of Environmental Impact Assessment	Environment and Natural Resources Secretariat. National System of Environmental Impact Assessment

Norm or Policy	General description	Relevant institutions
Framework Law on Public Policies in Social Matters (Decree 38-11)	Provides a legal framework for public policies on social matters according to the Country's vision 2010-2038 and National Plan 2010-202	National Council for the Coordination and Articulation of Public Policies on Social Matters
ESS2. Labour and Working Conditions		
Work code	Regulates labour relations by establishing the minimum rights and duties of employers and workers	Labour and Social Security Secretariat
Equal Opportunities for Women Act (Decree 34-00)	Eliminate discrimination and obtain equality between men and women	Women's National Institute
Social Security Act (Decree 80-2001)	Guarantee the human right to health and medical care, the protection of livelihoods and social services necessary for individual and collective well-being	Honduran Institute of Social Security
Minimum Wage Act	Determine the procedures for the application of the Minimum Wage and the Agencies responsible for its establishment, monitoring, control and compliance	Labour and Social Security Secretariat
ESS3. Resource Efficiency and Pollution Prevention		
Law for the promotion of electricity with renewable sources (Decree 70-07)	promote public and / or private investment in electricity generation projects with renewable resources	National Electric Power Company
Regulations for solid waste management (AGT 1567-10)	Regulate the integral management of solid waste, including their prevention, reduction, storage and conditioning operations, transportation, treatment and final disposal	Municipal hall
Law for the production and consumption of biofuels (Decree 144-07)	Declares of national interest the research, production and use of biofuels to generate employment, increase energy self-sufficiency and contribute to reducing pollution	Environment and Natural Resources Secretariat. Industry and Commerce Secretariat. Agriculture and Livestock Secretariat.
ESS4. Community Health, Safety and Security		
Health Code (Decree 65-1991)	General regulations concerning public health	Health Secretariat
Social Security Act (Decree 80-2001)	Guarantee the human right to health and medical care, the protection of livelihoods and social services necessary for individual and collective well-being	Honduran Institute of Social Security
General Regulations for Environmental Health	Regulates the compliance of the environmental health provisions contained in the General Health Code	Health Secretariat
National Food Security and Nutrition Strategy	Instrument that contains guidelines for implementation and operation, as well as measurable indicators for decision making	National Council for Food and Nutritional Security
Law of the National Risk System (Decree 151-09)	legal framework to prevent and reduce the risks of potential disasters, and to respond and recover from the damage caused by natural phenomena or by those generated by human activities	Permanent Commission of Contingencies
Drinking Water and Sanitation Policy	Guidelines and strategic objectives to guarantee an adequate management of drinking water and sanitation	National Council of Drinking Water and Sanitation
ESS5. Land Acquisition and Involuntary Resettlement		
Land Use Act (Decree 180-2003)	General provisions for land use and competent authorities	Land Use Council
Property Law (Decree 82-03)	Strengthen and grant legal security to property owners, develop and execute a national policy that allows both: foreign and national investment, as well as access to property by all sectors of society	Property Institute
Law for Social Housing Fund (Decree 167-91)	Establish policies for the housing and human settlements sector and promote favourable conditions to meet housing needs	National Commission of Housing and Human Settlements
Law of Agrarian Reform (Law 170-74)	Promotes a system of land tenure and exploitation that guarantees social justice	Agriculture and Livestock Secretariat
Civil Code	Deals with the main areas of private law	N/A
ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources		
General Environmental Act and its Regulation (Decree 104-93)	General regulations for the management, conservation, protection and restoration of natural resources	Environment and Natural Resources Secretariat

Norm or Policy	General description	Relevant institutions
Forestry, Protected Areas and Wildlife Act (Decree 98-2007)	Legal regime for the administration of forest resources and protected areas and wildlife	National Institute for Forest Conservation and Development, Protected Areas and Wildlife
National Strategy of Biodiversity	Provide the necessary guidelines that guide the actions of the different actors for the conservation of biodiversity, in harmony with the country's commitments and goals	Environment and Natural Resources Secretariat
IPP. GCF's Indigenous Peoples Policy		
Titling of communal areas of officially recognized indigenous and Afro-descendant organisations (Decree 61-13)	Grant legal security to these communities with respect to their ancestral lands	National Institute for Forest Conservation and Development, Protected Areas and Wildlife
Public Policy against Racism and Racial Discrimination for the Integral Development of Indigenous and Afro-Honduran Peoples	maintain their identity and diversity, promote spaces for participation and exercise of rights in the social, economic, political, cultural and environmental fields, respecting their worldview	N/A
ESS8. Cultural Heritage		
Law for the Protection of the Nation's Cultural Heritage (Decree 81-84)	Defence, conservation, claim, rescue, restoration and protection of the assets that constitute the Cultural Heritage	Honduran Institute of Anthropology and History
Law of Creation of the Honduran Institute of Anthropology and History	Defence, exploration, restoration, repair, recovery, growth and scientific research of archaeological, anthropological, historical and artistic treasures, as well as typical places and of natural beauty	Honduran Institute of Anthropology and History

5.1.4 Nicaragua

Norm or Policy	General description	Relevant institutions
ESS1. Assessment and Management of Environmental and Social Risks and Impacts		
Environmental Assessment System for permits and authorizations for the sustainable use of natural resources (Decree 20-17)	Regulates the administrative provisions for permits and authorizations for the sustainable use of natural resources	Ministry of Environment and Natural Resources
General environmental and natural resources act (Law 217-96)	Sets the general rules for the conservation, protection, improvement and restoration of the environment and the natural resources that integrate it, ensuring its rational and sustainable use	Ministry of Environment and Natural Resources
ESS2. Labour and Working Conditions		
Law on equal rights and opportunities (Law 648-08)	Promote equality and equity in the enjoyment of human, civil, political, economic, social and cultural rights between women and men	Nicaraguan Women's Institute
Social Security Act (Law 539-05)	Regulate and develop a social security system that contemplates the rights and duties of citizens, for the protection of workers and their families facing the social contingencies of life and work	Nicaraguan Social Security Institute
General law of sanitation and security at work (Law 133-07)	Minimum provisions that, in the matter of hygiene and safety of work, the State, employers and workers must develop in the work centres	Ministry of Labour
Labour Acquired Rights Act (Law 56-04)	Protects the benefits acquired against any norm or agreement that seeks to reduce them	N/A
General Labour Inspection Act (Law 664-08)	Promotes the protection and compliance of legal provisions related to the working conditions	Ministry of Labour
Labour Code (Law 185-96)	Regulates labour relations by establishing the minimum rights and duties of employers and workers	Ministry of Labour
Labour and Social Security Code of Procedures (Law 815-2012)	Contains the principles and procedures for labour and social security trials.	Labour Court of Appeal. Labour Tribunals. Social Security Tribunals
Creates the National Institute for Training and Labour Development (Law 642-07)	Promote actions to improve the economic and working conditions, capacity building, strengthen public institutions and unions	National Institute for Training and Labour Development
ESS3. Resource Efficiency and Pollution Prevention		
Efficient Energy Act (Law 956-17)	Legal framework that promotes an efficient and rational use of energy	Ministry of Energy and Mines

Norm or Policy	General description	Relevant institutions
National Energy Policy (13-04)	Use and provision of the public electric power service	National Energy Commission
National Policy of Clean Production (Decree 22-06)	guidelines, definitions, strategies and actions oriented to the productive sectors and services of the country to promote sustainable development	Ministry of Environment and Natural Resources. Ministry of Development, Industry and Commerce.
Regulations for the control of substances that deplete the ozone layer (Decree 91-00)	Rules and procedures for the registration, control, reduction and substitution of substances that deplete the ozone layer	Ministry of Environment and Natural Resources. Ministry of Agriculture
Basic Law for the regulation and control of pesticides, and dangerous toxic substances. (Law 274-97)	regulates and controls these substances, determines institutional competences and ensures the protection of the sustained agricultural activity, human health, natural resources, occupational safety and hygiene and the environment in general	Ministry of Agriculture
Regulation establishing the provisions for wastewater discharge (Decree 21-17)	Sets limits or maximum ranges for permissible spills	Ministry of Environment and Natural Resources. National Water Authority. Health Environment
ESS4. Community Health, Safety and Security		
Sanitary Provisions Act (Law 394-88)	Regulations for the organisation and operation of sanitary hygienic activities	Ministry of Health
General Health Act (Law 423-03)	Protect the right that every person has to enjoy, preserve and restore their health	Ministry of Health
Law for a culture of dialogue, reconciliation, security, work and peace (Law 985-19)	Safeguard peace, stability, the common good and peaceful coexistence	N/A
Military Code for the Organisation, Jurisdiction and Social Security (Law 181-14)	Institution in charge of national defence, provide cooperation to the police and other issues such as the conservation of the environment, cases of emergency or risk management	Presidency of the Republic. General Command
Creation of the National System for Prevention, Mitigation and Attention of Disasters (Law 337-00)	General framework, rules and principles for the functioning of the System for Prevention, Mitigation and Attention of Disasters	National Committee of the National System
Creates the Protection and Health Agricultural Institute (Law 862-14)	Facilitates, regulates and implements sanitary and phytosanitary actions	Agricultural Protection and Health Institute
Food and Nutrition Sovereignty and Security Act (Law 693-09)	Guarantee access to food for the population	National Commission for Food and Nutrition Sovereignty and Security
Law of the Nicaraguan Legal Digest of Food and Nutrition Sovereignty and Security (Law 881-15)	Compiles, organises and consolidates the legal framework regarding Food and Nutrition Sovereignty and Security	N/A
ESS5. Land Acquisition and Involuntary Resettlement		
General Law of the Public Registry and its Regulation (698-09)	Creation, regulation, organisation, administrative regime, operation and procedures of Public Registries	National System of Registries. Supreme Court of Justice
Organic Law of the Nicaraguan Institute of Territorial Studies (Law 311-99)	Organize and redefine the functions, powers and scope of competence of the Institute	N/A
Land Policy Framework (Decree 70/06)	Promotes legal and physical security of land tenure based on sustainable land use	Ministry of Agriculture
Agrarian property protection Act (Law 88-90)	Guarantees the acquisition of property rights to the peasantry, individual producers, cooperatives, indigenous communities and the Atlantic Coast	Public Registry
General Law of National Cadastre (509-05)	Establish the norms that regulate the establishment, maintenance, development and updating of the Cadastre at the national level, its structure and operation	General Directorate of Physical Cadastre of the Nicaraguan Institute of Territorial Studies
Law for the regulation, ordering and titling of spontaneous human settlements (Law 309-99)	legal framework for urban planning, demarcation and titling of Spontaneous Human Settlements	Municipalities
ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources		
National Biodiversity Strategy	Objective: contribute to the generation of knowledge, sustainable development and conservation of biodiversity	Ministry of Environment and Natural Resources

Norm or Policy	General description	Relevant institutions
Law for the conservation and sustainable use of biological diversity (Law 807-12)	Regulates the conservation and sustainable use of the biological diversity, guaranteeing an equitable participation and fair distribution of its the benefits	Ministry of Environment and Natural Resources
General environmental and natural resources act (Law 217-96)	Sets the general rules for the conservation, protection, improvement and restoration of the environment and the natural resources that integrate it, ensuring its rational and sustainable use	National Commission of the Environment. Ministry of Environment and Natural Resources
IPP. GCF's Indigenous Peoples Policy		
Statute of Autonomy of the Regions of the Atlantic Coast of Nicaragua (Law 28-87)	Recognition of the rights and duties of the communities	Regional Council
Dignified and equitable treatment of indigenous and Afro-descendant peoples Law (Law 757-11)	Guarantee fair and equal treatment in terms of opportunities and access to work	N/A
Law on the communal property regime of indigenous peoples and ethnic communities (Law 445-03)	Regulates the regime of communal ownership of the lands of indigenous and ethnic communities of the Atlantic Coast and the basins of the rivers Coco, Bocay, Indio y Maíz	Communal Assembly Regional Autonomous Councils and Governments
ESS8. Cultural Heritage		
Law for the Protection of the Nation's Cultural Heritage (Law 1142-82)	Protect and conserve the cultural heritage	Ministry of Culture
Creates the Commission for Artistic and Historic Heritage (Decree 1498-68)	protection of the Nicaraguan cultural heritage	Ministry of Public Education

5.1.5 Costa Rica

Norm or Policy	General description	Relevant institutions
ESS1. Assessment and Management of Environmental and Social Risks and Impacts		
Organic Law of the Environment (Law 7554)	Framework law on environmental matters. Includes general provisions on environmental impact assessment	Ministry of Environment and Energy
General Regulations on Environmental Impact Assessment Procedures (Decree 31849)	Define the general requirements and procedures to grant environmental viability (license) and environmental permits	National Environmental Technical Secretariat
ESS2. Labour and Working Conditions		
Labour code	Regulates labour relations by establishing the minimum rights and duties of employers and workers	Ministry of Labour and Social Security
Organic Law of the Ministry of Labour and Social Security	In charge of the management, study and dispatch of all matters related to work and social welfare	Ministry of Labour and Social Security
National Wages Council Law (Law 832)	Fixes minimum salaries	Ministry of Labour and Social Security
Law for the Protection of the Worker (Law 7982)	Regulates labour capitalization funds, pensions and strengthening the regime of disability, age and death from the Social Security	Ministry of Labour and Social Security Costa Rican Social Security Fund
Constitutes the Costa Rican Social Security Fund	Governs and administers the social security fund	Costa Rican Social Security Fund
ESS3. Resource Efficiency and Pollution Prevention		
Organic Law of the Environment (Law 7554)	Framework law on environmental matters. Includes provisions concerning energy sources and pollution prevention	Ministry of Environment and Energy
Law for Integral Waste Management (Law 8839)	Regulates waste management and the efficient use of resources	Ministry of Health
National Decarbonization Plan 2018-2050	Plan for decarbonization of the economy	Government
Law that Regulates the Rational Use of Energy (Law 7447)	Establish the means and mechanisms for a rational use of energy	Ministry of Environment and Energy
ESS4. Community Health, Safety and Security		
Emergency and Risk Prevention Law (Law 8488)	Regulates the actions needed to reduce the causes of loss of life and the social, economic and environmental consequences, induced by risk factors of natural and anthropic origin	National Commission of Emergencies
General Health Act (Law 5395)	General regulations regarding health as a right guaranteed by the State	Ministry of Health

Norm or Policy	General description	Relevant institutions
ESS5. Land Acquisition and Involuntary Resettlement		
Land and Colonization Law (Law 2825)	Promotes productivity and fair distribution of production activities, contributes to the conservation and adequate use of natural resources, avoids land concentration and speculation	Rural Development Institute
Expropriation law (Law 7495)	Regulates forced expropriation due to legally proven public interest	Public administration
National Cadastre Law (Law 6545)	Creation and regulation of the national cadastre	Public Registry
Officialises the National Land Use Policy (Decree 37623)	Integrate a framework of common objectives among a number of institutional actors and at the same time, constitute a guide for the strategic planning of the territory	Public sector in general
Creation of the National Registry (Law 5695)	Unify registration criteria, coordinate functions, facilitate procedures for users and improve registration techniques	Ministry of Justice and Peace
ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources		
Organic Law of the Environment (Law 7554)	Framework law on environmental matters	Ministry of Environment and Energy
Biodiversity Law (Law 7788)	Conservation and sustainable use of biodiversity, as well as the fair distribution of its benefits	Ministry of Environment and Energy
Wildlife Conservation Act (Law 7317)	General regulations for wildlife management and conservation	Ministry of Environment and Energy
IPP. GCF's Indigenous Peoples Policy		
Biodiversity Law (Law 7788)	Includes general aspects regarding free, previous and informed consent	Ministry of Environment and Energy
Indigenous Act (Law 6172)	Establishes who is considered as an indigenous person, declares indigenous reserves and their limits	Rural Development Institute. National Commission of Indigenous Affairs
Access to justice for the indigenous peoples of Costa Rica (9593)	Guarantee access to justice for the indigenous population considering their ethnic, socioeconomic and cultural conditions, considering indigenous law as long as it does not violate human rights, and considering their worldview	Judicial Branch
General Mechanism for Consultation of Indigenous Peoples (Decree 40932)	Regulate the obligation of the Executive Power to consult indigenous peoples in a free, prior and informed manner, through appropriate procedures and through their representative institutions	Ministry of Justice and Peace
ESS8. Cultural Heritage		
Historical-Architectural Heritage Law (Law 7555)	Conservation and protection of the historical-architectural heritage	Ministry of Culture, Youth and Sports
National Policy of Cultural Rights	Guiding instrument for government plans and strategic actions	Ministry of Culture, Youth and Sports
Archaeological Heritage Law (Law 6703)	Conservation and protection of the archaeological heritage	Ministry of Culture, Youth and Sports

5.1.6 Panamá

Norm or Policy	General description	Relevant institutions
ESS1. Assessment and Management of Environmental and Social Risks and Impacts		
Law 6 of January 22, 2002 on Transparency of Public Management	The institutions of the State at the national and local level shall have the obligation to allow citizens to participate in all acts of public administration that may affect the interests and rights of groups of citizens, through the modalities of citizen participation that establishes this Law.	State-wide
Resolution No. AG-0363-2005 of July 8, 2005	It is ordered that all works, activities or projects that could generate a positive or negative environmental impact to any element part of the National Historical Heritage must report the findings.	Ministry of Culture

Norm or Policy	General description	Relevant institutions
Executive Decree No. 123 of August 14, 2009 on Environmental Impact Assessment	Environmental Impact Assessment Process is approved, which identifies the relevant environmental impacts of projects/initiatives.	Ministry of Environment
ESS2. Labour and Working Conditions		
Decree No. 252 of December 30, 1971 on Workplace Industrial Hygiene and Safety (Labour Code)	General labour protection standards, employment contract, special rules, rights and obligations of workers and employers, alteration of working conditions and suspension of contract effects, termination of the employment relationship and special contracts. Professional risks related to hygiene and safety, replacement of workers and penalties.	Ministry of Labour
Law 44 of August 12, 1995: Update of Working Regulations	Dictates norms that regularize and modernize labour relations. Labour Code provisions are updated, in particular on regulation of private employment placement agencies, breaks, salary, employment contract, maternity protection, workers 'rights and employers' obligations, dismissal, union rights and collective agreements.	Ministry of Labour
Law 59 of September 12, 2017: Update of Labour Code	Modifies and adds articles to the Labour Code. Sanctions companies that hire foreigners illegally and minor workers who do not comply with the corresponding requirements.	Ministry of Labour
ESS3. Resource Efficiency and Pollution Prevention		
1972 Political Constitution	Article 118 establishes as a fundamental duty of the State to ensure that the population lives in a healthy and pollution-free environment, where air, water and food meet the requirements of the adequate development of human life.	State-wide
Law 66 of November 10, 1947 which adopts the National Sanitary Code.	The Sanitary was approved. This legal body regulates everything related to the organisation of public health and the administrative organisation of the National Department of Public Health.	Ministry of Health
Law 36 of May 17, 1996 on Environmental Pollution	Specialized Institute of Analysis (IEA) of the University of Panama is ordered to install a network of measurement of environmental pollution produced nationwide.	Ministry of Environment
Executive Decree No. 3 of January 14, 2009 on Soils Protection.	By which the Environmental Standard of Soil Quality is established for various uses.	Ministry of Environment
Executive Decree No. 5 of February 4, 2009 on Emissions from Fixed Sources	Establishes the maximum permissible limits of air emissions produced by fixed sources in order to protect the population's health, natural resources, and the quality of the environment, from air pollution.	Ministry of Environment, Ministry of Health
Resolute No. 42 of September 14, 2011	Regulates Pesticide Applications in Land	Ministry of Agricultural Development
ESS4. Community Health, Safety and Security		
Cabinet Decree No. 1 of January 15, 1969 which establishes the Ministry of Health	Establishes the Ministry of Health (MINSA) for the execution of health promotion, protection, repair and rehabilitation actions in accordance with constitutional provisions.	Ministry of Health
Law 18 of June 3, 1997: Police Force	The organisation and operation of the National Police was regulated.	Ministry of Security
Executive Decree No. 467 of November 7, 2007 on Pesticide Residues	The Sanitary Regulation was adopted that establishes the maximum limits of Pesticide Residues and other contaminants in fruits and vegetables of national consumption and export.	Ministry of Agricultural Development
Executive Decree No. 420 of December 14, 2018 on Healthcare	the Panama Health Care Model is established, based on the strategy of primary health care, which objective respond to the needs of individual, family, community and environmental health.	Ministry of Health
ESS5. Land Acquisition and Involuntary Resettlement		
1972 Political Constitution.	Art. 48, 50 and 118 refer to the social nature of the property.	State-wide
Civil Code	Article 338 of the Civil Code of the Republic of Panama. No one may be deprived of his property except by competent authority and for serious	Justice Branch

Norm or Policy	General description	Relevant institutions
	reasons of public utility and prior compensation.	
ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources		
Law 5 of January 4, 1989	Adoption of the Convention on the Conservation of Migratory Species of Wild Animals, also known as the Convention on Migratory Species (CMS) or the Bonn Convention.	Ministry of Environment, Ministry of Foreign Affairs
Law 24 of June 7, 1995	The Wildlife Law is created with the main objective of protecting, conserving the natural heritage of Panama and in turn investigating rare species and variety of wildlife, restoring and developing genetic resources, in addition to safeguarding natural ecosystems.	Ministry of Environment
Law 2 of January 12, 1995	the Convention on Biological Diversity is approved in all its parts	Ministry of Environment
Law 9 of January 3, 1996	Seeks to adopt a more effective approach at all levels, in combating desertification and mitigating the effects of drought.	Ministry of Environment
Resolution AG-0098-2004	The National Committee to Combat Drought and Desertification (CONALSED) was created, in support of the National Environment Authority (ANAM).	Ministry of Environment
Executive Decree No. 122, 2009	The National Biodiversity Policy, its principles, objectives and proposed lines of action for the sustainable management and selective use of the country's biological diversity are approved.	Ministry of Environment
Executive Decree No. 128, 2018	Approves the 2018-2050 National Biodiversity strategy and plan, as an effective instrument for the integration of biodiversity goals into national policies and strategies for development and poverty reduction.	Ministry of Environment
IPP. GCF's Indigenous Peoples Policy		
1972 Political Constitution	he State recognizes and respects the ethnic identity of the national indigenous communities, will carry out programs aimed at developing the material, social and spiritual values of each of its cultures. The State guarantees indigenous communities the custody of the necessary lands and their collective ownership for the achievement of their economic and social wellbeing.	State-wide
Cabinet Decree 53 of 1971 on Indigenous Peoples	Adopts the Convention No. 107 of 1957, of the International Labour Organisation (ILO), on the Protection and Integration of Indigenous Populations and Other Tribal and Semi tribal Populations in independent countries. Ensure that the right of indigenous populations to their lands is respected and respecting the form or procedure that each indigenous population has in the subject of titling or other procedure concerning their lands. Protects the collective rights of intellectual property and the traditional knowledge of indigenous peoples.	State-wide
Law 72, 2008 on Indigenous People's Lands	Establishes the special procedure for the free adjudication of collective ownership of lands traditionally occupied by indigenous peoples and communities.	Titling Authority, Ministry of Government
Executive Decree No. 223, 2010 on Indigenous People's Lands	Establishes the special procedure for the adjudication of collective land ownership of indigenous peoples that are not within the comarcas.	Ministry of Government, National Authority for Land Titling.
Law 20, 2000 on the Intellectual Property of Indigenous Peoples	Protect the collective rights of intellectual property and the traditional knowledge of indigenous peoples.	Ministry of Education, Ministry of Commerce, Institute of Culture
Executive Decree 687, 2008 on Indigenous People's Education	Intercultural bilingual education is implemented and developed in the indigenous communities with special emphasis on literacy in the mother tongue and spirituality of the indigenous peoples.	Ministry of Education
Law 88, 2010 on Indigenous People's	Through this law, the languages and alphabets of the	Ministry of Government, Ministry of

Norm or Policy	General description	Relevant institutions
Languages	indigenous peoples of Panama are recognized and dictates norms for intercultural bilingual education.	Education
Law 17 of June 27, 2016 on Indigenous Knowledge	Establishes a special regime to protect and promote respect for the knowledge of traditional indigenous medicine and create mechanisms for the protection of traditional cooking through the special system of collective intellectual property and guarantees the full and effective participation of congresses, councils or traditional indigenous authorities.	Ministry of Government, Ministry of Health, Ministry of Education
Law 37 of August 2, 2016	Establishes the right to free, prior and informed consultation and consent to indigenous peoples, whenever legislative and administrative measures that affect their collective rights are considered.	State-wide, Ministry of Government
Executive Decree 203, 2018	Through this Decree, the National Council for the Integral Development of Indigenous Peoples is created.	Ministry of Government, National Council for the Integral Development of Indigenous Peoples
ESS8. Cultural Heritage		
Law 67, 1941	Establishes guidelines and prohibitions, regarding the exploitation and commerce of monuments and archaeological objects by inexperienced persons and without the proper authorization.	Ministry of Commerce, Ministry of Culture
Law 14, 1982	Through this Law, everything related to the custody, conservation and administration of the assets considered Historical Patrimony of the Nation is regulated.	National Institute of Culture (Now Ministry of Culture)

5.1.7 Dominican Republic

Norm or Policy	General description	Relevant institutions
ESS1. Assessment and Management of Environmental and Social Risks and Impacts		
Establishes the Regulations for the Organisation and Development of the National Monitoring and Evaluation System (Decree 267-15)	Institutional information systems that cover the different planning, execution, monitoring and evaluation processes of policies, plans, public programs and projects. Systematically verifies the degree of fulfilment of the objectives and goals	National Commission of Monitoring and Evaluation
Regulation for environmental control, surveillance and inspection and the application of administrative sanctions (R. 18-07)	Procedures for environmental monitoring, inspection and administrative sanctions	Ministry of Environment and Natural Resources
Regulation of the System of Environmental Permits and Licenses, Procedure for the environmental evaluation of existing facilities and Procedure of environmental impact assessment for new projects (R. 06-04)	Establishes regulations and procedures according to what is provided by the Environment and Natural Resources Act regarding environmental permits, evaluations and impact assessments	Ministry of Environment and Natural Resources
Creates the Directorate of Social Participation and Access to Public Information (R. 6-09)	Facilities and promotes public participation	Ministry of Presidency
ESS2. Labour and Working Conditions		
Labour code (Law 16-92)	Regulates labour relations by establishing the minimum rights and duties of employers and workers	Ministry of Labour
National Wage Committee (D 512-97)	Sets and reviews the different rates of wages	National Wage Committee
Creation of the National Occupational Health and Safety Council (D 989-03)	Consultative body for the prevention of accidents at work and occupational diseases.	National Council of Security and Occupational Health
Creates the Dominican System of Social Security (Law 87-01)	Develops the reciprocal rights and duties of the State and of citizens regarding financing for the protection against age-related risks, disability, unemployment due to advanced age, survival, illness, maternity, childhood and occupational risks	National Council of Security and Occupational Health
Occupational Health and Safety	Regulates the conditions under which productive	Ministry of Labour

Norm or Policy	General description	Relevant institutions
Regulations (Decree 522-06)	activities shall be developed to prevent accidents and health damage as a consequence of labour related activities	
ESS3. Resource Efficiency and Pollution Prevention		
Authorizes the Dominican Corporation of State Electric Companies, to promote, directly or indirectly, the electricity generation activity. (Law 394-14)	Promote projects of power generation that aims to modify the national energy matrix and expand the generation offer to sources of low cost and environmental impact	Dominican Corporation of State Electric Companies
Operational regulations for the Clean Production and Efficient and Sustainable use of Resources Network (D 346-14)	Regulations for the operation of the network	Clean Production and Efficient and Sustainable use of Resources Network
Law on Incentives for Renewable Energies and Special Regimes (Law 57)	Regulatory framework and basic regulations to be applied to encourage and regulate the development and investment in projects that take advantage of any source of renewable energy and that seek to benefit from these incentives	National Commission of Energy
Approves the National Policy for the Integral Management of Municipal Solid Wastes (R. 19-2014)	Achieve a comprehensive management of municipal solid waste, which at the same time minimizes the effects or on the health of the population, is environmentally sustainable and socioeconomically viable	Ministry of Environment and Natural Resources
ESS4. Community Health, Safety and Security		
General Health Act (Law 42-01)	Regulates all general aspects concerning the right to health	Ministry of Public Health
Creates the National System for Food and Nutrition Sovereignty and Security of the Dominican Republic. (ley 589-16)	Development of food and nutrition security and sovereignty policies, as instruments	National Council for Sovereignty and Food and Nutrition Security
Risk Management Act (Law 147)	Avoid or reduce loss of life and damage that may occur on public goods, materials and the environment	National Council for Disaster Prevention, Mitigation and Response. National Emergency Commission. Regional, provincial and municipal committee
Creates the National Bureau on Security, Citizenship and Gender (Decree 212-13)	Propitiate and manage the execution of public policies and programs on violence and crime prevention, and encourage peaceful coexistence	Ministry of Interior and Police
ESS5. Land Acquisition and Involuntary Resettlement		
Law of the national cadastre (Law 150)	Regulate the conservation and updating of the inventory of the country's real estate in its physical, economic and legal aspects	General Directorate of National Cadastre
Real Estate Registration Law (Law 108)	Regulates the registration of Real Estate rights	Superior Land Courts and Original Jurisdiction Courts. National Directorate of Registry of Titles. National Directorate of Cadastral Measures
Agrarian Reform (Law 5879)	Establish a national agrarian policy that includes land distribution	Dominican Agrarian Institute
General Regulation of Title Records	Regulates the operation of the National Directorate of Registry of Titles and Title Records, as well as the procedure and manner in which that real estate rights are registered	National Directorate of Registry of Titles
Special procedure for expropriations attempted by the State	Expropriation procedures for duly justified causes of public utility or social interest	Central or local government
ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources		
Environment and Natural Resources Act (64-00)	Provides general regulations for the protection, conservation, improvement and restoration of the environment and the sustainable use of natural resources	Ministry of Environment and Natural Resources
Protected Areas Act	General regulations concerning the objectives of the different categories of protected areas	Ministry of Environment and Natural Resources
Sectorial Biodiversity Law (Law 333-15)	Provides principles and guidelines for the conservation and sustainable use of biodiversity	Ministry of Environment and Natural Resources

Norm or Policy	General description	Relevant institutions
IPP. GCF's Indigenous Peoples Policy		
No related laws or regulations were found		
ESS8. Cultural Heritage		
Establishes the incentive and promotion regime for cultural patronage in the Dominican Republic. (Law 340-19)	Promotes and incentives cultural patronage in the private sector to contribute to the cultural development of the nation	Ministry of Culture
Cultural Heritage of the Nation (Law 318)	Establishes provisions for the protection of monumental, artistic, documentary and folkloric heritage	Ministry of Culture. Ministry of Education. Police. Customs and Immigration authorities

5.2 Institutional Framework

The proposed project will be implemented over a period of seven years, from 2020–2027. The Central American Bank for Economic Integration (CABEI) will be the Accredited Entity (AE) for the project, and will be responsible for overseeing the implementation, financial management, evaluation, reporting and closure of the project.

Accredited Entity: as the AE, CABEI will oversee project implementation, using its experience having successfully implemented similar project activities involving financial intermediation across the region. CABEI will be responsible for financial management and will be accountable for the use of GCF resources under the project. It will maintain project accounts, facilitate staff recruitment and procurement processes and will monitor resource mobilisation of baseline as well as co-finance. In addition, as the AE, CABEI will: i) ensure that the project is executed in accordance with GCF standards; ii) supervise, oversee and manage the implementation of project interventions; iii) report on project progress; and iv) ensure that project activities are well coordinated and aligned with countries' national priorities. Project implementation by CABEI will also take place in close coordination with a Regional Project Steering Committee (RPSC).

Executing Entities: The project will be executed by three institutions with clear roles according to their capacities and role in the region. CABEI will be the accredited entity for the project, but will also be directly executing the major part of component 1 of the project as they will be directly responsible for the set up and management of the three financial facilities of the project. The Food and Agriculture Organization (FAO) will be the Executing entity for the Technical Assistance facility under this component supported by UNEP as technical advisor. FAO will also play a major role in the execution of the capacity building, technical assistance and implementation of the Ecosystem based Adaptation (EbA) demonstration sites throughout the region as the Executing Entity of outputs 2 and 4 of the programme. The Central-American Commission for Environment and Development (CCAD) will play a key role in political coordination among participant countries through the direct execution of output 3 focused of gathering and disseminating key results and analysis derived from the execution of the project aiming at generating evidence to inform and mainstream adaptation into key national policies and regional strategies. UNEP will provide technical advice to CCAD for the development of technical knowledge products on financial mechanisms for EbA, methodologies for

ecosystem services valuation and technical guidelines for EbA implementation. The EE will be accountable to CABEI as the AE for the effective implementation of project interventions. All operating policies and procedures will follow CABEI's standards of operation. The EE will also work in close coordination with the RPSC and RPMU.

Regional Project Steering Committee: the RPSC will comprise representatives from inter alia: i) Central American Commission for Environment and Development (CCAD); ii) CABEI; iii) United Nations Environment Programme (UNEP) — in a Technical Advisory Role; and iv) national-level CCAD liaisons. The RPSC will primarily be responsible for providing technical oversight and advisory support at the regional level. This will include: i) overseeing project implementation; ii) reviewing annual workplans and project reports; iii) reviewing the project's fulfilment of environmental and financial objectives; iv) approving any changes to the project's targets, activities or timelines; and v) supporting communities to access the grant facility established under Output 2. The RPSC will be centrally placed to ensure consistent project progress across all seven countries. Biannual RPSC meetings will be held to take management-related and technical decisions, discuss the project's main performance indicators and provide strategic guidance. The RPSC will also be responsible for overseeing the RPMU.

Regional Project Management Unit: the RPMU will be responsible for day-to-day project administration and execution, and the regional technical coordination of project activities. It will ensure that project implementation proceeds through clear work plans, terms of reference and carefully designed administrative arrangements that meet CABEI and GCF requirements. A full-time staff member will be recruited to fulfil the role of Project Manager (PM), who will head the RPMU and will be responsible for the daily on-the-ground implementation and management of the project. The PM will be responsible for ensuring the project achieves the targets set out in the Results Framework to the required standards of CABEI and the GCF and within the specified time and budget allocations. To achieve these targets, the PM will: i) report directly to the RPSC on project management-related matters; ii) manage the project in accordance with the specified workplans and allocated budget; iii) ensure that all project interventions are implemented according to CABEI and GCF guidelines; iii) work closely with regional and national institutions to ensure that the project is managed effectively and that the needs of all beneficiary groups are considered; and iv) oversee the efficient and effective information and knowledge-transfer to relevant project partners. The PM will be required to fulfil these roles for the duration of the project.

In addition to the PM, the RPMU will be comprised of: i) a Project Coordinator (PC); ii) a Financial and Procurement Officer (FPO); iii) an Environmental and Social Safeguards Officer (ESO); iv) a Communications Officer (CO); v) a Gender Officer (GO); vi) a Monitoring and Evaluation (M&E) Specialist; and vii) an Administrative Officer (AO). The PC will be contracted full-time to support the PM in the implementation of project activities by ensuring that there is effective coordination

between relevant project stakeholders during the implementation phase and serving as a focal point for facilitating the various stakeholder engagements that will be undertaken.

An international Chief Technical Advisor (CTA) will be employed on a part-time basis and will be hosted within the RPMU. The CTA will primarily be responsible for providing technical oversight and guidance for all activities to be implemented under the proposed project. In addition, the CTA will inter alia: i) support the annual planning process and budgets; ii) provide monitoring and operational support to the project; iii) coordinate and supervise the work of specialist technical advisors in National Coordination Units (NCUs); and iv) provide biannual reports to the RPMU and RPSC on project performance and progress towards objectives.

CABEI Investment Committee: to support the implementation of activities under Component 1 of the project, an Investment Committee (IC) will be established at CABEI's headquarters in Tegucigalpa, Honduras. The IC will report to the RPSC and will be comprised of technical and financial experts. Its responsibility will be to manage the operation of the guarantee facility and the EbA credit line established under the project. The experts of the IC will carry out analyses of relevance, sustainability, and cost-effectiveness of all applications, thereby ensuring they are framed within the specific objectives of the project. The IC will undertake these functions in close collaboration with the RPMU and the National Advisory Committees (described below).

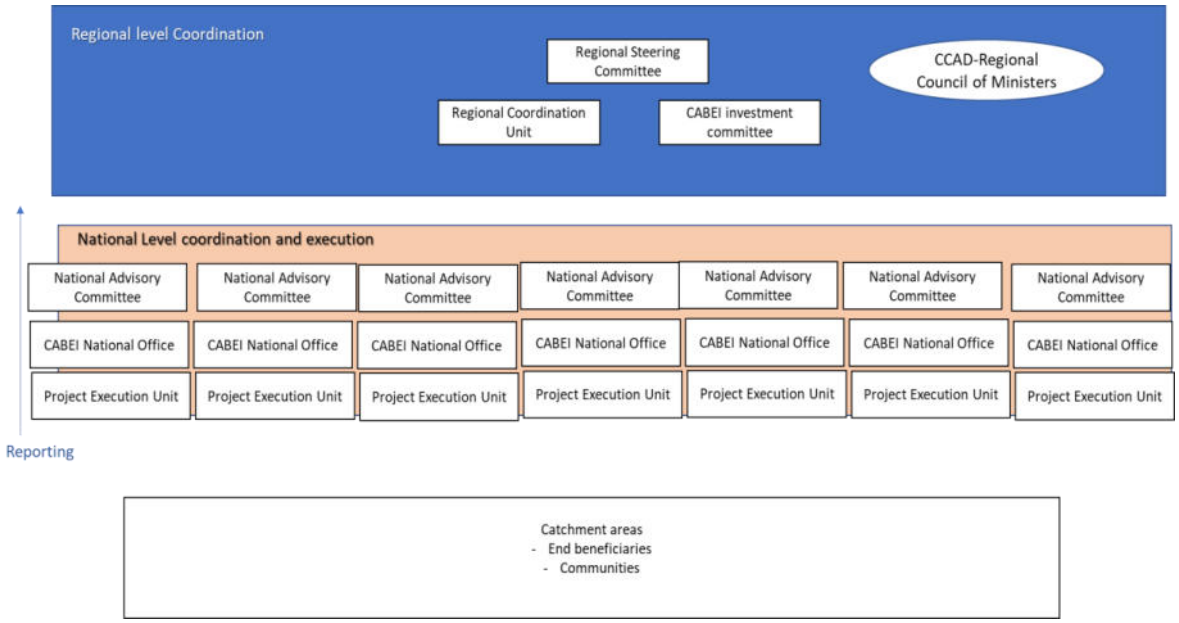
National Advisory Committees: A National Advisory Committee (NAC) will be established in each of the seven participating countries. Each NAC will be comprised of a: i) National Project Director (Chair); ii) CABEI national representative; iv) national climate change office/department representative; v) Ministry of Environment representative; vi) Ministry of Agriculture representative; and vii) Ministry of Planning representative. The responsibilities of the NACs will include national project guidance, planning and oversight, as well as supervision of national financial execution. The NACs will also recommend Partner Financial Institutions (PFIs) — in collaboration with the Project Execution Units (PEUs) — for participation in project activities and will work closely with CABEI's IC and the RPMU to coordinate activities under Component 1 of the project. They will also participate in coordinating national access to the EbA credit line and the trust fund established by the project and will provide relevant inputs to the IC to assist with decision-making.

Project Execution Units (PEUs): will be established in the target catchments of each of the participating countries. Each unit will be comprised of: i) a Coordinator (technical leader); ii) an EbA, water and energy technical advisor; iii) a financial advisor to give guidance on the EbA credit line and trust fund; iv) an administrative officer; v) a social communication and engagement officer (with gender knowledge); and vi) a monitoring and evaluation officer (part time). These PEUs will be responsible for daily execution of the project in the respective target catchments, as well as communication and capacity-building activities with participating local governments, farmers and

communities. They will provide monitoring, reporting and evaluation services, as well as technical assistance project execution services. The EbA, water and energy expert will provide technical assistance to local governments, farmers and communities on implementing EbA, water- and energy-efficient interventions under the project. The financial advisor will provide technical assistance to local financial institutions to support EbA, to learn how to use the financial mechanisms established under the project, and for the valuation of natural assets. The PEUs will also be responsible for the identification of, and project formulation for finance applications — EbA credit line or trust fund — to be submitted to the NCUs for approval, after which the IC and RPSC will sign off and funds will be released by the EbA fund and disbursed through the relevant PFI. The social communication and engagement officer will be involved in engagement of stakeholders in capacity-building activities and will ensure that gender matters are considered. The administrative officer will support all project activities, including logistics. The monitoring and evaluation officer will define and implement the monitoring plan for the project and will ensure that targets are being met, including the tracking of risks. CABEI national offices will manage all national budget allocations. [To be confirmed by CABEI]

Partner Financial Institutions: PFIs (as part of CABEI's network) will be selected in each country to manage financial flows in the target municipalities according to decisions made by the NACs. In the case where there is no accredited institution within the target catchment area — for example, in Nicaragua — accredited institutions will be provided with technical assistance to offer an institutional loan to another non-accredited financial institution that can then directly lend to the end beneficiary. The PFIs will work closely with the PEUs to ensure interventions financed directly by the project, and using the mechanisms established by the project, are well-aligned with project objectives. The figure below shows the institutional arrangements for project implementation.

Figure 1. Project management structure.

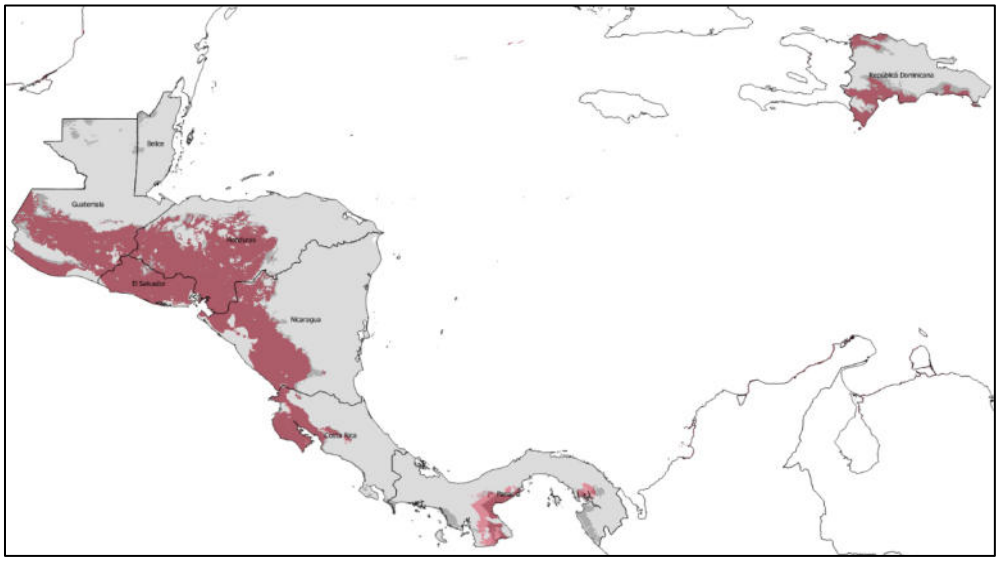


Source: Project Funding Proposal

6 ENVIRONMENTAL AND SOCIAL BASELINES OF THE PROJECT COUNTRIES

The Central America region known as the Dry Corridor covers a significant part of the pacific slope of Guatemala, Honduras, El Salvador and Nicaragua, as well as areas much smaller in Costa Rica (Guanacaste) and Panama. The term Dry Corridor, which includes semiarid and subhumid ecosystems, emerged in the recent years, attracting attention to the increasing frequency and intensity of the dry periods that affect the region, which are related to the El Niño Southern Oscillation (ENSO).

Figure 2. The current and projected extent of the Central America Dry Corridor and Arid Zones of the Dominican Republic.



Source: The Project

The map above shows the current coverage in red, and the projected 2050 coverage in red and grey, which means that the expansion of the Dry Corridor is expected to increase from 64% of the Central American municipalities to 85% by 2050. This map is based on the calculations of the Central International of Tropical Agriculture (CIAT), based on the current climatic distribution, future scenarios and the evapotranspiration estimations.

The Dry Region is the most densely populated region of Central America, with a population of 10.5 million people in an area of ~ 530,500 square kilometres (FAO 2017). The arid zones of the Dominican Republic cover ~ 17% of the national territory (~ 8,050 square kilometres) and have a population of ~ 1.2 million people, which is 12% of the total population.

Almost 60% of the people in the Dry Corridor live in poverty, and the most severe poverty is found in Nicaragua, Honduras, El Salvador and Guatemala. The Dominican Republic Southwest provinces that are classified as arid and semiarid zones have the highest rates of poverty in the country. The

indigenous people prominent in parts of the region, especially in Guatemala, where ~ 40% of the population is represented, are generally the most affected by poverty. As a result of this widespread poverty, the rural communities of the region have limited capacity to adapt to the impacts of climate change.

The majority of the rural people in the Dry Corridor and the Arid Zones depend on agriculture for their subsistence. Coffee and sugarcane are the most important crops grown for exportation, whereas maize and sugarcane and beans are the main staple crops. They practice agriculture from a small to a large scale. The small-scale farmers cultivate for subsistence and selling, while the big commercial farmers produce crops mainly for exportation. Livestock breeding is important in some areas and is practised semi intensively and extensively. In addition to agriculture, forest plantation supports the livelihoods of local communities in certain parts. Wood is still harvested from natural forests in some areas, mainly in Honduras. Since agriculture and forestry are greatly affected by local climatic conditions, the livelihood of rural people in the Dry Corridor and Arid Zones is extremely sensitive to climate change.

Baseline problem

Water catchment areas in the Dry Corridor and Arid Zones of the Dominican Republic provide ecosystem services that are vital for basic needs and livelihoods of the rural population. Tree cover in watersheds maintains water efficiency and reduces risk of flooding, however, a great part of forest cover has been lost due to land use change, where only 5 of the 22% of forest cover remains in different ecoregions of the Dry Corridor and Arid Zones (Olson y Dinerstein 2002). Currently, the main threat to the remaining forest is degradation, mainly as a result of unsustainable timber harvesting (especially for firewood), fires and infestations of bark beetles in pine forests.

There is also greater deforestation in certain upper watersheds to create space for livestock and crops. The loss of tree cover as a result of the conversion of agroforestry systems to other land uses (for example, pastures, urban areas, non-agroforestry crops) also threatens ecosystem services.

In addition to water collection degradation, water resources in many parts of the region are negatively affected by i) overexploitation; ii) contamination of surface waters and aquifers by various economic activities; iii) limited sewage treatment; and iv) modification of the physical structure of watercourses. On the coasts, the effects of climate change on floods, erosion and saline intrusion threaten food and water security, especially where there is overexploitation of water resources.

Tendencies and impacts of climate change

The Dry Corridor climate is characterised by minor fluctuations in temperature and annual bimodal distribution of rainfall. The rainy season lasts from May to October, with the highest rainfall in May and June, followed by a less pronounced wet period in September and October. The rainy season is interrupted by a dry period in July and August, which is known as summer drought and locally known

as 'canicula' or 'veranillo'. Dryland rice farming on the Pacific side of Central America depends on the start, length and distribution of rainy weather, therefore, current and projected changes in rainfall are critical in determining the vulnerability of small farmers to climate change.

Dry Corridor of Central America is one of most vulnerable tropical regions in the world to climate change. The Global Climate Risk Index places Honduras, Nicaragua, Guatemala, Dominican Republic and El Salvador among the most vulnerable countries in the world to climate events (positions 1, 4, 9, 11 and 15, respectively). In most parts of the Dry Corridor, rainy seasons are shortening, and summer droughts intensity are increasing. Longer droughts that extend for a year or more are also becoming more frequent and severe, mainly due to the increasing frequency and intensity of El Niño events. At the same time, extreme rainfall events are increasing in frequency and severity due to changes in La Niña, which is part of the El Niño Southern Oscillation (ENSO) cycle that strongly influences the region's climate. In general, the Dry Corridor and Arid Zones of Dominican Republic expand due to increases in temperatures related to climate change and due to the frequency of droughts.

Intervention Zone

These sites were selected considering their location in the Dry Corridor, the risk and vulnerability to climate change, especially the exposure, particularly to drought, and vulnerability factors: a) environmental deforestation and degradation, b) social, linked explicitly to poverty, and c) economic, considering the impacts on the means of survival of the local population. The following table shows the municipalities selected in each of the countries that are part of the project:

Table 2. Intervention municipalities for each project country

Country	Municipalities
Costa Rica	Liberia, Nicoya, Santa Cruz, Bagaces y Carrillo.
El Salvador	Concepción Batres, Jucuarán, El Carmen, El tránsito y San Miguel.
Guatemala	Zaculapa, San Andrés Sajcabajá, Uspantán, Canillá y Chicamán.
Honduras	Choluteca, Marcovia, Morolica, Apacilagua, Orocuina y Duyure.
Nicaragua	Telpaneca, Palacagüina, Yalagüina, Jícaro y Somoto.
Panama	Guararé, Pocrí, Pedasí, Tonosí y Macaracas.
Dominican Republic	Monción, San Ignacio de Sabaneta, Villa Los Almacigos, El Pino y Partido.

Source: The project

6.1 GUATEMALA

The municipalities prioritised for Guatemala are Zaculapa, San Andrés Sajcabajá, Uspantán, Canillá and Chicamán. Below are the current main environmental and social characteristics of the target municipalities in Guatemala.

6.1.1 Hydrology and Climatology:

In the five target municipalities, two physiographic regions predominate, the region of "Tierras Altas Cristalinas" that have resistant rocky materials and whose border to the north is a first-order fault that culminates in the Cuilco River, and the region of "Tierras Altas Sedimentarias" constituted by limestone hills of karst relief, or sedimentary marine rocks originated by the deposit of marine organisms rich in calcium carbonate. Similarly, there are at least four ranges of rainfall, from areas with low rainfall that form semi-arid areas (20% of the territory with annual rainfall of less than 500 mm), with a predominance of the range that fluctuates between 500 and 1000 mm per year, meeting portions of the municipalities with rainfall of 1000-2000 mm (MAGA, 2011, pp. 10-13). Concerning the characteristics of water resources see the table below.

Table 3. Water resource characteristics of Guatemalan municipalities

Zacualpa	San Andrés Sajcabajá	Canillá		Chicamán
The 60% of the rivers are from the Watershed River Chixoy, and the other 40% belong to the river Motagua. The main rivers are: Agua caliente, Arriquín, Camacutz, Chinimasiguán, Chiquito, El Durazno, Grande, La Vega, Pacuyum, Pachichoj, Pojopop, Pasaquil, Rancho, Sacboj, Sajquim, Tonalá, Tuluché, Tunajá, Tzamcam, Xicalbal y Xoltobal.	Rivers: Agua Caliente, Chusanyab, Sacaj, Lagulix, San Sebastián, Chilil, Las Casas, Tapezquillo, Xecam, Chiminisiguán, Lilillá, Tierra Colorada, Xoljá o Pajquiej, Chixoy o Negro, Pasabaquiej y Tucunel. There are also 2 small rivers, 19 creeks, and 7 streams.	-15 river sources - A variety of rivers: Agua Caliente, Chixoy o Negro, Cacuj, Lilillá, Pasabaquiej, Saquim, Vega del muerto y Xolotobal - 3 rivers: Chimistán, Chicoj y el Rincón -Streams: Libalabaj, Chitraj, Pacachu, Las Canoas, Pasuch, Chimul, Chatuj y los Encuentros Picaché	There are 44 water bodies in the municipality regarding of 18 rivers, 4 small rivers, 2 lagoons, 1 creek, and 19 streams. The most important rivers are Chixoy, Xabil, La Cal, Copón y Cuatro Chorros.	There are 36 water bodies in the municipality regarding of 10 rivers, 1 small river, and 25 streams. The most important rivers are Chixoy, Calá, Agua Fría, Los Encuentros, Cuatro Chorros. The main streams are: El Navarro, Grande, El Rosario y las Pacayas.
Urban Area: 2 supply systems, 1 of the Chiché river (covers 1,165 services). The other supply received from a river of la aldea Chimatzat, Zacualpa and covers 430 services.[1]	The 70% (2,301 households) have potable piped water, and the 30% (1,007 households) obtain the water from mechanical wells, rivers and springs. Only the municipality capital have a service of water supply in households, 53 communities have this services and 13 communities lack a formal supply system[2].	57% (902 households) have access to potable water, regarding to 893 have tap water or intra-family service, and 9 use a public system of piped water.[3]	56.16% (5,095 households) have intra-household service of water supply, and 42.73% (3,876 households) have access to public system of piped water or filling water vessels.[4]	- The 77% of households have piped water, in 13 communities - Wells water supply in 11 communities.[5]

Source: Project Team

[1] Development Plan of the Municipality of Zacualpa, Quiché (PDM Zacualpa, 2010, pp. 32-36).
[2] Development Plan of the Municipality of San Andrés Sajcabajá, Quiché (PDM SAS, 2011, pp. 40-47).
[3] Development Plan of the Municipality of Canillá, Quiché (PDM Canillá, 2010, pp. 30-39).
[4] Development Plan of the Municipality of Uspantán, Quiché (PDM Uspantán, 2010, pp. 41-49).
[5] Development Plan of the Municipality of Chicamán, Quiché (PDM Chicamán, 2010, pp. 42-55).

6.1.2 Climate Change and vulnerability

In order to understand vulnerability conditions to climate change of the municipalities of Guatemala, that are part of the project, it is feasible to analyse temperature trends since 1970. These trends report an increase in maximum temperatures by 0.2 °C per decade and minimum rising temperatures at 0.3 °C per decade; the number of cold days and nights has been reduced by 2.2% and 2.4% per decade, respectively, and there have been increases in the number of hot days and nights by 2.5% and 1.7% per decade, respectively. Concerning the rainfall pattern, an average annual rainfall increases of 13–27% across the country has been identified since 1960, with the largest increase in the North and Pacific coast, as well as the irregular start of the rainy season and intense rainfall in short periods of time. As for extreme weather events, the frequency and intensity of the El Niño / La Niña cycles has increased since 1970, causing frequent and severe sequences in the eastern parts of the Dry Corridor.

Nowadays, vulnerability conditions are related to poverty conditions in the population, lower water availability affecting ecosystems, agriculture and hydroelectric power generation; food security affectations due to reduced food availability; high food insecurity; absence management practices of rainwater, water reservoirs and infiltration wells; agricultural soils susceptible to erosion.

6.1.3 Protected Areas

San Miguel Uspantán has several declared natural reserves and others in process, for a total amount of 4,262 ha (equivalent to 42.62 km^2) that represent 4.93% of the municipal territory. Among those declared are the Chimel Private Nature Reserve with an extension of 2,076 hectares of mixed forest, and La Gloria Private Nature Reserve, with an area of 220 hectares of mixed forest.

Cerro Los Morales community reserve, El Palmar with an extension of 540 ha, Reserva comunitaria Las Guacamayas community reserve has a 965 ha. extension, Sicaché community reserve with 100.2 ha, La Parroquia Reserve with 13.9 ha are under registration process, and La Gloria Private Natural Reserve with a 347.81 ha extension is under expansion process (PDM Uspantán, 2010, p. 45).

In Canillá there are several archaeological sites that do not have adequate infrastructure, nor are there any management and administration projects: Los Cerritos – Chiloj 3 km from the Cabecera municipal, Pueblo Viejo, to 16 km from the Cabecera municipal, Pila de Aguas sulfurosas from la Aldea Sajcap 3 km from Cabecera municipal and la Lagunita 4 km from the Cabecera municipal (PDM Canillá, 2010, p. 48).

The following areas are located in Chicamán: El Amay Municipal Reserve officialised as El Amay Regional Park, a forest area with an area of 100 km2; private Nature Reserve El Recuerdo with an extension of 23 ha of which 19 ha have mixed forest; and the Community Nature Reserve El Soch with an area of 251.15 ha. (PDM Chicamán, 2010, p. 54).

6.1.4 Biodiversity and biological corridors

There are 9 life zones on different altitude floors in Quiché. The most widespread is the tropical low montane humid forest that occupies 34.53% of Quiché territory; the tropical premontane humid

forest present in 18.79% of the territory; and the tropical premontane humid forest with 17.46% of the territory. There are no biological corridors. There has been an initiative of the Mesoamerican Biological Corridor for many years, but it has not become active (IARNA-URL, 2018, p. 119).

6.1.5 Land Use

40% of the western region has deep soils, which coincide with a portion of the target municipalities, particularly Uspantán and Chicamán, while the municipalities of San Andrés Sajcabajá, Zacualpa and Canillá have predominantly shallow or thin soils (IARNA-URL, 2018, p. 119).

Table 4. Main characteristics of land use in the target municipalities in Guatemala[6]

Land Use	Zacualpa	San Andrés Sajcabajá	Uspantán	Canillá	Chicamán
Artificialised territories: urbanised zones, industrial or commercial and non-agricultural artificial green areas.	0.1% (42.45 ha)				
artificialised territories: urban fabric, cemetery, runway, green areas and recreation.		0.16% (28.08 ha)	0.48% (403.19 ha)		
artificialised territories: urbanised zones, industrial or commercial areas and communication networks, mines, rubble and artificial non-agricultural green areas.				0.45% (45.98 ha)	0.33% (186.93 ha)
agricultural territories with crops such as basic grains (corn and beans), vegetables (potatoes, onions, cabbage, carrots, lettuce), permanent tree crops and natural grass.	23.9% (5,933.03 ha)				
agricultural territories with corn and bean crops, vegetables and grasses.		42.38% (7,173.54 ha)			
agricultural territories with crops of corn, beans, vegetables, coffee, cardamom, pastures and agroforestry systems.			37.72% (31,553.71 ha)		
agricultural territories with annual crops (corn and beans), vegetables (potatoes, onions, cabbage, carrots and lettuce) and other crops that adapt to the semi-warm and temperate climate				38.81% (31,553.71 ha)	26.69% (15,112.52 ha)
forests and semi-natural means are mostly mixed type forests, followed by conifers. There are also scattered trees, low shrub vegetation and open spaces, with little or no vegetation.	75.8% (18,773.85 ha)				
forests and semi-natural means are mostly mixed type forests, followed by conifers and broadleaved. Coniferous forest plantations are also found; low shrubby vegetation, beaches, dunes or sand and rocks or lavas		57.29% (9,697.06 ha)			
forests and semi-natural means, it has mainly broadleaf type forests followed by mixed and coniferous. There are also coniferous and broadleaf forest plantations; low shrub vegetation and beaches, dunes or sand.			61.61% (51,541,95 ha)		

[6] Map of vegetation cover and land uses, year 2010, scale 1:50,000, Republic of Guatemala (MAGA-DIGEGR, 2015).

Land Use	Zacualpa	San Andrés Sajcabajá	Uspantán	Canillá	Chicamán
forests and semi-natural means mainly with mixed and broadleaved forests, conifers and scattered trees, thickets and / or guamil				60.54% (6,178.53 ha)	72.30% (40,926.66 ha)
forests and semi-natural means, it mainly has mixed forests (19.20%) and broadleaf (16.10%). Scattered trees, bushes and guamil (34%).					
Water bodies like rivers.	0.01% (2.53 ha)	0.16% (26.98 ha)	0.19% (156.96 ha)	0.20% (20.07 ha)	0.67% (377.38 ha).

Source: Project Team

6.1.6 Productive Activities

The main productive activities of the municipalities of Guatemala are summarised in the following table:

Table 5. Productive activities characteristics of Guatemalan municipalities

Main productive activities	Zacualpa	San Andrés Sajcabajá	Uspantán	Canillá	Chicamán
Agricultural	66%		68%		74.34%
Livestock	3%				6.9%
Artisanal	6%		5%		12.4%
Commerce	10%		3%		1.38%
Services	8%		6%		4.71%
Employees	25% [7]		4% [8]		-
Others					0.27%
Rate of unemployed men[9]	national data only = 1.6				
Rate of unemployed women	national data only = 2.7				
Participation in a workforce (men)[10]	84%	80%	83%	88%	88.9%
Participation in a workforce (women)	16%	20%	17%	12%	11.1%
Jobs done by women (including informal jobs)		Family orchards, embroidery, nurseries, looms, bakeries.[11]	Poultry breeding, nursery plant production and elaboration of shampoo.[12]	Harvest and storage of produced commodities.[13]	Sow basic grains, orchards and nurseries Harvest grains and vegetables. Reforestation. Breading goats and sheep and elaboration of

[7] PDM Zacualpa (2010, p. 40).
[8] PDM Canillá (2010, p. 45).
[9] ENEI 2-2018. National Survey of Employment and Incomes (INE, 2018, p. 25).
[10] Demographical projection for 2009, available at the Population Census of 2002 (data retrieved from the municipality plans) (INE, 2003).
[11] According to Carlos Ixcuná Olmos, Municipal Planning Director of San Andrés Sajcabajá (2019, personal communication).
[12] According to Alfredo Itzep, Municipal Planning Director of Uspantán (2019, personal communication).
[13] PDM Canillá (2010, p. 46).

Main productive activities	Zacualpa	San Andrés Sajcabajá	Uspantán	Canillá	Chicamán
					cheese.[14]

Source: Project Team

6.1.7 Food Security

In general terms, the north western administrative region (Huehuetenango and Quiché) has the highest prevalence of chronic malnutrition in the country (54.9%), categorised as very high nutritional vulnerability. At departmental level, Quiché ranks third in nutritional vulnerability with 55.3%.

Chicamán and Uspantán have the highest values of chronic malnutrition among target municipalities, 57.4% and 55.9% respectively, categorised as very high in nutritional vulnerability. Zacualpa and San Andrés Sajcabajá, have 47% and 37.8%, with a category of high nutritional vulnerability and finally, Canillá has 29.3%, classified as moderate nutritional vulnerability, the only one below the national average of 37.6% (SESAN, 2015, pp. 28-37).

6.1.8 Social Conditions

The social characteristics of the target municipalities in Guatemala as follows:

Table 6. Social conditions of the target municipalities in Guatemala

	Zacualpa	San Andrés Sajcabajá	Uspantán	Canillá	Chicamán
Total Population 2002 Census[15] 2018 Census[16]	 22,846 32,750	 19,035 24,981	 41,892 65,872	 9,073 12,172	 25,280 39,731
Rural Population 2002 Census 2018 Census	 16,231 27,747	 17,160 22,165	 37,694 59,208	 7,575 9,683	 23,387 36,811
Population by sex (2018 Census)[17] Men Women	 15,499 17,251	 11,762 13,219	 32,548 333,324	 5,802 6,370	 19,403 20328
Municipality Extension (km^2)	336.0	446.0	865.0	123.0	516.0

[14] According to Javier Eduardo Gamarro, Municipal Planning Director of Chicamán (2019, personal communication).

[15] XI National Census of Population and VI Census of Household (INE, 2003). Available at https://www.ine.gob.gt/sistema/uploads/2014/02/20/jZqeGe1H9WdUDngYXkWt3GIhUUQCukcg.pdf (consulted October 7, 2019).

[16] XI National Census of Population and VI Census of Household (INE, 2003). Available at https://www.ine.gob.gt/sistema/uploads/2014/02/20/jZqeGe1H9WdUDngYXkWt3GIhUUQCukcg.pdf (consulted October 7, 2019).

[17] General characteristic of the population, Census 2018 (INE, 2019). Total population per sex, Población total por sexo, age and area per five-years groups, according to the municipalities. Available at https://www.censopoblacion.gt/explorador (consulted October 7, 2019).

	Zacualpa	San Andrés Sajcabajá	Uspantán	Canillá	Chicamán
Poverty Rate[18] Poverty (2002) Extreme Poverty (2002)	 84.4 34.0	 88.6 37.7	 87.7 36.6	 79.0 87.7	 33.9 38.4
Infant mortality[19] Under 1 year Under 5 years	 11.89 3.42	 8.17 6.20	 13.46 5.45	 6.43 0.0	 25.33 9.80
Male life expectancy[20]	Five-year national data 2015-2020 (Men) = 69.1				
Female life expectancy[21]	Five-year national data 2015-2020 (Women) = 76.1 Five- year data 2015-2020 (department) = 75.20				
Food security / vulnerability[22]	47.0 = High	37.8 = High	55.9 = Very High	29.3 = Moderate	57.4 = Very high
School dropout rate for boys and girls (2018)[23]	4.59% preschool 6.02% primary	6.84% preschool 6.33% primary	2.80% preschool 3.36% primary	2.30% preschool 4.57% primary	3.47% preschool 4.70% primary

Source: Project Team

Table 7. Average schooling per sex, according to the Department, 2014[24]

	Population aged 15 years and over			Young People from 15 to 24		
	Total	Men	Women	Total	Men	Women
Country Total	6.0	5.3	5.6	7.3	7.1	7.2
Quiché	5.0	4.0	4.4	6.6	6.2	6.4

Source: Project Team

In 4 of the prioritised municipalities the smallholding prevails (92.96%), from total identified farms, 39.92% are micro farms, and 53.04% subfamily farms. According to producers' classification, these farms correspond to producers in under subsistence and subsistence conditions. Regarding land tenure, the modalities vary between communal, municipal or private tenure. Most of the farms reported in 2003 agricultural census (99% Zacualpa, 94% San Miguel Uspantán, 77% Canilla and 89% Chicamán), report owners position. Although, the lack of legal certainty in the country must be considered (INE, 2004, p. 90).

According to 2016 Guatemala Environmental Report, the western highlands is not only the most fragmented region with the lowest average farm sizes, but also has one of the territories with the

[18] Census 2002 (INE, 2003), modified by PNUD.

[19] Sistema de información gerencial en salud (SIGSA) (2009) cited in the Development Plans of the prioritized municipalities (PDM Canillá, 2010; PDM Chicamán, 2010; PDM SAS, 2011; PDM Uspantán, 2010; PDM Zacualpa, 2010).

[20] Statistics (INDH, 2014). Available at https://desarrollohumano.org.gt/estadisticas/estadisticas-indicadores-basicos/indicadores-basicos/ (consulted October 1, 2019).

[21] Statistics (INDH, 2014). Available at https://desarrollohumano.org.gt/estadisticas/estadisticas-indicadores-basicos/indicadores-basicos/ (consulted October 1, 2019).

[22] SESAN (2015, pp. 28-37).

[23] Annual Statistic of Education 2018 (MINEDUC, 2018), according to the Ministry of Education regarding about the prioritized municipalities. Available at http://estadistica.mineduc.gob.gt/Anuario/home.html# (consulted October 1, 2019).

[24] Average schooling per sex, according to the Deparment (INDH, 2014). Elaboration regarding to the data of ENCOVI 2014. Available at https://desarrollohumano.org.gt/estadisticas/estadisticas-genero/escolaridad-promedio-por-sexo-segun-departamento/

lowest agricultural vocation and has several most impoverished departments, including Quiché (74.4%), with a mostly indigenous population (MARN, 2017, p. 210).

6.1.9 Key Stakeholders

The key stakeholders which include cooperatives, NGOs, community associations, in the municipalities targeted by the project are the following:

Table 8. Key Stakeholders of the target municipalities in Guatemala[25]

Zacualpa	San Andrés Sajcabajá	Uspantán	Canillá	Chicamán
- 41 COCODES* - Alcaldía Indígena is dedicated to conflict resolution and advice. - Mercy CorEAS ((supports legalization of property) in aldeas San José Sinaché and San Antonio Sinaché.	- 69 COCODES with representation of all the communities - Local Integral Development Association - New Life Social and Productive Integral Development Association - Integral Development Association Kak'Awi'em (New Hope) -Pro-Improvement Committees - Church organisations - Brotherhoods	- 160 COCODES - 15 COCODES de 2º nivel	- 36 COCODES - 5 COCODES of 2º level - Livestock Association AGACAN - Save the Children - Institute of Social Cooperation - Guardians and Health Promoters - Friends Association of Canillá - Land Legalization Committees of Chimul and Chicaj - Association of Users of the Irrigation Unit in Sajcap, Punta del Llano, Chimistán and el Rincón.	- 74 COCODES - 146 community organisations: + 5 women + 6 farmers + 35 school committees + 61 development committees + 14 sports committees + 7 pro-land committees + 15 church groups + 3 health patrols - Alcaldes assistants

*Community development council

Source: Project Team

6.1.10 Ethnic Groups

On average, targeted municipalities have 77% indigenous population (Zacualpa with 94.2%, San Andrés Sajcabajá with 89.1%, Uspantán with 80.4%, Canillá with 44.7% and Chicamán with 76.6%) (INE, 2003). In 2018 Census, a classification of 6 types peoples was made: Maya, Garifuna, Xinca, Afro-descendant / Creole, Ladino and foreign; where 41.7% belong to the Maya people, 0.1% to the Garífuna people, 1.8% belong to the Xinca people, 0.2% belong to Afro-descendant or Creole people, 56% to the Ladino people and 0.2% are foreigners. The average of Mayan peoples is 78.2% in the five target municipalities, and only in Canillá municipality is mostly Ladino, with 53.8%:

[25] Data retrieved from the Development Plans in the prioritized municipalities (PDM Canillá, 2010; PDM Chicamán, 2010; PDM SAS, 2011; PDM Uspantán, 2010; PDM Zacualpa, 2010).

Table 9. The indigenous population characteristics of the target municipalities in Guatemala

Municipality	Total Population	Village of Origin					
		Maya	Garífuna	Xinca	Afrodescendant /Creole	Ladino(a)	Foreigners
Zacualpa	32,750	31,264	21	2	32	1,422	9
San Andrés Sajcabajá	24,981	22,251	7	0	11	2,712	0
San Miguel Uspantán	62,872	54,380	40	7	634	10,804	7
Canillá	12,172	5,560	19	2	19	6,553	19
Chicamán	39,731	31,162	21	0	11	8,536	1

Source: Project Team

In Guatemala, Maya people have 22 linguistic/ethnic communities, which all are present in all 5 targeted municipalities, varying in number of each linguistic community inhabitants, mainly predominant Maya-K'iche 'people with 61%; following in order of importance the Ladino people with 21%; Maya-Poqomchi' people 12% and the Maya-Uspanteko people 3%.

6.1.11 Gender

Regarding gender conditions, the following table summarises the main characteristics of target municipalities:

Table 10. Gender conditions characteristics of target municipalities in Guatemala

	Zacualpa	San Andrés Sajcabajá	Uspantán	Canillá	Chicamán
Women Organisations (Environment defenders, productive organisations, cooperatives	41Women Committees	10 groups that integrate 320 Women members of the Municipal Women's Office - Microcredit Program		Municipal Coordinator of Women	
% of women with land ownership	According to the information from the 2003 Agricultural Census, in the 7.7% of women own land, in contrast to the remaining 92.3% of men.				
Representation of women in local governments	21.92% (Of 64 women, 50 participate in 41 COCODES		- COCODES has a 15% representation of women - 6% public employees	40% participation of women (in managerial positions is limited)	5% in community representation positions of 518 members, 94 are women (18.5%) participation

Source: Project Team

6.1.12 Participation

Community Development Council known as the community level of Urban and Rural Development Council System, under Article 4 of the Law on Urban and Rural Development Councils. Its purpose is that members of a community interested in promoting and carrying out a participatory policy process meet to identify and prioritise projects, plans and programs that benefit them.

6.1.13 Safety Conditions

There are 41 cases of land conflict registered with the Ministry of Agrarian Affairs (SAA) In the 5 municipalities, the following table shows the information and although Canillá municipality does not appear, one of the conflicts of territorial boundaries of San Andrés Sajcabajá is precisely with municipality of Canillá as counterpart. These types of conflict cases are highly likely to escalate. The main figures are presented below

Table 11. Security figures of the municipalities of Guatemala

	Zacualpa	San Andrés Sajcabajá	Uspantán	Canillá	Chicamán
Criminal Rate (2013)[26]	30.1	31.2	19.4	24.1	11.1
Homicide Rate (2013)	12.9	7.8	3.0	8.0	--
Reported rate of domestic violence (2013)	0.8	1.9	0.8	--	0.6
Places with problems of ´Maras´ (organised gangs) and/or assaults[27]	Urban Area, Tunajá I and Tunajá II	There is no report	Cholá, Saj Rakan Chituj and Tierra Blanca	No homicides or organised crime reported	Belejú, Chixoy, Soch, Zona Reyna y La Cruz (assault and robbery)

Source: Project Team

On the other hand, Zacualpa municipality reports Mara gangs. To counteract the crime generated by the Maras, the village population organise Security Boards to protect inhabitants' integrity.

6.2 EL SALVADOR

In El Salvador, the municipalities considered for the intervention of the project are Concepción Batres, Jucuarán, El Carmen, El Tránsito y San Miguel.

6.2.1 Hydrology and Climatology

This region of interest is divided into three climatic zones: hot tropical savanna, warm tropical savanna and high tropical climate (Magaña and Saguer, 2005). Throughout the entire territory linked to the San Miguel river basin, temperatures range between 17 ° C and 37 ° C.

On the other hand, the San Miguel river basin is in a flood risk zone of approximately 4450 km² of area, which puts some 1240 settlements on alert, representing a population of 28,000 people (MARN, 2017). Of these settlements, 438 are at a high rated risk, putting 14,500 people affected

[26] Quiché characterization. Rate of crime, homicides and reports of domestic violence, for prioritized municipalities (INE, 2014a, p. 77).

[27] Data retrieved from the Development Plans of the municipalities (PDM Canillá, 2010, pp. 32-33; PDM Chicamán, 2010, p. 45; PDM SAS, 2011, p. 43; PDM Uspantán, 2010, p. 37; PDM Zacualpa, 2010, p. 27).

(op. Cit.). In the territories associated with the basin of interest, some 9,000 hectares of cultivation have been affected as potentially vulnerable to flooding.

In the municipality of El Carmen there are two main Hydrogeological Units. The first one is located in the North - West sector of the municipality, between los Cantones, El Caulotillo and El Tejar, it is a Porous Aquifer of Great Extension and Medium Productivity, it is composed of Alluvial Sediments of the Rio Grande Valley of San Miguel, in this sector they run over the area of the El Carmen, Las Pilas and San Antonio rivers (VMVDU et al., no date – a). The other Hydrogeological Unit is identified as a Local Porous Aquifer of Limited Extension and Medium to Low Productivity. It is located on a small intermontane alluvial valley in the Salalagua of the Cantón El Piche Zone (VMVDU et al., no date – b).

The San Miguel area is the largest in urban development and therefore with a greater demand for water resources. The two largest aquifer areas of the subregion are present in its territory. The main one, due to its territorial extension, is the Hydrogeological Unit known as Porous Aquifer of Large Extension and Medium Productivity, this aquifer occupies the entire central part of the municipality, encompassing the valley through which the Río Grande de San Miguel runs (VMVDU et al., no date - b). The other Hydrogeological Unit presents a Volcanic Aquifer. Large fissure and probably large production, which occupies the surrounding area of the Chaparratisque volcano (VMVDU et al., no date - b).

6.2.2 Climate Change and Vulnerability

In El Salvador, an average annual temperature increases of 1.3 ° C has been reported since 1950, an increase in the number of warm days and nights in general. Concerning the annual average precipitation patterns, a variability of May is reported, with a general decrease since 1960. On the other hand, extreme climatic events are mainly presented by the increase in the frequency and intensity of extreme rain events, from 1 per decade (1960–1980) to 8 per decade (2000–2010); increase in the intensity of the ´canicula´, as it is recognized in Central America, an average period of 40 days of extreme heat; and increase in the frequency of droughts and dry periods.

The vulnerability of the region focuses on the decrease in food availability and the loss of self-consumption crops that put food security at risk; There has been an increase in urban area expansion, therefore the demand for water resources. In addition, the homes are located in areas where there are risks of landslides and floods.

6.2.3 Protected Areas

The protected areas in the municipalities focused on by the project are the following: El Jocotal Lagoon, San Juan Lagoon, Aramuaca Lagoon, Olomega Lagoon, La Chiricana wetland, San Miguel or Chaparrastique Volcano, Chilanguera Volcano, El Socorro II Volcano, Volcano Tierra Blanca, Buena Esperanza Volcano, the Tecapa - San Miguel Conservation Area, the Xiriualtique - Jiquilisco Biosphere Reserve, and buffer zones, or buffer zones where they can only have places for activities

compatible with the conservation objectives and have 48,257 ha where two important characteristics stand out (MARN, no date – a; Gallo and Rodríguez, 2007).

6.2.4 Biodiversity and biological corridors

In the Xiriualtique - Jiquilisco Biosphere Reserve there is the presence of the largest mangrove area in El Salvador; on the other hand, two ecosystems of "dulce" forests of high regional and national level are conserved: The Evergreen Latifoliate Forests, and the Semi-deciduous Mixed Broadleaved Forests. The first are those that provide habitat to the only species of primate that survives in El Salvador, Ateles geofrogii. The Semi-deciduous Mixed Broadleaf Forests contain in the Xiriualtique - Jiquilisco Biosphere Reserve the most significant and least fragmented remnants of the country. In the Biosphere Reserve, 37 endangered species and more than 58 threatened species are conserved (MARN, no date - b). It should be noted that the agua dulce mangrove (*Bravaisia integérrima*), is present especially near the Rio Grande de San Miguel, and is catalogued in danger in other countries of Central America, so it is necessary to pay special attention to its formations (MARN, 2004, p. 52).

The El Jocotal Lagoon poses as a critical habitat that expands and contracts thus invading the herbaceous swamps, floodplains and reeds that surround it. Between the El Jocotal Lagoon and the Rio Grande de San Miguel there is a seasonally saturated forest, unique in the country for containing several hundred hectares dominated almost exclusively by Pepper trees (MARN, no date – c).

Similarly, the Olomega lagoon represents one of the largest natural lagoons present in the Central America Dry Forest ecoregion, this being an ecoregion where lagoons with a size exceeding 5000 hectares are scarce. The Olomega lagoon and the surrounding flood areas serve as a critical habitat for migratory birds, with displacement parameters that exceed several kilometres of affected individuals over the years. In this context, Olomega stands out for being necessarily the main place of investment of the minor porrón (*Aythya affinis*) in El Salvador. Other migratory species registered in the area are Anas discors, A. clypeata, Oxyura jamaicensis. Also, along with the anátidas are important concentrations of other aquatic birds, among which the ardeidas with 11 species stand out, two of which are migratory: Ardea herodias, Egretta rufescens. Other species abundant in the area are two species of migratory pelicans (*Pelecanus erythrorhynchus y P. occidentalis*) (RAMSAR, 2012).

Other species present are the Papaturro (*Coccoloba caratsana*), El carreto (*Samanea saman*), el Mongollano (*Pithecellobium dulce*) and the Huiscoyol (*Bractis major*). The most representative species are: huiscoyol (*Bactris subglobosa*), guarumo (*Cecropia obtusifolia*), ojushte (*Brosimum terrabanum*), amate (*Ficus goldmanii*), zorra (*Pithecollobium saman*). In the wetland different species of fauna classified as threatened or endangered for the country have been detected, among them are: la mojarra negra (*Cichlasoma guija*), el pato real (*Cairina moschata*), el pato candilejo (*Oxyura jamaicensis*), ibis oscuro (*Plegadis falcinellus*), espátula rosada (*Ajaia*). The species of passing birds consists of chipe trepador (*Mniotilta varia*); pavito migratorio (*Setophaga ruticilla*), semillero piquigrueso (*Pheuticus ludovicianus*), Chonte (*Turdus grayi*), Cheje (*Melanerpes aurifrons*),

chipe amarillo norteño (*Dendroica petechia*) and gavilán de patas rojas (*Geranospiza caerulescens*) (RAMSAR, 2012).

The fish fauna is quite varied with 14 species identified in the area, among which some species of fish stand out, as they are listed as endangered in El Salvador, eight species of ducks have been identified and there are two species of animals that are extremely few in the country, and that can be found in the area as one of their last shelters. Animals are el mono araña (*Ateles geoffroyi*) and el cocodrilo americano (*Crocodylus acutus*). The most representative plant communities of the lagoon are the reeds, brambles and palms. Among the animal communities in the area, el mono araña and el cocodrilo americano stand out (RAMSAR, 2012).

There are no biological correctors in the area of interest, it is only possible that there are connectors which are sites that ensure the biodiversity flow and ecological viability (Xiomara Aquino, 2019, [MARN], personal communication, 14-15 October).

6.2.5 Land Use

The main uses of land in the target municipalities is shown below:

Table 12. Land use of target municipalities according to the municipality of Jucuaran[28]

Description	Area in Square Metres	%
Forests	149156,500.73	66.67
Mangroves	11389,863.61	5.09
Sugar Cane	2078,342.87	0.93
Annual / permanent crops	3124,265.79	1.40
Basic Grains	23343,073.73	10.43
Lagoons, seas, coasts and esteros	6921,010.93	3.09
Grasses	16744,845.73	7.49
Beaches, Sand, Dunes	2022,273.00	0.90
Aquaculture perimeter	80,140.53	0.04
Salt Marshes	205,931.82	0.09
Urban Fabric	1961,800.93	0.88
Herbaceous Vegetation	4942,083.90	2.21
Ecotonal Zones	1737,075.12	0.78
Total	223707,208.70	100.00

Source: Project Team

6.2.6 Productive Activities

The inhabitants of the area are mainly engaged in agricultural activities, mixed crops where vegetables such as green chili and pipian are grown in small family plots. Also, they are dedicated to annual crops such as basic grains: corn, beans, sorghum, corn starch; but sugarcane and cotton are also grown.

Table 13. Characteristics of the main productive activities in the Municipalities of El Salvador

	Concepción Batres	Jucuarán	El Carmen	El Tránsito	San Miguel
Main productive activities	Agriculture, Livestock, fishing, trade and services.	Cultivation of basic grains, coffee, shrimp, beach tourism, restaurants, coffee nursery.	Grains, vegetables and fruits. Breeding of cattle, pigs, poultry, artisanal fishing and beekeeping.	Formal and informal trade, Agriculture, Electromechani-cal workshops, fishing, etc.	Basic grains, vegetables, coffee, sugar cane, maguey fruits, etc.
Male unemployment rate		64.4 %	8.77 In general there is no difference	61%	5.9 In general, it does not differ.

[28] Plan de Ordenamiento urbano del Municipio de Jucuarán (INYPSA, no date - a)

	Concepción Batres	Jucuarán	El Carmen	El Tránsito	San Miguel
Female unemployment rate		86%	between men and women (PMRO).		
Participation of men in the workforce		Farmers, Fishing.	66.5 % in the Department of La Unión.	39%	58.2 % in San Miguel department.
Participation of women in the female workforce		Restaurants, fish sales in Usuluán y San Miguel, Domestic work.	35.3% in the department of La Unión.		41.8 % in San Miguel department.
small producers production			83% of growers grow areas of a block or less. 15% do it in areas of 1 to 2 blocks. 2% grow crops in fields of 2 to 5 blocks. 25 producers rent land to cultivate.		Marañón 1412 blocks
Jobs performed by women (including informal work)		Domestic work, product sales and food processing.	Housewife. Informal commerce.	Housewife. Informal commerce.	

Source: Project Team

Regarding the unemployment rate, the region has great diversity, on the one hand, there is a dynamic urban centre with one of the lowest unemployment rates nationwide (San Miguel, 5.9%) compared to other departments with close rates 9% as La Unión. Therefore, when planning the impulse to formal productive activities, the empowerment of the departments of Usulután, Morazán and La Unión must be taken into account. Finally, another of the challenges facing the region is the high informality rate higher than the national rate (40.2%) according to the results derived from the EHPM (2014), which reaches up to 14 percentage points more in departments such as La Unión and 11.5 % more in Morazán (DIGESTYC, 2018).

6.2.7 Social Conditions

The social characteristics of the four municipalities of El Salvador are summarized in the following table:

Table 14. Social conditions of El Salvador's target municipalities

	Concepción Batres	Jucuarán	El Carmen	El Tránsito	San Miguel
Total Population	12,507 Ha	13,424 Ha	12,324 Ha	18,363 Ha	218,410 Ha
Rural Population	9,255 Ha (74%)	12,350 Ha (92%)	10,537 Ha (86%)	10,751 Ha (59%)	60,274 Ha (28%)
Municipality extension	119.05 Km²	269.96 Km²	105.40 Km²	74.58 Km²	594 Km²
Poverty Rate	30.9%	31.40%	20.1% Low poverty	Extreme low poverty	

	Concepción Batres	Jucuarán	El Carmen	El Tránsito	San Miguel
	- Extreme poverty (35%)				
Level of education men	4.4 years There is a serious deficit, a large part (81.84%) have not begun secondary school studies.	Men > 50 years: 3ª grade. From the year 2.000, 90% up to high school.	Illiteracy rate 26.80%		The average schooling of the San Miguel subregion is 3.94 grade.
Level of education for women	4.3 years. The average schooling is up to 4th grade. Only 26.2% of young people are in high school.	Women> 50 years: 3rd grade. From year 2000, 90% up to high school			
Male unemployment rate		64.4 %	8.77%	61%	5.9
Female unemployment rate		86%	8.77		5.9
Femicide Rate	0	1 violence feminicide (2018)			
Percentage of gender violence		15 gender violence (2018)			
School dropout rate for boys	5.9% (versus 4.6% at national level)			12%	
School dropout rate for girls	3.7% (versus 4.2% at national level).				

Source: Project Team

6.2.8 Food Security

In Concepción Batres, the children of the municipality suffer from low child malnutrition, with 27.6% of the child population between 6 months to 5 years with height delay, 3 children for every 10 suffer from malnutrition (Asociación Intermunicipal Bahía de Jiquilisco, 2017, p. 62). The population with the highest vulnerability rate has 11% of children between the ages of 0 and 4, a population mostly affected by malnutrition (Asociación Intermunicipal Bahía de Jiquilisco, 2017, p. 29); In Jucuarán, a sustainable family program is currently being worked on with the theme of food security (Santana Rivas, 2019, [Environmental Unit, Municipality of Jucuaran], 10 October); In Carmen, 93% of producers grow basic grains from a self-consumption perspective, thereby prioritizing their food security and allocating the remainder, if any, for sale. In El Transit and San Miguel there is no data (Terra Global Consultores, 2017).

6.2.9 Key Stakeholders

The key stakeholders in the municipality, including cooperatives, NGOs, community associations, are the following:

Table 15. Key Stakeholders of El Salvador's target municipalities

Jucuarán	El Tránsito	San Miguel
Restaurant owner's cooperative, Agriculture Cooperative, Livestock Cooperative, Fishery Cooperative, A Coffee Cooperative in the making	Fishery Cooperative, Brisas Libertarias World Vision. Juntas de agua	Las mancomunidades de Municipios (Asociación) Fundación Salvadoreña para la Promoción Social y el Desarrollo Económico. Ministerio de Agricultura y Ganadería (MAG). Ministery of health. Juntas de Agua. Administración Nacional de acueductos y Alcantarillados (ANDA). Algunas iniciativas privadas en el territorio: Asociación de Regantes (agricultores organizados para el riego) Comité Local Ramsar. Comité Asesor Tecapa-San Miguel (Trabaja con Áreas Naturales Protegidas). Ingenio Chaparastique (FUNDAZUCAR). La red de jóvenes orientales lidera proyectos del MAG. mancomunidades asociadas a la cuenca del Río Grande de San Miguel, la Asociación de municipios Chaparrastique y Micsur.

Source: Project Team

6.2.10 Ethnic Groups

Concepción Batres presents the national trend where the mestizo predominates the population (86%). Ethnic groups represent 0.04% and are represented by a small part of the population. In the Municipality of Concepción Batres, ethnic groups being a minority, without reaching 1%, there are only 5 people who are considered ethnic, 3 from the Kakawira group and 2 from another group (unspecified) (INYPSA, no date – b, p. 14). In Jucuarán the mestizo is 76% of the population. Ethnic groups represented 0.007% (INYPSA, no date – b, p. 15).

6.2.11 Safety conditions

These municipalities have high homicide rates and lack security plans. They also have the presence of Maras and gangs of the south, who carry out extortion and robbery, mainly in small businesses in the rural areas and the transport system, compromising the development of municipalities (INYPSA, no date – b, p. 14).

6.3 HONDURAS

The target municipalities in Honduras are Choluteca, Marcovia, Morolica, Apacilagua, Orocuina and Duyure.

6.3.1 Hydrology and Climatology

According to Orlin Valladares, responsible of the Municipal Unit of Environment of the municipality of Morolica (2019, personal communication, 10 October), the main sources of

water in Morolica are Calichuche, El Cacao, Finca Vieja; in Apacilagua are El cerro la sarquía, Capulín, Guacimal, La Peña, Engaña vieja; and in Duyure are the Horno and La Montañita microbasins, La Flor, Apasupo, Chilamate which flow into the Choluteca river. For Duyure, the water for agriculture is obtained from wells and other small sources on each land and there is also the use of drip irrigation systems. In terms of water management infrastructure, there are 50 water crops that small producers have built, as measures to meet the demand for water for livestock. Regarding domestic water, 70% of the population has access to water in their homes, this water is not potable, government programs have however provided filters for homes. In these municipalities, there is no early warning for drought.

6.3.2 Climate Change and Vulnerability

In Honduras, temperature trends since 1960 have shown an average annual temperature increase of 0.6 ° C per decade, with the greatest warming in the dry season, as well as an increase in the number of warm days and nights. On the other hand, there are inconsistent trends in annual rainfall and an increase in heavy rainfall events by 1.2% per decade. Extreme weather events, especially the El Niño / La Niña phenomena, the increase in frequency and intensity of the cycles, the increase in the intensity and duration of the Canicula.

Following Dalila Sierra (2019 [consultant of Honduras], personal communication, 10 October), regarding to the loss of the inhabitants, climatic variations have affected food insecurity due to the drought that causes considerable losses in basic grain crops; Similarly, the early start of the rainy season influences crop loss.

6.3.3 Protected Areas

According to REGATA there are 206 km2 in Choluteca, and 90 km2 in Marcovia declared as protected areas. Juan Benito Guerra, responsible of the Municipal Unit of Environment of the municipality of Choluteca (2019, personal communication, 10 October), states that the protected areas in Choluteca are El Jicarito and San Bernardo wetlands, and San Ramón which is a water source.

6.3.4 Biodiversity and biological corridors

Cedar, mahogany and ceiba are threatened. Mangroves are at risk due to shrimp farming. The main wild species in the area (flora and fauna) are also endangered, and they include deer, turkey, lowland paca, armadillo, garrobo. There are no biological corridors in the area (Alcaldía Municipal de Duyure, 2018; Alcaldía Municipal de Morolica, 2019; UNEP-CUDECA, 2019).

6.3.5 Land Use

The main uses of the land in the target municipalities in Honduras are as follows:

Table 16. Main uses of land of target municipalities in Honduras

Land Use	Morolica	Apacilagua	Duyure
Agriculture	2000 ha.	50 blocks for maize; 350-400 blocks to produce vegetables: 3 blocks.	Subsistence, basic grains: 80 Blocks
Livestock	12,000 ha in grassland.	1000 blocks	80% of the available land

Source: Project Team

The state of degradation of the affected ecosystems or agroecosystems has occurred, and the degradation of forests and water production continues, so the agricultural frontier continues to expand. This year there was a lower level of water sources due to fires and the weevil plague, in other cases due to livestock and fires, forest cover has been lost. There are also forest logging activities done by exploitative companies (sawmills) and, currently, there are institutional tensions between the Forest Conservation Institute, which provides permits for exploitation, and the municipalities that seek to protect water sources. Changes in land use are mainly due to (UNEP-CUDECA, 2019):

- The pine plague and the true weevils (Curculionidae) have destroyed the conifers, which are then used in livestock and agriculture.
- Coffee planting has been stopped in Duyure.
- The expansion of the agricultural frontier, with migratory agriculture and which is then subsequently replaced by livestock.
- Fires in intense summer leave the forests that pass as agricultural areas uncovered. In the pine forests, natural reforestation is left. But in the lower areas, where there is a mixed forest, it is typically used for livestock and agriculture.

6.3.6 Productive Activities

The main productive activities of this target region are as follows:

Table 17. Main productive activities of the target municipalities in Honduras[29]

Productive Activities	Choluteca[30]	Marcovia	Morolica	Apacilagua	Orocuina	Duyure
Agriculture, forestry and fishing	23%	56%	81%	89%	64%	79%
Manufacturing Industries	11%	12%	2.4%		14%	2.6%
Construction	8.5%	5.4%	3.1%	1.5%	3.1%	
Teaching	5.6%		3.6%	1.7%	3.5%	4.3%
Wholesale and Retail Trade	24%	10%	2.4%	1.6%	8 %	2.4%
Transport and Storage		3.3%				
Other Activities	28%	12%	7 %	4.9%	7.9%	9.4%

Source: Project Team based on population and housing census 2013

[29] Census of Population XVII and Household VI, 2013 (INE, 2014-b)
[30] Choluteca indicators 2018 (INE, 2018).

6.3.7 Food Security

One of the main threats to food security in this territory is the problem of drought, which has caused considerable losses in basic grain crops (mainly corn and beans). In the first cycle of 2019, there was a delay at the beginning of the rainy season (which should start in May) which caused early planting losses (Dalila Sierra, 2019, personal communication [Consultant of Honduras], 12 October).

The Ministry of Agriculture and Livestock (SAG) reported a loss in the area planted in the department of Choluteca of 58%. This situation translates into a low availability of food and the phenomenon that translates as "seasonal hunger" which causes nutritional care in the most vulnerable population, causing malnutrition in the most vulnerable groups (children under 5, women and older adults). Following the National Survey of Demography and Health (INE, 2012), 21% of children under 5 years of age were chronically malnourished (Size / age) in the department of Choluteca. Although, this value is below the national average that was 23% for the same indicator, this indicates that 2 out of 10 children suffer the scourge of malnutrition.

6.3.8 Social Conditions

The main characteristics of the social conditions of the target municipalities in Honduras are summarized in the following table:

Table 18. Social conditions of the target municipalities in Honduras

	Choluteca	Marcovia	Morolica	Apacilagua	Orocuina	Duyure
Total Population 2018 [31]	H 77,976 M 86,475 Total 164,451	H 23,313 M 24,197 Total 47,510	h: 2,725 m: 2,292 total: 5,017	H 4,659 M 4,443 Total 9,102	H 9418 M 9356 Total 18,775	H 1835 M 1,712 Total 3,547
Rural Population 2018 Projection[32]	H 28,393 M 27,383 Total 55,776	H 13,033 M 12,720 Total 25,753	h: 2,725 m: 2,292 Total 5,017	H 4,659 M 4,443 Total 9,102	H 8275 M 8023 Total 16,298	H 970 M 772 Total:1,742
Municipality extension[33]	4,360 Km2	482,3 km²	281,3 km²	213,1 km²	124,6 km²	105.5 km 2
Poverty Rate of 2013 [34]	58%	60%	75%	79%	71%	62
Illiteracy Census 2013[35]	12%	16%	9%	23%	24%	16%
Schooling for men[36]			68%			
Schooling for women[37]			70%			
Literacy	0.71	0.72	0.60	0.67	0.67	0.69
Infant mortality rate[38]	19 every thousand live births					

[31] INE (2014-b)
[32] INE (2014-b)
[33] INE (2014-b)
[34] INE (2014-b)
[35] INE (2014-b)
[36] Municipal Development Plan, municipality of Morolica (Alcaldía Municipal de Morolica, 2019)
[37] (Alcaldía Municipal de Morolica, 2019)
[38] National Survey of Demography and Health, 2011-2012 (INE, 2012)

	Choluteca	Marcovia	Morolica	Apacilagua	Orocuina	Duyure
School dropout rate for girls and boys[39]			4.95% from 1 to 6 grade. 1.76% de 7mo a 9no. 7.5% in Media Education.			
Jobs done by women[40]	Shrimp Manufacturing Banking sector		Domestic employees	Weeding, Cutting, cleaning, manufacturing. Domestic Employees	family gardens, Agricultural work	housewife, home bread-making, Food Stores

Source: Project Team

6.3.9 Key Stakeholders

For the target municipalities, the main constituents are the alcaldía municipal, Rural Savings Banks, civic organisations, Juntas de agua, Livestock Associations, Evangelical - Catholic - Adventist Churches, Women's Network, Microenterprises. Following the Municipal Development Plan of Morolica (Alcaldía Municipal de Morolica, 2019), there are also Parent education centered associations, health committees, sports clubs, producer and livestock groups and environmental groups. In Duyure there is the Network of Women, Microenterprises, Project PROSASUR, Alianza para el corridor (Alcaldía Municipal de Duyure, 2018).

6.3.10 Ethnic Groups

The indigenous population of the department of Choluteca is 0.31% (INE, 2014-b). According to Juan Benito Guerra, responsible of the Municipal Environmental Unit of the municipality of Choluteca (2019, personal communication, October 10), the first settlers of Choluteca belonged to the Chorotegas ethnic group.

6.3.11 Gender

In Duyure (Marlon Ramírez, 2019 [Municipal Environmental Unit], personal communication, 02 October), Apaciguala (Santos Emilio Baquedano, 2019 [Municipal Environmental Unit), personal communication, 15 October) y Morolica (Orlin Valladares, 2019 [Municipal Environmental Unit) , personal communication, 02 October), women occupy important positions in the municipal administration (mayors, vice mayors, governors, Directors of the civic organisations and the water boards officials), which indicate a higher level of participation of women in political-administrative terms. In rural areas, women's work is concentrated in the home and in informal jobs, so their level of income is very low, which creates a dependency on the heads of household, which according to

[39] Alcaldía Municipal de Morolica (2019)

[40] According to the responsibles of the Municpal Units of Environment in Duyure (Marlon Ramírez, 2019, personal communication, 02 October), Morolica (Orlin Valladares, 2019, personal communication, 02 October), Choluteca (Juan Benito Guerra Fúnez, 2019, personal communication, 15 October), Apacilagua (Santos Emilio Baquedano, 2019, personal communication, 15 October), Marcovia (Edwin Banegas, 2019, personal communication, 14 October) y Orocuina (Eugenio Alvarez, 2019, personal communication, 15 October)

family structure are men (husband, father, brother). At the municipal level, the main gender characteristics are presented below:

Table 19. Main gender characteristics in the prioritised municipalities of Honduras[41]

	Morolica	Apacilagua	Orocuina	Duyure
Women's organisations (environmental defenders, productive organisations, cooperatives (list)	Microbasin councils that are mixed. A network of women at the municipal and community level. OMM supported	If there is a group of women for nature. They do reforestation and forest protection. A network of women at the municipal and community level. OMM supported. Microbasin boards that are mixed.	There is a municipal environmental committee that is mixed. There are executive positions for women. Network of municipal women.	Women's network of the municipality, carry out some productive projects such as the initiative of family gardens but do not engage in environmental defence actions
Women with land ownership	3%	8%		5%
Representation of women in local governments	1 deputy mayor and 2 councillors	1 deputy mayor and 1 councillor.	1 deputy mayor and 1 councillor	Mayor and 1 councillor. Management positions at the level of rural savings banks and employers.

Source: Project Team

6.3.12 Participation

According to the responsibles of the Municpal Units of Environment in Duyure (Marlon Ramírez, 2019, personal communication, 02 October), Morolica (Orlin Valladares, 2019, personal communication, 02 October), Choluteca (Juan Benito Guerra Fúnez, 2019, personal communication, 15 October), Apacilagua (Santos Emilio Baquedano, 2019, personal communication, 15 October), Marcovia (Edwin Banegas, 2019, personal communication, 14 October) y Orocuina (Eugenio Alvarez, 2019, personal communication, 15 October), the participation processes that were carried out have selected the communities where more water management problems were identified or where basin councils were established. Likewise, in the municipalities open councils are held every three months. Apart from the above, there are two important community bodies:

- Civic Organisations: rural communities and neighbourhoods and colonies in urban areas are organized into civic organisations. They are chosen by the members of the community, and officially represent the community before mayors, the same community and any external instance such as NGOs, private companies among others.
- Water boards: local bodies that are organized at a community level with the purpose of ensuring water management, especially for human consumption in the communities, as well as the protection of water sources, the maintenance of water supply projects and assignment of user fees.

[41] According to the responsibles of the Municpal Units of Environment in Duyure (Marlon Ramírez, 2019, personal communication, 02 October), Morolica (Orlin Valladares, 2019, personal communication, 02 October), Choluteca (Juan Benito Guerra Fúnez, 2019, personal communication, 15 October), Apacilagua (Santos Emilio Baquedano, 2019, personal communication, 15 October), Marcovia (Edwin Banegas, 2019, personal communication, 14 October) y Orocuina (Eugenio Alvarez, 2019, personal communication, 15 October)

Furthermore, there are other regional platforms:

- Risk management board: a permanent body for risk management involving around 32 stakeholders such as NGOs, private companies, civil society organisations.
- Environment, Risk Management and Climate Change Adaptation Board: promoted by the Regional Planning Technical Unit of the Government of Honduras which operates within the framework of the National Vision Plan (Plan de Nacion Vision de Pais), established in 2010. The coordinator of this board is CODEFAGOL (Committee of defence of the Flora and Fauna of the Gulf of Fonseca). This board is currently not as strong as the first since it depends a lot on external bodies such as the government or cooperation support.

6.3.13 Safety Conditions

The territory is not considered violent. Although there is the occurrence of robberies or street robberies, or in homes. This is not such a worrying indicator compared to other areas of the country, such as the north coast or the central district. The municipalities are not known for the presence of ´maras´ or gangs. However, there is the presence of groups dedicated to the distribution and consumption of drugs in marginal areas, especially in the large urban centres of Choluteca and Marcovia (Dalila Sierra, 2019, personal communication [consultant of Honduras], 12 October).

6.4 NICARAGUA

The proposed intervention municipalities are: Telpaneca, Palacagüina, Yalagüina, Jícaro and Somoto.

6.4.1 Hydrology and Climatology:

The municipality of Telpaneca has a relatively rugged terrain, its topography is irregular climatic characteristics, and its temperature is high. Palacagüina has an irregular topography; the climatic characteristics are hot and subhumid temperature. The municipality of Yalagüina has an irregular topography and hot temperature. Jícaro has a tropical savanna climate with a rainfall of 1200 to 1400 per year, with a prolonged wet period, this is due to its windward position with respect to the mountains of Dipilto - Jalapa and Telpaneca. In general, the municipalities have a high level of erosion due to the expansion of the livestock and agricultural frontier (MARENA-Delegaciones Territoriales, 2019, p. 5). Concerning water resources, the following table presents the main information by municipality:

Table 20. Characteristics of Water Resources of Priority Municipalities in Nicaragua[42]

[42]Nicaragua, Characterization form of municipalities (MARENA-Delegaciones Territoriales 2019, p. 15).

Description	Telpaneca	Palacagüina	Yalagüina	Jícaro	Somoto
Water Sources	It comes from the Coco River	MABE and infiltration wells in the sub-basin	MABE, PPBM and MAG	Jícaro River Basin	MABE, PPBM, MAG y PEM [43]
% Agricultural water use	20%	10%	30%	40%	SD
% of domestic water use	80%	100%	98% [44]	40%, 16 M^3/family (3 people)	16.59 M^3/Vivienda [45]
Potabilisation systems used	100%	80%	80%	Mini Aqueduct by electric pumping	Mini acueducto por Bombeo Eléctrico
Water demand	High	High	High	40,000 M^3/month	150,080 M^3/mes
There is a drought early warning system (yes, no)	Yes (drought plan)	Yes (drought plan)	Yes (drought plan)	No, only through the warning from INETER, SINAPRED	No
Is there a water management infrastructure?	Collection Pile	Collection Pile	Collection Pile	Without information	Laguna de estabilización [46]
Population with sanitation	85%	No	80%	None	90% [47]
Sanitation services	Latrines	Latrines	Latrines	None	Letrinas [48]

Source: Project Team

6.4.2 Climate Change and vulnerability

In Nicaragua, there was an increase in annual temperature variations since 1950, with increases in a yearly average temperature of 0.9˚C, with a rate of 0.2–0.4˚C per decade. Similarly, there has been a decrease in the average rainfall by 5-6% per decade, and the most variable onset and duration of the summer drought. On the other hand, extreme weather events are characterised by an increase in storms at a rate of 2.2 incidents per decade, including an increase in the proportion of rainfall. In the same manner, the intensity of drought and hurricane events have occurred, and the severity and duration of the canicula has increased.

The vulnerability of the inhabitants lies in the high levels of poverty that arise due to a reduction in crop productivity, and in the decrease in river flows from which water is obtained for productive activities and human consumption.

6.4.3 Protected Areas

Only one protected area is reported in Telpaneca, where the El Malacate Water Reserve exists (MARENA-Delegaciones Territoriales, 2019, p. 13).

[43] Characterization of Somoto (Alcaldía Municipal de Somoto, 2017, p. 49).
[44] Municipal characterization de Yalagüina (Alcaldía Municipal de Yalagüina, sin fecha, p. 9).
[45] Environmental Municipal Plan 2010 - 2015 (Alcaldía Municipal de Somoto, et al. 2010, p. 26).
[46] Wastewater treatment plants of Nicaragua (ENACAL, 2003, p. 18).
[47] Municipal strategy of adaptation to climate change in Somoto (MARENA et al. 2011, p. 16).
[48] Latrines in the rural area and stabilization lagoons in the urban area.

6.4.4 Biodiversity and Biological Corridors

There are no endemic or threatened species in the target municipalities. Nor are there any biological corridors in the area. The species of flora and fauna found in the municipalities are broadleaved forest and pine; wildlife such as deer, bush pig, bracilillo, rabbit, garrobo and coyote, bush cat, tigrillo, and snakes (MARENA-Delegaciones Territoriales, 2019, p.14).

6.4.5 Land Use

The characteristics of the main uses of the land in the Nicaraguan municipalities are as follows:

Table 21. Characteristics of the main uses of the land in the target municipalities in Nicaragua[49]

	Telpaneca	Palacagüina	Yalagüina	Jícaro	Somoto
Use	Agrículture and Livestock	Agrículture and Livestock	Agrículture and Livestock	Livestock: 2,533 Ha. Farming: 7,889 Ha. Forest: 32,439 Ha.	Agriculture and livestock [50]
Area	282.624 km^2	90 km^2	70 km^2	42,861 Ha	474 km^2
Observations	Expansion of the agriculture frontier	Expansion of the Livestock Frontier	Expansion of the agriculture and livestock frontier	Soils for agroforestry [51]	Changes to semi-intensive livestock

Source: Project Team

6.4.6 Productive Activities

The main productive activities carried out in the 5 target municipalities in Nicaragua are described below:

Table 22. Characteristics of the productive activities of the target municipalities in Nicaragua[52]

Production	Telpaneca	Palacagüina	Yalagüina	Jícaro	Somoto
Main productive activities	Grain, Livestock	Grain, Livestock	Grain, Livestock, small handcraft industries	Grain, coffee, Livestock, Forestry, Vegetable farming	Grain Livestock
Unemployed men	70%	40%	60%	45%	31.5% [53]
Unemployed women	50%	30%	40%	40%	68.5%
Male workforce	30%	48.1%	40%	45%	67.5%
Female workforce	50%	51.9%	60%	40%	32.5%
Large producers	10%	1%	15%	5%	0.5%[54]
Medium producers	45%	45%	40%	15%	11.5%
Small producers	45%	54%	45%	80%	7.5%

[49] MARENA-Delegaciones Territoriales (2019, p. 8).
[50] Alcaldía Municipal de Somoto (2017, p. 40).
[51] Caracterización Municipal El Jícaro (INIFOM, no date, p. 6)
[52] MARENA-Delegaciones Territoriales (2019, p. 17).
[53] Alcaldía Municipal de Somoto (2017, p. 35).
[54] IV Censo Nacional Agropecuario. Departamento de Madriz y sus municipios (INIDE and MAGFOR, 2013, p. 49).

Production	Telpaneca	Palacagüina	Yalagüina	Jícaro	Somoto
Jobs done by women	Domestic workers, Teachers	Domestic workers, Teachers	Domestic worker, nurses, Teachers, agroindustry	Housewives, day labourers, Coffee and beans, harvesters	Housewives, teachers, nurses, agricultural activities

Source: Project Team

6.4.7 Food Security

The municipality of Jícaro reports a percentage of food security of 3%, Telpaneca reports regular conditions depending on the areas. There is no data available for the other municipalities (MARENA-Delegaciones Territoriales, 2019, p. 3).

6.4.8 Social Conditions

The prevailing social conditions of the municipalities of Nicaragua are summarized below:

Table 23. Social conditions of the municipalities of Nicaragua[55]

	Telpaneca	Palacagüina	Yalagüina	Jícaro	Somoto
Total Population	24,014	15,718	11,525	34,008	39,567
Rural Population	17,609	10,540	9,698	26,271	16,618
Municipality Area	353.28 kms²	164.37 km²	70,9 kms²	428.78 km²	474 km²
Poverty Rate	52.9	55.6525	29.4 [56]	42.2	30.1
Level of Education for men	65%	87 %	70%	85 %	84.5%
Level of Education for women	70%	92%	90%	89%	89.54
Maternal mortality Rate	5%	0%	0%	0 %	0% [57]
Infant mortality rate	10%	0%	0%	2 %	4.2
Male life expectancy	65%	65%	60%	65 %	75
Female life expectancy	75%	70%	60%	75 %	72
Food Security	23%	Without information	Without information	3 %	No data
Femicide Rate	0%	0%	0%	1 murder in 2019	04
Gender Violence	20%	0%	0%	1%	95
School Dropout rate for boys	17%	2%	1.85%	5%	
School dropout rate for girls	15%	4%	2.57 %	5%	8.3% [58] [59]
Percentage of women without an identity card in the municipalities	10%	N0	5%	2%	20%

Source: Project Team

[55] MARENA-Delegaciones Territoriales (2019, p. 1).
[56] Statitistics of Somoto (INIDE, 2008, p. 65).
[57] Map of maternal mortality 2016-2017-2018-june 2019 (MINSA, 2019, p. 12).
[58] Alcaldía Municipal de Somoto et al. (2010, p. 29).
[59] Percentage comprises boys and girls.

6.4.9 Key Stakeholders

The key stakeholders in the municipality, including cooperatives, NGOs, community associations are the following:

Table 24. Main stakeholders of the target municipalities of Nicaragua

Telpaneca	Palacagüina	Yalagüina	Jícaro	Somoto
U.COM, Ayuda en Acción, Lácteos los Lirios	U.COM, Beneficios secado de café, Lácteos Renacer.	Taller de rosquilla, cooperativa de bambú, emprederurismo, Juan XXIII, entre otras	Coop. Orfilia Vásquez, Coop. Santiago. Coop. Nuevo Horizonte, ASUMUPRO, Núcleo Asociativo de BEAS	MCN, UNAG, APRODEIN

Source: Project Team

6.4.10 Ethnic Groups

In Telpaneca there is an organisation such as Pueblo Indígena de Telpaneca, but there is no presence of ethnic groups (MARENA-Delegaciones Territoriales, 2019, p. 2).

6.4.11 Gender

The outstanding characteristics of gender conditions in the target municipalities are summarised in the following table:

Table 25. Gender characteristics in the municipalities of Nicaragua[60]

Participation	Telpaneca	Palacagüina	Yalagüina	Jícaro	Somoto
Women Organisations	COSMUSOL	Prodecoop, cooperativa 10 Mayo, CATIE.	None	Coop. Orfilia Vásquez, Coop. Santiago, ASUMUPRO, Coop. Nuevo Horizonte, Núcleo Asociativo de BEAS	Casa de la Mujer
Women with land ownership	60%	15%	10%	4%	2% [61]
Representation of women in local governments	50% Councillors Mayors	50% Councillors Mayors	50%	Social Development, Cadastre, HR, Accounting, Civil Registry, Tax Administration, CDI, Livestock Registry.	50%

Source: Project Team

6.4.12 Participation

In the target municipalities, consultation processes occur through municipal councils, although there have been previous processes of consultation and community participation involving other projects (MARENA-Delegaciones Territoriales, 2019, p. 7).

[60] MARENA-Delegaciones Territoriales (2019, p. 6).
[61] INIDE and MAGFOR (2013, p. 49).

6.4.13 Safety Conditions

For the municipalities of Telpaneca, Palacagüia and Jalagüia there is a percentage above 90% of the safety conditions, which is good. There are incidents of physical, psychological abuse and intrafamily violence. There is no presence of armed groups or gangs in any of the target municipalities (MARENA-Delegaciones Territoriales, 2019, p. 3).

6.5 COSTA RICA

In Costa Rica, the municipalities modified for the intervention of the project are Liberia, Nicoya, Santa Cruz, Bagaces and Carrillo.

6.5.1 Hydrology and Climatology

Since the beginning of this decade, water deficits have occurred not only in the Chorotega Region but also in the municipalities of interest to the project. Apart from the low humidity report of the Dry Corridor region, atmospheric force agents such as the El Niño phenomenon (2015-2016; 2018-2019, recently) have contributed to the development of drought and therefore to the scarcity of water resources. As a result, this has led to dangerous consequences to the local population, such as adverse health conditions (due to the variation in hygienic conditions related to animal deaths and lack of water resources), malnutrition (due to the loss of crops and herds of cattle), water rationing, need to migrate, need to resort to credits and financing to save crops, among others (Calvo-Solano et al., 2018).

In terms of climatic conditions, Liberia has a warm climate where the average temperature ranges between 26 ° -28 ° C. In addition, there are two distinguished seasons, where the rainy season is marked by the presence of floods and, the dry season predominantly by drought (UNDP-FOMUDE, 2009). It is important to mention that this climatic behaviour has left innumerable losses on agriculture and livestock (UNDP-FOMUDE, 2009; Calvo-Solano et al., 2018).

Nicoya, on the other hand, presents the typical characteristics of the area with two marked seasons (dry and rainy) and it is very prone to the development of droughts, favouring hydrometeorological negatives in agriculture and livestock (Calvo-Solano et al., 2018). It has a geography that is predominantly based on valleys and plains suitable for agriculture and livestock, in which the crops of basic grains (rice and corn) and melon (Calvo-Solano et al., 2018) thrive.

With respect to Santa Cruz, it is reported that this municipality has high vulnerability to drought, with activities that have adverse effects on the agricultural sector; Similarly, it has a very marked and long-lasting dry season and a short rainy season (Calvo-Solano et al., 2018).

Finally, in relation to the municipality of Bagaces, its climate is generally warm, with some moisture from the Pacific, which favours the development of agricultural activities; However, according to Calvo-Solano, Quesada-Hernández, Hidalgo and Gotlieb (2018), the marked dry season and its long

duration, will favour the presence of sequences that have adverse consequences on livestock activity.

6.5.2 Climate Change and Vulnerability

In Costa Rica, temperature trends reported since 1960 show an average annual temperature increase of 0.2–0.3 ° C per decade, an increase in the average duration and temperature of the drought in summer, an increase in the number of warm days and nights by 2.5% and 1.7%, per decade respectively, and a decrease in the number of cold days and nights by 2.2% and 2.4%, per decade respectively (IMN, no date-a, no date-b). Similarly, an increasing trend in precipitation has been reported, but no significant changes were observed in the average annual rainfall. On the other hand, since 1950 an increase in extreme rainfall was observed, which is strongly correlated with the temperature of the tropical Atlantic Ocean and the increase in the frequency and intensity of extreme weather events such as floods and droughts (Quesada-Hernández et al., 2019).

The vulnerability of the population focuses on lower water availability, which affects not only human consumption, but also ecosystems, agriculture, hydroelectric power generation; and as a result, a decrease in food availability is expected (Solano and Villalobos, no date).

6.5.3 Protected Areas

The protected areas in the area are: Riberino Zapandí Wetland, Corral de Piedra Wetland, Barra Honda National Park, Diriá National Park, Mata Redonda Wildlife Refuge, Iguanita Wildlife Refuge, Cipanci Wildlife Refuge, Peninsula Protection Zone from Nicoya, Monte Alto Protective Zone, and Cerro La Cruz Protective Zone.

6.5.4 Biodiversity and Biological Corridors

Endemic species of the region are mainly two hummingbirds, the esmeralda capirotada (*Elvira cupreiceEAS*) that inhabits the Guanacaste and Tilarán mountain ranges, and la amazilia manglera (*Amazilia boucardi*), in danger of extinction and el carpintero de Hoffmann (*Melanerpes hoffmannii*), among others. Endangered species are also found: Mono Congo (*Alouatta Palliataes*), Soterrey Sabanero (*Cistothorus platensis*), lapa verde (*Ara ambiguus*), Amazilia de manglar (*mazilia boucardi*); and at the forest level: guanacaste blanco (*Albizia niopoides*), espavel (*Anacardium excelsum*), ron ron (*Astronium graveolens Jacquin*), cedro amargo (*Cedrela odorata*), ceiba (*Ceiba pentandra Gaertn*), cocobolo (Dalbergia retusa Helmsl),guapinol (*Hymenaea courbaril*) and tempisque (Sideroxylon capiri Pittier) (CostaRica21, 2019).

As for fauna, the diversity of birds stands out, there are about 300, including la pava, el jilguero, la oropéndola de Montezuma, el tucancillo, el rey de zopilotes, el oropopo o búho de anteojos, el pájaro campana, el pájaro sombrilla, la urraca y el cargahuesos, among others. Some of the most typical mammals in this región are tepezcuinte, el jaguar, el cariblanco, el puma, la danta, el

armadillo, el tolomuco y el perezoso de dos dedos. According to estimations on the number of diurnal and nocturnal butterfly species, there are about 5,000. Also, the chanchos de monte (*Tayassu pecari*) Venado Cola Blanca (*Odocoileus virginianus*), Mono Congo (*Alouatta palliata*) and Mono Cara Blanca (*Cebus capucinus*), lo mismo que Pizotes (*Nasua narica*). There are about 250 species of birds, among which predominates la Urraca (*Calocitta formosa*). There is also a record of 100 species of amphibians and reptiles, the most representative being the Tortuga Lora (*Lepidochelys olivacea*) and la serpiente cascabel (*Crotalus durissus*), in addition, there are more than 30,000 species of insects that inhabit these dry forests of Santa Rosa (CostaRica21, 2019).

Regarding flora, forest species such as Guanacaste (*Enterolobium cyclocarpum*), Pochote (*BombacoEASis quinata*), Guapinol (*Hymenaea courbaril*), Indio Desnudo o Jiñocuave (*Bursera simaruba*) and el Caoba (*Swietenia macrophylla*). In the coastal sector, the Mangle Rojo (*Rhizophora mangle*) predominates, as well as other species of mangrove vegetation in Costa Rica.

In this area there are three biological corridors that are: Rincón Cacao (2850 Has), Rincón Rain Forest (32580 Has), Arenal-Tenorio (33860 Has) (SINAC, no date).

6.5.5 Land Use

The main uses of land in the target municipalities are as follows:

Table 26. Main uses of land in the target municipalities of Costa Rica[62]

Land Use	Liberia	Nicoya	Santa Cruz	Bagaces	Carrillo
Forest conservation	X	X	X	X	X
Use of sustainable wood	X	X	X	X	X
Cultivation and production of rice, cotton, sugarcane, corn, sorghum, beans, vegetables, coffee and fruits, mainly melon.	X	X	X	X	X
Beekeeping	X				
Collection of bivalve molluscs, crustaceans, polychaetes and fishing in mangroves.		X	X	X	X
Livestock for meat, milk.	X	X	X	X	X

Source: Project Team

The degradation of existing ecosystems or agroecosystems is zero, since, on the one hand, they continue to pursue productive practices and over-exploitation of soils and on the other, improvements in fire control, tabulated livestock, agroforestry systems among others. The trend in changing land use is:

- Higher incidence of forest fires
- Agriculture (e.g. extensive cane and rice crops)
- Urbanization (e.g. tourism developments)
- Deforestation (e.g. illegal logging)
- Development of hydroelectric plants

[62] According to Sonia Lobo (2019, personal communication, [SINAC], 30 September and 03 October) y José Joaquín Calvo (2019, personal communication, [SINAC], 30 September and 03 October).

- Large-scale geothermal energy production
- Cane and rice crops
- Extensive livestock farming
- Pressure for aquaculture spaces
- Residential and commercial development

6.5.6 Productive activities

The data related to the main productive activities of the target municipalities are summarized in the following table:

Table 27. Characteristics of the main productive activities of the target municipalities of Costa Rica[63]

	Liberia	Nicoya	Santa Cruz	Bagaces	Carrillo
Main productive activities[64]	Rice, cotton, sugarcane, corn, sorghum, beans, vegetables, coffee and fruits, melon, beekeeping. Livestock for meat, milk	Rice, cotton, sugarcane, corn, sorghum, beans, vegetables, coffee and fruits, melon, beekeeping. Livestock for meat, milk Bivalve mollusks collection, crustaceans, polychaetes and mangrove fishing	Rice, cotton, sugarcane, corn, sorghum, beans, vegetables, coffee and fruits, melon, beekeeping. Livestock for meat, milk Bivalve mollusks collection, crustaceans, polychaetes and mangrove fishing	Rice, cotton, sugarcane, corn, sorghum, beans, vegetables, coffee and fruits, melon, beekeeping. Livestock for meat, milk Bivalve mollusks collection, crustaceans, polychaetes and mangrove fishing	Rice, cotton, sugarcane, corn, sorghum, beans, vegetables, coffee and fruits, melon, beekeeping. Livestock for meat, milk Bivalve mollusks collection, crustaceans, polychaetes and mangrove fishing
Male unemployment rate	4,8%	3,6%	4,4%	4,4%	5,6%
Female unemployment rate				2,2%	
Participation in workforce (Men)	13.991	10.834	12.162	4.596	8.044
Participation in workforce (women)	8.588	5.441	6.750	1.599	3.888

Source: Project Team

The informal economy is present throughout the national territory and therefore also in the municipalities of interest; This is due in large part to immigration from Nicaragua, which, in the majority of cases does not involve a regulated immigration status which then leads to informality to cover one´s living expenses. Poverty conditions and lower educational levels also influence the trend

[63] Percentage data according to INEC (2016) and Bouroncle et al. (2013, annex 5).
[64] According to Sonia Lobo (2019, personal communication, [SINAC], 30 September and 03 October) y José Joaquín Calvo (2019, personal communication, [SINAC], 30 September and 03 October).

of the informal economy, among which street sales, informal transport businesses, occasional domestic work and seasonal agricultural work stand out.

6.5.7 Food Security

Several studies have highlighted the challenges that drought has caused in the region (Ordaz et al., 2010; Calvo-Solano et al., 2018; Gotlieb et al., 2019), within them, the loss of crops (basic grains), diminished yields and death of cattle. This has influenced a decrease in the availability of food, a decrease in the purchasing power of the population in this region and as the drought in these territories is recurrent, the availability of water resources has decreased both for activities related to agriculture and livestock, as well as for human consumption.

A combination of these factors has caused a situation of food insecurity even beyond the levels of danger in the area's population endangering the health of the people in the region. This has also affected the child population with a great force since, being in a period of development, they need the consumption of basic nutrients for their proper growth.

6.5.8 Social Conditions

The main social characteristics are reported in the following table:

Table 28. Social conditions of the Project municipalities in Costa Rica[65]

	Liberia	Nicoya	Santa Cruz	Bagaces	Carrillo
Total Population	62987	50825	55104	19536	37122
Rural Population	11351	28426	28621	10416	13983
Municipal Area	1443,635818	1325,57494	1319,64966	1272,07520	599,062968
Poverty Rate (IPH)	16,720	22,628	19,331	23,505	20,096
Male educational level (rural)	4314	10.270	10.551	3.649	4.995
Female educational level (rural)	3.763	10.412	10.522	3.456	4.964
Maternal mortality rate (general)		5,6			
Infant mortality rate	12,8	7,8	-		11,3

Source: Project Team

6.5.9 Key Stakeholders

The following communal, institutional and non-governmental stakeholders, are located in the target municipalities:

[65] Following INEC (2016).

Table 29. Key stakeholders of the Project municipalities in Costa Rica

Liberia	Nicoya	Santa Cruz	Bagaces	Carrillo
Consejos de distrito Unión Cantonal de Liberia Encuentros cantonales CEN CINAI de Cañas Dulces, Liberia, San Roque y Nazareth. Asociación de Sabaneros y Cocineras Rescate Cultural Asociación Pro Niñez y Adolescencia	Nicoya Encuentros cantonales Consejos de distrito Asociación de Desarrollo Integral (ADI) de Nicoya Asociación Ejército de Salvación Club Rotario de Nicoya Club Activo 20-30 Club de Leones Internacional Damas Panamericanas FEDEAGUA Hogar de Ancianos Iglesia Católica Iglesia Centroamericana La Paz Grupo ecológico El Tucán Grupo humanístico Nueva Acrópolis NICOYAGUA	COOMUDECAT Asociación de Agricultores Asociación de Agricultores Comité de Deportes Comité Pro-Tamarindo CEN Villareal ASADA Comité de Seguridad Junquilla Comité Tutelar ADI Socorro ADI Cartagena ADI Tempate ADI El Llanito ADI Brasilito ADI Portegolpe ADI Guapote ADI Marbella ADI Tulita ADI Buenos Aires ADI San Juan Consejos de distrito CCCI Santa Cruz Junta de Educación Junta de Salud Comité de Salud Comité de Cementerio Comité de Emergencias	CECUDI Bagaces Comité de Deportes CCCI Bagaces Comités de Caminos Comités de Educación Comité de Persona Joven Comités de Vecinos Organizaciones comunales Fundación Amigos de Guayabo Asociación de Scouts Club de Leones ADI Bagaces ADI Mogote ADI Fortuna ADI Río Naranjo	ADIs en general COOPE GTE Empresa Privada (Industria Arenera) ONG SINA ONU Habitat GTZ

Source: Project Team

6.5.10 Ethnic Groups

According to the National Commission of Indigenous Affairs (CONAI, 2016), in Chorotega Region Guanacaste, the Chorotega people are located in the indigenous territory of Matambú, in the towns of Matambuguito y Hondores which is part of Nicoya municipality (target area of this project) and in the municipality of Hojancha; nevertheless, according to confirmation of the Project team who reviewed the influence area of the Tempisque basin (Project's objective) through satellite images, the indigenous Chorotega people are not present within the delimitation of the area of interest of the project. In line with this, an official confirmation from the Ministry of Environment -National System of Conservation Areas (SINAC) focal point for this project, was received indicating that Matambuguito and Los Hondores towns were indeed outside the Tempisque River Basin.

6.5.11 Gender

The main gender characteristics in the municipalities of Costa Rica are presented below:

Table 30. Gender characteristics in Costa Roca municipalities[66]

	Liberia	Nicoya	Santa Cruz	Bagaces	Carrillo
Women's organisations (environmental defenders, productive organisations, cooperatives	Guanacaste women agenda	Guanacaste women agenda Federation of Women of the Gulf of Nicoya Land Committe of Nicoya-Sector, Women	Guanacaste women agenda	Guanacaste women agenda	Guanacaste women agenda
Percentage of women who own land	17,84%	19,33%	22,51%	9,60%	16,36%
Representation of women in local governments	52%	42,30	53,13	50%	44,44%
Jobs performed by women (List includes informal work)	Agriculture, Livestock and fishing; Mines and quarries; Manufacturing industries; Public Services Supply; Building; Trade and repair of vehicles; Transportation and storage; Accommodation and food services; Information and communication; financial and insurance services; Real estate activities; Scientific and technical professionals; Administrative staff and support services; Public administration; Teaching; Human health; Artistic and Recreational Activities; Homes; Extra-territorial organisations.				

Source: Project Team

6.5.12 Participation

The Integral Development Associations (ADIs) stands out in all the target municipalities as the most outstanding participation scheme. These consist of organised groups of people within a community, who seek to carry out all kinds of actions to improve social, economic, cultural and environmental conditions in the area in which they live.

Other spaces for community participation in the target municipalities, at the time of project development, are the Cantonal Institutional Coordination Councils (CCCI) created by Law 8801, in which the institutions responsible for the projects come together with the municipality populations and can even carry out proposals in this space. In the different municipalities, different Boards, such as Health, Water, Education, among others, stand out, among others, which, based on their reason for creation, provide their position and recommendations regarding the formulation of new projects. It should be noted that a similar role is played by the different Cantonal Committees, within which the Youth, Sports, Natural Resources and Health Surveillance stand out.

In the target municipalities of this project, the prior local consultation processes have been the following:

- Cantonal meetings.
- Citizen participation workshops.
- Training for population groups.

[66] According to INEC (2011).

- Establishment of Promoting Networks.
- Promotion of Community Volunteering.

It should be noted that these mechanisms promote the exchange of information between the community and the teams that have facilitated previous projects (Fernández, 2010).

Also in the Governance structure of MINAE-SINAC are the Regional Councils of the Conservation Areas (CORACs) and the Local Councils of the Conservation Areas (COLACS) (SINAC, 2017).

6.5.13 Safety Conditions

The safety conditions in this project area vary. If one considers the generality of the crimes, in 2012 Liberia was the tenth municipality at the national level with the highest number of crimes in respect to vehicle theft, assault of people, homicides and home assault (DIGEPAZ, 2012). According to an Analysis of Clusters conducted by DIGEPAZ (2012), the municipalities of Santa Cruz, Bagaces and Carrillo, are among those with the lowest crime rates, except for burglary. Finally, it should be noted that Nicoya since 2012 is within the group of safer municipalities due to its high score in social indicators.

There is a presence of gangs and organised crime groups that quarrel over the territories mainly for due to issues related to drugs trade.

6.6 PANAMÁ

In Panama, the 5 prioritised municipalities are located in the province of Los Santos and are Guararé, Pocr, Pedasí, Tonosí and Macaracas.

6.6.1 Hydrology and Climatology

The Province of Los Santos belongs to the Central Pacific water region, which is marked by the fact that its watercourses flow into the Pacific Ocean and its river basins have lower rainfall intensities. Its precipitation levels predominate between the ranges of 1,000 and 2,000 mm / year (Ruiz, 2012). The aqueducts are managed by the Board of Rural Aqueduct Administrator (JAAR), which are a community organisation with legal status, non-profit and public interest. This board is the administrator of the usufruct of the assets and investments in the drinking water supply system built by the State, JAAR itself and another organisation (Vega, 2012).

6.6.2 Climate Change and Vulnerability

Temperature trends in Panama report an increase of 0.35 ° C in the average annual temperature, with an increase in the number of hot days and nights, and a decrease in the number of cold days and nights. Similarly, a reduction of 10 to 15% in average annual rainfall is reported, particularly due to the El Niño phenomenon, and an increase in the number of extreme rain events (ETESA, no date).

Among the characteristics of vulnerability, this population is accentuated near the sea, resulting in general problems of water availability for productive activities in summer. In addition, there are currently losses of water resources, crops and death of livestock, affecting food security and economic income (Bouroncle et al., 2014).

6.6.3 Protected Areas

In accordance with the INEC with a source from the Panama Ministry of Environment, in those territories the following protected areas can be found: Bosque comunal el Colmón, Peñón de la Honda, La Tronosa, Cerro Canajagua, Zona litoral del corregimiento de la Enea (Guararé), Zona litoral del corregimiento del Espinal (Guararé), Microcuenca del río cacao (Macaracas) (INEC, 2017).

6.6.4 Biodiversity and biological corridors

There are no biological corridors in the area.

6.6.5 Land Use

The main use in the 5 districts is agricultural with activities in extensive dual-purpose livestock, breeding, fattening and dairy, the second activity is agricultural production. The province of Los Santos in the past went through a process of deforestation for agricultural and livestock activities. Currently, these activities predominate as the livelihood of families. According to the 2012 forest cover map, stubble and secondary forests are reported. This is due to climate change effects that make the producers see the need to move their activity to other areas of the country, and this abandonment leads to an increase in forest cover (Ministerio de Ambiente, 2017).

6.6.6 Productive Activities

The main productive activities done in the target municipalities are:

Table 31. Main productive activities in the municipalities of Panama[67]

Guararé	Pocrí	Pedasí	Tonosí	Macaracas
rice, corn, cane and sorghum	Rice, corn, cane, beans and sorghum	Rice and maíze	Rice, corn, cane, beans, melons, watermelons, vegetables, yams	Rice, corn, cane, beans and yams

Source: Project Team

An informal economy of 54% is reported in the target municipalities.

[67] Bouroncle et al (2013, annex 5).

6.6.7 Food Security

The country is working on the "National Plan for Food and Nutrition Security 2017-2021" that seeks to guarantee food access for those who live in extreme poverty. The purpose of the plan is to promote food and nutritional security through intersectoral, inter-institutional and multidisciplinary coordination in food and nutrition (MIDES and SENAPAN, 2017).

In these districts, because they are fields, people grow a large part of their food, and the state has implemented a series of subsidies that help children in schools, older adults and mothers, which in turn has generated income and less burden for families (Contraloría General de la República, 2015).

6.6.8 Social Conditions

The social conditions of the target municipalities in Panama are presented in the following table:

Table 32. Social conditions of the prioritised municipalities in Panama[68]

	Guararé	Pocrí	Pedasí	Tonosí	Macaracas
Total Population[69]	10381	3259	4275	9787	9021
Rural Population	6033	3259	2355	8309	6797
District Extension (Km2)	218	278	377	1259	545
Poverty rate[70]	16.0	14.5	15.3	29.5	27.9
Male life expectancy[71]	74.09	74.64	74.65	73.62	73.64
Female life expectancy	81.78	82.18	82.19	80.87	81.07

Source: Project Team

6.6.9 Key Stakeholders

The main key stakeholders identified in the municipalities, including cooperatives, NGOs, community associations, are as follows:

Table 33. Key stakeholders in the municipalities of Panama

Guararé	Pocrí	Pedasí	Macaracas
APROLU	Asociación de Artesanía de Pocrí y Paritilla, Asociación de Pescadores, JAAR, Grupos organizado de salud	APASPE, Proyecto Ecológico Azuero Asociación de productores silvopastoriles	APLDMACA, APROLECH, APROPELL, JOCA, AGUA, APROLELAC, APLEP, APMG, JPM, APAPAH

Source: Project Team

6.6.10 Ethnic Groups

In the Project's target area, there are no indigenous groups. This area is mostly made up of rural people who practice subsistence agriculture and livestock farming. However, it is important to note that it is due to the increase in the costs of the labourers, the reduction in the yield of agricultural

[68] Percentage data according to Bouroncle et al. (2013, annex 5).
[69] Following Bouroncle et al. (2013, annex 5).
[70] MEF (2017). Poverty and social inequality in Panama.
[71] INEC (2014). Estimation of life expectancy at birth by sex, regarding to province, district, comarca, district, and indigenous region in the Republic of Panama. Available at http://www.minsa.gob.pa/sites/default/files/publicacion-general/esperanza_de_vida.pdf

products and the disinterest in the young generation in agriculture, that the large producers in the area have started to employ indigenous people from other areas of the country, especially of Ngabe Bugle descent, to address the reduction in labour. Although there is a small presence of indigenous migrants in the area, there are no traditional laws or regulations that have an impact on the project's target area, so the conventional national regulations are applicable.

The hiring of these indigenous workers is of an informal manner and most likely these indigenous people cannot aspire to the level of payment of the local places and it is very common that they live in deplorable conditions near the farms where they work.

6.6.11 Participation

There are participation and consultation schemes in the country; a recent example is the National Biodiversity Strategy, the National REDD+ Strategy and other projects at country level. By regulation, all initiatives should be published as part of the community consultation process through the website of the ministries in charge, where the public can comment; There is also a national consultation plan according to the implementation project/plan/strategy area (Novoa, 2016).

6.6.12 Safety Conditions

There are no violent events or adverse security conditions for these municipalities. In these districts there are no armed groups or gangs.

6.7 DOMINICAN REPUBLIC

In the Dominican Republic, the prioritised municipalities are: Monción, San Ignacio de Sabaneta, Villa Los Almacigos, El Pino and Partido.

6.7.1 Hydrology and climatology:

The project's target area is located in the northeastern part of the country, on the northern slope of the central mountain range, with a very heterogeneous relief, which goes from the small plains, with an altitude of 20 meters above sea level, to mountainous areas that reach 2000 meters above sea level, and with slopes that exceed 55%. These conditions make the area to have an extremely varied climate. Despite the major differences in altitude and the distorting effect of the wet winds caused by the relief lines, temperatures are not limiting for human settlements.

The rainfall regime presents great variations according to the territory relief, in the low parts, the rains barely reach 700 mm per year, with two dry periods, one short from February to March and another longer in the summer (June - September); In the months of spring, moderate rains of convective origin are received, the October - January period is the rainy season, caused by the

passage of cold fronts typical of the winter season. In the mountainous regions the modified rainfall regime, annual values reach 2,000 mm, with a prolonged rainy period from May to October and reaching the lowest values from January to March. Regarding the management of water resources, see below:

Table 34. Characteristics of water resources management in prioritised municipalities in the Dominican Republic

	Monción	Sabaneta	V. Los Almácigos	El Pino	Partido
Water Sources	Aqueducts, Wells, Rivers, Rain	Aqueducts, Wells, Rivers, Rain	Aqueducts, Wells, Rivers, Rain	Aqueducts, Wells, Rivers, Rain	Aqueducts, Wells, Rivers, Rain
% Agricultural water use	47	47	47	81	81
% Domestic water use	37	34	37	13	13
Potabilization systems used	Chlorination				
Main irrigation technologies used	Aspersion Dripping River canalization Flooding	Aspersion Dripping River canalization	Aspersion Dripping River canalization	Aspersion Drip River canalization	Aspersion Dripping River canalization
Water Demand	36%	36%	36%	57%	57%
Type of sanitation services	Septic tanks				

Source: Project Team

6.7.2 Climate Change and Vulnerability

In the Dominican Republic, an annual average temperature increases of 0.05 ° C per decade has been reported since 1960, an increase in the number of hot days at 17.4% and hot nights at 13.2%, with the highest increase rate from June to August. As of this year, a decrease in annual average rainfall is reported by 4.5%, and an increase in the intensity and duration of heatwaves since 1950.

There are also high poverty rates that directly affect the population in the presence of extreme weather events such as droughts and floods which affect crops and livestock production. As a consequence, the cost of food rises. Also, the soils have high levels of erosion and degradation. The population´s agricultural production has also been affected by crop plagues and water challenges.

6.7.3 Protected Areas

The protected areas in the zone of the Project's direct influence are Armando Bermúdez National park, Nalga de Maco National Park, Manolo Tavarez Justo Forest Reserve, Piky Lora National Park, Alto de Mao Forest Reserve, Cerro Chaquey Wildlife Refuge, Cañón Río Gurabo Wildlife Refuge and Río Cana Forest Reserve[72].

[72] National System of Protect Areas (Ministerio de Medio Ambiente y Recursos Naturales, 2019), https://ambiente.gob.do/wp-content/uploads/2019/06/Sistema-Nacional-de-Areas-Protegidas-Junio-2019.pdf

6.7.4 Biodiversity and biological corridors

In a study conducted partly in the project target area, 249 species of vascular plants were observed, of which 20 are endemic, 210 natives to the Spanish island, 3 naturalized, 16 introduced. This total is distributed in 81 families, of which the Pinaceae is present in almost all the communities as well as the pinus occidentalis, those that present the most significant number of species are: Meliaceae, Myrtaceae Verbenaceae, Pinaceae, Fabaceae, Euphorbiaceae, Malvaceae , Poaceae, Asteraceae, Borragináceae, Mimosaceae. The most abundant genera are: Roystonea, Sabal, Bactris, Bursera, Tetragastris, Trichilia, Eugenias, Inga.

In the wide-leaf secondary forests, the most common plant species are Guarana (*Cupania americana*), Copey (*Clusia rosea*), Catey (*Bactris plumeriana*), Caimoni (*Wallenia laurifolia*), Caimito (*Chrysophylum caimito*) and various species of Eugenias.

In riparian forests, the most abundant tree species are: Amacey (*Tetragastris balsamífera*), Guarana (Cupania americana), Cabirma (*Guarea guidonea*), Copey (*Clusia rosea*), Catey (*Bactris plumeriana*), Caimoni (*Wallenia laurifolia*), Caimito (*Chrysophylum caimito*), Escobón (*Eugenia montícola*), Gina (*Inga Fagifolia*) and Palo amargo (*Trichilia pallida*).

In the cloud forest, the tree stratum is dominated by the Lengua de vaca (*Dendropanax arboreus*), Bija cimarrona (*Alchornea latifolia*), Palo de viento (*Didymopanax tremulus*) and most of the trees reach a height of up to 25 meters. Among the associated tree species is the common name Palo e cotorra (*Brunellia comocladifolia*) and Gina (*Inga fagifolia*).

There is a total of 14 reptile species, equivalent to 8% of the 185 known species of La Española, of these two (2) are native to La Española Island, one (1) introduced and the remaining endemic (cuadro). The latter are equivalent to 7% of the 168 endemic species reported for the island. Two (2) endangered lizard species were registered in this group, which correspond to the A. baleatus and A. christophei species. Both in the Endangered Category (EP).

As for birds, there are 41 species belonging to 22 families. Of that total (41), 21 are permanent residents, 12 endemic, 7 migratory and one (1) coloniser. Regarding endemic species of the La Española Island, 12 species were found in the studied areas, such as: la cigua palmera (*Dulus dominicus*), national bird, el papagayo (*Priotelus roseigaster*), el cuatro ojos (Phaenicophilus palmarum), pájaro bobo (*Coccyzus longirostris)*, barrancolí (Todus subullatus), chi-cui (Todus angustirrostris), carpintero (*Melanerpes striatus)*, cotorra (*Amazona ventralis*), perico (*EASittacara chloropterus*), as well as the, maroita (*Contopus hispaniolensis*), lechuza cara ceniza (*Tyto glaucoEAS*) and el cuervo (*Corvus leucognaphalus*). There is only the Caribbean Biological Corridor[73].

The only biological corridor is the Caribe. Its goal is the conservation of biodiversity, environmental rehabilitation and the development of life alternatives in Haiti, la Rd and Cuba (PNUMA/UE CBC PROJECT).

[73] Diagnosis of biodiversity and socio-environmental features in the áreas located between the provinces of Santiago Rodriguez and Comendador: Proposal for an Ecological Restoration (Ministerio de Medio Ambiente y Recursos Naturales, 2016)

6.7.5 Land Use

The tendency to change land use occurs in areas that have been abandoned for several years in which the forest recovers as a result. In another case, there is the change in coffee cultivation, due to the prevalence of the drill and / or low market price, so other crops begin to be cultivated, crops such as cocoa, fruit trees, etc. The reduction of forest cover Is mainly due to change of land use for crops and/or grass.

A recent study estimated that by 2015, 7% of the forests will be in degradation process in the project area. In the case of pine forests, this degradation will be due to illegal extraction, poor forest management and also pest attacks as a result of prolonged periods of drought. As for dry forests, it will be due to overgrazing of goats, the extraction of firewood and coal. Soils show an accelerated degradation rate due to erosion and overgrazing.

6.7.6 Productive activities

The table below presents the main productive activities that take place in the target municipalities of the Dominican Republic.

Table 35. Productive activities in the target municipalities of the Dominican Republic

	Monción	Sabaneta	V. Los Almácigos	El Pino	Partido
Main productive Activities	Livestock, agriculture and Wood production	Coffee, agriculture, livestock and wood	Coffee, agriculture and livestock	Agriculture and Livestock	Agriculture and Livestock
Main national agricultural companies (name and type)	Grupo RICA, a dairy producer				
Main international agricultural companies (name and type)	PARMALAC y NESTLE, all dairy products				
Male unemployment rate	7.8	11.5	13.4	17.6	5.6
Female unemployment rate	6.5	6.6	7.3	9.2	6.4
Male workforce	67.4	71.3	76.7	71.6	71.6
Female workforce	32.3	28.7	23.3	25.5	28.4
Percentage of large producers	6.1	6.1	6.1	6.1	6.1
Percentage medium producers	44.7	44.7	44.7	44.7	44.7
Percentage small producers	36.4	36.4	36.4	36.4	36.4
Jobs done by women	Domestic services, Education, Workers, Secretaries, Formal and informal sellers, Accounting and administration, Workers in the agricultural sector, Processing of edible products, Professional services in different areas.				

Source: Project Team

The table below shows agricultural activities done in the municipalities of the Dominican Republic:

Table 36. Agricultural activities developed in prioritised municipalities

	Monción	Sabaneta	V. Los Almácigos	El Pino	Partido
Roles of women in the agricultural sector	Sowing, harvesting and threshing work, post-harvest work (storage and loading packaging)				
Main crops by municipality	Bitter yucca, yucca, Guandul, Citrus, Beans, Banana, Coffee, Corn, Yautia, Sweet potato, Banana, Chili, Tomato, Cucumber, Tobacco, Macadamia, Avocado	Bitter yucca, Cassava, Guandul, Citrus, Bean, Banana, Coffee, Corn, Yautia, Sweet potato, Banana, Chili, Tomato, Cucumber, Tobacco, Avocado, Cocoa, Rice	Bitter yucca, Cocoa, Guandul, Citrus, Bean, Banana, Coffee, Corn, Yautía, Sweet potato, Banana	Cassava, Guandul, Citrus, Bean, Banana, Coffee, Corn, Yautía, Sweet potato, Cocoa	Cassava, Guandul, Citrus, Bean, Banana, Corn, Yautía, Sweet potato
Crop Area	646	6,893	237	103	1444
Socio agroforestry crops	Short cycle crops with trees, avocado and fruit trees				

Source: Project Team

6.7.7 Food Security

Food production in the area is subject to weather conditions. Extreme events such as droughts and floods affect crops and livestock production directly. The production of milk and meat, and minor crops, was considerably reduced by a period of drought from mid-2018 to September 2019. Other foods are imported from other regions but at a high cost.

6.7.8 Social Conditions

The social conditions of the municipalities of the Dominican Republic are presented below:

Table 37. Social conditions of the municipalities of the Dominican Republic

	Monción	San Ignacio de Sabaneta	Villa Los Almacigos	El Pino	Partido
Total Population	11,753	34,540	11,183	5,675	6,951
Rural Population	3,817	18,892	7208	3,656	4,470
Municipality Extension (Km2)	139	801	207	88	150
Poverty rate	39.4	45.8	65.3	49.6	65.3
Education level for men (basic)	53.5	54.2	54.6	54.6	52.2
Education level for women (basic)	46.4	45.7	45.4	45.4	47.8
Rate of Maternal mortality (in hospitals.)	*	2.1	1.7	*	*
Rate of infant mortality (National Data)	35 /1000 nv	35 /1000 nv	35 /1000 nv	35 /1000 nv	35 /1000 nv
Life expectancy for men (national level)	71.0	71.0	71.0	71.0	71.0
Life expectancy for women	77.3	77.3	77.3	77.3	77.3
Food security state (?)					
Femicide Rate (national 2015)	1.5	1.5	1.5	1.5	1.5
Gender violence Percentage	25.6	25.6	25.6	25.6	25.6
Rate of school dropouts (girls and boys)	2.98	2.98	2.98	2.98	2.98

Source: Project Team

As for land tenure, the most substantial proportion of land the landowners in the area have is in the small (<1.25 ha) to medium (<12.5 ha) range. The majority of small landowners are on untitled lands (56%), which have been occupied by their predecessors for over 40 years. In a few cases, they may be in lease conditions (1.6%).

6.7.9 Key Stakeholders

The main stakeholders identified in the target municipalities are as follows:

Table 38. Main Stakeholders in Dominican Republic Agriculture

Monción	Sabaneta	V. Los Almácigos	El Pino
-Producers -Agricultural bank -Department of agriculture -INDRHI -Producer Associations -Cooperatives -Donor Funding -Intermediaries -Asoc. casabe producers	- Producers -Agricultural bank -Department of agriculture -INDRHI -Producer Associations -Cooperatives -Donor Funding -Intermediaries Casabe producer's association	-Producers -Agricultural bank -Department of agriculture -INDRHI -Producer Associations -Cooperatives -Donor Funding -Intermediaries	- Producers -Agricultural bank -Department of agriculture -INDRHI -Producer Associations -Cooperatives-Donor funding -Intermediaries

Source: Project Team

6.7.10 Ethnic Groups

In the Dominican Republic, there are no ethnic groups.

6.7.11 Gender

Concerning the gender characteristics of the target municipalities of the Dominican Republic, the following was identified:

Table 39. Gender characteristics in the target municipalities of the Dominican Republic

	Monción	Sabaneta	V. Los Almácigos	El Pino	Partido
Women organisations (environmental defenders, productive organisations, cooperatives	Mothers´ Centre	1. Mothers´ Center 2.Grupo TEGULINA, grupo de Tejedoras de guano	Mothers´ Centre	Mothers´ Centre	Mothers´ Centre
Percentage of women with land ownership	25	25	25	25	25
Representation of women in local governments	41.7	20	20	47.1	50

Source: Project Team

6.7.12 Participation

In previous projects, participation has been carried out through group consultations in community workshops, as direct beneficiaries, community representation in the board of directors (Assemblies of partners) or meetings, community workshops, and discussions with different stakeholders.

6.7.13 Safety Conditions

In the 5 municipalities, 16 deaths were recorded due to traffic accidents in 2017[74]. There is no presence of armed groups or gangs.

[74] Socio-demographic profiles of the prioritized municipalities (ONE, 2010).

7 RISKS, IMPACTS AND BENEFIT ANALYSIS OF THE PROJECT

The Project proposes the development of actions to address the impacts of climate change that threaten the livelihoods of vulnerable communities in the Dry Corridor of Central America and Arid Zones of Dominican Republic, with activities at landscape and home level in priority basins through the promotion of Ecosystems Based Adaptation (EbA) strategies, forests and agroforestry systems in prioritized basins, and efficient water and energy technologies in rural communities.

It is important to note that these solutions will be supported through capacity building for local governments, financial institutions and communities; loans and microfinance for EbA activities and small natural resource-based businesses; and the integration of EbA into policies and incentive creation. It is therefore, clear that activities to be developed generate mainly environmental benefits by improving the connectivity of Central American dry corridor and arid zones of Dominican Republic, strengthening ecosystem services provision, as well as social benefits for agricultural producers, rural populations, and generally residents of direct and indirect influence areas in each of the municipalities of Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama and Dominican Republic.

However, this chapter presents the risks evaluation based on the main considerations of each social and environmental safeguards of the Green Climate Fund, considering that safeguard implementation in any type of project, helps to ensure that activities do not cause unintentional harm to people or ecosystems, reduces conflicts, optimises benefits, while insuring that planned activities are successful in a general way (WRI, 2015).

According to WRI (2015), safeguard implementation in a project generates value for communities by encouraging the involvement of local people as effective beneficiaries of the project, preventing conflicts with communities and protecting the rights to natural resources, among others; similarly, it generates value for project developers by avoiding project delays and higher costs, preventing environmental degradation, and avoiding reputational damage.

Particularly, the GCF will require accredited entities to ensure that activities are accurately evaluated, environmental and social risks properly categorised, and environmental and social risks and impacts adequately assessed (GCF, 2019). The GCF has adopted the following approach for risk categorisation:

Category C – Low Risk: activities with minimal or no adverse environmental or social risks or impacts.

Category B - Medium Risk: activities with potential risks or limited adverse environmental or social impacts that are few in number, generally site-specific, largely reversible and easily approachable through mitigation measures

Category A - High Risk: activities with possible significant environmental or social risks or impacts that are diverse, irreversible or unprecedented.

Based on this risk classification, an analysis matrix called ESMF Dry Corridor was developed, which contains a risk analysis for each of the Project activities, and the most important risks by country. The risk's components analysis is presented below, nonetheless, the complete risk identification by country can be consulted in **Annex 6C**.

7.1 Risk and impact analysis of the Project activities

7.1.1 Output 1. Strengthened technical capacity of local government, farmers and rural communities to implement EbA and other adaptation measures.

7.1.1.1 Activity 1.1. Develop site-specific intervention plans for the 7 target catchments to integrate EbA measures through a participatory process with municipal authorities, local communities, and other stakeholders.

Risks and Impacts	Risk Level
• The necessary means for full, broad and effective participation are not guaranteed or ensured. • No recognition, respect or inclusion of the governance and decision-making mechanisms. • Costs and benefits of intervention plans differentially affects the most vulnerable groups. • Restrictions on land use are generated. • Modification of livelihoods and/or income generation by modifications made to adopt sustainable practices of EbA activities. • Agricultural frontier expansion could occur due to EbA options, particularly on land for forest protection. • Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Accidents and occupational disease for project workers performing field work. • Worker safety could be affected due to public order issues.	**C - Medium Risk**

The development of intervention plans involves the participation of key stakeholders, therefore, one of the identified risks is that necessary means for full, broad and effective participation are not guaranteed or ensured during the community workshops, especially with those stakeholders located in remote and hard-to-reach rural areas, who have barriers in language use, or low levels of education who require clear language in the explanation of objectives to enable their effective participation. Such a situation could occur especially in Nicaragua, Panama and the Dominican Republic, as there are no strong existing participation structures.

Similarly, in case of working with indigenous communities, the non-recognition, respect or inclusion of their mechanisms of government and decision-making could pose a risk, especially in Guatemala where indigenous peoples participation has been identified.

In addition, costs and benefits of intervention plans could affect differentially the most vulnerable groups, which are often communities with low levels of education or weak organisational structures that do not allow them to manage their participation in a timely a proper manner.

In addition, intervention plans outcome could generate restrictions on land use, modifying subsistence means and/or income generation due to the transformations carried out to adopt sustainable practices proposed in EbA activities.

Also, intervention plans will define EbA activities that will be promoted in each prioritised target basins, therefore if clear criteria for the improvement of existing agricultural areas is not defined the agricultural frontier could expand, particularly on land for forest protection due to AbE options. In addition, these agricultural activities could increase pesticides and fertilisers use, producing risks of worker poisoning and contamination of natural resources.

Finally, in the implementation of Project activities, accidents and occupational diseases for project personnel who perform fieldwork may have place, as well as public order problems that could possibly affect the safety of workers.

7.1.1.2 Activity 1.2. Provide technical assistance to municipal authorities, farmers and rural communities for the implementation of EbA practices as well as water- and resource-efficient technologies.

Risks and Impacts	Risk Level
• Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Emission of short and long-life climate pollutants, by EbA protocols implementation, especially, if agroforestry systems include the use of chemically sourced nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • The necessary means for full, broad and effective participation are not guaranteed or ensured. • Restrictions on land use could be created. • Modification of livelihoods and / or income generation by modifications made to adopt sustainable practices proposed in EbA protocols. • The culture, knowledge and practices of traditional indigenous peoples/local communities are not recognised, respected and preserved. •The use of the language, cultural practices, institutional arrangements and religious beliefs of peoples are not considered. • Accidents and occupational disease for project workers performing field work. • Worker safety could be affected due to public order issues. • Restoration activities in wooded areas could lead to ecosystem disruptions if activities do not meet the characteristics of ecosystems and special considerations for managing critical habitats in legally protected areas.	**B - Medium Risk**

This activity envisages developing cooperation agreements with commercial farmers for forest restoration and sustainable land management, which could lead to restrictions on current land uses and changes in livelihoods, and thus, a possible income reduction from changes made to adopt sustainable practices proposed in the EbA protocols.

In addition, the intended technical assistance activities include protocols development for sustainable EbA practices implementation, focusing on conservation and restoration of forests and wetlands remnants, and agroforestry systems in the seven basins, through three interconnected approaches: conserve and restore existing forest areas and agroforestry systems, establish new mixed plantations of native species and agroforestry systems, and develop sustainable sources of firewood. In case of forest areas restoration activities, it could lead to ecosystem disturbances if activities do not respond to ecosystem characteristics and special considerations for managing critical habitats and/or legally protected areas; this is the specific case of El Salvador, as the predominant native ecosystem in the Project influence area is the Natural Savannah

Similarly, mixed species plantations and agroforestry systems, including the restoration of existing agroforestry systems, may lead to an increase in the use of pesticides and fertilisers; impacts are related to workers poisoning and pollution of natural resources, as well as exposure of the community to waste and hazardous materials, if they are improperly handled; moreover, the use of nitrogen fertilisers, in particular of chemical origin, emit short and long life climate pollutants, as well as ploughing and ground removal activities.

Furthermore, training programmes under this activity may not guarantee and ensure the necessary means for full, broad and effective stakeholder participation, especially of the most vulnerable population and indigenous people by not considering their language use, cultural practices and existing institutional arrangements. Specially in Guatemala, where indigenous peoples are planned to participate in this component, the risk of not recognising, respecting and preserving the culture, knowledge and practices of their communities could have place.

Finally, related to labour and working conditions, accidents and occupational disease during fieldwork, as well as potential risks of public order issues could affect the Project workers safety.

- **Guatemala**

Due to indigenous communities' presence in the Project area, all assistance actions trigger risks related to ignore, disrespect and not preserve the culture, knowledge and practices of indigenous peoples. Similarly, restoration activities in forest areas could lead to alterations of critical and/or legally protected areas.

- **El Salvador**

Natural Savanna is the predominant native ecosystem In El Salvador's area of influence; therefore, the restoration activities of forest areas could lead to alterations of these ecosystems that are characterized by the absence of trees. Also, safety risks could be generated for workers due to the Country's public order problems.

- **Honduras**

The safety of workers could be at risk due to public order problems of the country.

7.1.1.3 Activity 1.3. Provide technical assistance to farmers and rural communities for the development of natural resource-based businesses and alternative climate-resilient livelihoods.

Risks and Impacts	Risk Level
• The necessary means for full, broad and effective participation are not guaranteed or ensured in workshops and training programmes. • No recognition, respect or inclusion of stakeholder governance and decision-making mechanisms. • Opportunities for indigenous peoples/local communities are not promoted in accessible, culturally appropriate and inclusive way. • Accidents and occupational disease for project staff performing fieldwork. • Worker safety could be affected due to public order issues.	**C - Low Risk**

This activity will be developed through training processes for local communities to develop small natural resource-based businesses that will support the implementation and maintenance of EbA interventions, and benefit businesses from ecosystems goods and services provided through EbA.

Therefore, triggered risks from development of this activity are mainly social, related to participation of communities in community participation workshops to develop livelihood action plans for each community, situations could arise where the necessary means for full, broad and effective participation of all stakeholders is not be guaranteed and ensured, particularly as some municipalities in the project have low rates of education such as El Salvador, and therefore trainings and workshops may not be accessible, culturally appropriate and inclusive with local communities. This risk is further intensified in those countries where citizen participation structures are not visible as Nicaragua, Panama and Dominican Republic.

Moreover, the aim of this activity is to involve people or organisations with commercial purposes, not the ones with activities of basic subsistence, so it is understood that indigenous peoples of Guatemala will not be involved; however, in case the project receives a manifestation of interest from these communities, and agreements are made to ensure that cultural practices and religious beliefs are not transgressed, risks may arise related to the non-recognition, respect or inclusion of their own governance and decision-making mechanisms, or the promotion of opportunities for peoples in a way that are not accessible, culturally appropriate and inclusive.

Finally, project personnel performing field work could be exposed to accidents and occupational disease, and their safety maybe affected in the events or situations that alter public order, especially in El Salvador and Honduras.

7.1.2 Output 2. Demonstration adaptation interventions implemented in rural communities across seven target catchments in the Dry Corridor and Arid Zones.

7.1.2.1 Activity 2.1. Implement large-scale EbA interventions within rural communities across the seven target catchments.

Risks and Impacts	Risk Level
• Pollution from the use of agrochemicals. • Possible increase in the use of pesticides and fertilisers in the EbA options, causing risks of workers poisoning and pollution of natural resources. • GHG emissions from agricultural activities. • Community affectation due to the use of agrochemicals in agricultural and active restoration processes. • Inadequate management of solid and liquid waste. • Modification of natural habitats by expanding the agricultural frontier or pine and wood/firewood crop establishment. • Land use restrictions are generated. • Modification of livelihoods or income generation from changes made to adopt sustainable practices proposed in EbA protocols. • The culture, knowledge and practices of traditional indigenous peoples/local communities are not recognised, respected and preserved. • The safety of project workers may be affected by public order issues. • Occupational accidents and disease for project workers performing fieldwork. • Linking foreign people to local culture.	**B - Medium Risk**

In order to analyse the risks that may arise from EbA interventions within rural communities, an analysis of the Project sub-activities is presented, as well as an analysis of the main EbA measures groups that apply to this activity.

On the one hand, this activity involves the establishment of agroforestry, silvopastoral and agrosilvopastoral systems, sustainable firewood plantations, mixed native species new plantations in the seven basins, including restoration activities on forest areas, in case of active restoration techniques are used, correspond primarily to AbE mixed systems strategies classification. This group of activities can increase agrochemicals use such as pesticides and fertilisers, causing possible contamination to natural resources and consequently the target communities of the Project, and intoxication of workers, in the event of improper chemicals handling. Similarly, the development of agricultural activities is linked greenhouse gas (GHG) emissions from nitrogen fertilisers use, land tillage, and methane emission if the animal load increases in silvopastoral systems. Also, agricultural activities could have an inadequate management of solid and liquid waste in case EbA activities do not generate clear guidelines for efficient management of solid and liquid waste.

On the other hand, activities related to sustainable firewood plantations, agroforestry, forestry and agrosilvopastorals, and even native pine plantations, could lead to an agricultural frontier expansion and degradation of other native habitats, in the event that the criteria of the areas characteristics where the project will implement its actions is not clear; nonetheless, activities under this component will be promoted mainly on degraded areas with current agricultural uses, therefore, this risk could be classified as low.

Moreover, actions related to native tree nurseries establishment, conservation of natural forest, and restoration of forest areas in the seven Project basins are listed as ecological support EbA actions; it could lead to land use restrictions, modification of current livelihoods and/or reduction of income generation by changes made to adopt sustainable practices proposed in EbA protocols.

Likewise, the development and support of these activities with foreign personnel from the Project, could link these people and influence the local culture, especially in indigenous peoples areas Guatemala, and could lead to not recognising, respecting and preserving the culture, knowledge and practices of indigenous peoples and traditional local communities.

In addition, the safety of project workers performing this fieldwork could be affected, especially in El Salvador and Honduras due to rates of violence in these countries, and workers could be exposed to accidents, such as falls, lacerations with work tools, and occupational diseases such as animal bites and exposure to thermal stress due to high temperatures.

Secondly, the risk analysis of different types of EbA strategies is presented. Specific risk analysis for different types of Ecosystem-based Adaptation strategies, founded on EbA classification proposed by the UNEP MEbA Project:

- **Agricultural support:**

The use of organic fertilisers, vermicompost, soil conditioning, water crops, drainage systems and contour ditches are EbA activities classified as agricultural support. Although these practices have been widely implemented by farmers, if technical procedures are not considered, there may be other implications that could interfere with the overall performance of production systems; if contour ditches are wrongly drawn can cause erosion problems.

- **Ecological support:**

Ecological restoration of remaining forests and wetlands, firebreaks - fire prevention trenches, mixed nurseries, beekeeping, seed banks, sustainable forest management, soil restoration, retaining walls, filtration dams, infiltration wells and ecotourism are Ecological support activities. Generally, there are no high risks associated with the implementation of ecological support activities; however, sustainable forest management activities must follow a strict methodology to prevent biodiversity loss and biodiversity replacement of native forests with commercial timber crops.

In specific cases of fire prevention trenches, retaining walls, filtration dams, infiltration wells, their design and construction should be supported by technical experts, as the risks related to health and occupational safety can lead to human calamities, as well as interfere with ecosystem functions. Moreover, if construction techniques are carried out inappropriately, the expected results may not be achieved, and existing systems could be affected.

- **Mixed systems**

EbA mixed systems include sustainable wood and firewood production, mixed plantations with native species, recovery or establishment of agroforestry, silvopastoral and agrosilvopastoral systems, natural shade, windbreakers and home orchards; these strategies have been widely known for their multiple benefits, but if environmental and hydrometeorological characteristics are not previously analysed, there may be some risks related to ecosystems impact and poor systems performance. In addition, there are two risks related to the heterogeneity of production systems, the first one is that some crops require specific treatments and may have more problems if no special measures are taken, and the second is the possible increase in pest control resistance.

Regarding agrosilvopastoral, silvopastoral, agroforestry systems, a weak and dispersed technical assistance could lead to system failure as many factors are involved in their establishment and operation, for example, the imbalance of animal load. Also, poor planning of forestry component can turn mechanised harvesting and fodder preparation a difficult task. Overall, processes may have low sustainability due to high costs or if farmers are impatient to receive rapid results, as outcomes will be achieved in the long term.

7.1.2.2 Activity 2.2. Implement demonstration water- and resource-efficient technologies within rural communities across the seven target catchments.

Risks and Impacts	Risk Level
• Low acceptance of efficient kilns technologies. • The culture, knowledge and practices of indigenous peoples / traditional local communities are not recognised, respected and preserved • Possible occupational risks during the establishment and operation of technological improvement options. • Possible public health risks from contamination stored in water collection systems • Deforestation promotion for charcoal production in half-orange kilns proposed by the project. • In relation to solar panel pumping systems, an inadequate waste management of the system's batteries could have place.	**B - Medium Risk**

The implementation of efficient technologies for water and resource management within rural communities established by the Project are classified as Technological Improvement EbA measures; On the one hand, the installation of rainwater harvesting systems on community buildings, and community-level rainwater reservoirs in target communities, can improve the efficiency in the

resources use, although possible public health risks from contamination stored in water collection systems could have place, in case clear guidelines for its cleaning and maintenance are not generated.

On the other hand, the installation of half-orange kilns for efficient production of charcoal could cause social risks related to the low sustainability of processes due to the low acceptance of efficient kiln procedures, and failures in strategies since their installation requires specialised technicians, which could lead to possible occupational risks in the establishment and operation of technological improvement options. In addition, if communities do not use charcoal on the baseline, deforestation could be increased through the use of firewood in kilns proposed by the Project.

Finally, obsolete batteries from solar panel pumping systems could cause risks in case of an inadequate management as waste, especially as the batteries type used in these systems are similar to the ones used in cars, with high level lead, representing a contamination hazard for both, natural resources and the population exposed to this waste.

7.1.2.3 Activity 2.3. Establish the grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing and start operations.

Risks and Impacts	Risk level
•Possible increase in pesticides and fertilisers use due to EbA options, causing poisoning in workers and pollution to natural resources. • Emission of short- and long-life climate pollutants related to the use of nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • The change of practices could reduce agricultural systems productivity, therefore reduce producers' income. • The culture, knowledge and practices of indigenous peoples are not recognised, respected and preserved, in the event that monetary transactions are against their principles. • The use of language, cultural practices, and institutional arrangements of indigenous peoples is not considered. • The benefits of the donation facility resources are restricted to the most vulnerable groups.	**C - Low Risk**

In particular, the grant facility for the implementation of EbA activities could increase the use of pesticides and fertilisers, causing possible risks related to worker poisoning and pollution to natural resources, as well as exposure of hazardous waste as result of inadequate use of these agrochemicals, and the generation of short- and long-life climate pollutants.

In Guatemala, where working the grant facility with indigenous populations is a probability, particularly with the different ethnicities located in the Project area, risks related to unacknowledging, respecting and preserving the culture, knowledge and practices of these peoples could occur especially, in the event that monetary transactions are contrary to their principles; likewise, the use of language, cultural practices, and institutional arrangements of indigenous peoples may not be considered.

Also, a risk related to the inequitable distribution of benefits could take place, for instance, in case that most vulnerable groups cannot access the donation mechanisms since they do not have strong organisational structures.

7.1.3 Output 3. Information on climate change adaptation and its financing disseminated across the region and mainstreamed into local and national policies.

7.1.3.1 Activity 3.1. Establish regional knowledge hub for the dissemination of information on EbA in the Dry Corridor and Arid Zones.

Risks and Impacts	Risk Level
• Knowledge management products are not accessible and inclusive. • In workshops and training programmes situations could arise where the necessary means for full, wide and effective participation of all stakeholders are not guaranteed and ensured. •Knowledge products and training spaces for indigenous peoples and local communities are not developed in an accessible, culturally appropriate and inclusive way.	**C - Low Risk**

In particular, the creation and operation of a regional knowledge hub on Ecosystems based Adaptation of Dry Corridor and Arid Zones brings with it multiple benefits and positive impacts for the inhabitants of the Central American region in general, as will be seen in the following benefit chapter; however, the risks of this activity, although with a low valuation, may be social in case knowledge management products are not easily accessible, understandable and inclusive to the general community.

In addition, in capacity building activities, workshops and training programmes, situations could arise where the necessary means for the full, comprehensive and effective participation of all stakeholders are not guaranteed or ensured.

Finally, in the specific case of Guatemala, if knowledge management products and training spaces are not accessible, culturally appropriate and inclusive for indigenous peoples located in the Project municipalities, and the country in general, that would subsequently consult this information.

7.1.3.2 Activity 3.2. Raise awareness of financial mechanisms for the implementation of CCA interventions.

Risks and Impacts	Risk Level
• Occupational accidents and disease for project workers performing fieldwork. • Worker safety affected by public order issues. • Information related to financial mechanisms is not adequately disclosed, in particular, its environmental and social risks and impacts linked to indebtedness, and EbA activities approach in a format that is not accessible, timely, understandable and appropriate.	**C - Low Risk**

This activity involves training to access financial instruments and the EbA credit line. Family subsistence agricultural producers will only have access to the grant fund, while producers engaged in commercial activities will have access to other instruments. Therefore, the identified risks are relating to the community not being fully informed about environmental risks and impacts, such as habitat impacts if activities to be financed are not implemented in compliance with the requirements and within stipulated areas, as well as social issues linked to the conditions of indebtedness. Similarly, EbA activities approach could be in an inaccessible format that is delivered in an untimely, incomprehensible and inappropriate manner (especially if it is too technical). The probability of this happening is low, although the impact could be high; however, the risks of this activity are characterized as low.

Furthermore, there could be risks related to safety, accidents and occupational disease for the fieldworkers.

7.1.3.3 Activity 3.3. Enhance capacity of national and local-level policy-makers, in partnership with knowledge network of universities, research centers and private sector, to integrate climate change adaptation and the valuation of natural capital into local policies.

Risks and Impacts	Risk Level
• Ecosystem services valuation methodologies can generate biases when evaluating and visualising the importance of certain types of ecosystems, causing an impact on biodiversity and habitats. • In the guidelines for economic incentives application, related information is not adequately disclosed on environmental and social risks and impacts to interested parties in an accessible, timely, understandable and appropriate way • In case of economic incentives applied to indigenous peoples, risks associated with non-recognition, respect or inclusion of their mechanisms of government and decision-making could have place, particularly if economic valuation of ecosystem services or receiving money is against its principles. • The use of the language, cultural practices, institutional arrangements and religious beliefs of peoples are hindered. • The full participation of stakeholders is not promoted, stakeholders point of views may not considered, and accessible and inclusive means are not provided the in workshops to be organised under this activity. • Accidents and occupational disease for project staff performing fieldwork. • Workers safety affected due to public order issues.	**B - Medium Risk**

The Project proposes to develop or adjust the methodology to assess ecosystem services in order to increase policymakers capacity at the local level; methodologies for assessing ecosystem services can cause biases when assessing and visualising the importance certain ecosystems type, especially those non-forested, thus allow degradation patterns, causing impact on biodiversity and habitats.

In addition, guidelines development for local governments to outline protocols and criteria for the implementation of economic incentives, and training activities to provide policy changes, including the use of protocols and criteria for EbA adoption and the application of economic incentives, could trigger environmental and social risks to the Project target population if related information is not

adequately disclosed to stakeholders in a format and in a way that is accessible, timely, understandable and appropriate.

In the case of Guatemala, the application of economic incentives to indigenous peoples may generate a risk of non-recognition, respect or inclusion of their own governance and decision-making mechanisms, particularly if economic valuation ecosystem services or receiving money is against their principles. Similarly, access to grant facility donations and other possible similar financial mechanisms could obstruct peoples' use of language, cultural practices, and religious beliefs.

Furthermore, workshops for Dry Corridor and Arid Zones municipalities that seek to disseminate information to local governments, may not encourage the participation of stakeholders, especially those affected by the Project, points of view of stakeholders may not be considered, and accessible and inclusive means could not provide.

Finally, risks associated with project personnel performing field work could have place, as they could be exposed to accidents and occupational disease, and their safety may be affected in the event of situations of public order alteration.

7.1.4 Output 4. Financial products and services to finance EbA investments are offered by Partner Financial Institutions (PFI), including PFI access to EbA on-lending funds and support mechanisms.

Based on an intensive analysis of the risks and impacts that may arise in the social and environmental field by the implementation of the project activities, the analysis of each activity of Output 4 is presented below:

7.1.4.1 Activity 4.1. Set-up and establish the financial structure for the lending and guarantee facilities.

This activity includes the development of fiscal, legal and regulatory studies, create a legal entity and the establishment of a steering committee. There are no risks or impacts on the environment or the community related to these activities.

7.1.4.2 Activity 4.2. Financing mechanism of the EbA lending facility and guarantee facility.

Risks and Impacts	Risk Level
•Decision-making is not consistent with the needs and expectations of stakeholders. • A possible decrease in economic income could occur, in case credit conditions do not have favourable interest rates and terms for small producers; also, credit conditions are not in	**B - Medium Risk**

accordance with the return rate of EbA investments, which would cause high indebtedness of agricultural producers. • Sustainable development and opportunities for indigenous peoples/ local communities are not promoted in a way that is accessible, culturally appropriate and inclusive. •The culture, knowledge and practices of indigenous peoples/traditional local communities are not recognised, respected and preserved. •The use of traditional language, cultural practices, institutional arrangements and religious beliefs are not considered. •Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Agricultural frontier expansion could be increased if environmental and social criteria is not included for access and monitoring the designed financial instruments.	

The developed EbA lending facility for small and large-scale EbA investments at the farm, business and household level, will only be carried out with those producers who have commercial agricultural activities; risks associated with decision-making not consistent with the needs and expectations of all stakeholders could occur, especially if the needs of small farmers and households are not consider as well as their payment capacity.

A possible decrease in economic income could have place, in the event that credit conditions do not have favourable interest rates and terms for small producers, the return rate of AbE investments is not consistent with income, causing high indebtedness of agricultural producers.

Particularly, if the credit line is promoted in indigenous communities, the culture, knowledge and practices of indigenous peoples/local traditional communities may not be recognised, respected and preserved, especially as monetary transactions for the improvement of ecosystem services may be against their ideology, that is if these mechanisms are not culturally appropriate and inclusive. Then again, risks related to not considering the use of native language, cultural practices, institutional arrangements and religious beliefs of peoples could also occur.

Additionally, some Ecosystem-based Adaptation measures are the agricultural or agrosilvopastoral management of livestock, which use pesticides or fertilisers and could be increased to the extent of the credit lines replication success, thus leading to an increase in agrochemicals. This growth could have an impact on the occupational health and safety of Project workers, causing poisoning, and/or contamination of natural resource in case of their mismanagement.

Finally, the designed financial instruments could increase the expansion of agricultural frontier, if the environmental criteria for grant it and the social criteria for monitoring the implementation of financed actions are not clear.

Specifically, the risk analysis for each of the Project's countries shows following impacts:

- **Guatemala**

The selected municipalities in Guatemala have a high poverty rate (80%), except for Chicamán that reports a rate close to 34%. This particular condition could increase risk, if the credit payment fees, interest rate and terms are not in line with their payment capacity. Also, in Guatemala, the Project will work with indigenous peoples, by promoting a financial instrument it could incur in non-recognition, respect, or inclusion of the cultural values of the peoples.

- **Honduras**

In Honduras, selected municipalities have high poverty rates ranging from 58% to 80%. This particular condition could increase the risk if credit fees for, interest rate and deadlines are not consistent with the inhabitants' capacity of payment.

- **Dominican Republic**

High rates of poverty are present in the Project's target areas, ranging from 40% to 65%, therefore, if credit fees, interest rate and terms are not consistent with the population payment capacity, their poverty could be increased.

7.1.4.3 Activity 4.3. Technical assistance (TA) facility to strengthen technical capacity of accredited and non-regulated financial institutions to access and channel funds for small- and large-scale EbA investments.

Risks and Impacts	Risk Level
• The necessary means for full, broad and effective participation are not guaranteed and ensured. • Accidents and occupational disease for project personnel performing field work. • Worker safety could be affected due to public order issues.	**C - Low Risk**

The most visible risks for this activity are related to working conditions, as there may be impacts on the safety of workers by public order problems and/or accidents and disease on field visits.

- **El Salvador**

El Salvador is a country in Central America with the highest rate of homicide violence, according to EFE (2018) and the safety conditions reported in the baseline, so the safety of Project workers is at risk due to public order issues.

- **Honduras**

Honduras is the second country on the continent with the highest rate of homicide violence according to EFE (2018), therefore the most visible risk is on Project worker safety due to public order problems. However, municipal data reports a low level of violence and absence of gangs, so this risk can be classified low.

7.2 BENEFITS OF THE PROJECT ACTIVITIES

The set of actions proposed by the Project will contribute to improving livelihoods while increasing the resilience of Dry Corridor of Central America and the Arid Zones of Dominican Republic inhabitants, through the improvement of adaptive capacity of the ecosystems and services to extreme climate events, directly benefiting the health conditions and well-being of the populations in the target zones, and increasing food and water security.

It is estimated that the activities to be developed will positively impact 1,750,000 people living in the seven watersheds of the countries that make up the project; however, they will also indirectly benefit large numbers of people across the region by incorporating ecosystem-based adaptation criteria into national policies, improving the capacity of local governments to implement EbA strategies at the territorial level, and to generally facilitate greater access to credits and other financial instruments for the implementation and scaling of EbA actions.

The project will, therefore, promote an increase in the management of national financial resources and technical skills to implement climate change adaptation interventions, through a series of innovative approaches that include increasing water supply from watersheds and reducing demand from domestic and agricultural users to address the region's growing water stress from climate change; sustainable restoration and management of forests, wetlands and agroforestry landscapes to ensure water supply; and the promotion of water efficiency technologies and approaches to manage the growing demand for water.

7.2.1 Benefits of Output 1.: Strengthened technical capacity of local government, farmers and rural communities to implement EbA and other adaptation measures.

7.2.1.1 Activity 1.1. Develop site-specific intervention plans for the 7 target catchments to integrate EbA measures through a participatory process with municipal authorities, local communities, and other stakeholders.

This activity involves the community in a participatory and innovative way, in the territory planning through the development of each of the 7 basins intervention plan and will generate spaces to achieve an integrated dynamic work with municipal authorities, promoting community empowerment and improving social cohesion.

The dialogue space will promote relations construction between the different stakeholders involved, articulating visions and achieving consensus on how to develop the interventions in each basin, as well as developing joint measures in each territory; in particular, Guatemala regions where work with Indigenous populations is planned, will allow their visions of the territory, their traditional knowledge and ancestral knowledge to be heard and included in its planning.

Also, the formulation of basin intervention plans will provide local authorities and community stakeholders with technical capabilities to anticipate and determine levels of climate vulnerability, risks and future opportunities. In addition, it will allow community monitoring in each municipality of intervention plans formulation process for each basin.

Moreover, the territories and their local authorities will have specific diagnostics of each basin, integrating elements of local knowledge of the territory and its specific problems, with aspects of technical expertise that allow the identification of risks and opportunities for improving overall basin management.

Within the environmental benefits, territory intervention planning centred on Ecosystem-based Adaptation strategies will stop deforestation and agricultural frontier expansion, while strengthening the management of natural resources in the territory. This results in a greenhouse gas emissions reduction from deforestation and forest degradation, and an increase in CO_2 capture by improving the region's carbon sinks. The connectivity of natural habitats will also ae improved by promoting the growth and development of native fauna and flora species.

7.2.1.2 Activity 1.2. Provide technical assistance to municipal authorities, farmers and rural communities for the implementation of EbA practices as well as water- and resource-efficient technologies.

Through technical assistance activities for local authorities, farmers and rural communities, the capacities of the stakeholders on efficient water and energy use technologies and sustainable EbA practices will be strengthened, allowing the multiplication of this knowledge with other local stakeholders, through the training programme of trainers.

Also, technical tools for public workers to bring EbA strategies into municipal policies and territorial management strategies will be also be provided, in this way, the prioritisation of more sustainable management of natural resources will have place in the territories development agendas, demonstrating economic and social benefits from ecosystems and native species conservation.

Furthermore, it will enable vulnerable populations, small commercial producers, small subsistence farmers, local communities and individual households to adopt water and energy efficient technologies and build capacities to improve the management of natural resources, for instance sustainable land management practices which optimise ecosystem services provision in watersheds.

Besides, ecosystems restoration through AbE strategies will improve water safety in future weather conditions by optimising the hydrological flow and infiltration of rainwater in groundwater reserves, while using technologies such as rainwater harvesting systems, will increase household water safety and reduce water demand. This not only provides benefits for populations settle in the Project's direct influence area, but also for all inhabitants located along the selected watersheds.

In addition, the adoption of energy-efficient technologies will optimize biomass combustion processes and charcoal production by reducing people's exposure to particulate matter, and combustion gases from traditional systems; likewise, the use firewood will be reduce, thus dropping

forests and ecosystems degradation caused by the extraction of firewood individuals, and lowering CO_2 emissions from combustion.

7.2.1.3 Activity 1.3. Provide technical assistance to farmers and rural communities for the development of natural resource-based businesses and alternative climate-resilient livelihoods.

With the livelihoods assessment results of each of the seven basins, local governments will have greater and better information to carry out comprehensive territorial planning, strengthen interventions proactively to reduce climate risks that become evident, and promote alternatives that best suit the needs of local people and ecosystems.

Community participation workshops for action plans construction will allow to contemplate the realities of local communities, as well as their aspirations and visions of development. This will also support the maintenance of traditional knowledge complemented by other types of technical knowledge.

Through training programs on livelihood for the creation of local natural resource-based businesses, the community will be enabled to have technical tools and strengthen their capacities for building local businesses, boosting earnings and strengthening partnerships for commercialisation of products from EbA strategies; it will also allow for a local economy diversification by including ecotourism strategies and non-timber forest products harvesting.

Therefore, their quality of life and economic empowerment will be improved, while encouraging businesses to benefit from goods and services that ecosystems provide through EbA strategies, strengthening vulnerable communities by providing climate-resistant revenue generation opportunities.

Building entrepreneurial skills also provide work opportunities for women and young people who have the least access to paid work, discouraging the migration of young capital that usually moves to large cities for economic income and better quality of life. Similarly, the creation of enterprises results in an alternative to counteract the growing informal economy seen in all Project target areas.

Finally, all activities related to the creation of enterprises will allow the territories to increase food and nutrition security not only by promoting the diversification of income sources, but also by the possible increase in food production.

7.2.2 Benefits of Output 2. Demonstration adaptation interventions implemented in rural communities across seven target catchments in the Dry Corridor and Arid Zones.

7.2.2.1 Activity 2.1. Implement large-scale EbA interventions within rural communities across the seven target catchments.

Specific EbA intervention strategies in each basin, customised and adapted to the territories biophysical conditions, will allow agricultural producers and inhabitants of prioritised basins to learn strategies to develop EbA actions in their premises directly from the project's technical staff, with constant technical support to ensure the successful implementation of these activities.

The implementation of field activities also will lead to improved provision of ecosystem assets from watersheds, including improving water quality and improving underground water recharge; in particular management of agroforestry, forestry and agrosilvopastoral systems, soil conservation will be allowed, improving fertility by progressive accumulation of organic matter, reduce soil erosion by runoff, improving water filtration and moisture retention of soils, and improving water quality and availability; moreover, greater biodiversity will be promoted in livestock and agricultural systems, as well as its landscape connectivity improvement; likewise, the climate resilience of production systems will be increased, reducing risks and losses of the agricultural sector due to climate variability.

Through forest restoration activities of forest and wetlands, and the establishment of mixed native species plantations, natural processes of water and climate regulation will be strengthened, providing a more stable water safety to inhabitants, especially during drought sessions. In addition, by increasing forest cover, landscape conditions are stabilised in extreme weather events; for instance, during rainy season forest covers with native species prevent or reduce the likelihood of landslides and floods; during extreme heat waves, forests help to reduce thermal sensation and provide shade. Besides, deforestation reduction can be impacted, therefore, reducing greenhouse gas emissions from forest systems and other native ecosystems degradation and deforestation.

7.2.2.2 Activity 2.2. Implement demonstration water- and resource-efficient technologies within rural communities across the seven target catchments.

Technologies for the efficient use of water resources proposed under this activity will contribute to improving the quality and availability of water through the reduction of its consumption. Besides, it will increase water safety for households due to rainwater harvesting systems strategies and solar panels pumping systems that are proposed.

By promoting more efficient combustion systems, the emission of carbon dioxide is reduced, as well as the consumption of firewood for charcoal production, which is ultimately summarised in less deforestation, and thus in the maintenance of carbon sinks. It also improves the life quality of rural populations, and their health conditions by reducing smoke and particulate matter generation from conventional systems.

Finally, the adoption of water and resource efficient technologies will increase the resilience capacity and livelihood improvement of the most vulnerable communities, while improving the resilience of ecosystems and ecosystem-based services.

7.2.2.3 Activity 2.3. Establish the grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing and start operations.

The establishment of a grant facility that operates through non-reimbursable financing, will allow community of the Project target area to strengthen all actions to achieve an adaptation to climate change based on ecosystems, especially the most vulnerable and in poverty conditions stakeholders, who by their own means cannot implement actions to efficiently reduce their vulnerability to climate change.

Similarly, EbA activities contribute directly to improving environmental conditions, by promoting biodiversity conservation and sustainable management of natural living resources, as well as improving economic and social conditions of target populations, improving productivity and increasing productive systems resilience under extreme weather events, which are increasingly frequent in the region.

Furthermore, the monitoring mechanisms to be developed as part of the facility, will allow beneficiary communities to access technical assistance. Likewise, results from communication strategies will provide transparency to the entire process and will allow both general community and donors, to know the scope and end of donations.

7.2.3 Benefits of Output 3. Information on climate change adaptation and its financing disseminated across the region and mainstreamed into local and national policies.

7.2.3.1 Activity 3.1. Establish regional knowledge hub for the dissemination of information on EbA in the Dry Corridor and Arid Zones.

The establishment of a regional knowledge centre will provide a platform for the dissemination of information throughout the region, and will help decision makers to take an evidence-based planning approach, even allowing territories and basins not included in the project to access the knowledge generated in Central America, understand and equate their environmental problems and response strategies raised and developed in this experience, providing information to political, academic and social processes at the regional level.

It is also an opportunity to link specific territory knowledge of rural and indigenous communities, as well as the contributions they develop to promote sustainable management of natural resources.

Knowledge products that are shared will improve decision making on guidelines, directives and policies to respond to climate change adaptation, as well as the creation of territory models that enable landscapes and habitats connectivity far beyond the geopolitical boundaries of each country, integrating particular considerations of each territory into the planning and ordering processes, as well as including dynamics and needs of vulnerable groups as women, indigenous people, rural population and young people.

Therefore, action carried out under this activity will strengthen technical capacities of policymakers and decision-makers at municipal level and community organisations to make better decisions, develop projects that aim to increase resilient practices and control projects implemented in the municipalities.

From an environmental point of view, these processes will allow to deflection historical trends in Central American ecosystems degradation, allowing the inclusion of the environment as a valuable asset in the planning processes of the territory, improving watershed and water resource management in the dry corridor and arid areas of the region.

7.2.3.2 Activity 3.2. Raise awareness of financial mechanisms for the implementation of CCA interventions.

Training of public agency officials at municipal level will enhance the capacity of decision makers to allocate economic resources and promote financial incentives for EbA practices adoption in communities based on the Project prioritised basins.

This will enable farmers and entrepreneurs, as well as local communities and organisations to have a greater understanding of financial mechanisms and benefits obtained from EbA strategies implementation.

In addition, it will strengthen the adoption of Ecosystem-based Adaptation strategies, generating specific knowledge that allows communities and their organisations to create business models tailored to their potential, and access to financial systems in a simple way to achieve successful revenue generation through EbA initiatives.

7.2.3.3 Activity 3.3. Enhance capacity of national and local-level policy-makers, in partnership with knowledge network of universities, research centers and private sector, to integrate climate change adaptation and the valuation of natural capital into local policies.

Actions considered to increase policymakers capacity, will improve the ability of decision-makers to estimate an economic value for ecosystem services as result of methodology for ecosystem valuation, allowing them to raise awareness about the importance of sustainable management of natural resources, strengthening institutions capacity to demonstrate the value and effectiveness of EbA interventions in territories, and increase resilience of vulnerable communities in Dry Corridor of Central America and Arid Zones of Dominican Republic.

In addition, it will allow local governments to adopt policies to implement and generate economic incentives to facilitate farmers and rural communities to increase their resilience to extreme weather events and improve socioeconomic conditions, while enhance the region's habitats conditions.

Finally, it will generate regional dialogues that allow to plan and think policies aimed at climate resilience, with a comprehensive environment, ecosystem and social view of the region, turning policies locally adopted more effective and strengthening economic initiatives developed at the municipal level.

7.2.4 Benefits of Output 4. Financial products and services to finance EbA investments are offered by Partner Financial Institutions (PFI), including PFI access to EbA on-lending funds and support mechanisms.

7.2.4.1 Activity 4.1. Set-up and establish the financial structure for the lending and guarantee facilities.

The generation of this structure will contribute to better monitoring and control of the financial instruments that will be created under the Project, guidelines can be created and ensured to properly implement EbA strategies, not only under responsible banking criteria but considering the Project safeguards, and potentiate the Project benefits. Likewise, the Steering Committee will allow for timely corrections in the event that any risk and impact associated with the activities to be financed are triggered, and adjust the eligibility, follow-up and monitoring criteria.

7.2.4.2 Activity 4.2. Financial mechanism of the EbA lending facility and guarantee facility.

By accessing a lending facility to implement Ecosystem-based Adaptation activities at local level, agricultural producers, can improve the efficiency of their production processes, particularly small ones, therefore improve their family group conditions by reducing their poverty and enabling employment diversification. It will also create opportunities to develop businesses based on natural resources and alternative livelihoods, considering climate scenarios and market demand for products and services.

Also, accessing an EbA credit line allows new business opportunities for women and young people living in these areas, even more considering the high unemployment gap of men and women for instance in Guatemala, where 85% of workforce are male workers in the Project's targeted municipalities.

The EbA credit line will develop companies aiming to produce AbE projects generating an economic, social and environmental impact. Greater access to this type of credit will reduce financial barriers to implementing climate change adaptation measures and will allow financial institutions and commercial banks to become more aware of market opportunities in this field.

Then again, since this facility is a combined credit line, which will receive different sources of financing, not only from donation resources, it will allow Project countries to have a financial instrument that can be sustained in the long term, and even be replicated in other provinces and municipalities in the medium term.

7.2.4.3 Activity 4.3. Technical assistance (TA) facility to strengthen technical capacity of accredited and non-regulated financial institutions to access and channel funds for small- and large-scale EbA investments.

This activity will primarily promote capacity building of financial intermediaries on the concepts, financial methodology and tools to provide products and services oriented to EbA technologies, therefore they will have tools to advise future clients on strategies to optimise their production models with measures such as conservation of wetlands, forests and agroforestry systems that, in addition to reducing losses and damage from the effects of climate change, increase the sustainable management of natural resources, improving biophysical conditions of the areas to be intervened, while increasing business productivity.

In addition, this activity will allow to customise technical assistance models according to the characteristics of each PFI, so that financial instruments will have constant technical support, even during the implementation and operation of financed activities. Likewise, the establishment of constant reassessment methodologies will allow PFI to take early corrective actions in the event that any risks or impacts can be triggered by the instruments' implementation.

8 MITIGATION MEASURES

The Green Climate Fund's Environmental and Social Policy describes the responsibilities related to the management of environmental and social risks throughout the life cycle of the activities financed by the Fund, therefore, the GCF is responsible for requiring and ensuring that risks classification processes are done according to the requirements of the Environmental and Social Standards (GCF, 2019a). Additionally, according to the GCF (2019a), an activity's environmental and social risk category indicates the extent of due diligence to be performed by the accredited entity or its executing entities; the mitigation measures, including necessary resources to implement the environmental and social management framework; and stakeholder participation and information disclosure.

Therefore, once potential risks and impacts that may be triggered by the Project implementation in communities and environment have been identified, a correlation of the activities with the environmental and social safeguards of the Green Climate Fund is made, in order to support the successful implementation of proposed by contributing to the generation of guidelines so that no involuntary damage to people or ecosystems is generated (WRI, 2015). The environmental and social safeguards of the Green Climate Fund stablish a general standard (ESS1) for the evaluation and management of environmental and social risks and impacts, and seven remaining standards that cover specific themes (ESS 2-8); ESS1 covers the elements that must be implemented to support the remaining seven standards implementation (GCF, 2019). The following figure shows each Standard:

Figure 3. Social and Environmental Safeguards of the Green Climate Fund

Also, in accordance with the previous chapter risk analysis, guidelines that must be followed by the parties involved are established in order to avoid, mitigate and reduce possible risks and negative impacts of each of Project implementation activities. While traditional risk assessment methodologies require the establishment of control actions only for high risks, or Category A as considered in this project, which represent those activities with significant potential risks and adverse environmental or social impacts, this Project has stablished safeguards mechanisms guidelines for each activity, even though 6 activities were classified category B - medium risk, 5 evaluated in category C - low risk, and a risk-free activity. Additionally, since the project involves intermediary financial institutions (IFIs and PFIs), it is classified as Medium level of intermediation, I-2 for the GCF.

8.1 Mitigation measures and guidelines for developing the Output 1. Strengthened technical capacity of local government, farmers and rural communities to implement EbA and other adaptation measures.

8.1.1 Mitigation measures and guidelines to develop the activity 1.1 Develop site-specific intervention plans for the 7 target catchments to integrate EbA measures through a participatory process with municipal authorities, local communities, and other stakeholders.

GCF Safeguards	Mitigation measures
ESS2. Labour and Working Conditions ESS3. Resource Efficiency and Pollution Prevention ESS4. Community Health, Safety and Security ESS6. Biodiversity Conservation and sustainable management of living natural resources IPP. GCF's Indigenous Peoples Policy	• A Stakeholder Engagement Plan must be developed so this activity implementation guarantees the full, wide and effective participation of all stakeholders involved, especially vulnerable groups and indigenous populations of Guatemala. • Particularly for indigenous populations, the recognition, respect and inclusion of their own governing mechanisms, and their ancestral beliefs and knowledge should be secured. • Appropriate capacity building of key stakeholders must be developed so that they can participate in a timely manner in decision-making, and governing mechanisms of the different stakeholder groups located in target area should be included. • Likewise, as part of the Stakeholder Engagement Plan, this activity should include the participation of women in the formulation, design and implementation of the basin intervention plans, particularly in those activities that promote local governance processes, conservation strategies and productive projects with a gender approach. • An integrated pest management and agrochemicals use programme must be developed, following the guidelines established in this ESMF, which will mitigate the identified risks on communities and project workers. • During the construction of the seven basins Plans, clear guidelines should be generated on the type and scope of the activities that will be included, emphasising that for no reason deforestation and ecosystem degradation will be promoted. • The occupational health and safety protocol for field work should be developed. • Likewise, a public order risk safety protocol must be developed for field work

Instruments to be developed during implementation that will be applicable to this activity:

• Stakeholder Engagement Plan

• Indigenous Peoples Plan

• Integrated pest management and agrochemical use programme: in order to avoid impacts on workers' health and contamination of natural resources due to an inadequate management of agrochemicals, the Project Executing Unit must develop a pest management and agrochemical use programme for all Project's activities, following section 7.7 guidelines.

• Occupational health and safety protocol for field work.

• Public security risk protocol for field work.

8.1.2 Mitigation measures and guidelines to develop the activity 1.2. Provide technical assistance to municipal authorities, farmers and rural communities for the implementation of EbA practices as well as water- and resource-efficient technologies.

GCF Safeguards	Mitigation measures
ESS2. Labour and Working Conditions ESS3. Resource Efficiency and Pollution Prevention ESS4. Community Health, Safety and Security ESS5. Land Acquisition and Involuntary Resettlement ESS6. Biodiversity Conservation and sustainable management of living natural resources IPP. GCF's Indigenous Peoples PolicyIPP. GCF's Indigenous Peoples Policy	• The Stakeholder Engagement Plan must include procedures to establish clear rules for participation and distribution of benefits in an equitable manner among the key stakeholders. • Appropriate capacity building of key stakeholders must be developed so that they can participate in a timely manner in decision-making, and governing mechanisms of the different stakeholder groups located in target area should be included. • In case of indigenous populations participation, their life plans, policies and philosophies should considered to promote appropriate decision making for the stakeholders and the management of natural resources. • With regards to GHG emissions caused by EbA sustainable practices protocols implementation, the project will increase carbon sinks by enhancing forest cover in agroforestry, silvopastoral and agrosilvopastoral systems, as well as carbon storage from restoration activities, so the carbon balance will be positive when CO2 capture is higher than possible emissions generated by project. Nevertheless, technical Project staff should promote the use of nitrogen fertilisers of organic or biological origin when possible. • Due to the possible use of pesticides and fertilisers, this activity should apply the integrated pest management and agrochemical use program. • Safety protocol for field work, and the occupational health and safety protocol must be also applied.

Instruments to be developed during implementation that will be applicable to this activity:

• Stakeholder Engagement Plan

• Indigenous Peoples Plan

• Integrated pest management and agrochemical use programme.

• Occupational health and safety protocol for field work.

• Public order risk safety protocol for field work

8.1.3 Mitigation measures and guidelines to develop the activity 1.3. Provide technical assistance to farmers and rural communities for the development of natural resource-based businesses and alternative climate-resilient livelihoods.

GCF Safeguards	Mitigation measures
ESS2. Labour and Working Conditions IPP. GCF's Indigenous Peoples Policy	• The necessary means for full participation must be guaranteed, so that all Project target basins inhabitants can properly participate in training programs for stablishing locally appropriate businesses, based on their livelihoods and the natural resources characteristics; therefore, the project must carry out the training program in accordance with the guidelines established in the Stakeholder Engagement Plan. • Likewise, all project employees who carry out field activities must follow the safety protocol and the occupational health and safety protocol.

Instruments to be developed during implementation that will be applicable to this activity:

• Stakeholder Engagement Plan

• Indigenous Peoples Plan

• Occupational health and industrial safety protocol for field work.

• Public order risk safety protocol for field work

8.2 Mitigation measures and guidelines for developing Output 2. Demonstration adaptation interventions implemented in rural communities across seven target catchments in the Dry Corridor and Arid Zones.

8.2.1 Mitigation measures and guidelines to develop the activity 2.1. Implement large-scale EbA interventions within rural communities across the seven target catchments.

GCF Safeguards	Mitigation measures
ESS2. Labour and Working Conditions ESS3. Resource Efficiency and Pollution Prevention	• A Protocol for integrated pest management and agrochemical use should be developed and applied to all project activities that require the use of fertilisers or pesticides, in order to avoid health workers impacts and contamination of natural resources by an inadequate handling of agrochemicals. This protocol will be applied especially for the establishment of nurseries, active restoration activities, agroforestry / silvopastoral / agrosilvopastoral systems, new mixed native species plantations and sustainable firewood plantations. • Furthermore, in order to reduce GHG emissions from nitrogen fertilizers of chemical origin, when possible, the Project technical team should prioritise the use of organic or biological fertilisers. • Likewise, the technical assistance process must include a module for the efficient management of solid and liquid waste from agricultural activities.

ESS4. Community Health, Safety and Security ESS6. Biodiversity Conservation and sustainable management of living natural resources. IPP. GCF's Indigenous Peoples Policy	• Additionally, clear criteria should be established on the characteristics and scope of actions for sustainable wood plantation, agroforestry, silvopastoral and agrosilvopastoral, in order to avoid the expansion of the agricultural frontier, and deforestation of natural ecosystems. • EbA actions to be implemented in indigenous territories, must be previously arranged and built with indigenous peoples, preserving the use of language, cultural practices, and institutional arrangements of the peoples. • Moreover, if the EbA actions of ecological support restricts land use or modifies current subsistence means which results in the reduction of economic income, the Project must generate an economic compensation strategy for Producers. • In addition, in the event that foreign workers support Project activities development their labour contracts should clearly state that they cannot influence local culture; when possible, the Project will prioritise using the local labour, although this involves developing prior training processes. • Finally, the safety protocols for public order risks and occupational health and safety of the project must be applied.

Instruments to be developed during implementation that will be applicable to this activity:

•Integrated pest management and agrochemical use protocol.

• Inclusion of a module for the efficient management of solid and liquid waste in the technical assistance program.

• Indigenous Peoples Plan

• Economic compensation strategy if risks of economic income reduction are anticipated.

• Occupational health and industrial safety protocol for field work.

• Public order risk safety protocol for field work.

8.2.2 Mitigation measures and guidelines to develop the activity 2.2. Implement demonstration water- and resource-efficient technologies within rural communities across the seven target catchments.

GCF Safeguards	Mitigation measures
ESS2. Labour and Working Conditions ESS3. Resource Efficiency and Pollution Prevention ESS4. Community Health, Safety and Security ESS6. Biodiversity Conservation and sustainable management of living natural resources. IPP. GCF's Indigenous Peoples Policy	• The Project must guarantee the allocation of specialised technical staff for the installation of combustion systems, in order to avoid occupational hazards to the project communities. • A protocol for cleaning and maintenance of water collection systems should be created in order to avoid the proliferation of microorganisms and the accumulation of particles that may affect the health of the beneficiary population. • A prior analysis of communities' baseline should be conducted in order to determine where they use charcoal, and therefore if half-orange kilns can increase deforestation for firewood use. If so, the project must establish a strategy to prevent forest degradation and deforestation increase in the Project surrounding areas, for instance implementing firewood banks. • The safety protocol for public order risks, and occupational health and safety protocol of the project must be applied. • A Protocol must be designed and applied the Project technical staff to guarantee the correct disposal of used batteries from solar panel pumping systems, in order to avoid contamination of lead and other waste contained in the batteries.

Instruments to be developed during implementation that will be applicable to this activity:

• Indigenous Peoples Plan

• Strategy to prevent forest degradation and deforestation increase in the surrounding areas of the project, due to firewood and charcoal growing demand.

• Occupational health and safety protocol for field work.

• Public order risk safety protocol for field work.

• Protocol for cleaning and maintenance of water systems.

• Protocol for the correct disposal of discarded batteries from solar panel pumping systems.

8.2.3 Mitigation measures and guidelines to develop the activity 2.3. Establish the grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing and start operations.

GCF safeguards	Mitigation measures
ESS2. Labour and Working conditions ESS3. Resource Efficiency and Pollution Prevention ESS6. Biodiversity Conservation and Sustainable Management of Natural Living Resources IPP. GCF's Indigenous Peoples Policy	• For grant facility resources allocation, a Manual with Investment Principles should be created to define the criteria on activities type that will be financed, including the criteria to avoid financing activities that promote deforestation or degradation of natural resources. • Likewise, the Manual must contemplate the scope and objectives of the Project safeguards, which in this case are the safeguards of the Green Climate Fund. • The Fund operator must submit a digital daily report with information on the activities to which the funds were allocated and approved, georeferencing the beneficiary property location. This information will be analysed by the Steering Committee during its follow-up meetings, to adjust any pertinent criteria in order to comply with the safeguards. • Financial advisors working on the grant facility should be trained on the criteria for beneficiaries selection, so they can broadly advise future beneficiaries on the best options that should be implemented according to beneficiaries capabilities; this includes a differentiated access strategy for the most vulnerable stakeholders, as small producers and community organisations. • Specific criteria for granting financial incentives should be established and included in order to guarantee the proper management of critical areas and complementary conservation strategies, as well as criteria to ensure the most vulnerable stakeholders inclusion to allow them access to incentives, as a key part of the Stakeholder Engagement Plan. • In Guatemala case, the application of economic incentives to indigenous peoples should be developed together with adequate FPIC process, where they express their clear approval to work with the reception of money from the Donation Facility, and Peoples full knowledge of this mechanism is evidenced, prior to implementation.

Instruments to be developed during implementation that will be applicable to this activity:

• Manual of Investment Principles for Grant Facility management.

• Stakeholder Engagement Plan: the Project will develop an in-depth Stakeholder Engagement Plan (SEP) during the implementation stage, based on the initial (SEP) developed in Chapter 11 of this

ESMF, where each Project activity must be deepen with the specific stakeholders of the municipalities where the project will be implemented.

• Indigenous Peoples Plan: chapter 8 contents the initial Indigenous Peoples Plan, with specific guidelines that must be followed in order to build a in depth Plan during the implementation phase.

8.3 Mitigation measures and guidelines for developing Output 3. Information on climate change adaptation and its financing disseminated across the region and mainstreamed into local and national policies.

8.3.1 Mitigation measures and guidelines to develop the activity 3.1. Establish regional knowledge hub for the dissemination of information on EbA in the Dry Corridor and Arid Zones.

FCV Safeguards	Mitigation measures
ESS2. Labour and Working Conditions IPP. GCF's Indigenous Peoples Policy	• A strategy to ensure that information products on best practices and lessons learned from the regional knowledge hub are easily accessible, understandable and inclusive for the community in general; including a specific strategy for indigenous populations, if necessary. • Similarly, training programs for those responsible for policies and decision at the municipal level, as well as training programmes for community organisations, should ensure the participation of all groups of stakeholders involved, especially the most vulnerable, following the guidelines of the Stakeholder Engagement Plan.

Instruments to be developed during implementation that will be applicable to this activity:

•A Strategy that ensures that information products from the reginal knowledge hub are easily accessible, understandable and inclusive for all stakeholders' groups settle in the Project target countries.

• Indigenous Peoples Plan

• Stakeholder Engagement Plan.

8.3.2 Mitigation measures and guidelines to develop the activity 3.2. Raise awareness of financial mechanisms for the implementation of CCA interventions.

GCF Safeguards	Mitigation measures

ESS2. Labour and Working Conditions IPP. GCF's Indigenous Peoples Policy	• Within the training programs, a module to address the socialisation of environmental risks and impacts from activities implementation to be financed with the grant facility and the credit line must be included, for instance, risks related to possible effects on natural habitats in case the activities are not implemented complying with the requirements and stipulated areas, and end up in an increase in deforestation and degradation. Likewise, social risks linked to the conditions of indebtedness must be socialised. • Also, the establishment of EbA activities should be socialised to interested parties in an accessible, timely, understandable and appropriate format, where technicalities are use only if the public has the knowledge level that allows them to understand, and if they are absolutely necessary. • Both measures need to be included in the Stakeholder Engagement Plan • Project personnel who travel and carry out field work must follow the Safety and the occupational health and safety protocol.

Instruments to be developed during implementation that will be applicable to this activity:

- Stakeholder Engagement Plan
- Indigenous Peoples Plan
- Occupational health and industrial safety protocol for field work.
- Public order risk safety protocol for field work.

8.3.3 Mitigation measures and guidelines to develop the activity 3.3. Enhance capacity of national and local-level policy-makers, in partnership with knowledge network of universities, research centers and private sector, to integrate climate change adaptation and the valuation of natural capital into local policies.

GCF Safeguards	Mitigation measures
ESS2. Labour and Working Conditions ESS3. Resource Efficiency and Pollution Prevention ESS4. Community Health, Safety and Security ESS6. Biodiversity conservation and sustainable management of living natural resources. IPP. GCF's Indigenous Peoples Policy	• Developed methodologies for assessing ecosystem services must be complemented by an analysis of the importance of natural ecosystems that generate less economic recognition for ecosystem services payment, in order to discourage historical degradation patterns that have affected biodiversity and habitats of the region. • Likewise, the elaboration of guidelines for local governments and training activities to be provided must contemplate a module on environmental and social risks and impacts that may be caused by indebtedness conditions, and by the allocation of resources to develop activities not approved by the Project. These communication processes must be carried out in accessible, timely, understandable and appropriate formats. • In the case of Guatemala, appropriate prior FPIC processes must be applied to indigenous peoples, where its full knowledge and understanding of financial instruments is evidenced, as well as the economic implications of ecosystem services valuation and receiving money from the grant facility is recorded, prior to implementation. • A clear work program must be provided to carry out workshops, to allow the participation of stakeholders, especially those affected by the project, where their opinions are considered and accessible and inclusive means are provided. • Finally, the project personnel who travel and conduct field work, must follow the Safety Protocol established for the project, and the occupational health and safety protocol

Instruments to be developed during implementation that will be applicable to this activity:

- Stakeholder Engagement Plan
- Indigenous Peoples Plan
- Occupational health and industrial safety protocol for field work.
- Public Order Risk Safety Protocol for field work.

8.4 Mitigation measures and guidelines to develop Output 4. Financial products and services to finance EbA investments are offered by Partner Financial Institutions (PFI), including PFI access to EbA on-lending funds and support mechanisms.

8.4.1 Mitigation measures and guidelines to develop the activity 4.1. Set-up and establish the financial structure for the lending and guarantee facilities.

GCF Safeguard	Mitigation Measure
ESS2. Labour and working conditions	The project must ensure for this, and all activities to be implemented, that staff hiring is clear and in compliance with the terms of employment, labour laws and other related to non-discrimination, equal opportunities, child labour and forced labour of direct, hired and third-party workers.

8.4.2 Mitigation measures and guidelines to develop the activity 4.2. Financial mechanism of the EbA lending facility and guarantee facility.

GCF safeguards	Mitigation measures
ESS2. Labour and Working conditions. ESS3. Resource Efficiency and Pollution ESS4. Community Health, Safety and Security ESS6. Biodiversity Conservation and Sustainable Management of	• EbA credit line operation will require a Manual with the Investment Principles, in which the mechanisms are defined so that the PFIs can: 1. analyse the borrowing and payment capacity of Producers before the credit granting; this implies analysing the family unit, not just the productive activity. 2. Technically advise each producer according to their capacities. 3. Define what activity could be financed and under what conditions, define the criteria for its implementation, including not finance activities that promote deforestation and degradation of natural ecosystems. 4. The investment principles must contemplate the safeguards of the project and the GCF. • Likewise, a technical assistance program must be developed to support the activities to be financed, which include best practices in responsible banking topics. • Moreover, a monitoring, reporting and verification mechanism should be established to ensure that the activities carried out meet the criteria. This includes a digital daily report, addressed to the Steering Committee, with the credit beneficiaries' characteristics, and georeferenced location of the property. • Additionally, periodic audits should be carried out on these operations to identify and correct bad practices in case they are identified. These audit reports must be presented and evaluated by the Steering Committee, in order to effectively correct negative impacts on the community and the environment. • Financial institutions contract framework, must include a clause where the institutions pledge that activities financed with EbA resources will not promote deforestation and habitat degradation.

GCF safeguards	Mitigation measures
Natural Living Resources IPP. GCF's Indigenous Peoples Policy	• Recommendation guidelines will be developed to modify the mechanism for granting credit and align the logic of microfinance institutions with the logic of the productive activity that is promoted, so that the credit terms benefits agricultural producers. • Furthermore, in case of Guatemala's indigenous populations, the necessary FPIC processes must be carried out, where the full knowledge of the peoples and their clear approval and interest in accessing the credit line are expressed, prior to implementation.

Instruments to be developed during implementation that will be applicable to this activity:

• Manual of Investment Principles for EbA Credit Line management.

• Periodic audit reports on the allocation and operation of EbA credit line, which consolidates each PFI management.

• Indigenous Peoples Plan for Guatemala, in case the credit line is used by the indigenous population, under a properly documented agreement, where they express their interest and conformity.

8.4.3 Mitigation measures and guidelines to develop the activity 4.3. Technical assistance (TA) facility to strengthen technical capacity of accredited and non-regulated financial institutions to access and channel funds for small- and large-scale EbA investments.

GCF Safeguards	Mitigation measures
ESS2. Work and working conditions	• The training strategy should include topics related to biodiversity conservation, efficient resource management and pollution prevention, as well as the enhancement of benefits to reduce climate vulnerability. • The guidelines established in the Stakeholder Engagement Plan must be followed to guarantee the necessary means for full, broad and effective participation of all PFI personnel, especially those advisors who will work directly with the producers • Additionally, as part of the Stakeholder Engagement Plan, public officials of financial banks should be trained on integrated land use planning and biodiversity conservation and ecosystem services. • Occupational health and safety protocol for field work should be developed. • Likewise, a public order risk safety protocol must be developed for field work.

Instruments to be developed during implementation that will be applicable to this activity:

• Stakeholder Engagement Plan

• Occupational health and safety protocol for field work: an occupational health and safety protocol should be developed to cover the entire Project, where clear actions that all project employees should follow when undertaking field work are specified, in accordance to section 7.5 guidelines.

• Public order risk safety protocol for field work: in accordance with the guidelines established in section 7.6 of this document, a security protocol should be developed to reduce public order risks

for the entire Project, which must be followed by all workers who travel to filed in order to develop Project activities.

8.5 Guidelines for developing an Occupational Health and Safety Protocol for field work

At the beginning of the project implementation phase, the Project Executing Entities must develop an Occupational Health and Safety Protocol for Project staff who perform field work, in order to mitigate, reduce or eliminate possible risks and impacts related to activities, as occupational accidents such as falls, diseases from field work, thermal stress, animal bites, electric shock, among others. The protocol must establish the type of actions that must be considered to avoid, or react to any event, and could consider the UN Environment protocols and guidelines as base of good practice. In this way, the Project must:

- Carry out a continuous training plan on health and social security issues and keep records of activities.
- A report of occupational accidents, diseases and incidents must be kept, and relevant reports must be prepared.
- Preparations for possible emergencies and response actions should be made.
- Actions to address adverse impacts such as occupational injuries, deaths, disability or illness must be prepared.
- Similarly, processes will be established in workplaces reported by the Project workers to be unsafe or unhealthy, so that they can be withdrawn from the work situation with reasonable justification.
- In the case of third-party contracts, the Project will ensure that the performance of those parties is monitored and managed in relation to the protocol guidelines, which may also be included in the contracting agreements.

8.6 Guidelines for the development of a Public Order Risk Safety Protocol for field work

The Project must guarantee adequate security and integrity conditions to the Project personnel that carry out field activities, through the development and implementation of a Security Protocol that establishes guidelines on the mechanisms and procedures to manage the risks derived from situations of public order threats. For the development of this protocol, the UN Environment protocols and guidelines could be considered as base of good practice; likewise, the following guidelines must be considered:

- The protocol must establish the actions that must be carried out before field work, during the activity development and after field work.
  - Before the visit starts, necessary information related for the activities' development must

be established, for instance:

- Updated report of public order situation prior to the field visit.
- Updated fieldwork schedule.
- Report on the travel time, stakeholders in the area, type of transport, local authorities and their contact details, road conditions, etc.
- Determine whether prior communication with a community is needed, as well as any badge or staff identification for the field visit
- Communication equipment needed as well as communication forms to guarantee status reports from staff during the visit.
- Th stakeholders type needed for the visit must be determine.

- During the visit, the beginning must be communicated, and the establishment of follow-up procedures to guarantee the workers' status must be set, for instance behavioural etiquette (e.g. caution for taking photographs, clothing, etc.), completion and return activities.

- After field visits, the roads to avoid should be defined, and set the procedure to inform the completion of the activity.

- Finally, an action protocol must be created in case of armed confrontation in the area, mines presence or kidnapping risks.

8.7 Guidelines for the development of an integrated pest management and agrochemical use programme

For those Project activities where agricultural, livestock and forestry activities are promoted, an Integrated Pest Management and agrochemical use programme should be developed, in order to minimise and optimise their use, including continuous monitoring of adversities such as weeds, plagues and diseases. The following instructions should be considered:

- The project must ensure adequate management of pests and diseases of agricultural and forestry crops through strict observance of applicable legislation and compliance with the standards that have been established for this purpose as part of the forest and agricultural management instruments.
- Mechanisms for prevention and control of pests and diseases must be appropriate established according to the ecological conditions of each site.
- All phytosanitary control actions must adhere to what is established in the official regulations of the seven countries.
- Before starting any phytosanitary control activity, the Project beneficiaries must notify relevant state authorities, the control measures application.
- Besides, soil fertility will be managed by the use of precise fertiliser dosages, according to the specific needs of the crops, and preferably choose organic, biological or mineral origin fertilisers.
- Fertilisers application techniques that minimize the risk of contamination of aquatic

ecosystems, groundwater, the atmosphere and natural ecosystems present on the premises should be used.

- Risks associated with the application of agrochemicals and pesticides on wildlife such as bees or beneficial insects should be mitigated.
- In case pesticides and agrochemicals application is imminent, vegetation barriers that separate natural ecosystems should be established.
- Personnel who handle these types of products must be properly trained to avoid occupational diseases or risks arising from an inadequate management.

9 GUIDELINES FOR DEVELOPING THE INDIGENOUS PEOPLE PLAN

Due to the importance of preserving indigenous peoples rights, the Green Climate Fund has developed an Indigenous Peoples Policy, in order to recognise the identities and aspirations of different people by differentiating them from the majority groups, and which have traditionally been relegated in mitigation, adaptation and development models. It also recognises that many of these peoples are in vulnerable conditions, and in most cases the distribution of project benefits are not equally shared or the projects are not planned in an appropriate manner, bringing on negative impacts upon their lives since they would not properly involved either (GCF, 2018c).

In order to express a complete and effective commitment to involve indigenous peoples in the design, development and implementation of the activities to be financed by the GCF, the Policy encourages the anticipation and avoidance of any adverse impacts that their activities may have on rights, interests and well-being of indigenous peoples, and when is not possible to avoid them, they should be minimized, mitigated and/or compensated appropriately and equitably, in a consistent manner and improving the results over time (GCF, 2018c).

The Project Team, aware of distributing the Project benefits in an appropriate manner, will develop an Indigenous Peoples Plan (IPP) in compliance with the GCF requirements. In this chapter, initial considerations to properly involve indigenous peoples in the development and implementation of the Project are set, particularly for Guatemala's ethnicities since is the only country where indigenous peoples are located within the Project target basins.

Furthermore, once the sub activities to be implemented in Guatemala have been designed in depth and a clear scope of sub activities defined, a complete Indigenous Peoples Plan should be developed, describing the actions to minimise or compensate adverse impacts, identifying opportunities and actions to enhance the Project benefits for indigenous people, in a way that is culturally appropriate. In this case, indigenous peoples of Guatemala are not the only beneficiaries of the implementation of the activities, so the relevance of developing a Community Development Plan will be evaluated in accordance with the GCF guidelines (GCF, 2018c).

The preliminary structure of the Indigenous Peoples Plan for the Project is presented below, based on the components suggested by "Operational guidelines: indigenous peoples policy of the Green Climate Fund" (GCF, 2019c), considering that these guidelines are a part of a dynamic process to implement the Fund's Indigenous Peoples Policy, and the depth level to which this IPP responds in particular is due to the nature of the Project and the effects that will be addressed:

9.1 Baseline Information

This component should summarise relevant background information that clearly shows indigenous peoples' conditions, including indigenous women, circumstances and livelihoods, describing and quantifying the natural resources on which indigenous peoples depend on. The source of this background information should be appropriately referenced.

As mentioned in the baseline chapter of this Environmental and Social Management Framework, only the following ethnic groups in Guatemala are located in the watershed areas where the Project's actions will be implemented, those with ties to their lands due to inheritance, habitual use, and cultural or spiritual attachment; also, groups located in mixed settlements as part of a broader community in the Project target area.

On average, the 5 target Project municipalities have 77% of indigenous peoples (Zacualpa with 94.2%, San Andrés Sajcabajá 89.1%, Uspantán 80.4%, Canillá 44.7% and Chicamán 76.6%) (2002 Census). 2018 census a classification of 6 types of communities was made: Maya, Garífuna, Xinca, Afro descendent /Creole, Ladino or foreign; where 41.7% belong to Maya, 0.1% to Garífuna, 1.8% to Xinca, 0.2% to afro descendants or creoles, 56% Ladino and 0.2% are foreign. In the 5 prioritised municipalities, Maya population is 78.2% on average and only Canillá municipality is mostly Ladino predominant (53.8%).

The primary characteristics of the indigenous peoples:

- Mayas, with a significant population in Guatemala, is formed by the following ethnic group: achií, akateco, awakateco, chalchiteco, ch'orti', chuj, itzá, ixil, jacalteco, kaqchikel, k'iche', mam, opan, poqomam, poqomchi', q'anjob'al, q'eqchi, sakapulteco, sipakapense, tektiteko, tz'utujil, uspanteko. According to 2008 census, they represent 41.7% of the population, even though under inequality conditions in comparison to the rest of the population in terms of health, employment, income, housing and education. They have faced hydroelectric plants construction as they have been affected by water access difficulties and pollution in their territories. In Guatemala, Maya Peoples have 22 linguistic communities/ethnicities, all present in the Project municipalities, where Maya- K'iche' is predominantly with 61% of presence, followed by Ladino people with 21%, Maya-Poqomchi' 12% and Maya-Uspanteko 3%, although the amount of each linguistic community may vary among the municipalities.

- Xinca, are an indigenous people living in Guatemala and El Salvador, although for this Project purposes, only Guatemala inhabitants will be considered as they are located in the Project influence area. They have a language that is endangered and has fewer than 100 speakers. The territories in which they live have been invaded by mining projects and other development projects with serious impacts on the environment and natural resources.

- Garífuna in Guatemala are a cross-border people living in Nicaragua, Belize, Guatemala and Honduras, who are descended from African and indigenous Arawak and Caribes peoples who came into contact in colonial times in the Lesser Antilles, from where they were displaced. They arrived in Guatemala 216 years ago. These peoples suffer from racism and discrimination that is reflected in lack of employment opportunities which results in low incomes affecting basic needs satisfaction as housing, health, education, access to public services, among Other.

- Afro descendants/creoles in Guatemala, they speak English (also called Creole or Black Caribbean), they come from African ethnic groups from the coastal regions of West Africa. They also came through being displaced from Jamaica, Trinidad and Tobago and other Caribbean countries during the 14th century. They face invisibility, structural racism, lack of access to political participation and representation.

The following table presents indigenous peoples' distribution in the Project 5 target municipalities of Guatemala:

Table 40. Indigenous population distribution in Guatemala's prioritised municipalities

Municipality	Total Population	Village of Origin					
		Maya	Garífuna	Xinca	Afro descendant/Creole	Ladino	Foreign
Zacualpa	32,750	31,264	21	2	32	1,422	9
San Andrés Sajcabajá	24,981	22,251	7	0	11	2,712	0
San Miguel Uspantán	62,872	54,380	40	7	634	10,804	7
Canillá	12,172	5,560	19	2	19	6,553	19
Chicamán	39,731	31,162	21	0	11	8,536	1

Source: Project Team based on INE, XII National Population Census and VII de Vivienda - 2018.

According to the Family Agriculture and Strengthening of Peasant Economy (PAFFEC) Programme implemented by the Ministry of Agriculture, Livestock and Food through the National Rural Extension System, indigenous people who engage in the agricultural work are classified within sub-subsistence agriculture, identifying mainly as indigenous under conditions of extreme poverty, with little access to land, which leave their survival strategies to temporary or extra-parcelary employment. Some could be classified as subsistence Agriculture, which is basically households with production for self-consumption and provides some surplus of basic grains and other products for the domestic market. However, access to credit and technology markets is inefficient, infrastructure is poor, and there is little access to basic services.

Finally, there is a group of people listed under Surplus Agriculture, who are non-traditional agricultural producers and small-scale coffee producers. In case of non-traditional ones, possess irrigation systems and even have credit access. They fall under a segment that is dedicated to

commerce (not conceived as business agriculture), which has deficiencies in access to financial and technological markets. It is unclear whether any ethnic group could be classified as surplus farmers

Therefore, it is estimated that, although in two of the Project's prioritised municipalities, Uspantán and Chicamán, there is an important area where cardamom is cultivated, indigenous peoples dedicated to this crop cannot be classified as commercial farmers, nor medium private farmers.

Moreover, as part of Project's baseline the following indigenous peoples have been mentioned but it has been identified that their reserve areas are not located within the Project target area, therefore they are not contemplated in this Indigenous Peoples Plan; however, during implementation phase of the Project, an in depth review of any small groups within the Project influence area should be carry out to ensure that their traditions, cultural beliefs and norms are respected:

- Kakawira and nahuapipil in El Salvador, located in small groups, these populations are historically characterised by marginalisation and invisibilisation, and have fought tenaciously for their recognition at constitutional level for the full exercise of their fundamental human rights and for those cultural rights recognise as important. The National Project Team verified that the settled population is not located within the basin's area of influence and is therefore not covered by the Project.

- Ngäbe-buglé, are an ethnic group with a presence in Panama and Costa Rica. Being a cross-border people, it has been considered as a migrant population. The majority of the population Ngäbe y Buglé are currently in Panamanien territory, particularly in La Comarca. In Costa Rica the indígenous Ngäbe Buglé have occupied territories in the upper and lower South Pacific. They are constantly migrating between the two countries due to changes in labour markets and difficulty in accessing resources. The Ngäbe Buglé meet the needs of agro-industrial production activities that have progressively required labour, mainly in coffee and banana production. As unskilled workers, in conditions of social, economic and legal vulnerability, and, belonging to a differentiated socio-cultural and linguistic system, they constitute an "attractive" sector to meet these employment needs (FLACSO, 2014).

9.2 Key findings and analysis of impacts, risks and opportunities.

This section should summarise key findings, impact analysis, risks, and opportunities and possible recommended measures to prevent or mitigate adverse impacts, improve positive impacts, sustainable preserve and manage natural resource and achieve a sustainable community development in line with their plans.

In particular, the Project Ecosystem-based Adaptation to increase climate resilience in the Central American Dry Corridor and the Arid Zones of the Dominican Republic, promotes activities to improve

natural resources management and reduce populations vulnerability under extreme weather events, through a socio-ecological approach, recognising the link between social and ecological systems, and therefore no social impacts are expected for the indigenous people living in the prioritised basins; however, in order to avoid, prevent and/or mitigate potential future impacts, some risks related to each activity were identified and on which the Plan should focus:

Table 41. Potential risks related to indigenous peoples

Activity	Risks and impacts
1.1. Develop site-specific intervention plans for the 7 target catchments to integrate EbA measures through a participatory process with municipal authorities, local communities, and other stakeholders.	• The necessary means for full, broad and effective participation are not guaranteed or ensured. • No recognition, respect or inclusion of the governance and decision-making mechanisms. • Costs and benefits of intervention plans differentially affects the most vulnerable groups. • Restrictions on land use are generated. • Modification of livelihoods and/or income generation by modifications made to adopt sustainable practices of EbA activities.
1.2. Provide technical assistance to municipal authorities, farmers and rural communities for the implementation of EbA practices as well as water- and resource-efficient technologies.	• The necessary means for full, broad and effective participation are not guaranteed or ensured. • Restrictions on land use could be created. • Modification of livelihoods and / or income generation by modifications made to adopt sustainable practices proposed in EbA protocols. • The culture, knowledge and practices of traditional indigenous peoples/local communities are not recognised, respected and preserved. •The use of the language, cultural practices, institutional arrangements and religious beliefs of peoples are not considered. • Restoration activities in wooded areas could lead to ecosystem disruptions if activities do not meet the characteristics of ecosystems and special considerations for managing critical habitats in legally protected areas.
1.3. Provide technical assistance to farmers and rural communities for the development of natural resource-based businesses and alternative climate-resilient livelihoods.	• The necessary means for full, broad and effective participation are not guaranteed or ensured in workshops and training programmes. • No recognition, respect or inclusion of stakeholder governance and decision-making mechanisms. • Opportunities for indigenous peoples/local communities are not promoted in accessible, culturally appropriate and inclusive way.
2.1. Implement large-scale EbA interventions within rural communities across the seven target catchments.	• Land use restrictions are generated. • Modification of livelihoods or income generation from changes made to adopt sustainable practices proposed in EbA protocols. • The culture, knowledge and practices of traditional indigenous peoples/local communities are not recognised, respected and preserved. • Linking foreign people to local culture.

Activity	Risks and impacts
2.2. Implement demonstration water- and resource-efficient technologies within rural communities across the seven target catchments..	• Low acceptance of efficient kilns technologies. • The culture, knowledge and practices of indigenous peoples / traditional local communities are not recognised, respected and preserved
2.3. Establish the grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing and start operations.	• The change of practices could reduce agricultural systems productivity, therefore reduce producers' income. • The culture, knowledge and practices of indigenous peoples are not recognised, respected and preserved, in the event that monetary transactions are against their principles. • The use of language, cultural practices, and institutional arrangements of indigenous peoples is not considered. • The benefits of the donation facility resources are restricted to the most vulnerable groups.
3.1. Establish regional knowledge hub for the dissemination of information on EbA in the Dry Corridor and Arid Zones.	• Knowledge management products are not accessible and inclusive. • In workshops and training programmes situations could arise where the necessary means for full, wide and effective participation of all stakeholders are not guaranteed and ensured. •Knowledge products and training spaces for indigenous peoples and local communities are not developed in an accessible, culturally appropriate and inclusive way.
3.2. Raise awareness of financial mechanisms for the implementation of CCA interventions.	• Information related to financial mechanisms is not adequately disclosed, in particular, its environmental and social risks and impacts linked to indebtedness, and EbA activities approach in a format that is not accessible, timely, understandable and appropriate.
3.3. Enhance capacity of national and local-level policy-makers, in partnership with knowledge network of universities, research centers and private sector, to integrate climate change adaptation and the valuation of natural capital into local policies.	• In the guidelines for economic incentives application, related information is not adequately disclosed on environmental and social risks and impacts to interested parties in an accessible, timely, understandable and appropriate way • In case of economic incentives applied to indigenous peoples, risks associated with non-recognition, respect or inclusion of their mechanisms of government and decision-making could have place, particularly if economic valuation of ecosystem services or receiving money is against its principles. • The use of the language, cultural practices, institutional arrangements and religious beliefs of peoples are hindered. • The full participation of stakeholders is not promoted, stakeholders point of views may not considered, and accessible and inclusive means are not provided the in workshops to be organised under this activity.
4.1. Set up and establish the EbA lending and guarantee facility.	•Decision-making is not consistent with the needs and expectations of stakeholders. • A possible decrease in economic income could occur, in case credit conditions do not have favourable interest rates and terms for small producers; also, credit conditions are not in accordance with the return rate of EbA investments, which would cause high indebtedness of agricultural producers. • Sustainable development and opportunities for indigenous peoples/ local communities are not promoted in a way that is accessible, culturally appropriate and inclusive. •The culture, knowledge and practices of indigenous peoples/traditional local

Activity	Risks and impacts
	communities are not recognised, respected and preserved. •The use of traditional language, cultural practices, institutional arrangements and religious beliefs are not considered.

9.3 Measures to avoid, minimize and mitigate negative impacts and enhance positive impacts and opportunities.

Once impacts are identified, the measures agreed in the FPIC process should be clearly described, to prevent, minimise and mitigate potential adverse effects on indigenous peoples and to improve positive impacts. Appropriate action arrangements should be established to detail the measures to be taken, the responsibilities and schedules agreed upon, including implementation details (who, how, where and when). Where feasible, priority should be given to prevention measures over mitigating or compensatory measures.

The main mitigation measures to be developed are as follows:

Table 1. Mitigation measures set to mitigate, reduce or eliminate risks related to indigenous peoples

Activity	Mitigation Measures
1.1. Develop site-specific intervention plans for the 7 target catchments to integrate EbA measures through a participatory process with municipal authorities, local communities, and other stakeholders.	• A Stakeholder Engagement Plan must be developed so this activity implementation guarantees the full, wide and effective participation of all stakeholders involved, especially vulnerable groups and indigenous populations of Guatemala. • Particularly for indigenous populations, the recognition, respect and inclusion of their own governing mechanisms, and their ancestral beliefs and knowledge should be secured. • Appropriate capacity building of key stakeholders must be developed so that they can participate in a timely manner in decision-making, and governing mechanisms of the different stakeholder groups located in target area should be included.
1.2. Provide technical assistance to municipal authorities, farmers and rural communities for the implementation of EbA practices as well as water- and resource-efficient technologies.	• The Stakeholder Engagement Plan must include procedures to establish clear rules for participation and distribution of benefits in an equitable manner among the key stakeholders. • Appropriate capacity building of key stakeholders must be developed so that they can participate in a timely manner in decision-making, and governing mechanisms of the different stakeholder groups located in target area should be included. • In case of indigenous populations participation, their life plans, policies and philosophies should considered to promote appropriate decision making for the stakeholders and the management of natural resources.
1.3. Provide technical assistance to farmers and rural communities for the development of natural resource-based businesses and alternative climate-resilient livelihoods.	• The necessary means for full participation must be guaranteed, so that all Project target basins inhabitants can properly participate in training programs for stablishing locally appropriate businesses, based on their livelihoods and the natural resources characteristics; therefore, the project must carry out the training program in accordance with the guidelines established in the Stakeholder Engagement Plan.

Activity	Mitigation Measures
2.1. Implement large-scale EbA interventions within rural communities across the seven target catchments.	• EbA actions to be implemented in indigenous territories, must be previously arranged and built with indigenous peoples, preserving the use of language, cultural practices, and institutional arrangements of the peoples. • Moreover, if the EbA actions of ecological support restricts land use or modifies current subsistence means which results in the reduction of economic income, the Project must generate an economic compensation strategy for Producers. • In addition, in the event that foreign workers support Project activities development their labour contracts should clearly state that they cannot influence local culture; when possible, the Project will prioritise using the local labour, although this involves developing prior training processes.
2.2. Implement demonstration water- and resource-efficient technologies within rural communities across the seven target catchments.	• The Project must guarantee the allocation of specialised technical staff for the installation of combustion systems, in order to avoid occupational hazards to the project communities. • A prior analysis of communities' baseline should be conducted in order to determine where they use charcoal, and therefore if half-orange kilns can increase deforestation for firewood use. If so, the project must establish a strategy to prevent forest degradation and deforestation increase in the Project surrounding areas, for instance implementing firewood banks.
2.3. Establish the grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing and start operations.	• The Fund operator must submit a digital daily report with information on the activities to which the funds were allocated and approved, georeferencing the beneficiary property location. This information will be analysed by the Steering Committee during its follow-up meetings, to adjust any pertinent criteria in order to comply with the safeguards. • Financial advisors working on the grant facility should be trained on the criteria for beneficiaries selection, so they can broadly advise future beneficiaries on the best options that should be implemented according to beneficiaries capabilities; this includes a differentiated access strategy for the most vulnerable stakeholders, as small producers and community organisations. • In Guatemala case, the application of economic incentives to indigenous peoples should be developed together with adequate FPIC process, where they express their clear approval to work with the reception of money from the Donation Facility, and Peoples full knowledge of this mechanism is evidenced, prior to implementation.
3.1. Establish regional knowledge hub for the dissemination of information on EbA in the Dry Corridor and Arid Zones.	• A strategy to ensure that information products on best practices and lessons learned from the regional knowledge hub are easily accessible, understandable and inclusive for the community in general; including a specific strategy for indigenous populations, if necessary. • Similarly, training programs for those responsible for policies and decision at the municipal level, as well as training programmes for community organisations, should ensure the participation of all groups of stakeholders involved, especially the most vulnerable, following the guidelines of the Stakeholder Engagement Plan.

Activity	Mitigation Measures
3.2. Raise awareness of financial mechanisms for the implementation of CCA interventions.	• Within the training programs, a module to address the socialisation of environmental risks and impacts from activities implementation to be financed with the grant facility and the credit line must be included, for instance, risks related to possible effects on natural habitats in case the activities are not implemented complying with the requirements and stipulated areas, and end up in an increase in deforestation and degradation. Likewise, social risks linked to the conditions of indebtedness must be socialised. • Also, the establishment of EbA activities should be socialised to interested parties in an accessible, timely, understandable and appropriate format, where technicalities are use only if the public has the knowledge level that allows them to understand, and if they are absolutely necessary.
3.3. Enhance capacity of national and local-level policy-makers, in partnership with knowledge network of universities, research centers and private sector, to integrate climate change adaptation and the valuation of natural capital into local policies.	• Likewise, the elaboration of guidelines for local governments and training activities to be provided must contemplate a module on environmental and social risks and impacts that may be caused by indebtedness conditions, and by the allocation of resources to develop activities not approved by the Project. These communication processes must be carried out in accessible, timely, understandable and appropriate formats. • In the case of Guatemala, appropriate prior FPIC processes must be applied to indigenous peoples, where its full knowledge and understanding of financial instruments is evidenced, as well as the economic implications of ecosystem services valuation and receiving money from the grant facility is recorded, prior to implementation. • A clear work program must be provided to carry out workshops, to allow the participation of stakeholders, especially those affected by the project, where their opinions are considered and accessible and inclusive means are provided.
4.1. Set up and establish the EbA lending and guarantee facility.	• Likewise, a technical assistance program must be developed to support the activities to be financed, which include best practices in responsible banking topics. • Additionally, periodic audits should be carried out on these operations to identify and correct bad practices in case they are identified. These audit reports must be presented and evaluated by the Steering Committee, in order to effectively correct negative impacts on the community and the environment. • Recommendation guidelines will be developed to modify the mechanism for granting credit and align the logic of microfinance institutions with the logic of the productive activity that is promoted, so that the credit terms benefits agricultural producers. • Furthermore, in case of Guatemala's indigenous populations, the necessary FPIC processes must be carried out, where the full knowledge of the peoples and their clear approval and interest in accessing the credit line are expressed, prior to implementation.

The following criteria should be considered during the overall Project development to avoid, prevent and mitigate any possible impacts that may arise from implementation:

- The 169 Convention on Indigenous and Tribal Peoples in Independent Countries of the International Labour Organisation has been in force in Guatemala since 1997, focusing on the right to prior, free and informed consultation, to allow indigenous peoples to participate effectively in their decisions. The Free, Prior and Informed Consent (FPIC) process was adopted as a consultation mechanism (Xiloj Cuin, 2016).

- Article 66 of the constitution states that "Guatemala is formed by various ethnic groups including indigenous groups of Mayan descent. The State recognises, respects and promotes their way of life, customs, traditions, forms of social organisation..." recognising their forms, which must be respected (Xiloj Cuin, 2016).
- The Political Constitution of the Republic of Guatemala states that when there are general decisions of importance, the people, who are the sovereign must be listened and must have the final say in such situations, indigenous peoples have the right to also receive respect for their own ways of making decisions (Xiloj Cuin, 2016).
- Furthermore, Decree 12-2012 of the Congress of the Republic establishing the Municipal Code, recognises the legal form of indigenous communities, indigenous mayors, consultation with indigenous communities or authorities, and community lands, allowing indigenous peoples to be involved in the country's politics (Xiloj Cuin, 2016; RIDH, 2015). Therefore, the Project should consider the different development plans of indigenous communities to avoid the risks associated with generating potential restrictions on the access, use and usufruct of natural resources, violation of the rights associated with ancestral knowledge, sacred sites and cultural values.
- Article 58 of the Political Constitution of the Republic recognises the value of indigenous languages, cultural identity, and the right of the population and communities to preserve their cultural identity according to their values, language and customs (RIDH, 2015), therefore, training strategies should be differentiated for ethnic groups, and should consider the governance and decision-making mechanisms that each community manages autonomously and differentiated.
- Similarly, the Guatemalan state provides special protection to indigenous lands, including family heritage, popular housing and agricultural production, in accordance with article 67 of Guatemala's Political Constitution (RIDH, 2015).

9.4 Community-based natural resource management.

The means to ensure the continuation of key livelihood activities for these communities, their traditional and cultural practices survival should be provided, where necessary. Such subsistence activities may include grazing, hunting, collecting or artisanal fishing. This component clearly states how the natural resources on which indigenous peoples depend, and the geographically distinct areas and habitats in which they are located, will be conserved, managed and used sustainably

9.5 Result of FPIC processes and future engagement plans.

This section will describe information disclosure process, and the Free, Prior and Informed Consent (FIPC) process for consultations, including good faith negotiations and documented agreements with indigenous peoples, and how problems have been addressed. The framework for future participation should clearly describe the process of continuous FPIC consultations and the

participation of indigenous peoples (including men and women) in the Project implementation and operation processes. It is important to emphasize that FPIC will be used in all cases, even where the legislation refers only to “consultation”.

In order to standardise the instruments for achieving optimal environmental and social management of the entire project, it is suggested to follow the guidelines set out in the Stakeholder Engagement Plan (SEP); it is also suggested, feed the SEP correctly in order to incorporate key aspects from IPP, so the participation of indigenous peoples is properly considered in engagement and spaces for FPIC processes where various stakeholders types are present, not only indigenous peoples, so that indigenous peoples participating in these spaces can also access Project benefits in an equitable manner.

9.6 Benefit sharing plans.

The Indigenous Peoples Plan should develop a culturally appropriate strategy that clearly describes measures to enable indigenous peoples to take advantage of the opportunities generated by the project and sustainably preserve and manage the use of natural resources on which they depend.

9.7 Tenure Arrangements.

The project does not include the acquisition of land, voluntary resettlement of indigenous peoples or any type of population; therefore, it does not provide for any kind of arrangement with respect to land tenure. On the contrary, what the Project seeks is to increase the resilience of the population and ecosystems in the face of extreme climate events, through the implementation of activities that will be developed in collectively with the different groups of people including indigenous peoples, and be voluntarily implemented by them.

9.8 Grievance Redress Mechanism.

Indigenous peoples located in the direct influence Project area will be able to access the Grievance Redress Mechanism established by the Project in Chapter 9 of this document. However, during the development of the Indigenous Peoples Plan, the relevance of the mechanism should be assessed, whether it is easily accessible to indigenous peoples, including the possibility of interacting with indigenous peoples in their language and in way they are more comfortable. The grievance redress mechanism must ensure anonymity; provide fair, transparent and timely redress of complaints at no cost to those who file them; and, if necessary, provide special accommodations for women, youth and the elderly, and other vulnerable groups within the community, to file their grievances.

Appropriate procedures should be established to address indigenous peoples' complaints arising from the implementation and operation of the project. Similarly, the availability of judicial remedies

and traditional dispute settlement mechanisms among indigenous peoples should be considered. Indigenous women and men should be informed of their rights and the possibilities of administrative and legal resources or remedies, and any legal assistance available to assist them as part of the FPIC process.

9.9 Costs, budget, schedule, organisational responsibilities.

It includes an appropriate summary of the implementation costs, budget as well as the administration and management of funds and project expenditures

9.10 Monitoring, evaluation and reporting

A monitoring, evaluation and reporting mechanisms should be outlined, including the responsibilities, frequencies, feedback and corrective action processes. Monitoring and evaluation mechanisms should include arrangements for the continual dissemination of FPIC processes for indigenous peoples (both women and men) and for the implementation and financing of any action identified in the evaluation process. Participatory monitoring such as community monitoring and information systems should be considered and supported.

For this particular Project, mechanisms should be established to monitor activities and to understand indigenous communities' perceptions of the Project implementation. Permanent monitoring will allow examining the progress of actions duration of Project implementation and will ensure benefits effectiveness for indigenous population. In compliance with the Green Climate Fund's Environmental and Social Standards, reporting will be done through semi-annual reports, and the Project Safeguards Specialist will be responsible of the process.

10 GRIEVANCE REDRESS MECHANISM

The Project Executing Entities must develop a mechanism that addresses all inquiries, complaints and claims that may have place during the Project activities implementation, both from the general community and from all Project workers, including community workers. It is key to point out that assistance by the GCF independent Redress Mechanism and the Secretariat's indigenous peoples' focal point is accessible at any stage, including before a claim has been made.

The mechanism must comply the following characteristics:

- The mechanism should allow citizens and project workers to access Project information in a timely manner and enable them to express their concerns or dissatisfactions regarding the development of project activities in each country.
- Therefore, the mechanism must support Project Executing Entities and community in strengthening their relationships through a participatory and inclusive communication process.
- The mechanism must have an instruction document for communications reception and to respond in an appropriate and timely manner.
- In order to generate corrective measures in case there are activities that generate discomfort in the community or the Project workers, all communications received, and responses given must be presented during the Project Steering Committee meetings.
- According to the International Labour Organisation, it is essential to ensure the recognition and guarantee indigenous peoples rights of their territory, their culture, autonomy, self-government, and their right to take part in decision making (prior FPIC process), through appropriate procedures and in particular through their representative institutions, whenever legislative measures are envisaged.
- Appropriate inter-institutional coordination between different agencies of the Project to generate timely and transparent responses regarding the communications received must be ensured.
- The stakeholder map in each country must be considered including specific needs and traditional forms for information access of indigenous peoples, farmers and women, and facilitate the manifestation of complaints, claims and conflict resolution.
- The mechanism must guarantee anonymity option for filing complaints and claims, as well as establish means of communication to notify the results of the nonconformity management made by the Project team.

10.1 Mechanism Methodology

The methodology of the Grievance Redress Mechanism must contemplate the following procedures:

1. Receipt and registration of petitions, complaints, claims or suggestions.

2. Confirmation of receipt, assessment of the request, complaint, inquiry, suggestion or claims, and assignment of communication to project staff in charge of responding.
3. Response communication to the citizen and its follow-up; the response should be issued in less than 15 calendar days, when possible
4. Closing the petition, complaint, allegation or suggestion process. In the event that an answer could not be given, it should be redirected to another area of the Project and commence the proceedings.

10.2 Communication channels

In order to efficiently address all communications from Project workers and community, the following service channels are proposed to be development by the Project Executing Entities:

1. The development of a virtual platform, that allows the population to access a web page to complete their requests through a form and receive a tracking number with which they can follow up on their request. This channel is convenient as it guarantees 24 hours a day access.
2. Creation of a specific email to attend to citizens communications, which would be in operation exclusively to handle complaints and inquiries and ensure timely response. Communications received by this means must have a tracking number assigned which can be followed up.
3. Enable a telephone number, fixed or mobile, in each of the Project target countries, for calls reception. This number must be attended by the Project focal point in each country, who must manually fill a communications form (similar to the one on the website), to document the complaint, query or claim. This document must also have a tracking number, just like other channels, in order to guarantee the follow-up and timely response of the communication presented by the citizen or Project workers.
4. Allocate a physical mailbox to receive any questions, complaints or claims associated with the Project implementation. This mailbox can be located in a public entity office part the Project, for instance municipalities' city hall.

11 MONITORING AND EVALUATION ARRANGEMENTS

Monitoring and evaluation arrangements allow the Project to obtain information on safeguards compliance and assess the success of mitigation, reduction or elimination measures of environmental and social risks and impacts set out in the Environmental and Social Management Framework. Therefore, this chapter contains the main indicators to be measured periodically to verify compliance with the safeguards, and subsequently the steps to ensure monitoring and evaluation.

11.1 Indicators

Indicators established as part of the monitoring and evaluation system of a Project, are the tools that allow planning and general management of the project, generate useful information to improve the decision-making process and the implementation of activities. The following indicators will measure mitigation measures compliance, therefore must be assessed in particular in each of the seven countries where the Project will be implemented, in order to ensure compliance of GCF safeguards, and the mitigation, reduction or elimination of potential risks and impacts that the Project could trigger on the environment and communities located in the area of influence:

Activity	Monitoring Indicators
Output 1. Strengthened technical capacity of local government, farmers and rural communities to implement EbA and other adaptation measures.	
1.1. Develop site-specific intervention plans for the 7 target catchments to integrate EbA measures through a participatory process with municipal authorities, local communities, and other stakeholders.	• SEP developed including strategies to ensure the full, broad and effective participation of key stakeholders in this activity, including special groups and indigenous populations (Yes/No) Evidence of strategy implementation or meetings must be submitted evidence • Present evidence of stakeholders' involvement on activities focus on capacity building to intervene in a timely manner in decision-making processes; also, evidence must be submitted of women's participation in formulation, design and implementation of intervention plans. • Present evidence showing that the involvement of indigenous peoples recognises, respects and includes their own mechanisms of government, beliefs and ancestral knowledge. • Integrated pest management and agrochemical use program developed by the Project and applied to this activity (Yes/No). • Number of catchment intervention plans with guidelines to prevent deforestation and ecosystem degradation during activities implementation/ Total intervention plans • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)

Activity	Monitoring Indicators
1.2. Provide technical assistance to municipal authorities, farmers and rural communities for the implementation of EbA practices as well as water- and resource-efficient technologies.	• SEP includes strategies to ensure that the activity development is under clear rules and allows participation and benefits distribution equally among actors (Yes/No). Evidence must be submitted • Present evidence on capacity building processes for decision-making (# evidences). • Present evidence showing that Life Plans, policies and philosophies of the Indigenous Peoples involved were considered in the development of communities working protocols. • Submit periodic reports on carbon emissions balance, considering absorptions of the new forest areas planted by the Project, and GHG emissions increase due to fertiliser use, methane emissions by livestock systems, and tillage work developed under the project, i.e. additional to those of the baseline. • Integrated pest management and agrochemical use program developed by the Project and applied to this activity (Yes/No). • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)
1.3. Provide technical assistance to farmers and rural communities for the development of natural resource-based businesses and alternative climate-resilient livelihoods.	• The SEP includes strategies to enable this activity to be carried out inclusively to all stakeholders, so they fully participate in engagement workshops and training programs on locally appropriate business based on natural resources and the characteristics of their livelihoods (Yes/No). Evidence must be submitted • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)
Output 2. Demonstration adaptation interventions implemented in rural communities across seven target catchments in the Dry Corridor and Arid Zones.	
2.1. Implement large-scale EbA interventions within rural communities across the seven target catchments.	• Number of EbA options with Protocol for Integrated Pest and Agrochemical Management Applied / Total number of EbA Options designed for the basin. Evidence must be submitted • Submit annual reports on carbon emissions balance, considering absorptions of the new forest areas planted by the Project, and GHG emissions increase due to fertiliser use, methane emissions by livestock systems, and tillage work developed under the project, i.e. additional to those of the baseline. • Present evidences that technical assistance process includes lessons about efficient management of solid and liquid waste from agricultural activities. • Catchment EbA Strategies have clear criteria to prevent agricultural frontier expansion and deforestation and degradation of natural ecosystems (Yes/No). Evidence must be submitted • Document with economic compensation strategy to producers whose productive systems and livelihoods resulted in lower economic income. • Quarterly progress report on the economic strategy implementation. • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted

Activity	Monitoring Indicators
	• Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)
2.2. Implement demonstration water- and resource-efficient technologies within rural communities across the seven target catchments.	• Document with the strategy to prevent forest degradation and increased deforestation in Project surrounding areas due to increased demand of firewood for charcoal production (Yes/No). • Document with Cleaning and Maintenance Protocol of water systems applied (Yes/No). Evidence must be submitted • Semi-annual report on natural resources state in the Project direct and indirect influence area. • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No) • Document with the Protocol for the correct disposal of batteries discarded from water pumping systems by solar panels. (Yes/No). Evidence must be submitted
2.3. Establish the grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing and start operations	• Investment Principles Handbook developed for the grant facility management, with clear criteria on the type of activities to be financed, and the GCF safeguards (Yes/No) • Number of reports submitted on the activities to which the funds were awarded and approved, georeferencing the location of the beneficiary site, assessed in the Project's steering committee. • Number of training to financial institution advisors on future beneficiary types and EbA strategies / Total training scheduled to financial institutions. • Proof of approval on the full understanding, interest and acceptance to receive resources from the grant facility by indigenous peoples. (Yes/No) Evidence must be submitted • Stakeholder Engagement Plan designed, including mechanisms to develop this activity (Yes/No)
Output 3. Information on climate change adaptation and its financing disseminated across the region and mainstreamed into local and national policies.	
3.1. Establish regional knowledge hub for the dissemination of information on EbA in the Dry Corridor and Arid Zones.	• Document with strategy that ensures that information products are easily accessible, understandable and inclusive for all stakeholder groups living in the countries targeted by the Project (Yes/No). • The IPP ensures the participation of all stakeholder groups involved, especially the most vulnerable (Yes/No). Evidence must be submitted • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted
3.2. Raise awareness of financial mechanisms for the implementation of CCA interventions.	• The training programme for public officials/agencies at the municipal level, medium-scale private organisations/farmers, women, vulnerable communities and their organisations, includes a module of environmental and social risks and impacts triggered from the implementation of activities to be financed by the grant facility and credit line, in accordance

Activity	Monitoring Indicators
	with SEP guidelines. (Yes/No) • The training and awareness-raising programme is developed in an accessible, timely, understandable and appropriate format, especially for vulnerable communities, and follows SEP guidelines. (Yes/No) Evidence must be submitted • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)
3.3. Enhance capacity of national and local-level policy-makers, in partnership with knowledge network of universities, research centers and private sector, to integrate climate change adaptation and the valuation of natural capital into local policies.	• Document developed with the analysis on the importance of natural ecosystems that generate less economic recognition for payment for ecosystem services, in order to discourage historical patterns of degradation that have affected biodiversity and habitats in the region (Yes/No). • Within the training program, a module is included and implemented on environmental and social risks and impacts that may triggered from borrowing conditions, and resources allocation to develop activities not approved by Project, and follows SEP guidelines (Yes/No). Evidence must be submitted • Evidence of approval by Guatemala's indigenous peoples on full understanding of the implications of ecosystem services economic valuations. (Yes/No). Evidence must be submitted • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)
Output 4. Financial products and services to finance EbA investments are offered by Partner Financial Institutions (PFI), including PFI access to EbA on-lending funds and support mechanisms.	
4.1. Set up and establish the EbA lending and guarantee facility.	• Investment Principles Handbook developed for EbA Credit Line Management (Yes/No) • Technical assistance programme designed to support of financed activities implementation (Yes/No) • Monitoring, report and verification mechanism prepared, with daily reports issued (Yes/No) • Presentation of at least one (1) annual audit report on responsible banking practices (Yes/No) • Recommendation guidelines developed to modify the lending mechanism and align the logic of microfinance institutions with the logic of promoted productive activity (Yes/No) • Proof of approval on full understanding, interest and acceptance to access credit line resources by indigenous peoples. (Yes/No) Evidence must be submitted
4.3. Technical assistance (TA) facility to strengthen technical capacity of accredited and non-regulated financial institutions to access and channel funds for small- and large-scale EbA investments.	• # Training developed on topics related to biodiversity conservation issues, efficient resource management and pollution prevention, as well as benefits enhancing to reducing climate vulnerability / # Total PFI of the Project. • Stakeholder Engagement Plan developed, including mechanisms to develop this activity (Yes/No) • Occupational health and safety protocol for fieldwork developed by the Project, and applied to this activity (Yes/No) Evidence must be submitted.

Activity	Monitoring Indicators
	• Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)

11.2 Monitoring provisions

The Environmental and Social Safeguards Officer of the Regional Project Management Unit (RPMU) will be responsible for monitoring the Project indicators in each of the seven countries and for carrying out the respective analysis and evaluation. The Coordinator of the RPMU will be responsible for integrating these results into other reports of the Project Monitoring and Evaluation Officer.

The Project Executing Entities will regularly monitor and supervise the Environmental and Social Management Framework, as is the one who work in Project management regionally, conduct technical supervision, and will guide the RPMU in establishing strategies to correct any negative indicators results.

Finally, according to the Project activities implementation schedule, the indicators results, and the analysis must be submitted to the Regional Steering Committee of the Project (RSCP) in each working session.

12 STAKEHOLDER ENGAGEMENT PLAN

This Stakeholder Engagement Plan (SEP) addresses the importance of ensuring the comprehensive and effective participation of all stakeholders in the development and implementation of the "Ecosystem-based adaptation to increase climate resilience in the Central American Dry Corridor and Arid Zones of the Dominican Republic" Project. The stakeholder FPIC processes are top priority in the development, implementation, evaluation and monitoring of project activities, as they ensure that the perceptions, concerns, needs and interests of the stakeholders involved are taken into account in the execution of each of the activities, with the purpose of avoiding and / or mitigating the adverse impacts that may be caused, and improving the well-being of vulnerable populations, including indigenous populations and women.

This SEP serves as a participation strategy that provides the Project team with basic guidelines and guidance on how to meet the requirements for stakeholder FPIC processes. This strategy is based on the principles of transparency, inclusion, non-discrimination and action without harm, which meets the guidelines of the GCF to ensure a significant participation of stakeholders, as described in the document "Design and guarantee significant stakeholder participation in projects supported by the GCF "(GCF, 2019b).

Therefore, the participation strategy will be used by the project team as a guideline to involve all stakeholders from an early stage which allows them, on the one hand, to announce Project detailed activities and risks, impacts and benefits in a clear, accessible and understandable manner for each stakeholder, and on the other, acknowledge stakeholder concerns and needs, so that they can be integrated in the project activities, either to make changes or improvements.

This plan will provide the basic mechanisms and methodologies to guarantee such participation in each of the Project activities, as well as stakeholder engagement strategies with special attention to those parts traditionally marginalised or underrepresented. It will be the basis for the SEP implementation and for developing the monitoring, follow-up and evaluation of both, the participation strategy and the implementation of project activities.

Phases to develop the Stakeholder Participation Strategy

In accordance with the Green Climate Fund's guidelines for the development of the Project participation strategy, the following steps must be followed:

12.1 Participation strategy design

In this phase, the entire participation plan will be elaborated in detail, taking into account the specific characteristics of each country and each group of stakeholders. It is important to consider the guidelines of this document for its formulation. This phase seeks to:

- To link a team of experts
- Hold informative meetings with stakeholders identified in the stakeholder map and under the proposed relationship criteria, to present the project and to obtain the perceptions, concerns, interests and needs of each stakeholder, and understand how to work successfully with each one of them.
- Conduct training activities with the entire work team, especially those who will be in the field, on the economic, political, social and cultural context of the places where they will work, ensuring that they will carry out their work in a respectful manner and in compliance with the guidelines proposed.
- Design the participation plan for each activity and sub activity of the project. The team of experts and the technical team of the project describe each of the activities to be implemented with each of the stakeholders and the methodologies to be used to achieve the proposed participation objectives and follow the relationship guidelines proposed in this plan.
- Update the stakeholder map with the new information collected.
- Set a work schedule in which the time for doing the participation activities is determined, the time for analysing information, coupled with the activity implementation schedule and sub activities of the project, so that they are fully coordinated. This schedule must be presented to all stakeholders taking into account their contribution to it and receive their confirmation of receipt and agreement.

The effective participation of the stakeholders involved in the project ensures that it is beneficial for them, especially for those in more vulnerable situations. Although the project seeks to have a positive impact through the implementation of ecosystem-based adaptation strategies, it can only meet its objective if the people who live and relate to these dry corridor ecosystems in Central America and the arid areas of the Dominican Republic are involved in the project in both decision making and activity execution.

Therefore, the specific characteristics and features of each of the groups of stakeholders should be considered, which means considering also the places where they are located and from where they will participate in the Project. This implies an understanding and reflection on the economic, political, social and cultural contexts of the target areas of the project and of each of the stakeholders.

These considerations will provide a better understanding of who the stakeholders are, and properly identify those who are most vulnerable due to their socioeconomic conditions and are subject to

oppression due to their gender, race / ethnicity and class status, which will therefore avoid producing or increasing these oppressions at any time. Likewise, stakeholders in positions of economic and political power could better understand and not exercise this power over the other vulnerable stakeholders during the Project implementation, using that power to serve Project's objectives instead.

With this in mind, it is essential to balance the levels of influence of each stakeholder in the Project implementation with the effort and purpose of giving voice and decision-making power to those who historically have had less access to decision-making and to whom the project will impact more directly. This is the main goal of developing a participation plan as one of the backbones of the project.

These considerations also imply that the entire work team, from the Project´s general coordinators, to those who work on field (especially them), have clarity about the context in which they will work and the importance of considering the specific characteristics of each of the stakeholders, especially the rural, ethnic and female populations. The participation plan must then guarantee respect, transparency, inclusion, non-discrimination and action without harm.

Team. It is essential that in each country a team of specialists with extensive experience in research and intervention work in the specific Project areas is created, with knowledge on local, community, institutional and private stakeholders, as well as economic, social and political dynamics. This team will oversee the designing of specific instruments and activities for each Project stages, as well as analysing the information and providing recommendations to those responsible of each activity.

Methodology. The methodologies to be developed must guarantee the effective participation of all stakeholders ensuring all stakeholders play a tangible part in decision making. They must consider the characteristics of the stakeholders with whom they are going to work with and the objectives of each activity, in this sense it should be considered whether the population is literate or not, if they speak Spanish or not, what their cultural references are, among others, in order to develop appropriate resources and know which language to use. Each of the activities to be developed must contemplate the methodologies that have already been used successfully in other projects with similar populations, contexts and focus; similarly, methodologies proposed from the social sciences can be included, as social mapping, in-depth interviews focus groups, age and gender groups, food flows diagrams, and other resources.

12.2 Stakeholder map

The identification of the target area is made in this phase, as well as stakeholder mapping. With this information an initial approach is made between the project team and the stakeholders in which,

through a horizontal and clear dialogue, the project's objectives and activities to be executed are presented. This first dialogue will be useful for:

- Obtaining information about other stakeholders interested in the Project and determine the way to initiate a dialogue with them.
- Getting information on what the initial perceptions are about the project and the activities to be done.
- Finding out what the main concerns and needs of each of the parties regarding the project are.
- Recognize the main relationship difficulties among the stakeholders
- Analyse the work team´s strengths in order to enhance them.

The complete stakeholder map provides a detailed knowledge of the stakeholders, their incidence level, their responsibility in the process, their interests, the areas in which they are and act, and their relevance in each of the Project activities, which enables them to determine the best way to establish a relationship with them, as well as to generate more appropriate strategies for dialogue and FPIC processes that lead to a more horizontal, transparent and respectful dialogue of its individuals.

The map serves not only to identify and provide the characteristics of the stakeholders, but also to identify the alliances and tensions between them, their perceptions, interests and concerns regarding the project, the position they assume in relation to the project, their location, their level of impact and involvement in the proposed activities. This is valuable information that helps to determine more accurately the forms or mechanisms of dialogue, as well as having better analysis through the information received from the stakeholders.

In addition, this map should be constantly updated, since during the process it is possible that new stakeholders may appear, that they change positions, that new interests arise, that new alliances or tensions occur, or that with the modification of some activity the most directly impacted stakeholders are changed.

In mapping the stakeholders, it is important to make a prioritized participation list using a hierarchy system. This implies an analysis of multiple factors related to the possible social and environmental impacts of the activity and the commitment level or intensity level that may be necessary for each group of stakeholders.

During project formulation, initial stakeholder mapping, socialization exercises and meetings about project activities were done. Therefore, the following existing information on the types of stakeholders, their levels of incidence and responsibility in the Project are as follows.

a) **<u>Communities</u>**: these stakeholders are those belonging to the various rural communities that are located in the area of the direct influence of the project. They are the ones who will have a direct impact on the implementation of each of the activities, and in some of them they are the main beneficiaries. They may or may not be organized and their performance space and level of influence is mainly local. Several categories are divided: peasants, women, ethnic peoples and within these indigenous and afro descendants; the following gives further explanation of the main features:

i. **Farmers**: they inhabit rural areas and are in conditions of illiteracy, poor access to public services, low income and food insecurity, characteristics that make them a vulnerable population. A part of them is not organized or affiliated with any organisation.

ii. **Women**: they are part of rural or ethnic communities, however, they are specifically mentioned because women are the ones who suffer the most from structural violence, that is, they are more illiterate women, more poor women, more women who are not competent in the Spanish language, more women at risk of work-related illnesses and most likely to have food insecurity. They have less access to decision-making, less access to power scenarios, less considered in FPIC processes. A part of this population is not part of any organisation.

iii. **Ethnic Groups**: they are a population with cultural peculiarities that are subject to special protection by international and national legislation. These indigenous and Afro-descendant peoples have low levels of basic needs met, minimum access to formal education, food insecurity, poor access to decision-making and have no positions of power, are the main victims of armed violence and have minimal access to land, among others. Some of these towns have a level of organisation that has allowed them to have dialogues with public and private institutions.

b) **Non-governmental Organisations (NGOs)**: These are organisations that work for political purposes, are autonomous and act non-profit. They carry out their work around a particular problem and / or population group and seek resources to develop projects for the benefit of the populations.

c) **Government Institutions**: These public stakeholders consist of local, regional and national government institutions that deal with some aspects of the project. These are represented by public officials. These institutions are responsible for part of the process as many of these institutions make environmental, social and cultural policies which directly affect the project. Likewise, it is their responsibility to guarantee the FPIC processes and concertation rights of the citizens and be able to monitor the Project achievements. In all the target countries, there are Public Ministries, Municipalities / City Halls, Conservation Institutes and Conservation Area Systems.

d) **Private sector**: refers to companies, cooperatives and profit organisations to which individuals and corporations belong. In this sector are agricultural, livestock, forestry and mining bodies that have some impact on the target area of the project, the companies that

are in the area and the financial corporations that are involved in component 1 of the Project. The impact level of this sector is local or regional depending on the area of action.

The following table shows the different types of mapped stakeholders for each country.

Stakeholders			
Community	**NGOs**	**Institutions**	**Private and financial entities**
Panamá			
- APASPE - Association of silvopastoral producers - Pocrí and Paritilla Craft Association - Fishermen's Association - Basin committees, sub-basin committees and JAAR (Administrative Board of Rural Aqueducts) - Association of bean producers - Association of tomato farmers - Association of organic producers - Association of Cucurbitaceae Agroexporters - Association of bean-friendly producers of the environment - Association of irrigation users El Hato de Antón. - Vegetable cooperatives in Antón (for marketing, supply demand). - Azuero ecological group. - Association of Agro-silvopastoral Producers of Pedasí (APASPE Pedasí). - Tonosí Rice Association - Salineros Association: in Guararé. - Association of corn producers - "Amigos del manglar" (organised group for mangrove protection) - National Association of Ranchers (Anagam, are members of the National Commission of Climate Change and the Association of Milk Producers of the Central Province, APREPECE) - Local authorities - May 1st settlement - Tonosí Agroecological Farm	- Azuero Ecological Project - Peace Corps - Pedasí turtles	- Ministry of Environment (MiAmbiente) - Social security fund - National Secretary for the Food and Nutrition Security Plan - National land administration authority - Emergency operations center - National civil protection system - Ministry of housing and land planning - Ministry of Economy and Finance - Ministry of Agricultural Development (MIDA) - Ministry of Health (MINSA) - Institute of National Aqueducts and Sewers (IDAAN) - Municipalities	- Savings bank - Panama national bank - Microserfin - Agricultural Development Bank - Nuevo Amanecer multi-service cooperative - Santa Catalina Savings and Credit Cooperative - Advance R.L. - Savin Group - Coop. Gladys B. De Ycaza - José del Carmen Domínguez Cooperative - BAC Credomatic - Banistmo - Azteca Bank - Global Bank - PROECO Azuero - APASPE - Albatross - APAIS - TOP - COESAN
Costa Rica			
- Guanacaste Women Agenda - Women's Federation of the Gulf of Nicoya - District councils - Cantonal Unions (of Liberia) - Cantonal meetings - Association of Sabaneros and Cooks - Association for Children and Adolescents - Cooperatives and chambers of livestock, agricultural, business and tourism - Cantonal Agricultural Centers - Santa Cruz Environmental Commission - Regional Development Council, Local Councils of Biological Corridors, Local and	- Cultural Rescue - Pan American Ladies - UN Habitat - NICOYAGUA - UNAFOR Chorotega - GTZ - Foundation for Sustainable Development (FUNDECODES) - Foundation of the Arenal Tempisque	- National Environmental Technical Secretariat - Central American Agricultural Council - Costa Rican Social Security Fund - National Emergency Commission - Rural Development Institute - Costa Rican Institute of Fisheries and Agriculture - National production council - Comprehensive agricultural marketing program - PAACUME - Ministry of Education (MEP)	- Fundecooperacion - Nicoya Rotary Club - Active Club 20-30 - International Lions Club - Sand industry - Cantonal agricultural center - BAC, Communal BAC - National Bank - Bank of Costa Rica - Popular Bank - COOPEANDE - COOCIQUE - COOPECAJA - COOPEALIANZA

Stakeholders			
Community	**NGOs**	**Institutions**	**Private and financial entities**
Regional Conservation Councils, Territorial Councils for Rural Development - Associations of Local Development, Associations and Associations of Rural Development, Integral Development Association (ADI), (from Nicoya, Socorro, Cartagena, Tempate) - CCCI (Cantonal Council of Interinstitutional Coordination) - Salvation Army Association - FEDEAGUA - Farmers Association - Security Committee - Board of Education - Health Board - Emergency Committee - Neighbors Committee - Roads Committee - Inter-institutional Committee of the Río Tempisque basin (private company, NGOs, public institutions) - Local Forest Council - Committee of Healthy Wetlands of the Corral de Piedra Wetland - Association of small farmers of Mata Redonda, Local Council CB Las Morrocochas - Associations administering the Community Aqueduct and Sewer Systems (ASADA) - Guanacaste Community Fund - Communal Water League - Committee of healthy wetlands in Tempisque	Conservation Area (FUNDACA) - Dry Forest Conservation Fund - Costa Rica Forever (CxS) - International Conservation (CI) - Guanacastecan fellowship - FUNDECONGO	- National Meteorological Institute (IMN) - National University (UNA) - University of Costa Rica (UCR) - Ministry of Environment and Energy (MINAE) - National System of Conservation Areas (SINAC) - National Commission for Biodiversity Management (CONAGEBIO) - CADETI (Advisory Commission on Land Degradation) - Aqueducts and Sewers (AYA) - Costa Rican Institute of Fisheries and Aquaculture (INCOPESCA) - National Underground Water, Irrigation and Drainage Service (SENARA) - Ministry of Agriculture and Livestock (MAG) - National Institute of Innovation and Transfer in Agricultural Technology (INTA) - Secretariat of Environmental Planning (SEPLASA) - National Center for Geoenvironmental Information (CENIGA) - National Monitoring System for Land Use, Land Cover and Ecosystems (SIMOCUTE) - Directorate of Environmental Quality Management (DIGECA) - National Directorate for Community Development (DINADECO) - PHONAFIFO - Biodiversity Forum - INDER - ONAMEC - FOLLOW - SNITTPR - National Insurance Institute (INS)	- COOPSERVIDORES - Servicoop - Mutual Group Alajuela La Vivienda - COOPENAE - COOPEMEP - Desyfin - Scotiabank - Promerica - Lafise - Improsa - Global Exchange - DAVIVIENDA - COOPEANDE, ANDE Box - Organisation for Tropical Studies (OET) - Center for Studies in Peninsular and Tempisque Waters, Sustainable Development - Guanacaste Dry Forest Conservation Fund
Nicaragua			
- 10 de Mayo Cooperative - Bamboo Cooperative - Orfilia Vásquez Cooperative - Santiago Cooperative - Nuevo Horizonte Cooperative - ASSUMPTION - Drinking Water Committees (CAPS) - Family, Community and Life Cabinets - Nicaraguan Community Movement - Central of Cooperatives of Multiple Services R.L. (Prodecoop)	- COSUDE - Water for Life - Nicaraguan American Foundation (ANF) - Radiofone Foundation - Wildong - Help in Action - Catholic Relief Services	- Nicaraguan Women's Institute - National Institute for Training and Labor Development - National Energy Commission - National Water Authority - ENACAL -CATIE - Institute of Agricultural Protection and Health - National Commission for Food and Nutrition Sovereignty and Security	-MCN -UNAG -APRODEIN -COSMUSOL -Prodecoop - Dairy the Lilies - FUNDENUSER Financial - Financial local development fund, s.a. - Bank of Central America - Production bank

Stakeholders			
Community	**NGOs**	**Institutions**	**Private and financial entities**
- National Farmers Union (UNAG) - Cooperativa Reina del Café - Agricultural cooperative Corcazán - Union of Agricultural Cooperatives (UCA) - Association of Northern Producers (APRODER) - Forestry Cooperative Central (CECOFOR), - Peasant Federation (FEDICAMP) - Community health networks - Faith and Hope Lutheran Church of Nicaragua - UCAFE - Campesino Forest Development Association (ADEPROFOCA) - Municipal Office, UMAS (Municipal Units for the management of a Sustainable Environment) - Community leaders - APRODEIN	- ONGAWA - Magic hands	- General Directorate of Physical Cadastre of the Nicaraguan Institute of Territorial Studies - Regional Council - Community assemblies - Autonomous regional councils - Autonomous regional governments - Nicaraguan Institute of Cultural - Humboldt Center - Social Promotion - International Center for Tropical Agriculture (CIAT) - Ministry of Family, Community, Cooperative and Associative Economy (MEFCCA) - Ministry of Environment and Natural Resources (MARENA) - Nicaraguan Institute for Municipal Development (INIFOM) - National Forestry Institute (INAFOR) - Institute of Protection and Animal and Plant Health (IPSA) - Nicaraguan Institute of Agricultural Technology (INTA) - Ministry of Agriculture and Livestock (MAG) - Nicaraguan Aqueduct and Sewer Company (ENACAL) - Ministry of Health (MINSA) - Ministry of Education (MINED) - Institute for Human Promotion (INPRHU) - Fire Brigades - Ministry of the Interior (MIGOB) - Property Intent - National Assembly (AN) - Ministry of Labour (MITRAB)	- Banco Finanzas S.A. - FAMA Financial - LAFISE BANK - BANCENTRO - FUNDENUSE - Coop. Santiago - FAMESA - FINANCIAL FINCA NICARAGUA - MyPymes
Honduras			
- Association of producers OROCUINA - Marine Farms Group - Water seals - Association of farmers - Women's network - Health committees - Microbasin tips - Association of producers - Municipal mayors, Municipal Environmental Units (UMAs) - ADETRIUNF - ASECHS - Community Advisory Councils - The Pespirense Development Association (ADEPES) - NASMAR Commonwealth	- Forcuencas - USAID - EMPRENDESUR - Prosasur - WMO - Caritas - CESAL - EMPRENDESUR - USAID - Swiss Red Cross	ental Impact Assessment - National Council for Coordination and Articulation of Social Policies - National Women's Institute - Honduran Social Security Institute - National Electric Power Company - Ministry of Industry and Commerce - National Food and Nutrition Security Council - Permanent Contingency Commission - National Council of Drinking Water and Sanitation -Territory Planning Council - Property Institute	- La Grecia SA sugar industry - Choluteca sugar industry - COEXMAR - CUMAR - Montelibano agroindustry - Snail industries - Cooperative San Marqueña Limitada - Atlantida Bank - Western Bank - Banpais - Central Bank of Honduras - Fichosa Bank - Azteca Bank - Workers Bank - Finsol Choluteca

Stakeholders			
Community	**NGOs**	**Institutions**	**Private and financial entities**
- MAMBOUCARE Commonwealth - Risk Management Board - Water Boards		- National Commission for Housing and Human Settlements - National Institute for Forest Conservation and Development, Protected Areas and Wildlife - Honduran Institute of Anthropology and History - Municipal Women's Office - Basin councils - Rural Boxes - Patronatos - Risk management roundtable - Environment, risk management and climate change adaptation roundtable. - IHCAFE - MiAmbiente - REDD - FIDA - Water and Sanitation of Honduras (ERSAP) - National Development Tables, Security Tables and Climate Change - Ministry of Agriculture (SAG). - ICF - Forest Conservation Institute	- Cooversat Cooversur - ELGA Cooperative - San Andrés Cooperative - Banrural - Adel microcredits - My credit - Cooperatives of saving and credit - FIPA (Honduran Foundation for Participatory Research). - AGROLÍBANO - FERTICA - DISAGROW - Shrimp Packers - The Pantaleón of La Grecia Foundation - Melonitas Businessmen (Melon) - CABEI - OFID - Global Comunity - Rural Box “Aldea De Carrizal Prieto” - Duyure Centro Rural Savings and Credit Center - Rural Box "Village of Red Lands" - Rural Box Morolica Centro - Agualcagua Community Rural Fund - Central Bank of Honduras - Bac Credomatic - Community Rural Fund - Finca Vieja Community Rural Box - RURAL BOX "VILLAGE THE OVEN” - Rural Box community El Potrero
El Salvador			
- Fishing, coffee, agricultural, shrimp, sugarcane cooperatives - La Primavera Association - ASUAGUA - ADESCOS - ANDA - Association of Municipalities (Association Chasparastique, Tepaca-Chinameca, MANORSAN) - Association of Irrigators (farmers organised for irrigation) - Ramsar Local Committee - Tecapa-San Miguel Advisory Committee (Work with Protected Natural Areas) - Oriental youth network - Associative, productive ventures without irrigation and irrigation associations	- JIKA - Save the children - Salvadoran Foundation for Social Promotion and Economic Development (FUNSALPRODESE)	- Presidency of the Republic - Salvadoran Social Security Institute - National Food and Nutrition Commission - National Commission for Civil Protection, Disaster Prevention and Mitigation - National Council of Territorial Development - Salvadoran Institute of Agrarian Transformation - National Geographic and Cadastral Institute - Agricultural Government Bank - Municipal environmental management team - Ministry of Agriculture and Livestock (MAG) - Ministry of Health - Water Boards - National Administration of Aqueducts and Sewers (ANDA)	- Fundemas - COAGRI - Cooperative Society of Producers of Marañón (SCPM) - Agricultural Bank of El Salvador - Workers Bank - Cooperative association of savings and credit and agricultural production El Salvador forward - Credimás - Cooperative Association of savings, credit and consumption of Pensioners of INPEP Usuluán - Agricultural Development Bank - Credicampo - Credit box - Promérica Bank - Bancovi - Hipotecary Banc - City Bank - Cuscatlan - Scotia

Stakeholders			
Community	**NGOs**	**Institutions**	**Private and financial entities**
		- Ministry of Environment - Municipal Mayors - PNC environment	- Atlantis - Local Economic Development Agency (ADEL-AMC) - PADECOMPS - Chaparastique sugra mil (FUNDAZUCAR) - Migueleña De R.L. Savings and Credit Cooperative Association - Promerica Bank - COOPAS DE R.L. - Acocrédito De R.L. - Credimás - ACOSETVI - ACOCAYCO - ACODEZO - Comédica - AMAPALITA SAVINGS AND CREDIT COOPERATIVE ASSOCIATION - COOPERATIVE ASSOCIATION OF SAVINGS, CREDIT AND PROVISIONING SANTIAGO DE CONCHAGUA - Azteca Bank - Davivienda Bank
Guatemala			
- Black Guatemalan Organization (Onegua) - Network of Afro-Latin American, Afro-Caribbean and Diaspora Women - Association of Afro-American Women Afro-American XXI Afro-descendants and Their Friends (AFROSA) - Association of Garifuna Women of Guatemala (ASOMUGAGUA) - Xinka People Coordinating Council (COPXIG) - Parliament of the Guatemalan Xinka People (PAPXIG) - AMISMAXAJ (Association of Xinkas Women of Jalapa) - Council of Mayan Organizations of Guatemala (COMG) - Coordinator of Organizations of the Mayan People of Guatemala (COPMAGUA) - Union of the Mayan People and the Mayan Council Tekum Umam - Council of Mayan women - Indigenous mayorships - Community development councils (COCODE) - COFRADIA - CONADIGUA -ASPREMKI - Association of midwives - Waxaqíp Tijax	- Mercy corps - Save the children - Friends of Canillá Association - Mayan Ombudsman - MOVIMONDO - Indigenous Ombudsman - Manuel Madrazo Foundation - Foundation of the cent - CONALFA - INAB	- Development councils - Office of Social Support of Municipalities - National Food and Nutrition Security Council - Secretariat of Planning and Programming of the Presidency - National Coordinator for the Reduction of Natural or Caused Disasters - Water Secretariat attached to the Ministry of the Presidency - Land Fund - Institutional Commission for the Development and Strengthening of Land Ownership. - Guatemalan indigenous development fund - Ministry of Communications, Infrastructure and Housing - University of San Carlos - Municipal Women's Office - Mediation center - Municipal forestry office - Peace Corps - National compensation program - Justice of the peace - Ministry of Public Health and Social Assistance - Ministry of Education	- Banrural - FUNCAFE - IGER - Banco de Desarrollo Rural, S.A. - Chicamán Business Genesis - Aztec Chicamán CIACUS - Business Genesis - Fondesol - Finca - Credichapin - Lions Club Association - Flor de Naranjo Association - ANACAFE (Rabinal, Cobulco and El Chol) - Nature Defense Foundation of Baja Verapaz - Users Association of the San Jerónimo Irrigation Canal - Bayer (Research) - Association of Forest Producers of Verapaces - Quiché is managed by the Community Development Councils (COCODES) and there is also a Municipal Environmental Management Unit (UNAM) - Quiché Forestry Association (AFORQ) - Company El Valle - Los Cerritos Association

Stakeholders			
Community	**NGOs**	**Institutions**	**Private and financial entities**
- New Life Social and Productive Integral Development Association - AGACAN Livestock Association - Promising Committees - Guardians and health promoters - Land legalization committees - Association of users of the irrigation unit - Municipal women's coordinator - Brotherhoods - Women's local development committees - Ecotourism Committee - Association of Integral Development of Cholatenses Farmers - Association for the integral development Los Altos - Peasant Association for Integral Development Waquib´nój -CADIWAN- - Association of mini-irrigation and agricultural producers AMPA - Associations for the integral development of agricultural producers Palquiadip - El Sembrador Integral Farmers Association - Potato Producers Association El Caracolito - Rural Association for the Integral Indigenous Development Cholá -ARDICH- - Association of tomato farmers - ASOCAU - Sicaché Village Livestock Committee - AURSA Association (Irrigation Users Association) - Municipal Environmental Management Units - MANCOSEQ Commonwealth - Departmental Water Commission - Water Committees - Association of Integral Development of Zacualpa, ASODINZA - Catholic churches		- Ministry of Social Development - Ministry of Agriculture and Livestock (MAGA), Learning Centers for Development (CADER) - National Forest Institute (INAB) - Ministry of Environment and Natural Resources (MARN) - Institute of Agricultural Sciences and Technologies (ICTA) - National Council of Protected Areas (CONAP) - Rural University - Commission for Prevention and Disasters - Secretariat of Food Security - National Secretariat of the Presidency - General Secretariat of Planning (SEGEPLAN)	- Departmental Water Commission (RASSQ) - SHARE - COMPARTAMOS - Banrural - Estrella del Norte Cooperative - Micoope-Cotoneb - CIACUS, R.L. - Maya Procredit - COOPER, R. L. - Zacualpa Integral Development Association - ASODINZA - Quick Express - Chapin Express - Western Union - IBC Polaris Load
República Dominicana			
- School committees - Integral social development association - Pro-land committees - Church groups - Mothers Center - TEGULINA Group - Group of guano weavers - Neighborhood Boards - Water Fund - Council for the Management of the Mao River Basin - Regantes Boards - Chacuey-Mahuaca Basin Council - PROLINO - Dam Council - Producer associations	- Livestock association of la Sierra - Nature Center - Save the Children - World Vision - Sierra Plan - Diocesan Caritas - Corpo Bao - ASOCALPA - Northwest Development Institute (INDENOR) - Churches Social Service	- National Monitoring and Evaluation Commission - National Occupational Health and Safety Council - National Social Security Council - Dominican Corporation of State Electric Companies - National Network for Cleaner Production and Efficient and Sustainable Use of Resources - National Energy Commission - National Council for Food and Nutrition Sovereignty and Security - National Council for Disaster Prevention, Mitigation and Response - National Emergency Commission	- Mamoncito Cooperative - Dominican Forest Chamber - CoopForest - Companies of Exporters and Suppliers of Agrochemicals - CoopBueno - Border Development - BanReservas - Agricultural bank - Coopsano - Coopglobal - Banco La Nacional - Women's Bank - San José Cooperative - FONDESA - Gomez Investments - ADOPEM

Stakeholders			
Community	**NGOs**	**Institutions**	**Private and financial entities**
	- Coffee Producers Association of Cidra de Toma - Farmers Association of Palmarejo - Forest Producers Association - Foundation for Community Development (FUDECO) - FUNDEPRODA - Center for Nature Education - Border Solidarity - FUNDEPRODA - GIZ - PROPAGAS - NATURALEZA	- General Directorate of National Cadastre - National Directorate of Registry of Titles - National Directorate of Cadastral Measures - Dominican Agrarian Institute - National Institute of Hydraulic Resources, Watershed Management, Environmental Management Department - Agricultural bank - Coffee Institute - Special Fund for Agricultural Development - Yaque Plan - Autonomous University of Santo Domingo - National Institute of Drinking Water and Sewerage (IINAPA) - Northwest Development Institute (INDENOR) - Ministry of Environment and Natural Resources - MAG - Ministry of Public Health	- Agricultural bank - ADEMI - RUAMAR - San Ignacio Cooperative - Media

12.2.1 Initial socialization activities of the Project

The Project development team made an initial approach to the different stakeholders in each of the countries involved in the Project; Once the stakeholders of each municipality were identified, the national Project consultants organized meetings with community and institutional stakeholders and NGOs in each of the countries. In these exercises, it was possible to make an initial characterization of the land uses and economic activities in each area, identify the main problems perceived in relation to climate change, as well as the adaptation measures that have been previously implemented and the sustainability alternatives of the project.

The meetings had equal participation of men and women and the contributions of each group were valued. They were done in workshops and revolved around the following points:

a) Land use: determine land use in the municipalities, benefits perceived by the local population.
b) Local perception of climate change: perceived changes in climate, perceived impacts on ecosystems and agroecosystems, perceived impacts on the population, proposals for adaptation measures
c) Prior adaptation processes in the area
d) Sustainability of the project: perception of the components and activities, perceived barriers

and mitigation strategies, stakeholders for sustainability, key policies.

e) Financial mechanisms.

The information given allows us to have first context of each one of the zones to intervene, as well as the perceptions of the local stakeholders on climate change, the adaptation processes and the effectiveness / feasibility of the components and activities of the project. The results of these meetings were considered to refine the design of the Project and should also be taken into account when methodologically considering the participation plan and the development of the sub activities. The characteristics of the sessions done by country are listed below:

Table 42. Characteristics of the initial socialization activities of the Project in each of the countries

Country	Date	Municipalities	Attendees		
			Women	Men	Total
Honduras	14/10/2019	Choluteca, Marcovia, Duyure, Morolica, Apacilagua y Orocuina	8	25	33
Nicaragua	14/10/2019	Somoto	13	16	29
El Salvador	16/10/2019	San Miguel	9	21	30
Panama	18/10/2019	Pedasí	12	18	30
Costa Rica	18/10/2019	Nicoya, Guanacaste	11	24	35
Guatemala	22/10/2019	Santa Cruz del Quiché	1	28	29
Dominican Republic	22/10/2019	San Ignacio de Sabaneta, Prov. Santiago Rodríguez	8	14	22

12.3 Stakeholders engagement

This phase gives the basic guidelines of establishing a relationship with the stakeholders so that:

- There is transparency, respect, non-discrimination and action without harm.
- The specific characteristics and features of the stakeholders are taken into account, especially those that are most vulnerable.
- Clear, accessible, understandable and smooth communication between the stakeholders and the work team is achieved.
- The stakeholders have the conditions to freely express their concerns, needs and interests.

By fully identifying the stakeholders involved in the initial map it is possible to determine the ways in which relations with them will develop throughout the project. This identification implies reaching the people and groups identified to deepen the understanding of people's expectations, interests and motivations. In addition, initial approaches provide the opportunity to share detailed information about activities, gather ideas on the most appropriate approaches to communication and engagement, and help refine the stakeholder map and participation strategy.

It is crucial to meet with all the stakeholders identified in the mapping exercise and not just those that are closer or more interested or are more susceptible to the project. This requires creativity in

terms of the multiple ways and mechanisms to bring closer and dialogue with all parties throughout the entire process. It is also important to classify the stakeholders in three categories:

1) The key stakeholders, who are the ones who will be most directly impacted by the implementation of project activities, who are the highest priority and with whom there will be greater interaction in dialogue and negotiation. These are mainly the communities settled in the target area farmers and ethnic groups-, local governments and some private entities with a very local impact.
2) The stakeholders, who are those who have a high degree of interest in the project and have the will and experience to participate but are not so directly affected by the activities to be developed. These are civil society organisations, the private sector and national institutions. And finally;
3) The less interested stakeholders, who are not so interested in the dialogue and negotiation processes but are interested in receiving information about the project and its activities. These could be some national institutions or the private sector.

Similarly, it is essential to create some relationship rules that involve big and small details and that take into consideration the characteristics of each group:

a) Communities: with these stakeholders all decisions must be made in a systematic manner so that the same people and organisations can decide the means by which they want to be informed, where to meet, how and who can provide services, what is the food they want to receive, establish communication channels and means of communication. The dialogue will always be respectful of their positions, beliefs and cultural sensitivities. It should be transparent and horizontal and take into account the following:

   - Find the means of communication that they can effectively use to make invitations to gatherings and other meetings and planned activities. Where applicable, go to the places to make the invitations so that everyone can be informed.
   - Hold meetings in places that are as close as possible to where they are, seeking equidistant places and using the spaces they usually use to meet and, in case of needing food or any other resource they can provide, allowing them to have an economic income.
   - Use language that is understandable when presenting and explaining project activities, clearly exposing the risks, impacts and benefits of these, using visual and methodological resources to carry out the activities to ensure that the people have understood.
   - Establish direct communication channels through which people can make inquiries at any time and have access to clear information about the project. In the same manner allowing the reception of complaints and requests that are attended to in a timely manner.

- Generate information in understandable formats for all groups of stakeholders; If a stakeholder is illiterate, oral information must be generated.
- Seek equal participation of men and women in all activities.
- Be informed about the characteristics of the population that involves being aware of their characteristics when relating to them and keep in mind their needs and aspirations. Do not use racist, discriminatory, offensive terms, do not refer to conflicts that are still in force, do not bring together communities / organisations / institutions in conflict and that destabilize general dialogue.

There are some characteristics depending on each stakeholder, besides the one mentioned above:

i. Farmers: paying special attention to young people and older adults, taking into account their contributions and feelings.
ii. Women: avoiding the use of sexist and / or degrading terms towards women, using inclusive language, acknowledging the contributions of women in the analyses, as well as their vision of the project.
iii. Ethnic groups: In case a person speaks a language other than Spanish, there must be the use of a translator in each and every one of the spaces in which the persons participate and whenever they talk with the project team. The translator should ideally be from the same community and should have a remuneration for his or her work. Together with the community, it will be decided who or who will perform this function and the way in which it will be carried out. Considering the systems and organisational structures of each town and community. Respecting hierarchies in internal decision making. It is important to keep in mind that for these stakeholders the FPIC processes defined by the 169 International Labour Organisation (ILO) Convention applies; In this case, national legislation should be consulted to determine the procedures that apply to these cases.

b) Civil society organisations:
- With these organisations it is crucial that they are always all equally summoned to meetings and activities.
- Considering the studies, papers, reports and documents carried out by them that account for the situation of the population regarding a specific problem.
- Keep information channels open.

c) Government institutions:
- To ensure that the same people always participate in the whole process, which allows for continuity in the process and in decision making.
- To ensure that those who participate have the capacity to decide and influence within their institutions, allowing the established agreements to be fulfilled.
- It is important that dialogue with these stakeholders can also be developed within the territory where the community stakeholders are located.

- Establish a channel and means of communication that allows constant dialogue, flow of information and also enable the discussions and decisions taken within the institutions and that affect the project in some way to be communicated quickly.

d) Private Sector:

✓ With this sector it is key that the dialogue can also be developed within the territory where the community stakeholders are located.

✓ Take advantage of the information and documentation generated by them that meets the needs of the project.

12.4 Plan for implementation

In this phase the activities and sub-activities of the Project are implemented, therefore here is where the Plan is put into practice. It is important to respect the guidelines of the relationship, the schedule, and the decisions made within the team and with the stakeholders. The following defined guidelines should be considered for each of the project activities where stakeholders, mechanisms and participation objectives are set.

Table 43. Mechanisms and stakeholders by activity

Activity	Stakeholders	Mechanisms	Objectives
Output 1. Strengthened technical capacity of local government, farmers and rural communities to implement EbA and other adaptation measures.			
1.1. Develop site-specific intervention plans for the 7 target catchments to integrate EbA measures through a participatory process with municipal authorities, local communities, and other stakeholders.	NGOs and Community, local, national and private institutions.	• Summon all identified community stakeholders considering the proposed guidelines. • Hold meetings by municipality where the activity and objective of the community monitoring evaluation committee are described in great detail. • Define a mechanism with the people through which the committee that considers people's knowledge and skills and is balanced between men and women, youth and adults. • Define the objectives and rules of the committee and leave minutes of the meetings. • Generate a methodology that allows a collaborative construction of the intervention plans in each basin, which especially values the contributions of the most vulnerable stakeholders. • Communicate according to the proposed guidelines to the community stakeholders about this activity, clearly. •Agree on the places and schedules of the workshops, looking for the ones that are most accessible and comfortable for all the people. • Design methodologically the workshops that allow them to be	• Understanding the nature and scope of the activity. • Strengthen capacities of community stakeholders • Provide specific knowledge about the activity. • Guarantee the conditions for all the stakeholders to attend the proposed meetings, workshops and meetings. • Offer support material that is understandable to all the people. • Ensure that the most vulnerable stakeholders are taken into account so as not to generate harm on them. • Assess the knowledge of each of the community stakeholders. • Provide knowledge to people about basin intervention plans • Generate spaces for dialogue between the different stakeholders and the project team. • Incorporate the aspirations, concerns, needs and interests of the locals in the intervention plans. • Ensure that the project involves the interests of each of the stakeholders, giving prominence to community stakeholders. • Validate intervention plans broadly and transparently. • Comply with agreements made with

Activity	Stakeholders	Mechanisms	Objectives
		didactic, that people get involved and understand the exercises. • Facilitate the movement of representatives of vulnerable groups to ensure their participation in the workshops. • Inform all stakeholders about the activity in advance. • Conduct this workshop preferably in a neutral place that allows quiet dialogues between stakeholders. • . Design a methodology that allows the stakeholders to understand the activity and get involved in it, as well as to talk with each other, for example: rotating worktables. • Perform exercises by sectors in which they can comprehensively review intervention plans. • Generate analysis socialization exercises by sectors that enable feedback • Clearly ask for the approval or not of analysed documents. • Use methodologies that adapt to the needs and characteristics of the stakeholders so that the information is clear and ensure that all stakeholders understand it. The formats and tools must be adapted for each stakeholder.	the stakeholders in each meeting. .
1.2. Provide technical assistance to municipal authorities, farmers and rural communities for the implementation of EbA practices as well as water- and resource-efficient technologies.	Commercial farmers, identified community stakeholders .	• Consider the guidelines established for the relationship with stakeholders in terms of meeting places, language and information. • Hold meetings with commercial farmers to raise awareness of issues related to forest resources and land management and generate alternative solutions. • Hold meetings with experts to train commercial farmers in AbE practices. Develop clear, understandable and applicable methodologies. • Accompany the farmers in the application of knowledge. • Conduct workshops with commercial farmers and community stakeholders establish protocols for sustainable AbE practices. • Conduct training workshops with community stakeholders where issues of AbE and efficient water technologies and technologies that reduce the demand for firewood are developed. • The training must be adapted to the cultural characteristics of each of the stakeholders. • Design the training program for trainers in a way that corresponds to the characteristics of the stakeholders that will participate. A training program that also allows the generation of a dialogue on shared	• Generate a system to centralize cooperation agreements with commercial farmers and generate compliance monitoring. • Strengthen capacities of commercial farmers in AbE sustainable practices. • Reception of technical assistance. • Establish consensus • Provide technical tools to community stakeholders on AbE. • Ensure that all stakeholders understand the information and can use it according to their cultural characteristics. • Prevent restoration activities from leading to ecosystem alterations. • Prevent AbE activities from expanding the agricultural frontier • Strengthen capacities in community stakeholders through ABE training • Generate knowledge sharing among stakeholders. • Value the knowledge of each of the stakeholders. • Guarantee the means for the most vulnerable stakeholders to participate.

Activity	Stakeholders	Mechanisms	Objectives
		knowledge and the appreciation of the knowledge of each of the stakeholders. • Use experiential and applied methodologies that allow the use of the knowledge acquired in the ABE training workshops and combine them with the background knowledge of the stakeholders.	
1.3. Provide technical assistance to farmers and rural communities for the development of natural resource-based businesses and alternative climate-resilient livelihoods.	Community: all identified .	• Consider the guidelines established for the relationship with stakeholders in terms of meeting places, language and information. • Conduct meetings with the community stakeholders in each basin to collectively assess existing livelihoods and identify climate risks and options to address them. • Workshops for the elaboration of action plans must be adapted to the cultural sensitivities of each of the stakeholders. • Design the training program in livelihoods in a way that responds to the characteristics of the actors that will participate, that allow generating the dialogue of knowledge and the valorisation of the knowledge of each of the stakeholders. • Develop clear and understandable and applied methodologies.	• Receive technical assistance • Establish consensus • Give technical tools to community stakeholders. • Ensure that all stakeholders understand the information and can use it according to their cultural characteristics. • Generate knowledge sharing among stakeholders. • Value the knowledge of each of the stakeholders. • Guarantee the means for the most vulnerable stakeholders to participate. • Incorporate the aspirations, concerns, needs and interests of the stakeholders interested in the action plans.
Output 2. Demonstration adaptation interventions implemented in rural communities across seven target catchments in the Dry Corridor and Arid Zones.			
2.1. Implement large-scale EbA interventions within rural communities across the seven target catchments.	Rural communities	• Link rural communities in each of the sub-activities. • Link local staff in the development of activities. • Provide training and security conditions to the people in the community who participate in the activities. Hold informational meetings with the communities before carrying out each activity	• Ensure the participation of the local community in all activities. • Avoid the arrival of foreign personnel. • Guarantee the consent of the communities for intervention with the activities.
2.2. Implement demonstration water- and resource-efficient technologies within rural communities across the seven target catchments.	Rural communities	• Link local communities to each of the sub-activities. • Make decisions together with the beneficiaries. • Hold informative meetings with the communities before carrying out each activity.	• Ensure that communities know in detail the activities to be carried out. • Guarantee the consent of the communities for intervention with the activities. To arrange with the communities the details for the development of the activities.
2.3. Establish the grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing and start operations.	Communities: farmers and producers and their associations, indigenous communities, women's organisations, community associations.	• Summon all identified community stakeholders taking into consideration the proposed guidelines Conduct meetings with community stakeholders in which it is explained what a trust fund is, how it works and how it can be accessed, in a didactic way so that all participants can understand it, using examples that are close to their own realities and making simulations.	• Provide information to community stakeholders about what the trust fund means and how it works. • Identify the needs and expectations of farmers, as well as their expectations in terms of economic gains and quality of life improvement. Ensure that the fund responds to the needs and expectations of the stakeholders involved.

Activity	Stakeholders	Mechanisms	Objectives
Output 3. Information on climate change adaptation and its financing disseminated across the region and mainstreamed into local and national policies.			
3.1. Establish regional knowledge hub for the dissemination of information on EbA in the Dry Corridor and Arid Zones.	Local and national institutions, NGOs, identified community stakeholders.	• Establish dialogues with national public institutions for the creation of the knowledge management centre. • Establish the operating criteria of the knowledge management centre. • Collect and systematize the experiences of the project and analyse them to account for the lessons learned. • . Generate institutional alignment recommendations for the implementation of AbE. • Generate environmental public policy guidelines for each of the countries. • Develop knowledge products taking into account different formats, languages, languages that link all knowledge and knowledge and that can be accessible to all the stakeholders. • Design training for decision makers at the municipal level on the impacts of climate change and the role of the EbA in its mitigation. • Design methodologies that correspond to the abilities of public officials that allow them to understand and appropriate knowledge.	• Understanding the nature and scope of the activity. • Ensure the means for the most vulnerable stakeholders to participate. • Ensure that all actors understand the information and can appropriate it according to their cultural particularities • Value the knowledge of each of the actors. • Ensure that knowledge products are in all formats, languages and languages that correspond to the needs and capacities and cultural characteristics of all stakeholders. • Strengthen the capacities of community organisations. • Strengthen capacities in local public institutions on the impacts of climate change. • Ensure the integration of knowledge about the impacts of climate change and the role of the EBA in local decision makers. • Ensure the adoption of AbE in community organisations.
3.2. Raise awareness of financial mechanisms for the implementation of CCA interventions.	Municipal public officials, private farmers, community stakeholders identified.	• Design training for municipal public officials on the different financial mechanisms. • Design methodologies that correspond with the abilities of public officials that allow them to understand and appropriate knowledge. • Generate teaching materials in different formats and languages, which support the appropriation and replication of knowledge about financial mechanisms • Design training for private farmers on the different financial mechanisms • Accompany vulnerable communities throughout the process of accessing the AbE credit lines and the trust fund. • Present experiences and successful cases of community organisations that have accessed the AbE line of credit or the trust fund.	• Understanding the scope of the activity. • Understanding the credit line system and its benefits and risks to medium-scale farmers. • Understanding the credit line system and its benefits and risks to vulnerable communities. • Capacity building of public officials and agencies on the designed financial mechanisms. • Provide tools to local public officials so they can accompany community stakeholders in making decisions about the adoption of financial mechanisms. • Provide clear and understandable information according to the characteristics of each stakeholder that enable the making of informed decisions about credit lines for AbE initiatives.

Activity	Stakeholders	Mechanisms	Objectives
3.3. Enhance capacity of national and local-level policy-makers, in partnership with knowledge network of universities, research centers and private sector, to integrate climate change adaptation and the valuation of natural capital into local policies.	NGOs, universities, local governments,	• Gather a team of experts • Develop methodologies for collecting evidence, experiences and research for analysis. • Make documents that provide elements for the incorporation of the EbA in the development of municipal public policies. • Design workshops aimed in the municipalities of the Dry Corridor and the Arid Zones where project experiences, the achieved benefits, and the lessons learned are dynamically presented so that they can incorporate AbE initiatives. • Ensure the availability of EbA's experiences materials in different formats and languages, which are accessible to all interested stakeholders. • Generate documents with guidelines to local governments so that they can adopt the application of economic incentives for AbE initiatives. • Promote in-depth dialogues with local governments about the experiences developed that enable them to use the knowledge in the generation of AbE adoption policies. • Conduct collaborative meetings with local governments in which the integration of natural capital profiles to development plans is made.	• Generate products in languages accessible to all stakeholders. • Generate solid documents that support the actions of AbE. • . Provide capacity for local governments to generate policies for the adoption of AbE. • Generate very diverse materials that provide information about the EbA to local governments to make decisions about the management of the effects of climate change. • Provide information to local governments about the importance of linking community stakeholders in decision making and in policy formulation for the adoption of AbE. • . Provide information to local governments about the importance of generating economic incentives.
Output 4. Financial products and services to finance EbA investments are offered by Partner Financial Institutions (PFI), including PFI access to EbA on-lending funds and support mechanisms.			
4.1. Organizar y establecer la estructura financiera de las líneas de crédito y garantía.	Private: commercial farmers, businesses, small farmers, financial institutions	• Hold meetings in neutral places where all stakeholders are comfortable to participate. Hold meetings with stakeholders so that they know the scope of the activity. It is important that these meetings be joint as each of them can express their concerns and needs, as well as answer questions. By generating this dialogue each party can know the position of the other. However, it is essential that the dialogue be maintained in clear and understandable terms for all attendees.	• Strengthen capacities of financial institutions. • Provide specific information on activities to the stakeholders. • Ensure that the credit lines created respond to the needs and characteristics of the target population and avoid economic displacement • Ensure that financial institutions can resolve unforeseen events at the time of execution. • Ensure the proper functioning of the institutions when activating the credit lines. • Ensure that the financial, social, environmental and technical criteria for accessing to credit lines are met and avoid the expansion of the agricultural frontier. To inform the target population of the mechanics of access to the credit line, the risks associated with the payment terms.
4.3. Technical assistance (TA) facility to strengthen technical capacity of accredited and non-	Private: financial institutions	Hold meetings with accredited financial institutions that want to get involved in the project to let them know the specifications of the project, as well as	• Strengthen capacities of financial institutions. • Provide specific information about the target population in order to

Activity	Stakeholders	Mechanisms	Objectives
regulated financial institutions to access and channel funds for small- and large-scale EbA investments.		the specific characteristics of the population that would access the investment funds. In these meetings, the problems and needs of the target population that allow financial institutions to design resources that respond to them must be presented.	respond to their needs and particularities. • Provide information about the objectives of investment funds so that they address the needs of the target population. • Ensure that investment funds respond to the particular needs of ethnic groups • . Ensure that the funds meet the stated objectives. Ensure the proper functioning of institutions when executing investment funds.

12.5 Monitoring and following up

This is a transversal phase to the others as is important to constantly review and receive feedback of the entire Project, especially the participation plan, as this enables the following:

- Update the stakeholder map.
- Design new, more successful methodologies.
- Fulfil the commitments pledged among the stakeholders.
- Respond to interests and needs.
- Resolve conflicts generated in the implementation

The time in which to conduct the evaluation must be specified, it can be established for certain periods of time or at the end of each activity. It is also important to establish a methodology to carry out the evaluations within the work team and between the team and the stakeholders, through extensive exercises, generating comfortable spaces in which the stakeholders can freely express their agreements and disagreements, and with methodologies that enable agreements to be reached.

13 COPING WITH COVID

This ESMF was developed before the COVID pandemic. However, this crisis has impacted rural and indigenous population more harshly, and, as part of activity 2.1, the project will ensure that the intervention planning considers those impacts and coping mechanisms.

As COVID has restricted access to indigenous people in the region, extra attention will be paid to indigenous engagement and FPIC processes in Guatemala. In this case, the implementation of a FPIC would help promote awareness of the needs of the indigenous peoples in the targeted municipalities in the country.

If by the time the project starts, it is still needed to rely on online means only, a formal assessment of communities capacity to participate on line will be done, including not only internet access but also the capacity in the community to support and facilitate online discussions and FPIC processes.

For communities with the capacity to participate in on line discussions, other issues will be considered, such as: the access to internet and equipment, sending printed material beforehand, ensuring social distance if participants are brought together, recording online discussions, the need of proper approval processes by communities, hiring an experienced on-line facilitator and repeating FPIC processes to ensure participation.

14 CONCLUSIONS AND RECOMMENDATIONS

- The Project will provide significant benefits for the Dry Corridor of Central America and the Dominican Republic Arid Zones inhabitants by increasing the resilience of their livelihoods to future extreme weather events, especially for populations that generally lack economic resources and knowledge to achieve this; it will also improve natural resource management and their species, bringing tangible benefits in terms of regeneration of ecosystems, increased forest cover in each basins, improvement of hydrological resource conditions, reduction of greenhouse gases from poor agricultural practices, and the degradation and deforestation of natural resources, increased carbon sinks.

- However, the risk analysis identified some risks and impacts that may be triggered by the implementation of some activities, although 6 activities were classified in category B - medium risk, 5 assessed in category C – low risk, and risk-free activity; therefore, it is necessary to follow the guidelines set out in the Mitigation Measures chapter as well as develop the instruments proposed in order to mitigate, reduce or eliminate these potential risks, or when not possible, to compensate them.

- The guidelines for the development of Project Indigenous Peoples Plan described in this document constitute an initial analysis basis, which has allowed to verify that the Project foresees the potential risks that may arise from the implementation of its activities, and establishes mitigation, reduction or elimination measures. However, during the next phase of the Project, the information, analysis and safeguard mechanisms of this IPP should be complemented much more thoroughly.

- During the implementation phase of the Project, a specific Stakeholder Engagement Plan should be developed to each Project's basins, so specific actions and strategies can be designed and appropriately involve the stakeholders related to each activity.

- Similarly, indicators and guidelines set out in the Monitoring and Evaluation Arrangements chapter should be applied to each country.

REFERENCES

Alcaldía Municipal de Duyure. 2018. *Plan de desarrollo Municipal*. Honduras: Alcaldía Municipal de Duyure.

Alcaldía Municipal de Morolica. 2019. *Plan de desarrollo Municipal. Plan de desarrollo municipal con enfoque de ordenamiento territorial PDM - OT 2019 - 2024.* Honduras: Alcaldía Municipal de Morolica.

Alcaldía Municipal de Somoto, AMUNIC y Apoyo PASMA II. 2010. *Plan Ambiental Municipal (2010 - 2015).* Nicaragua: Alcaldía Municipal de Somoto.

Alcaldía Municipal de Somoto. 2017. *Caracterización Somoto*. Nicaragua: Alcaldía Municipal de Somoto.

Alcaldía Municipal de Yalagüina. no date. *Caracterización Municipal de Yalagüina. Ficha Municipal*. Nicaragua: Alcaldía Municipal de Yalagüina.

Asociación Intermunicipal Bahía de Jiquilisco. 2017. *Diagnóstico Integral del Municipio de Concepción Batres, Departamento de Usuluán 2012-2017*. El Salvador: Asociación Intermunicipal Bahía de Jiquilisco, Subsecretaria de Desarrollo Territorial y Descentralización.

Bouroncle C.; Imbach P.; Rodríguez B.; Medellín C.; and Fung E. 2014. *La agricultura en Panamá y el cambio climático. ¿Dónde están las prioridades para la adaptación?*. Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Bouroncle, C., Imbach, P., Ney Ríos, J., Medellín, C., Calderer, Ll., Zamora, J.C., Manrow, M., Läderach, P., Rodríguez, B., Martínez, A., and Blackburn, D. 2013. *Análisis de vulnerabilidad a nivel nacional de seis países de América Central, para el proyecto "Análisis de vulnerabilidad e identificación de opciones de adaptación frente al cambio climático en el sector agropecuario y de recursos hídricos en Mesoamérica*. Available at http://www.cambioclimatico-regatta.org/images/vulnerabilidad/Informe_tecnico_PNUMA_131118.pdf

Calvo-Solano, O. D., Quesada-Hernández, L., Hidalgo, H., and Gotlieb, Y. 2018. Impactos de las sequías en el sector agropecuario del Corredor Seco Centroamericano. *Agronomía Mesoamericana*, 293), pp. 695–709.

CONAI (Comisión Nacional de Asuntos Indígenas). 2016. *Documentos*. Available at http://www.conai.go.cr/nosotros.html

Contraloría General de la República. 2015. *Comportamiento de la Economía a través de sus principales indicadores económicos y financiero del sector público*. Available at https://www.contraloria.gob.pa/assets/informe-trimestral-30junio2018.pdf

CostaRica21. 2019. *Bosque Tropical Seco de Costa Rica*. Available at http://www.costarica21.com/Bosque-Tropical-Seco-s.html

DIGEPAZ (Dirección General para la Promoción de la Paz y la Convivencia Ciudadana). 2012. *Ministerio de Justicia y Paz*. San José. Available at https://www.mjp.go.cr/viceministeriopaz

DIGESTYC (Dirección General de Estadísticas y Censos). 2018. *Encuesta de Hogares de propósitos múltiples, 2017*. El Salvador: Ministerio de economía, DIGESTYC.

EFE. 2018. *Centroamérica sigue siendo un nicho de violencia, pese a la bajada estadística*. [online] Available at https://www.efe.com/efe/america/sociedad/centroamerica-sigue-siendo-un-nicho-de-violencia-pese-a-la-bajada-estadistica/20000013-3513600#targetText=Honduras%20aparece%20como%20el%20segundo,a%20los%205.150%20de%202016. [Consultado: 21 Oct. 2019].

ENACAL (Empresa Nicaragüense de Acueductos y Alcantarillados). 2003. *Plantas de tratamiento de Aguas Residuales de Nicaragua*. Nicaragua: ENACAL.

ENEI. 2-2018. *Encuesta Nacional de Empleo e Ingresos 2-2018*. Guatemala: Instituto Nacional de Estadística.

ETESA (Empresa de Transmisión Eléctrica). no date. *El fenómeno de El Niño. Hidrometeorología*. Panama: República de Panamá.

Fernández, L. F. 2010. Desafíos de la gestión en seguridad y soberanía alimentaria y nutricional en América Latina. En: H.R. Viales, editor. *El contexto, los problemas y los actores de la definición de políticas científicas para la cohesión social en América Latina: Una visión desde Costa Rica*. Costa Rica: Sociedad Editora Alquimia 2000.

FLACSO. 2014. *La travesía laboral de la población Ngäbe y Buglé de Costa Rica a Panamá: características y desafíos*. Available athttp://biblioteca.clacso.edu.ar/Costa_Rica/flacso-cr/20170704051143/pdf_403.pdf

Gallo, M. and Rodríguez, E. 2007. *Reserva de la Biosfera, Xiriualtique-Jiquilisco. La Bahía de las Estrellas*. El Salvador: UNESCO, MARN, MAB, AECID.

GCF. 2018a. *Guidelines for the Environmental and Social Screening of Activities Proposed under the Simplified Approval Process. P.9.* [online] Available at https://www.greenclimate.fund/documents/20182/574766/Guidelines_-_Guidelines_for_the_Environmental_and_Social_Screening_of_Activities_Proposed_under_the_Simplified_Approval_Process.pdf/4df31b53-87bd-419a-9373-854047e3e87f [consultado el 24 de septiembre de 2019].

GCF. 2018b. *Environmental and Social Policy. P.25.* [online] Available at: https://www.greenclimate.fund/documents/environmental-social-policy [consultado el 24 de septiembre de 2019].

GCF. 2018c. *GCF Indigenous Peoples Policy. P.32.* [online] Available at: https://www.greenclimate.fund/documents/indigenous-peoples-policy [consultado el 5 de noviembre de 2019].

GCF. 2019a. *Sustainability guidance note: screening and categorizing GCF-financed activities*. P.15. [online] Available at: https://www.greenclimate.fund/documents/screening-categorizing-activities [consultado el 24 de septiembre de 2019]

GCF. 2019b. *Designing and ensuring meaningful stakeholder engagement on GCF-supported projects. P.9.* [online] Available at: https://www.greenclimate.fund/documents/meaningful-stakeholder-engagement [Consultado el 5 de noviembre de 2019]

GCF. 2019c. *Operational guidelines: Indigenous Peoples Policy. P. 37.* [online] Available at: https://www.greenclimate.fund/documents/guidelines-indigenous-peoples-policy. [consultado el 5 de noviembre de 2019]

Gotlieb, Y., Pérez-Briceño, P. M., Hidalgo, H., and Alfaro, E. 2019. The Central American Dry Corridor: a consensus statement and its background. *Revista Mesoamericana de Biodiversidad y Cambio Climático*, 3(5), pp. 42-51.

IARNA-URL (Instituto de Agricultura, Recursos Naturales y Ambiente - Universidad Rafael Landívar). 2018. *Ecosistemas de Guatemala basado en el sistema de clasificación de zonas de vida.* Guatemala: Instituto de Investigación y Proyección sobre Ambiente Natural y Sociedad, Universidad Rafael Landívar.

IMN (Instituto Meteorológico Nacional). no date - a. *Clima en Costa Rica - Pacífico Norte*. Available at https://www.imn.ac.cr/documents/10179/31165/PacificoNorte.pdf/4a0e8960-8c51-4390-8a8d-73d9d825d59b

IMN (Instituto Meteorológico Nacional). no date - b. *El clima y las regiones climáticas de Costa Rica*. Available at https://www.imn.ac.cr/documents/10179/31165/clima-regiones-climat.pdf/cb3b55c3-f358-495a-b66c-90e677e35f57

INDH Guatemala (Índice de Desarrollo Humano Guatemala). 2014. *Estadísticas – Indicadores Básicos* [Online]. Available at https://desarrollohumano.org.gt/estadisticas/estadisticas-indicadores-basicos/indicadores-basicos/

INE (Instituto Nacional de Estadística) 2019. *XII Censo Nacional de Población y VII de Habitación*. Guatemala: Dirección de Censos y Encuestas, Instituto Nacional de Estadística.

INE (Instituto Nacional de Estadística). 2003. XI *Censo Nacional de Población y VI de Habitación*. Guatemala: Dirección de Censos y Encuestas, Instituto Nacional de Estadística.

INE (Instituto Nacional de Estadística). 2012. *Encuesta Nacional de Demografía y Salud, ENDESA 2011-2012*. Available at http://www.revistazo.biz/web2/docs/HondurasENDESA2011_2012.pdf

INE (Instituto Nacional de Estadística). 2014a. *Caracterización departamental Quiché 2013.* Guatemala: Instituto Nacional de Estadística.

INE (Instituto Nacional de Estadística). 2014-b. *Censo XVII Población y VI de Vivienda 2013*. Available at http://170.238.108.227/binhnd/RpWebEngine.exe/Portal

INE (Instituto Nacional de Estadística). 2018. *Indicadores de Choluteca 2018*. Available at https://www.ine.gob.hn/V3/seccion/choluteca

INE (Instituto Nacional de Estadística. 2004. *IV Censo Nacional Agropecuario*. Guatemala: Dirección de Censos y Encuestas, Instituto Nacional de Estadística.

INEC (Instituto Nacional de Estadísticas y Censo). 2011. *Censos 2011*. Available at http://inec.cr/censos/censos-2011

INEC (Instituto Nacional de Estadísticas y Censo). 2014. *Estimación de la esperanza de vida al nacer por sexo, según provincia, distrito, comarca indígena en la República de Panamá*. Available at: http://www.minsa.gob.pa/sites/default/files/publicacion-general/esperanza_de_vida.pdf

INEC (Instituto Nacional de Estadísticas y Censo). 2016. *Encuesta Nacional de Cultura 2016. Principales Resultados*. Costa Rica: INEC, MCJD. Available at http://inec.cr/sites/default/files/documetos-biblioteca-virtual/reenc2016-27092017.pdf

INEC (Instituto Nacional de Estadísticas y Censo). 2017. *Panamá en cifras: 2012-16*. Panama: Contraloría General de la República.

INIDE (Instituto Nacional de Información de Desarrollo) y MAGFOR (Ministerio Agropecuario). 2013. *IV Censo Nacional Agropecuario. Departamento de Madriz y sus municipios*. Nicaragua: INIDE.

INIDE (Instituto Nacional de Información de Desarrollo). 2008. *Somoto en cifras.* Nicaragua: INIDE.

INIFOM (Instituto Nicaragüense de Fomento Municipal). no date. *Biblioteca Enacal. Caracterización Municipal El Jícaro.* Available at http://biblioteca.enacal.com.ni/

INYPSA. no date - a. *Plan de Ordenamiento Urbano del Municipio de Jucuarán. Formulación de los Planes de Ordenamiento Urbano de los Municipios de la Cuenca de la Bahía de Jiquilisco*. El Salvador: Gobierno de la República, Viceministerio de Vivienda y Desarrollo Urbano, BID.

INYPSA. no date - b. *Diagnóstico Sectorial Socioeconómico, Concepción Batres. Formulación de los Planes de Ordenamiento Urbano de los Municipios de la Cuenca de la Bahía de Jiquilisco*. El Salvador: Gobierno de la República, Viceministerio de Vivienda y Desarrollo Urbano, BID.

MAGA (Ministerio de Agricultura, Ganadería y Alimentación). 2011. *Diagnóstico de la Región de Occidente de Guatemala*. Guatemala: Unidad de Planificación Geográfica y Gestión de Riesgo – UPGGR-MAGA.

MAGA-DIGEGR (Ministerio de Agricultura, Ganadería y Alimentación). 2015. *Mapa de cobertura vegetal y uso de la tierra, a escala 1:50,000 de la República de Guatemala, Año 2010.* Guatemala: Dirección de Información Geográfica, Estratégica y Gestión de Riesgos –DIGEGR del Ministerio de Agricultura, Ganadería y Alimentación –MAGA.

Magaña, S.M. and Saguer, R. 2005. *Estudio Hidrológico de la subcuenca del río Grande de San Miguel,* thesis, Universidad Centroamericana José Simeón Cañas.

MARENA (Ministerio de Ambiente y Recursos Naturales), GIZ, y Cruz Roja Nicaragüense. 2011. *Estrategia Municipal de Adaptación ante el Cambio Climático en Somoto.* Nicaragua: MARENA.

MARENA-Delegaciones Territoriales. 2019. Nicaragua. *Ficha de Caracterización Municipal. Formulación de propuesta: Adaptación basada en Ecosistemas para aumentar la resiliencia en el Corredor Seco Centroamericano y Zonas Áridas de República Dominicana*. Nicaragua: MARENA.

MARN (Ministerio de Ambiente y Recursos Naturales). 2017. *Informe Ambiental del Estado de Guatemala 2016.* Guatemala: Ministerio de Ambiente y Recursos Naturales.

MARN (Ministerio de Medio Ambiente y Recursos Naturales). 2004. *Plan de Manejo del Área Natural del Complejo del Jocotal.* El Salvador: UCA Editores.

MARN (Ministerio de Medio Ambiente y Recursos Naturales). no date - a. *Áreas de Conservación*. Available at http://www.marn.gob.sv/areas-de-conservacion/3/

MARN (Ministerio de Medio Ambiente y Recursos Naturales). no date - b. *Reserva de Biósfera Xirihualtique-Jiquilisco*. Available at http://www.marn.gob.sv/reserva-de-biosfera-xiriualtique-jiquilisco/

MARN (Ministerio de Medio Ambiente y Recursos Naturales). no date - c. *Laguna El Jocotal*. Available at http://www.marn.gob.sv/sitio-ramsar-area-natural-protegida-laguna-el-jocotal/

MEF (Ministerio de Economía y Finanzas). 2017. *Pobreza y desigualdad en Panamá*. Panama: Ministerio de Economía y Finanzas.

MIDES (Ministerio de Desarrollo Social) and SENAPAN (Secretaria Nacional para el Plan de la Seguridad Alimentario y Nutricional). 2017. *Plan Nacional de Seguridad Alimentaria y Nutricional*. Panama: MIDES, SENAPAN, FAO, AMEXCID (Agencia Mexicana de Cooperación Internacional para el Desarrollo).

MINEDUC (Ministerio de Educación) 2018. *Anuario Estadístico de la Educación 2018.* Guatemala: Sistema de Registro Educativo (SIRE), Dirección de Planificación.

Ministerio de Ambiente. 2017. *Gaceta oficial Nº28229-A. Resolución Nº DM-0067-2017*. Available at https://www.gacetaoficial.gob.pa/pdfTemp/28229_A/GacetaNo_28229a_20170303.pdf

Ministerio de Medio Ambiente y Recursos Naturales. 2016. *Diagnóstico sobre de la biodiversidad y aspectos socioeconómicos en áreas ubicadas entre las provincias Santiago Rodríguez y Comendador: Propuesta para la Restauración Ecológica*. Dominican Republic: Ministerio de Medio Ambiente y Recursos Naturales.

Ministerio de Medio Ambiente y Recursos Naturales. 2019. *Mapa del Sistema Nacional de Áreas Protegidas*. Dominican Republic: Dirección de Información Ambiental y Recursos Naturales (DIARENA).

MINSA (Ministerio de Salud). 2019. *Mapa de Mortalidad Materna 2016-2017-2018-junio 2019*. Nicaragua: MINSA.

Municipio de Pocrí. 2018. *Plan Estratégico Distrital de Pocrí*. Panama: Municipio de Pocrí.

Novoa, C. 2016. La participación ciudadana como mecanismo de desarrollo en las comunidades. *Revista Gestión Pública*, (5), p. 21-27.

ONE (Oficina Nacional de Estadística). 2010. *Tu Municipio en cifras*. Available at https://www.one.gob.do/provinciales-y-municipales/tu-municipio-en-cifras

Ordaz, J. L., Mora, J., Acosta, A., Serna Hidalgo, B., and Ramírez, D. 2010. *Costa Rica: efectos del cambio climático sobre la agricultura*. Mexico: CEPAL

Ovalles, P. 2015. *Mapa de Uso y Cobertura del Suelo 2015, Análisis de Cambios, Mapa de Deforestación y Degradación de Bosques en la República Dominicana* [unpublished]. Dominican Republic: REDD+ Project.

PDM Canillá. 2010. *Plan de Desarrollo Municipal Canillá, Quiché 2011-2025.* Guatemala: Consejo Municipal de Desarrollo del Municipio de Canillá, Quiché, Secretaría de Planificación y Programación de la Presidencia (SEGEPLAN), Dirección de Planificación Territorial (DPT).

PDM Chicamán. 2010. *Plan de Desarrollo Municipal Chicamán, Quiché 2011-2025.* Guatemala: Consejo Municipal de Desarrollo del Municipio de Chicamán, Quiché, y Secretaría de Planificación y Programación de la Presidencia (SEGEPLAN), Dirección de Planificación Territorial (DPT).

PDM SAS. 2011. *Plan de Desarrollo Municipal San Andrés Sajcabajá, Quiché 2011-2025.* Guatemala: Consejo Municipal de Desarrollo del Municipio de San Andrés Sajcabajá, Quiché, Secretaría de Planificación y Programación de la Presidencia (SEGEPLAN), Dirección de Planificación Territorial (DPT).

PDM Uspantán. 2010. *Plan de Desarrollo Municipal Uspantán, Quiché 2011-2025.* Guatemala: Consejo Municipal de Desarrollo del Municipio de Uspantán, Quiché, Secretaría de Planificación y Programación de la Presidencia (SEGEPLAN), Dirección de Planificación Territorial (DPT).

PDM Zacualpa. 2010. *Plan de Desarrollo Municipal Zacualpa, Quiché.* Guatemala: Consejo Municipal de Desarrollo del Municipio de Zacualpa, Quiché, Secretaría de Planificación y Programación de la Presidencia (SEGEPLAN), Dirección de Planificación Territorial (DPT).

PNUD-FOMUDE. 2009. *Plan de Desarrollo Humano Local del Cantón de Liberia, 2011-2020. Proyecto de Fortalecimiento de las Capacidades Municipales para la Planificación del Desarrollo Humano Local En Costa Rica*. Costa Rica: PNUD.

Quesada-Hernández, L. E., Calvo-Solano, O. D., Hidalgo, H. G., Pérez-Briceño, P. M., and Alfaro, E. J. 2019. Dynamical delimitation of the Central America Dry Corridor (CADC) using drought indices and aridity values. *Progress in Physical Geography: Earth and Environment*, 43(5): pp. 1–16.

RAMSAR. 2012. *Ficha Informativa de los Humedales de Ramsar (FIR)– Versión 2009-2012*. Available at https://rsis.ramsar.org/RISapp/files/RISrep/AR2070RIS.pdf?language=en

Ridh.org. 2015. *Derechos de los pueblos indígenas en Guatemala*. [online] Available at: https://ridh.org/en/news/derechos-de-los-pueblos-indigenas-en-guatemala-por-cecilia-aracely-marcos-raymundo/ [consultado el 10 de Noviembre de 2019].

Ruiz, I. 2012. *Informe Final: Línea Base: diagnostico biofísico, socioeconómico y potencial energético de la cuenca hidrográfica entre los ríos Tonosí y la Villa*. Panama: Autoridad Nacional de Ambiente.

SESAN (Secretaría de Seguridad Alimentaria y Nutricional). 2015. *Cuarto Censo Nacional de Talla*. Guatemala: Secretaría de Seguridad Alimentaria y Nutricional (SESAN), Ministerio de Educación (MINEDUC), Instituto Nacional de Estadística (INE).

SINAC (Sistema Nacional de Áreas de Conservación). 2017. *Plan de Acción de Participación Ciudadana y Gobernanza del SINAC*. San José, Costa Rica. Available at http://www.sinac.go.cr/ES/partciudygober/Documents/Plan%20de%20Accion%20de%20PCG-SINAC.pdf

SINAC (Sistema Nacional de Áreas de Conservación). no date. Available at http://www.sinac.go.cr/ES/Paginas/default.aspx

Solano, J., and Villalobos, R. no date. *Regiones y Subregiones Climáticas de Costa Rica*. Available at https://www.imn.ac.cr/documents/10179/20909/Regionalizaci%C3%B3n+clim%C3%A1tica+de+Costa+Rica

Terra Global Consultores. 2017. *Diagnostico Agropecuario participativo del municipio del Carmen, La Unión, El Salvador*. El Salvador: Alcaldía Municipal El Carmen.

UNEP-CUDECA. 2019. *Honduras Local Consultation Workshop. Proposal Formulation: Ecosystem-based adaptation to increase resilience in the Central American Dry Corridor and Arid Zones of the Dominican Republic*. Honduras: UNEP-CUDECA.

Vega, V. 2012. *Análisis de la gestión del recurso hídrico en Panamá*, thesis, Universidad de Alicante.

VMVDU (Vice-Ministerio de Vivienda y Desarrollo Urbano), FOSEP (Fondo Salvadoreño para Estudios de Prevensión) y INYPSA. no date - a. *Plan de Desarrollo Territorial de la Subregion de San Miguel.*

Componente I. Diagnóstico Territorial I, vol. 1A. El Salvador: Vice-Ministerio de Vivienda y Desarrollo Urbano.

VMVDU (Vice-Ministerio de Vivienda y Desarrollo Urbano), FOSEP (Fondo Salvadoreño para Estudios de Prevensión) y INYPSA. no date - b. *Plan de Desarrollo Territorial de la Subregion de San Miguel. Componente I. Diagnóstico Territorial I, vol 1D*. El Salvador: Vice-Ministerio de Vivienda y Desarrollo Urbano.

WRI. 2015. *Environmental and social safeguards at the Green Climate Fund*.

Xiloj Cuin, L. 2016. *Sistematización del proceso de implementación del derecho a la consulta a los pueblos indígenas establecido en el Convenio 169 de la Organización Internacional del Trabajo (OIT) en Guatemala*. Guatemala: OXFAM, p.86.

ESMF Matrix

	Output	Activity	Sub-activities	Risks and impacts	Guatemala	Salvador	Honduras	Nicaragua	Costa Rica	Panama	Dominican Republic	Risk level	Benefits	GCF Safeguard	Mitigation Measures	Instruments to be developed during implementation that will be applicable to this activity	Monitoring Indicators	Responsible party / individual	
1	**Output 1. Strengthened technical capacity of local government, farmers and rural communities to implement EbA and other adaptation measures.**	1.1. Develop site-specific intervention plans for the 7 target catchments to integrate EbA measures through a participatory process with municipal authorities, local communities, and other stakeholders.	1.1.1 Establish a community-level monitoring and evaluation committee in each municipality and build the capacity of these committees to monitor the biophysical, social and economic conditions in their local catchment areas as well as to assess the level of climate vulnerability, risks and opportunities. 1.1.2 Hold community engagement workshops in each municipality to develop a framework for site-specific intervention plans in each of the seven targeted catchments. 1.1.3 Draft site-specific intervention plans for each of the seven targeted catchments. 1.1.4 Hold a stakeholder workshop to validate and get stakeholder buy-in for site-specific intervention plans in each of the seven targeted catchments.	• The necessary means for full, broad and effective participation are not guaranteed or ensured. • No recognition, respect or inclusion of the governance and decision-making mechanisms. • Costs and benefits of intervention plans differentially affects the most vulnerable groups. • Restrictions on land use are generated. • Modification of livelihoods and/or income generation by modifications made to adopt sustainable practices of EbA activities. • Agricultural frontier expansion could occur due to EbA options, particularly on land for forest protection. • Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Accidents and occupational disease for project workers performing field work. • Worker safety could be affected due to public order issues.	• Even though Guatemala have community councils for development, there are a wide range of stakeholders, so the necessary means for full, broad and effective participation are not guaranteed or ensured. • The culture, knowledge and practices of indigenous peoples are not recognised, respected and preserved. •Possible increase in pesticides and fertilisers use due to EbA options, as well as deforestation.	•Possible increase in pesticides and fertilisers use due to EbA options, causing poisoning in workers and pollution to natural resources. • Accidents and occupational disease for project workers performing field work. • Worker safety could be affected due to public order issues.	•Possible increase in pesticides and fertilisers use due to EbA options, causing poisoning in workers and pollution to natural resources.	• The necessary means for full, broad and effective participation are not guaranteed or ensured due to the lack of robust participation instances. • Agricultural frontier expansion could occur due to EbA options, particularly on land for forest protection. • Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Accidents and occupational disease for project workers performing field work. • Worker safety could be affected due to public order issues.	• Agricultural frontier expansion could occur due to EbA options, particularly on land for forest protection. • Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources.	• The necessary means for full, broad and effective participation are not guaranteed or ensured due to the lack of robust participation instances. • Agricultural frontier expansion could occur due to EbA options, particularly on land for forest protection. • Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Accidents and occupational disease for project workers performing field work. • Worker safety could be affected due to public order issues.	• The necessary means for full, broad and effective participation are not guaranteed or ensured due to the lack of robust participation instances. • Agricultural frontier expansion could occur due to EbA options, particularly on land for forest protection. • Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Accidents and occupational disease for project workers performing field work. • Worker safety could be affected due to public order issues.	**C - Medium Risk**	This activity involves the community in a participatory and innovative way, in the territory planning through the development of each of the 7 basins intervention plan and will generate spaces to achieve an integrated dynamic work with municipal authorities, promoting community empowerment and improving social cohesion. The dialogue space will promote relations construction between the different stakeholders involved, articulating visions and achieving consensus on how to develop the interventions in each basin, as well as developing joint measures in each territory; in particular, Guatemala regions where work with Indigenous populations is planned, will allow their visions of the territory, their traditional knowledge and ancestral knowledge to be heard and included in its planning. Also, the formulation of basin intervention plans will provide local authorities and community stakeholders with technical capabilities to anticipate and determine levels of climate vulnerability, risks and future opportunities. In addition, it will allow community monitoring in each municipality of intervention plans formulation process for each basin. Moreover, the territories and their local authorities will have specific diagnostics of each basin, integrating elements of local knowledge of the territory and its specific problems, with aspects of technical expertise that allow the identification of risks and opportunities for improving overall basin management. Within the environmental benefits, territory intervention planning centred on Ecosystem-based Adaptation strategies will stop deforestation and agricultural frontier expansion, while strengthening the management of natural resources in the territory. This results in a greenhouse gas emissions reduction from deforestation and forest degradation, and an increase in CO2 capture by improving the region's carbon sinks. The connectivity of natural habitats will also ae improved by promoting the growth and development of native fauna and flora species.	ESS2. Labour and Working Conditions ESS3. Resource Efficiency and Pollution Prevention ESS4. Community Health, Safety and Security ESS6. Biodiversity Conservation and sustainable management of living natural resources ESS7. Indigenous Peoples	• A Stakeholder Engagement Plan must be developed so this activity implementation guarantees the full, wide and effective participation of all stakeholders involved, especially vulnerable groups and indigenous populations of Guatemala. • Particularly for indigenous populations, the recognition, respect and inclusion of their own governing mechanisms, and their ancestral beliefs and knowledge should be secured. • Appropriate capacity building of key stakeholders must be developed so that they can participate in a timely manner in decision-making, and governing mechanisms of the different stakeholder groups located in target area should be included. • Likewise, as part of the Stakeholder Engagement Plan, this activity should include the participation of women in the formulation, design and implementation of the basin intervention plans, particularly in those activities that promote local governance processes, conservation strategies and productive projects with a gender approach. • An integrated pest management and agrochemicals use programme must be developed, following the guidelines established in this ESMF, which will mitigate the identified risks on communities and project workers. • During the construction of the seven basins Plans, clear guidelines should be generated on the type and scope of the activities that will be included, emphasising that for no reason deforestation and ecosystem degradation will be promoted. • The occupational health and safety protocol for field work should be developed. • Likewise, a public order risk safety protocol must be developed for field work	• Stakeholder Engagement Plan • Indigenous Peoples Plan • Integrated pest management and agrochemical use programme. • Occupational health and safety protocol for field work. • Public security risk protocol for field work.	• SEP developed including strategies to ensure the full, broad and effective participation of key stakeholders in this activity, including special groups and indigenous populations (Yes/No) Evidence of strategy implementation or meetings must be submitted evidence • Present evidence of stakeholders' involvement on activities focus on capacity building to intervene in a timely manner in decision-making processes; also, evidence must be submitted of women's participation in formulation, design and implementation of intervention plans. • Present evidence showing that the involvement of indigenous peoples recognises, respects and includes their own mechanisms of government, beliefs and ancestral knowledge. • Integrated pest management and agrochemical use program developed by the Project and applied to this activity (Yes/No). • Number of catchment intervention plans with guidelines to prevent deforestation and ecosystem degradation during activities implementation/ Total intervention plans • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)	Environmental and Social Safeguards Officer of the Project	**1**
2		1.2. Provide technical assistance to municipal authorities, farmers and rural communities for the implementation of EbA practices as well as water- and resource-efficient technologies.	1.2.1 Develop cooperation agreements with commercial farmers for forest restoration and sustainable land management. 1.2.2 Train commercial farmers on sustainable EbA practices, including silvopasture, agroforestry and SLM. 1.2.3 Develop protocols for the implementation of sustainable EbA practices, including the: i) conservation and restoration of forested areas; ii) establishment existing agroforestry systems; and iii) development of sustainable fuelwood source. 1.2.4 Develop protocols for the adoption of water-efficient technologies by households (e.g. rainwater harvesting systems), by communities (e.g. water intakes) and by smallholder and commercial farmers (e.g. (drip irrigation, solar water pumping) 1.2.5 Develop protocols for the adoption of resource-efficient technologies that reduce fuelwood demand, (e.g. efficient charcoal kilns, fuelwood drying, efficient biomass stoves). 1.2.6 Establish a training of trainers programme for representatives of local departments of environment, CBOs, water committees, women's organisations and local cooperatives within each target country for EbA and water-efficient technologies based on the protocols developed under sub-activities 1.2.3–1.2.5. 1.2.7 Organise training workshops linked to community meetings within each target municipality to train local communities on EbA and water-efficient technologies, including visits to demonstration sites to facilitate farmer to farmer knowledge exchange.	• Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Emission of short and long-life climate pollutants, by EbA protocols implementation, especially, if agroforestry systems include the use of chemically sourced nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • The necessary means for full, broad and effective participation are not guaranteed or ensured. • Restrictions on land use could be created. • Modification of livelihoods and / or income generation by modifications made to adopt sustainable practices proposed in EbA protocols. • The culture, knowledge and practices of traditional indigenous peoples/local communities are not recognised, respected and preserved. •The use of the language, cultural practices, institutional arrangements and religious beliefs of peoples are not considered. • Accidents and occupational disease for project workers performing field work. • Worker safety could be affected due to public order issues. • Restoration activities in wooded areas could lead to ecosystem disruptions if activities do not meet the characteristics of ecosystems and special considerations for managing critical habitats in legally protected areas.	• The culture, knowledge and practices of traditional indigenous peoples/local communities are not recognised, respected and preserved. •The use of the language, cultural practices, institutional arrangements and religious beliefs of peoples are not considered. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • Modification of livelihoods and / or income generation by modifications made to adopt sustainable practices proposed in EbA protocols. • Accidents and occupational disease for project workers performing field work. • Worker safety could be affected due to public order issues.	• Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Emission of short and long-life climate pollutants, by EbA protocols implementation, especially, if agroforestry systems include the use of chemically sourced nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • Modification of livelihoods and / or income generation by modifications made to adopt sustainable practices proposed in EbA protocols. • Restoration activities in wooded areas could lead to ecosystem disruptions if activities do not meet the characteristics of ecosystems and special considerations, in particular as natural sabanas are the main habitat present in the Project area. • Accidents and occupational disease for project workers performing field work. • Worker safety could be affected due to public order issues.	• Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Emission of short and long-life climate pollutants, by EbA protocols implementation, especially, if agroforestry systems include the use of chemically sourced nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • Modification of livelihoods and / or income generation by modifications made to adopt sustainable practices proposed in EbA protocols. • Accidents and occupational disease for project workers performing field work. • Worker safety could be affected due to public order issues.	• Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Emission of short and long-life climate pollutants, by EbA protocols implementation, especially, if agroforestry systems include the use of chemically sourced nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • Modification of livelihoods and / or income generation by modifications made to adopt sustainable practices proposed in EbA protocols. • Accidents and occupational disease for project workers performing field work. • Worker safety could be affected due to public order issues.	• Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Emission of short and long-life climate pollutants, by EbA protocols implementation, especially, if agroforestry systems include the use of chemically sourced nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • Modification of livelihoods and / or income generation by modifications made to adopt sustainable practices proposed in EbA protocols. • Accidents and occupational disease for project workers performing field work.	• Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Emission of short and long-life climate pollutants, by EbA protocols implementation, especially, if agroforestry systems include the use of chemically sourced nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • Modification of livelihoods and / or income generation by modifications made to adopt sustainable practices proposed in EbA protocols. • Accidents and occupational disease for project workers performing field work.	• Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Emission of short and long-life climate pollutants, by EbA protocols implementation, especially, if agroforestry systems include the use of chemically sourced nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • Modification of livelihoods and / or income generation by modifications made to adopt sustainable practices proposed in EbA protocols. • Accidents and occupational disease for project workers performing field work.	**B - Medium Risk**	Through technical assistance activities for local authorities, farmers and rural communities, the capacities of the stakeholders on efficient water and energy use technologies and sustainable EbA practices will be strengthened, allowing the multiplication of this knowledge with other local stakeholders, through the training programme of trainers. Also, technical tools for public workers to bring EbA strategies into municipal policies and territorial management strategies will be also be provided, in this way, the prioritisation of more sustainable management of natural resources will have place in the territories development agendas, demonstrating economic and social benefits from ecosystems and native species conservation. Furthermore, it will enable vulnerable populations, small commercial producers, small subsistence farmers, local communities and individual households to adopt water and energy efficient technologies and build capacities to improve the management of natural resources, for instance sustainable land management practices which optimise ecosystem services provision in watersheds. Besides, ecosystems restoration through AbE strategies will improve water safety in future weather conditions by optimising the hydrological flow and infiltration of rainwater in groundwater reserves, while using technologies such as rainwater harvesting systems, will increase household water safety and reduce water demand. This not only provides benefits for populations settle in the Project's direct influence area, but also for all inhabitants located along the selected watersheds. In addition, the adoption of energy-efficient technologies will optimize biomass combustion processes and charcoal production by reducing people's exposure to particulate matter, and combustion gases from traditional systems; likewise, the use firewood will be reduce, thus dropping forests and ecosystems degradation caused by the extraction of firewood individuals, and lowering CO2 emissions from combustion.	ESS2. Labour and Working Conditions ESS3. Resource Efficiency and Pollution Prevention ESS4. Community Health, Safety and Security ESS5. Land Acquisition and Involuntary Resettlement ESS6. Biodiversity Conservation and sustainable management of living natural resources ESS7. Indigenous Peoples	• The Stakeholder Engagement Plan must include procedures to establish clear rules for participation and distribution of benefits in an equitable manner among the key stakeholders. • Appropriate capacity building of key stakeholders must be developed so that they can participate in a timely manner in decision-making, and governing mechanisms of the different stakeholder groups located in target area should be included. • In case of indigenous populations participation, their life plans, policies and philosophies should considered to promote appropriate decision making for the stakeholders and the management of natural resources. • With regards to GHG emissions caused by EbA sustainable practices protocols implementation, the project will increase carbon sinks by enhancing forest cover in agroforestry, silvopastoral and agrosilvopastoral systems, as well as carbon storage from restoration activities, so the carbon balance will be positive when CO2 capture is higher than possible emissions generated by project. Nevertheless, technical Project staff should promote the use of nitrogen fertilisers of organic or biological origin when possible. • Due to the possible use of pesticides and fertilisers, this activity should apply the integrated pest management and agrochemical use program. • Safety protocol for field work, and the occupational health and safety protocol must be also applied.	• Stakeholder Engagement Plan • Indigenous Peoples Plan • Integrated pest management and agrochemical use programme. • Occupational health and safety protocol for field work. • Public order risk safety protocol for field work	• SEP includes strategies to ensure that the activity development is under clear rules and allows participation and benefits distribution equally among actors (Yes/No). Evidence must be submitted • Present evidence on capacity building processes for decision-making (# evidences). • Present evidence showing that Life Plans, policies and philosophies of the Indigenous Peoples involved were considered in the development of communities working protocols. • Submit periodic reports on carbon emissions balance, considering absorptions of the new forest areas planted by the Project, and GHG emissions increase due to fertiliser use, methane emissions by livestock systems, and tillage work developed under the project, i.e. additional to those of the baseline. • Integrated pest management and agrochemical use program developed by the Project and applied to this activity (Yes/No). • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)	Environmental and Social Safeguards Officer of the Project	**2**
3		1.3. Provide technical assistance to farmers and rural communities for the development of natural resource-based businesses and alternative climate-resilient livelihoods.	1.3.1 Conduct a livelihood assessment within each of the seven target catchments, focusing on climate risks and alternative options. 1.3.2 Conduct community engagement workshops to develop livelihood action plans for each target community based on the assessments conducted in 1.3.1. 1.3.3 Establish livelihood training programmes in each municipality for farmers and rural communities on locally appropriate natural resource-based businesses and climate-resilient livelihoods as identified in the livelihood action plans.	• The necessary means for full, broad and effective participation are not guaranteed or ensured in workshops and training programmes. • No recognition, respect or inclusion of stakeholder governance and decision-making mechanisms. • Opportunities for indigenous peoples/local communities are not promoted in accessible, culturally appropriate and inclusive way. • Accidents and occupational disease for project staff performing fieldwork. • Worker safety could be affected due to public order issues.	• No recognition, respect or inclusion of stakeholder governance and decision-making mechanisms. • Opportunities for indigenous peoples/local communities are not promoted in accessible, culturally appropriate and inclusive way. • Accidents and occupational disease for project staff performing fieldwork. • Worker safety could be affected due to public order issues.	• El Salvador has low school rates so trainings and workshops could not be adequate, accesible, cultural appropiate and inclusive for local communities. • Accidents and occupational disease for project staff performing fieldwork. • Worker safety could be affected due to public order issues.	• Accidents and occupational disease for project staff performing fieldwork. • Worker safety could be affected due to public order issues.	• The necessary means for full, broad and effective participation are not guaranteed or ensured in workshops and training programmes. • No recognition, respect or inclusion of stakeholder governance and decision-making mechanisms. • Opportunities forlocal communities are not promoted in accessible, culturally appropriate and inclusive way, in particular due to the low school rate (65-92%).	• Accidents and occupational disease for project staff performing fieldwork.	• The necessary means for full, broad and effective participation are not guaranteed or ensured in workshops and training programmes. • No recognition, respect or inclusion of stakeholder governance and decision-making mechanisms. • Accidents and occupational disease for project staff performing fieldwork.	• The necessary means for full, broad and effective participation are not guaranteed or ensured in workshops and training programmes. • No recognition, respect or inclusion of stakeholder governance and decision-making mechanisms. • Accidents and occupational disease for project staff performing fieldwork.	**C - Low Risk**	With the livelihoods assessment results of each of the seven basins, local governments will have greater and better information to carry out comprehensive territorial planning, strengthen interventions proactively to reduce climate risks that become evident, and promote alternatives that best suit the needs of local people and ecosystems. Community participation workshops for action plans construction will allow to contemplate the realities of local communities, as well as their aspirations and visions of development. This will also support the maintenance of traditional knowledge complemented by other types of technical knowledge. Through training programs on livelihood for the creation of local natural resource-based businesses, the community will be enabled to have technical tools and strengthen their capacities for building local businesses, boosting earnings and strengthening partnerships for commercialisation of products from EbA strategies; it will also allow for a local economy diversification by including ecotourism strategies and non-timber forest products harvesting. Therefore, their quality of life and economic empowerment will be improved, while encouraging businesses to benefit from goods and services that ecosystems provide through EbA strategies, strengthening vulnerable communities by providing climate-resistant revenue generation opportunities. Building entrepreneurial skills also provide work opportunities for women and young people who have the least access to paid work, discouraging the migration of young capital that usually moves to large cities for economic income and better quality of life. Similarly, the creation of enterprises results in an alternative to counteract the growing informal economy seen in all Project target areas.	ESS2. Labour and Working Conditions ESS7. Indigenous Peoples	• The necessary means for full participation must be guaranteed, so that all Project target basins inhabitants can properly participate in training programs for stablishing locally appropriate businesses, based on their livelihoods and the natural resources characteristics; therefore, the project must carry out the training program in accordance with the guidelines established in the Stakeholder Engagement Plan. • Likewise, all project employees who carry out field activities must follow the safety protocol and the occupational health and safety protocol.	• Stakeholder Engagement Plan • Indigenous Peoples Plan • Occupational health and industrial safety protocol for field work. • Public order risk safety protocol for field work	• The SEP includes strategies to enable this activity to be carried out inclusively to all stakeholders, so they fully participate in engagement workshops and training programs on locally appropriate business based on natural resources and the characteristics of their livelihoods (Yes/No). Evidence must be submitted • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)	Environmental and Social Safeguards Officer of the Project	**3**
4	**Output 2. Demonstration adaptation interventions implemented in rural communities across seven target catchments in the Dry Corridor and Arid Zones.**	2.1. Implement large-scale EbA interventions within rural communities across the seven target catchments.	2.1.1 Establish tree nurseries focused on native species. 2.1.2 Establish forest protection zones. 2.1.3 Protect and restore natural forest in major recharge areas and riparian zones. 2.1.4 Restore forested areas across seven catchments. 2.1.5 Restore pine forests in Guatemala, Honduras and Nicaragua. 2.1.6 Establish agroforestry systems using diversified living fence arrangements in basic grains crops. 2.1.7 Establish agroforestry systems for natural shade in coffee plantations. 2.1.8 Establish silvopasture systems using diversified living fence arrangements. 2.1.9 Establish silvopasture systems using individual trees. 2.1.10 Establish sustainable fuelwood and timber plantations. 2.1.11 Establish firebreaks for forests and plantations. 2.1.12 Construct living barriers for soil conservation. 2.1.13 Construct superficial drainage for soil conservation.	• Pollution from the use of agrochemicals. • Possible increase in the use of pesticides and fertilisers in the EbA options, causing risks of workers poisoning and pollution of natural resources. • GHG emissions from agricultural activities. • Community affectation due to the use of agrochemicals in agricultural and active restoration processes. • Inadequate management of solid and liquid waste. • Modification of natural habitats by expanding the agricultural frontier or pine and wood/firewood crop establishment. • Land use restrictions are generated. • Modification of livelihoods or income generation from changes made to adopt sustainable practices proposed in EbA protocols. • The culture, knowledge and practices of traditional indigenous peoples/local communities are not recognised, respected and preserved. • The safety of project workers may be affected by public order issues. • Occupational accidents and disease for project workers performing fieldwork. • Linking foreign people to local culture.	• Pollution from the use of agrochemicals. • Generación de GEI por el desarrollo de nuevas actividades agropecuarias • Community affectation due to the use of agrochemicals in agricultural and active restoration processes. • Inadequate management of solid and liquid waste. • The culture, knowledge and practices of traditional indigenous peoples/local communities are not recognised, respected and preserved. • The safety of project workers may be affected by public order issues. • Occupational accidents and disease for project workers performing fieldwork. • Linking foreign people to local culture.	• Pollution from the use of agrochemicals. • Generación de GEI por el desarrollo de nuevas actividades agropecuarias • Community affectation due to the use of agrochemicals in agricultural and active restoration processes. • Inadequate management of solid and liquid waste. • The safety of project workers may be affected by public order issues. • Occupational accidents and disease for project workers performing fieldwork. • Linking foreign people to local culture.	• Pollution from the use of agrochemicals. • Generación de GEI por el desarrollo de nuevas actividades agropecuarias • Community affectation due to the use of agrochemicals in agricultural and active restoration processes. • Inadequate management of solid and liquid waste. • The safety of project workers may be affected by public order issues. • Occupational accidents and disease for project workers performing fieldwork.	• Pollution from the use of agrochemicals. • Generación de GEI por el desarrollo de nuevas actividades agropecuarias • Community affectation due to the use of agrochemicals in agricultural and active restoration processes. • Inadequate management of solid and liquid waste. • Occupational accidents and disease for project workers performing fieldwork.	• Pollution from the use of agrochemicals. • Generación de GEI por el desarrollo de nuevas actividades agropecuarias • Community affectation due to the use of agrochemicals in agricultural and active restoration processes. • Inadequate management of solid and liquid waste. • Occupational accidents and disease for project workers performing fieldwork. • Linking foreign people to local culture.	• Pollution from the use of agrochemicals. • Generación de GEI por el desarrollo de nuevas actividades agropecuarias • Community affectation due to the use of agrochemicals in agricultural and active restoration processes. • Inadequate management of solid and liquid waste. • Occupational accidents and disease for project workers performing fieldwork.	• Pollution from the use of agrochemicals. • Generación de GEI por el desarrollo de nuevas actividades agropecuarias • Community affectation due to the use of agrochemicals in agricultural and active restoration processes. • Inadequate management of solid and liquid waste. • Occupational accidents and disease for project workers performing fieldwork.	**B - Medium Risk**	Specific EbA intervention strategies in each basin, customised and adapted to the territories biophysical conditions, will allow agricultural producers and inhabitants of prioritised basins to learn strategies to develop EbA actions in their premises directly from the project's technical staff, with constant technical support to ensure the successful implementation of these activities. The implementation of field activities also will lead to improved provision of ecosystem assets from watersheds, including improving water quality and improving underground water recharge; in particular management of agroforestry, forestry and agrosilvopastoral systems, soil conservation will be allowed, improving fertility by progressive accumulation of organic matter, reduce soil erosion by runoff, improving water filtration and moisture retention of soils, and improving water quality and availability; moreover, greater biodiversity will be promoted in livestock and agricultural systems, as well as its landscape connectivity improvement; likewise, the climate resilience of production systems will be increased, reducing risks and losses of the agricultural sector due to climate variability. Through forest restoration activities of forest and wetlands, and the establishment of mixed native species plantations, natural processes of water and climate regulation will be strengthened, providing a more stable water safety to inhabitants, especially during drought sessions. In addition, by increasing forest cover, landscape conditions are stabilised in extreme weather events; for instance, during rainy season forest covers with native species prevent or reduce the likelihood of landslides and floods; during extreme heat waves, forests help to reduce thermal sensation and provide shade. Besides, deforestation reduction can be impacted, therefore, reducing greenhouse gas emissions from forest systems and other native ecosystems degradation and deforestation.	ESS2. Labour and Working Conditions ESS3. Resource Efficiency and Pollution Prevention ESS4. Community Health, Safety and Security ESS6. Biodiversity Conservation and sustainable management of living natural resources. ESS7. Indigenous Peoples	• A Protocol for integrated pest management and agrochemical use should be developed and applied to all project activities that require the use of fertilisers or pesticides, in order to avoid health workers impacts and contamination of natural resources by an inadequate handling of agrochemicals. This protocol will be applied especially for the establishment of nurseries, active restoration activities, agroforestry / silvopastoral / agrosilvopastoral systems, new mixed native species plantations and sustainable firewood plantations. • Furthermore, in order to reduce GHG emissions from nitrogen fertilizers of chemical origin, when possible, the Project technical team should prioritise the use of organic or biological fertilisers. • Likewise, the technical assistance process must include a module for the efficient management of solid and liquid waste from agricultural activities. • Additionally, clear criteria should be established on the characteristics and scope of actions for sustainable wood plantation, agroforestry, silvopastoral and agrosilvopastoral, in order to avoid the expansion of the agricultural frontier, and deforestation of natural ecosystems. • EbA actions to be implemented in indigenous territories, must be previously arranged and built with indigenous peoples, preserving the use of language, cultural practices, and institutional arrangements of the peoples. • Moreover, if the EbA actions of ecological support restricts land use or modifies current subsistence means which results in the reduction of economic income, the Project must generate an economic compensation strategy for Producers. • In addition, in the event that foreign workers support Project activities development their labour contracts should clearly state that they cannot influence local culture; when possible, the Project will prioritise using the local labour, although this involves developing prior training processes. • Finally, the safety protocols for public order risks and occupational health and safety of the project must be applied.	•Integrated pest management and agrochemical use protocol. • Inclusion of a module for the efficient management of solid and liquid waste in the technical assistance program. • Indigenous Peoples Plan • Economic compensation strategy if risks of economic income reduction are anticipated. • Occupational health and industrial safety protocol for field work. • Public order risk safety protocol for field work.	• Number of EbA options with Protocol for Integrated Pest and Agrochemical Management Applied / Total number of EbA Options designed for the basin. Evidence must be submitted • Submit annual reports on carbon emissions balance, considering absorptions of the new forest areas planted by the Project, and GHG emissions increase due to fertiliser use, methane emissions by livestock systems, and tillage work developed under the project, i.e. additional to those of the baseline. • Present evidences that technical assistance process includes lessons about efficient management of solid and liquid waste from agricultural activities. • Catchment EbA Strategies have clear criteria to prevent agricultural frontier expansion and deforestation and degradation of natural ecosystems (Yes/No). Evidence must be submitted • Document with economic compensation strategy to producers whose productive systems and livelihoods resulted in lower economic income. • Quarterly progress report on the economic strategy implementation. • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)	Environmental and Social Safeguards Officer of the Project	**4**
5		2.2. Implement demonstration water- and resource-efficient technologies within rural communities across the seven target catchments.	2.2.1 Install rainwater harvesting systems on public or community buildings using rooftop capture and plastic or geomembrane deposits for storage (25 m3) to supply water for 8-12 families. 2.2.2 Install community-level rainwater reservoirs (500 m3). 2.2.3 Install half-orange kilns for efficient charcoal production to be administered by existing local cooperatives. 2.2.4 Install community-level water pumping systems by solar panels. 2.2.5 Technical design and guidance for the implementation of Water & Resource Measures.	• Low acceptance of efficient kilns technologies. • The culture, knowledge and practices of indigenous peoples / traditional local communities are not recognised, respected and preserved • Possible occupational risks during the establishment and operation of technological improvement options. • Possible public health risks from contamination stored in water collection systems • Deforestation promotion for charcoal production in half-orange kilns proposed by the project. • In relation to solar panel pumping systems, an inadequate waste management of the system's batteries could have place.	• Possible impact on water resources availability to surrounding communities by capture and irrigation systems. • Introduction of technologies not suitable for the region, or that are not consistent with the principles and beliefs of indigenous peoples	• Possible impact on water resources availability to surrounding communities by capture and irrigation systems. • Introduction of technologies not suitable for the region • Deforestation promotion for charcoal production in half-orange kilns proposed by the project.	• Possible impact on water resources availability to surrounding communities by capture and irrigation systems. • Introduction of technologies not suitable for the region	• Possible impact on water resources availability to surrounding communities by capture and irrigation systems. • Introduction of technologies not suitable for the region • Deforestation promotion for charcoal production in half-orange kilns proposed by the project.	• Possible impact on water resources availability to surrounding communities by capture and irrigation systems. • Introduction of technologies not suitable for the region. • Deforestation promotion for charcoal production in half-orange kilns proposed by the project.	• Possible impact on water resources availability to surrounding communities by capture and irrigation systems. • Introduction of technologies not suitable for the region. • Deforestation promotion for charcoal production in half-orange kilns proposed by the project.	• Possible impact on water resources availability to surrounding communities by capture and irrigation systems. • Introduction of technologies not suitable for the region. • Deforestation promotion for charcoal production in half-orange kilns proposed by the project.	**B - Medium Risk**	Technologies for the efficient use of water resources proposed under this activity will contribute to improving the quality and availability of water through the reduction of its consumption. Besides, it will increase water safety for households due to rainwater harvesting systems strategies and solar panels pumping systems that are proposed. By promoting more efficient combustion systems, the emission of carbon dioxide is reduced, as well as the consumption of firewood for charcoal production, which is ultimately summarised in less deforestation, and thus in the maintenance of carbon sinks. It also improves the life quality of rural populations, and their health conditions by reducing smoke and particulate matter generation from conventional systems. Finally, the adoption of water and energy efficient technologies will increase the resilience capacity and livelihood improvement of the most vulnerable communities, while improving the resilience of ecosystems and ecosystem-based services.	ESS2. Labour and Working Conditions ESS3. Resource Efficiency and Pollution Prevention ESS4. Community Health, Safety and Security ESS6. Biodiversity Conservation and sustainable management of living natural resources. ESS7. Indigenous Peoples	• The Project must guarantee the allocation of specialised technical staff for the installation of combustion systems, in order to avoid occupational hazards to the project communities. • A protocol for cleaning and maintenance of water collection systems should be created in order to avoid the proliferation of microorganisms and the accumulation of particles that may affect the health of the beneficiary population. • A prior analysis of communities' baseline should be conducted in order to determine where they use charcoal, and therefore if half-orange kilns can increase deforestation for firewood use. If so, the project must establish a strategy to prevent forest degradation and deforestation increase in the Project surrounding areas, for instance implementing firewood banks. • The safety protocol for public order risks, and occupational health and safety protocol of the project must be applied. A Protocol must be designed and applied the Project technical staff to guarantee the correct disposal of used batteries from solar panel pumping systems, in order to avoid contamination of lead and other waste contained in the batteries.	• Indigenous Peoples Plan • Strategy to prevent forest degradation and deforestation increase in the surrounding areas of the project, due to firewood and charcoal growing demand. • Occupational health and safety protocol for field work. • Public order risk safety protocol for field work. • Protocol for cleaning and maintenance of water systems. • Protocol for the correct disposal of discarded batteries from solar panel pumping systems.	• Document with the strategy to prevent forest degradation and increased deforestation in Project surrounding areas due to increased demand of firewood for charcoal production (Yes/No). • Document with Cleaning and Maintenance Protocol of water systems applied (Yes/No). Evidence must be submitted • Semi-annual report on natural resources state in the Project direct and indirect influence area. • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No) • Document with the Protocol for the correct disposal of batteries discarded from water pumping systems by solar panels. (Yes/No). Evidence must be submitted	Environmental and Social Safeguards Officer of the Project	**5**
6		2.3. Establish the grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing and start operations.	2.3.1 Define eligibility criteria from Steering Committee guidelines and align to national and municipal adaptation policies and initiatives, define final operability of the grant facility, including the definition of a competitive selection model. 2.3.2 Raise awareness on grant availability for EbA investment in conjunction with community engagement workshops under 1.1.1. 2.3.3 Monitor success of selected projects, including definition and documentation of underlying economics (knowledge gained to be disseminated to inform scale-up finance) 2.3.4 Communicate results via specific events and media initiatives. 2.3.5 Secure initial set-up and running cost of grant facility.	•Possible increase in pesticides and fertilisers use due to EbA options, causing poisoning in workers and pollution to natural resources. • Emission of short- and long-life climate pollutants related to the use of nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • The change of practices could reduce agricultural systems productivity, therefore reduce producers' income. • The culture, knowledge and practices of indigenous peoples are not recognised, respected and preserved, in the event that monetary transactions are against their principles. • The use of language, cultural practices, and institutional arrangements of indigenous peoples is not considered. • The benefits of the donation facility resources are restricted to the most vulnerable groups.	•Possible increase in pesticides and fertilisers use due to EbA options, causing poisoning in workers and pollution to natural resources. • Emission of short- and long-life climate pollutants related to the use of nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • The culture, knowledge and practices of indigenous peoples are not recognised, respected and preserved, in the event that monetary transactions are against their principles. • The use of language, cultural practices, and institutional arrangements of indigenous peoples is not considered. • The benefits of the donation facility resources are restricted to the most vulnerable groups.	•Possible increase in pesticides and fertilisers use due to EbA options, causing poisoning in workers and pollution to natural resources. • Emission of short- and long-life climate pollutants related to the use of nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • The benefits of the donation facility resources are restricted to the most vulnerable groups.	•Possible increase in pesticides and fertilisers use due to EbA options, causing poisoning in workers and pollution to natural resources. • Emission of short- and long-life climate pollutants related to the use of nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • The benefits of the donation facility resources are restricted to the most vulnerable groups.	•Possible increase in pesticides and fertilisers use due to EbA options, causing poisoning in workers and pollution to natural resources. • Emission of short- and long-life climate pollutants related to the use of nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • The benefits of the donation facility resources are restricted to the most vulnerable groups.	•Possible increase in pesticides and fertilisers use due to EbA options, causing poisoning in workers and pollution to natural resources. • Emission of short- and long-life climate pollutants related to the use of nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • The benefits of the donation facility resources are restricted to the most vulnerable groups.	•Possible increase in pesticides and fertilisers use due to EbA options, causing poisoning in workers and pollution to natural resources. • Emission of short- and long-life climate pollutants related to the use of nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • The benefits of the donation facility resources are restricted to the most vulnerable groups.	•Possible increase in pesticides and fertilisers use due to EbA options, causing poisoning in workers and pollution to natural resources. • Emission of short- and long-life climate pollutants related to the use of nitrogen fertilisers. • Inadequate handling of pesticides and fertilisers could expose the community to hazardous materials. • The benefits of the donation facility resources are restricted to the most vulnerable groups.	**C - Low Risk**	The establishment of a grant facility that operates through non-reimbursable financing, will allow community of the Project target area to strengthen all actions to achieve an adaptation to climate change based on ecosystems, especially the most vulnerable and in poverty conditions stakeholders, who by their own means cannot implement actions to efficiently reduce their vulnerability to climate change. Similarly, EbA activities contribute directly to improving environmental conditions, by promoting biodiversity conservation and sustainable management of natural living resources, as well as improving economic and social conditions of target populations, improving productivity and increasing productive systems resilience under extreme weather events, which are increasingly frequent in the region. Furthermore, the monitoring mechanisms to be developed as part of the facility, will allow beneficiary communities to access technical assistance. Likewise, results from communication strategies will provide transparency to the entire process and will allow both general community and donors, to know the scope and end of donations.	ESS2. Labour and Working conditions ESS3. Resource Efficiency and Pollution Prevention ESS6. Biodiversity Conservation and Sustainable Management of Natural Living Resources ESS7. Indigenous Peoples	• For grant facility resources allocation, a Manual with Investment Principles should be created to define the criteria on activities type that will be financed, including the criteria to avoid financing activities that promote deforestation or degradation of natural resources. • Likewise, the Manual must contemplate the scope and objectives of the Project safeguards, which in this case are the safeguards of the Green Climate Fund. • The Fund operator must submit a digital daily report with information on the activities to which the funds were allocated and approved, georeferencing the beneficiary property location. This information will be analysed by the Steering Committee during its follow-up meetings, to adjust any pertinent criteria in order to comply with the safeguards. • Financial advisors working on the grant facility should be trained on the criteria for beneficiaries selection, so they can broadly advise future beneficiaries on the best options that should be implemented according to beneficiaries capabilities; this includes a differentiated access strategy for the most vulnerable stakeholders, as small producers and community organisations. • Specific criteria for granting financial incentives should be established and included in order to guarantee the proper management of critical areas and complementary conservation strategies, as well as criteria to ensure the most vulnerable stakeholders inclusion to allow them access to incentives, as a key part of the Stakeholder Engagement Plan.	• Manual of Investment Principles for Grant Facility management. • Stakeholder Engagement Plan. • Indigenous Peoples Plan..	• Investment Principles Handbook developed for the grant facility management, with clear criteria on the type of activities to be financed, and the GCF safeguards (Yes/No) • Number of reports submitted on the activities to which the funds were awarded and approved, georeferencing the location of the beneficiary site, assessed in the Project's steering committee. • Number of training to financial institution advisors on future beneficiary types and EbA strategies / Total training scheduled to financial institutions. • Proof of approval on the full understanding, interest and acceptance to receive resources from the grant facility by indigenous peoples. (Yes/No) Evidence must be submitted • Stakeholder Engagement Plan designed, including mechanisms to develop this activity (Yes/No	CABEI/Environmental and Social Safeguards Officer of the Project	**6**
7	**Output 3. Information on climate change adaptation and its financing disseminated across the region and mainstreamed into local and national policies.**	3.1. Establish regional knowledge hub for the dissemination of information on EbA in the Dry Corridor and Arid Zones.	3.1.1 Establish a knowledge management hub linked to the Environmental Observatory to disseminate best practices and lessons learned from the project, to support decision-making related to EbA implementation. The hub will incorporate specific modules for engagement with universities, research centers and private sector in the region for EbA Measures. 3.1.2 Develop knowledge products to be disseminated through the knowledge hub, including sustainable landscape management standards and procedures, opportunities for access to financing and women's economic empowerment as well as technical assistance, business opportunities, technical guidelines for the assessment of ecosystem services and their contribution to human well-being. 3.1.3 Train policy- and decision-makers at the municipal level on climate change impacts, including the impacts of gender inequality, and the role of EbA in mitigating climate change impacts to support political and technical decision-making for climate resilience in the Dry Corridor and Arid Zones. 3.1.4 Strengthen the technical capacity of community organisations, including women's groups, and local champions in developing, revising and disseminating information products to support the adoption of EbA and other resilient practices.	• Knowledge management products are not accessible and inclusive. • In workshops and training programmes situations could arise where the necessary means for full, wide and effective participation of all stakeholders are not guaranteed and ensured. •Knowledge products and training spaces for indigenous peoples and local communities are not developed in an accessible, culturally appropriate and inclusive way.	• Knowledge management products are not accessible, cultural appopiate and inclusive for indigenous peoples located in Project municipalities, and in the country in general.	• Knowledge management products are not accessible and inclusive. • In workshops and training programmes situations could arise where the necessary means for full, wide and effective participation of all stakeholders are not guaranteed and ensured.	No risk are foreseen due to the participation platforms and instances organised in the country and the Project municipalities.	• Knowledge management products are not accessible and inclusive. • In workshops and training programmes situations could arise where the necessary means for full, wide and effective participation of all stakeholders are not guaranteed and ensure, as result of weak participation structures in the region.	• Knowledge management products are not accessible, cultural appropiate and inclusive for indigenous peoples of the country in general.	• Knowledge management products are not accessible and inclusive. • In workshops and training programmes situations could arise where the necessary means for full, wide and effective participation of all stakeholders are not guaranteed and ensure.	• Knowledge management products are not accessible and inclusive. • In workshops and training programmes situations could arise where the necessary means for full, wide and effective participation of all stakeholders are not guaranteed and ensure.	**C - Low Risk**	The establishment of a regional knowledge centre will provide a platform for the dissemination of information throughout the region, and will help decision makers to take an evidence-based planning approach, even allowing territories and basins not included in the project to access the knowledge generated in Central America, understand and equate their environmental problems and response strategies raised and developed in this experience, providing information to political, academic and social processes at the regional level. It is also an opportunity to link specific territory knowledge of rural and indigenous communities, as well as the contributions they develop to promote sustainable management of natural resources. Knowledge products that are shared will improve decision making on guidelines, directives and policies to respond to climate change adaptation, as well as the creation of territory models that enable landscapes and habitats connectivity far beyond the geopolitical boundaries of each country, integrating particular considerations of each territory into the planning and ordering processes, as well as including dynamics and needs of vulnerable groups as women, indigenous people, rural population and young people. Therefore, action carried out under this activity will strengthen technical capacities of policymakers and decision-makers at municipal level and community organisations to make better decisions, develop projects that aim to increase resilient practices and control projects implemented in the municipalities. From an environmental point of view, these processes will allow to deflection historical trends in Central American ecosystems degradation, allowing the inclusion of the environment as a valuable asset in the planning processes of the territory, improving watershed and water resource management in the dry corridor and arid areas of the region.	ESS2. Labour and Working Conditions ESS7. Indigenous Peoples	• A strategy to ensure that information products on best practices and lessons learned from the regional knowledge hub are easily accessible, understandable and inclusive for the community in general; including a specific strategy for indigenous populations, if necessary. • Similarly, training programs for those responsible for policies and decision at the municipal level, as well as training programmes for community organisations, should ensure the participation of all groups of stakeholders involved, especially the most vulnerable, following the guidelines of the Stakeholder Engagement Plan.	•A Strategy that ensures that information products from the reginal knowledge hub are easily accessible, understandable and inclusive for all stakeholders' groups settle in the Project target countries. • Indigenous Peoples Plan • Stakeholder Engagement Plan.	• Document with strategy that ensures that information products are easily accessible, understandable and inclusive for all stakeholder groups living in the countries targeted by the Project (Yes/No). • The IPP ensures the participation of all stakeholder groups involved, especially the most vulnerable (Yes/No). Evidence must be submitted • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted	Environmental and Social Safeguards Officer of the Project	**7**
8		3.2. Raise awareness of financial mechanisms for the implementation of CCA interventions.	3.2.1 Train public officers/agencies at the municipal level to facilitate the uptake of financial mechanisms in their communities. 3.2.2 Train medium–large scale private organisations/ farmers to access loans through the EbA credit line. 3.2.3 Raise awareness among vulnerable communities and their organisations, including women's groups, about available financial mechanisms, including the EbA Credit Line and Trust Fund.	• Occupational accidents and disease for project workers performing fieldwork. • Worker safety affected by public order issues. • Information related to financial mechanisms is not adequately disclosed, in particular, its environmental and social risks and impacts linked to indebtedness, and EbA activities approach in a format that is not accessible, timely, understandable and appropriate.	•The culture, knowledge and practices of indigenous peoples/traditional local communities are not recognised, respected and preserved. •The use of traditional language, cultural practices, institutional arrangements and religious beliefs are not considered. • Worker safety affected by public order issues. • Information related to financial mechanisms is not adequately disclosed, in particular, its environmental and social risks and impacts linked to indebtedness, and EbA activities approach in a format that is not accessible, timely, understandable and appropriate.	• Occupational accidents and disease for project workers performing fieldwork. • Worker safety affected by public order issues. • Information related to financial mechanisms is not adequately disclosed, in particular, its environmental and social risks and impacts linked to indebtedness, and EbA activities approach in a format that is not accessible, timely, understandable and appropriate.	• Occupational accidents and disease for project workers performing fieldwork. • Worker safety affected by public order issues. • Information related to financial mechanisms is not adequately disclosed, in particular, its environmental and social risks and impacts linked to indebtedness, and EbA activities approach in a format that is not accessible, timely, understandable and appropriate.	• Occupational accidents and disease for project workers performing fieldwork. • Worker safety affected by public order issues. • Information related to financial mechanisms is not adequately disclosed, in particular, its environmental and social risks and impacts linked to indebtedness, and EbA activities approach in a format that is not accessible, timely, understandable and appropriate.	• Occupational accidents and disease for project workers performing fieldwork. • Worker safety affected by public order issues. • Information related to financial mechanisms is not adequately disclosed, in particular, its environmental and social risks and impacts linked to indebtedness, and EbA activities approach in a format that is not accessible, timely, understandable and appropriate.	• Occupational accidents and disease for project workers performing fieldwork. • Worker safety affected by public order issues. • Information related to financial mechanisms is not adequately disclosed, in particular, its environmental and social risks and impacts linked to indebtedness, and EbA activities approach in a format that is not accessible, timely, understandable and appropriate.	• Occupational accidents and disease for project workers performing fieldwork. • Worker safety affected by public order issues. • Information related to financial mechanisms is not adequately disclosed, in particular, its environmental and social risks and impacts linked to indebtedness, and EbA activities approach in a format that is not accessible, timely, understandable and appropriate.	**C - Low Risk**	Training of public agency officials at municipal level will enhance the capacity of decision makers to allocate economic resources and promote financial incentives for EbA practices adoption in communities based on the Project prioritised basins. This will enable farmers and entrepreneurs, as well as local communities and organisations to have a greater understanding of financial mechanisms and benefits obtained from EbA strategies implementation. In addition, it will strengthen the adoption of Ecosystem-based Adaptation strategies, generating specific knowledge that allows communities and their organisations to create business models tailored to their potential, and access to financial systems in a simple way to achieve successful revenue generation through EbA initiatives.	ESS2. Labour and Working Conditions ESS7. Indigenous Peoples	• Within the training programs, a module to address the socialisation of environmental risks and impacts from activities implementation to be financed with the grant facility and the credit line must be included, for instance, risks related to possible effects on natural habitats in case the activities are not implemented complying with the requirements and stipulated areas, and end up in an increase in deforestation and degradation. Likewise, social risks linked to the conditions of indebtedness must be socialised. • Also, the establishment of EbA activities should be socialised to interested parties in an accessible, timely, understandable and appropriate format, where technicalities are use only if the public has the knowledge level that allows them to understand, and if they are absolutely necessary. • Both measures need to be included in the Stakeholder Engagement Plan • Project personnel who travel and carry out field work must follow the Safety and the occupational health and safety protocol.	• Stakeholder Engagement Plan • Indigenous Peoples Plan • Occupational health and industrial safety protocol for field work. • Public order risk safety protocol for field work.	• The training programme for public officials/agencies at the municipal level, medium-scale private organisations/farmers, women, vulnerable communities and their organisations, includes a module of environmental and social risks and impacts triggered from the implementation of activities to be financed by the grant facility and credit line, in accordance with SEP guidelines. (Yes/No) • The training and awareness-raising programme is developed in an accessible, timely, understandable and appropriate format, especially for vulnerable communities, and follows SEP guidelines. (Yes/No) Evidence must be submitted • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)	Environmental and Social Safeguards Officer of the Project	**8**
9		3.3. Enhance capacity of national and local-level policy-makers, in partnership with knowledge network of universities, research centers and private sector, to integrate climate change adaptation and the valuation of natural capital into local policies.	3.3.1 Build an evidence base, using both in-country research and findings from comparable ecological zones in other countries, to clearly demonstrate the value and effectiveness of proposed adaptation activities to municipal-level policy-makers. 3.3.2 Develop or adjust a methodology to value ecosystems services to develop accounts profiles of natural capital so that it is integrated into development plans in the Dry Corridor. 3.3.3 Develop guidelines for local governments outlining protocols and criteria for implementation of economic incentives for SLM (e.g. water funds, payments for environmental services). 3.3.4 Train local governments to make policy changes, including the use of protocols and criteria for the adoption of EbA and implementation of economic incentives for SLM (e.g. water funds, payments for environmental services). 3.3.5 Organise workshops targeting municipalities within the Dry Corridor and Arid Zones to disseminate the evidence resulting from local government experiences to promote the integration of climate resilience in broader policies and actions across the region.	• Ecosystem services valuation methodologies can generate biases when evaluating and visualising the importance of certain types of ecosystems, causing an impact on biodiversity and habitats. • In the guidelines for economic incentives application, related information is not adequately disclosed on environmental and social risks and impacts to interested parties in an accessible, timely, understandable and appropriate way • In case of economic incentives applied to indigenous peoples, risks associated with non-recognition, respect or inclusion of their mechanisms of government and decision-making could have place, particularly if economic valuation of ecosystem services or receiving money is against its principles. • The use of the language, cultural practices, institutional arrangements and religious beliefs of peoples are hindered. • The full participation of stakeholders is not promoted, stakeholders point of views may not considered, and accessible and inclusive means are not provided the in workshops to be organised under this activity. • Accidents and occupational disease for project staff performing fieldwork. • Workers safety affected due to public order issues.	• In the guidelines for economic incentives application, related information is not adequately disclosed on environmental and social risks and impacts to interested parties in an accessible, timely, understandable and appropriate way • In case of economic incentives applied to indigenous peoples, risks associated with non-recognition, respect or inclusion of their mechanisms of government and decision-making could have place, particularly if economic valuation of ecosystem services or receiving money is against its principles. • The use of the language, cultural practices, institutional arrangements and religious beliefs of peoples are hindered. • The full participation of stakeholders is not promoted, stakeholders point of views may not considered, and accessible and inclusive means are not provided the in workshops to be organised under this activity. • Accidents and occupational disease for project staff performing fieldwork. • Workers safety affected due to public order issues.	• Ecosystem services valuation methodologies can generate biases when evaluating and visualising the importance of certain types of ecosystems, causing an impact on biodiversity and habitats. • The full participation of stakeholders is not promoted, stakeholders point of views may not considered, and accessible and inclusive means are not provided the in workshops to be organised under this activity. • Accidents and occupational disease for project staff performing fieldwork. • Workers safety affected due to public order issues.	• Accidents and occupational disease for project staff performing fieldwork. • Workers safety affected due to public order issues.	• The full participation of stakeholders is not promoted, stakeholders point of views may not considered, and accessible and inclusive means are not provided the in workshops to be organised under this activity. • Accidents and occupational disease for project staff performing fieldwork.	• Accidents and occupational disease for project staff performing fieldwork.	• The full participation of stakeholders is not promoted, stakeholders point of views may not considered, and accessible and inclusive means are not provided the in workshops to be organised under this activity. • Accidents and occupational disease for project staff performing fieldwork.	• Ecosystem services valuation methodologies can generate biases when evaluating and visualising the importance of certain types of ecosystems, causing an impact on biodiversity and habitats. • In the guidelines for economic incentives application, related information is not adequately disclosed on environmental and social risks and impacts to interested parties in an accessible, timely, understandable and appropriate way. • The full participation of stakeholders is not promoted, stakeholders point of views may not considered, and accessible and inclusive means are not provided the in workshops to be organised under this activity. • Accidents and occupational disease for project staff performing fieldwork.	**B - Medium Risk**	Actions considered to increase policymakers capacity, will improve the ability of decision-makers to estimate an economic value for ecosystem services as result of methodology for ecosystem valuation, allowing them to raise awareness about the importance of sustainable management of natural resources, strengthening institutions capacity to demonstrate the value and effectiveness of EbA interventions in territories, and increase resilience of vulnerable communities in Dry Corridor of Central America and Arid Zones of Dominican Republic. In addition, it will allow local governments to adopt policies to implement and generate economic incentives to facilitate farmers and rural communities to increase their resilience to extreme weather events and improve socioeconomic conditions, while enhance the region's habitats conditions. Finally, it will generate regional dialogues that allow to plan and think policies aimed at climate resilience, with a comprehensive environment, ecosystem and social view of the region, turning policies locally adopted more effective and strengthening economic initiatives developed at the municipal level.	ESS2. Labour and Working Conditions ESS3. Resource Efficiency and Pollution Prevention ESS4. Community Health, Safety and Security ESS6. Biodiversity conservation and sustainable management of living natural resources. ESS7. Indigenous Peoples	• Developed methodologies for assessing ecosystem services must be complemented by an analysis of the importance of natural ecosystems that generate less economic recognition for ecosystem services payment, in order to discourage historical degradation patterns that have affected biodiversity and habitats of the region. • Likewise, the elaboration of guidelines for local governments and training activities to be provided must contemplate a module on environmental and social risks and impacts that may be caused by indebtedness conditions, and by the allocation of resources to develop activities not approved by the Project. These communication processes must be carried out in accessible, timely, understandable and appropriate formats. • In the case of Guatemala, an appropriate prior consultation processes must be applied to indigenous peoples, where its full knowledge and understanding of financial instruments is evidenced, as well as the economic implications of ecosystem services valuation and receiving money from the grant facility is recorded, prior to implementation. • A clear work program must be provided to carry out workshops, to allow the participation of stakeholders, especially those affected by the project, where their opinions are considered and accessible and inclusive means are provided. • Finally, the project personnel who travel and conduct field work, must follow the Safety Protocol established for the project, and the occupational health and safety protocol	• Stakeholder Engagement Plan • Indigenous Peoples Plan • Occupational health and industrial safety protocol for field work. • Public Order Risk Safety Protocol for field work.	• Document developed with the analysis on the importance of natural ecosystems that generate less economic recognition for payment for ecosystem services, in order to discourage historical patterns of degradation that have affected biodiversity and habitats in the region (Yes/No). • Within the training program, a module is included and implemented on environmental and social risks and impacts that may triggered from borrowing conditions, and resources allocation to develop activities not approved by Project, and follows SEP guidelines (Yes/No). Evidence must be submitted • Evidence of approval by Guatemala's indigenous peoples on full understanding of the implications of ecosystem services economic valuations. (Yes/No). Evidence must be submitted • Occupational health and safety protocol for field work developed by the Project and applied to this activity (Yes/No) Evidence must be submitted • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)	Environmental and Social Safeguards Officer of the Project	**9**
10	**Output 4. Financial products and services to finance EbA investments are offered by Partner Financial Institutions (PFI), including PFI access to EbA on-lending funds and support mechanisms.**	4.1. Set-up and establish the financial structure for the lending and guarantee facilities.	4.1.1 Set-up relevant fiscal, legal and regulatory compliance structures for the Lending facility's double trust structure and Guarantee facility. 4.1.2 Create legal agreements, including regulatory, legal and fiscal approvals for the lending and guarantee facilities. 4.1.3 Develop Steering Committee statutes and operational guidelines for the two facilities including eligibility criteria and processes for the blended EbA lending facility. 4.1.4 Define investment criteria from Steering Committee guidelines and align with national laws and regulations, responsible banking principles, national and municipal adaptation policies and initiatives, define final operability of the blended EbA lending facility. 4.1.5 Establish the guarantee facility to support EbA finance via the lending facility - define guarantee coverage criteria. Based on Regional Project Steering Committee guidelines and aligned with national laws and regulations, responsible banking principles, national and municipal adaptation policies and initiatives, the final operability of the EbA Guarantee Facility will be defined.	No risks or impacts are foreseen	No risks or impacts are foreseen	No risks or impacts are foreseen	No risks or impacts are foreseen	No risks or impacts are foreseen	No risks or impacts are foreseen	No risks or impacts are foreseen	No risks or impacts are foreseen	**Zero**	The generation of this structure will contribute to better monitoring and control of the financial instruments that will be created under the Project, guidelines can be created and ensured to properly implement EbA strategies, not only under responsible banking criteria but considering the Project safeguards, and potentiate the Project benefits. Likewise, the Steering Committee will allow for timely corrections in the event that any risk and impact associated with the activities to be financed are triggered, and adjust the eligibility, follow-up and monitoring criteria.	ESS2. Labour and working conditions	The project must ensure for this, and all activities to be implemented, that staff hiring is clear and in compliance with the terms of employment, labour laws and other related to non-discrimination, equal opportunities, child labour and forced labour of direct, hired and third-party workers.	None	None	CABEI	**10**
11		4.2. Financial mechanism of the EbA lending facility and guarantee facility.	4.2.1 Deployment of the lending facility 4.2.2 Deployment of the guarantee facility	•Decision-making is not consistent with the needs and expectations of stakeholders. • A possible decrease in economic income could occur, in case credit conditions do not have favourable interest rates and terms for small producers; also, credit conditions are not in accordance with the return rate of EbA investments, which would cause high indebtedness of agricultural producers. • Sustainable development and opportunities for indigenous peoples/ local communities are not promoted in a way that is accessible, culturally appropriate and inclusive. •The culture, knowledge and practices of indigenous peoples/traditional local communities are not recognised, respected and preserved. •The use of traditional language, cultural practices, institutional arrangements and religious beliefs are not considered. •Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. • Agricultural frontier expansion could be increased if environmental and social criteria is not included for access and monitoring the designed financial instruments.	• Municipalities of Guatemala have high poverty rates (80%), with exception of Chicamán which report a rate close to 34%. This particular condition could increase economic risk, in case credit conditions do not have favourable fees, interest rates and terms for producers. • Agricultural frontier expansion due to EbA options implementation. •Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources. •The Project will work with Indigenous peoples in Guatemala, by promoting a financial instrumento culture, knowledge and practices of indigenous peoples could not be recognised, respected and preserved.	• Poverty rates in El Salvador are relatively moderate low close to 58%, an economic risk could have place in case credit conditions do not have favourable fees, interest rates and terms for producers, althought low probability.	• Honduras municipalities present hig poverty rates from 585 to 80%. This particular condition could increase economic risk, in case credit conditions do not have favourable fees, interest rates and terms for producers. • Agricultural frontier expansion due to EbA options implementation. •Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources.	• Project municpalities have high poverty rates, therefore, an economic risk could have place in case credit conditions do not have favourable fees, interest rates and terms for producers. •Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources.	• Costa Rica is one of the countries with lowest poverty rate in the region, project municipalities have 20%, however, possibles economic income decrease could have place, if redit conditions do not have favourable fees, interest rates and terms for producers. •Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources.	• Proverty rate for Panamá municipalities is 20%, possibles economic income decrease could have place, if redit conditions do not have favourable fees, interest rates and terms for producers, althought low probability. •Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources.	• Project municipalities in Dominican Republic have poverty rates that range from 40 % to 65%, therefore, an economic risk could have place in case credit conditions do not have favourable fees, interest rates and terms for producers. • Agricultural frontier expansion due to EbA options implementation. •Possible increase in pesticides and fertilisers use in EbA options, causing worker poisoning and pollution of natural resources.	**B - Medium Risk**	By accessing a lending facility to implement Ecosystem-based Adaptation activities at local level, agricultural producers, can improve the efficiency of their production processes, particularly small ones, therefore improve their family group conditions by reducing their poverty and enabling employment diversification. It will also create opportunities to develop businesses based on natural resources and alternative livelihoods, considering climate scenarios and market demand for products and services. Also, accessing an EbA credit line allows new business opportunities for women and young people living in these areas, even more considering the high unemployment gap of men and women for instance in Guatemala, where 85% of workforce are male workers in the Project's targeted municipalities. The EbA credit line will develop companies aiming to produce AbE projects generating an economic, social and environmental impact. Greater access to this type of credit will reduce financial barriers to implementing climate change adaptation measures and will allow financial institutions and commercial banks to become more aware of market opportunities in this field. Then again, since this facility is a combined credit line, which will receive different sources of financing, not only from donation resources, it will allow Project countries to have a financial instrument that can be sustained in the long term, and even be replicated in other provinces and municipalities in the medium term.	ESS2. Labour and Working conditions. ESS3. Resource Efficiency and Pollution ESS4. Community Health, Safety and Security ESS6. Biodiversity Conservation and Sustainable Management of Natural Living Resources ESS7. Indigenous Peoples	• EbA credit line operation will require a Manual with the Investment Principles, in which the mechanisms are defined so that the PFIs can: 1. analyse the borrowing and payment capacity of Producers before the credit granting; this implies analysing the family unit, not just the productive activity. 2. Technically advise each producer according to their capacities. 3. Define what activity could be financed and under what conditions, define the criteria for its implementation, including not finance activities that promote deforestation and degradation of natural ecosystems. 4. The investment principles must contemplate the safeguards of the project and the GCF. • Likewise, a technical assistance program must be developed to support the activities to be financed, which include best practices in responsible banking topics. • Moreover, a monitoring, reporting and verification mechanism should be established to ensure that the activities carried out meet the criteria. This includes a digital daily report, addressed to the Steering Committee, with the credit beneficiaries' characteristics, and georeferenced location of the property. • Additionally, periodic audits should be carried out on these operations to identify and correct bad practices in case they are identified. These audit reports must be presented and evaluated by the Steering Committee, in order to effectively correct negative impacts on the community and the environment. • Financial institutions contract framework, must include a clause where the institutions pledge that activities financed with EbA resources will not promote deforestation and habitat degradation. • Recommendation guidelines will be developed to modify the mechanism for granting credit and align the logic of microfinance institutions with the logic of the productive activity that is promoted, so that the credit terms	• Manual of Investment Principles for EbA Credit Line management. • Periodic audit reports on the allocation and operation of EbA credit line, which consolidates each PFI management. • Indigenous Peoples Plan.	• Investment Principles Handbook developed for EbA Credit Line Management (Yes/No) • Technical assistance programme designed to support of financed activities implementation (Yes/No) • Monitoring, report and verification mechanism prepared, with daily reports issued (Yes/No) • Presentation of at least one (1) annual audit report on responsible banking practices (Yes/No) • Recommendation guidelines developed to modify the lending mechanism and align the logic of microfinance institutions with the logic of promoted productive activity (Yes/No) • Proof of approval on full understanding, interest and acceptance to access credit line resources by indigenous peoples. (Yes/No) Evidence must be submitted	CABEI/Environmental and Social Safeguards Officer of the Project	**11**
12		4.3. Technical assistance (TA) facility to strengthen technical capacity of accredited and non-regulated financial institutions to access and channel funds for small- and large-scale EbA investments.	4.3.1 Develop or adjust training curriculums and technical assistance methodology targeted to fill gaps identified during initial due diligence based on ToT or online course methodologies and targeting certification financial institution personnel 4.3.2 Initiate and execute tailormade technical assistance programme for PFIs based on gaps identified during initial due diligence 4.3.3 Periodic monitoring of TA and training success via reassessment based on scorecard used during initial due diligence 4.3.4 Adjust TA methodology and training curriculum according to periodic reassessment 4.3.5 Promote the blended EbA lending facility with potential network institutions and non-network institutions in each of the 7 countries	• The necessary means for full, broad and effective participation are not guaranteed and ensured. • Accidents and occupational disease for project personnel performing field work. • Worker safety could be affected due to public order issues.	• The most visible risks are related to working conditions, as security affectations to workers could ocurr due to public irder issues and or accidents and occupational disease for project personnel performing field work.	• El Salvador has the highest violence rate in Centroamerica according to EFE (2018), so Worker safety could be affected due to public order issues. • Accidents and occupational disease for project personnel performing field work.	• Honduras is the second country with the highest violence rate in Centroamerica due to homicides according to EFE (2018), so Worker safety could be affected due to public order issues. However, municipalities data report low violence rate and Maras and gangs absence, so the risk is low. • Accidents and occupational disease for project personnel performing field work.	• Accidents and occupational disease for project personnel performing field work.	• Accidents and occupational disease for project personnel performing field work.	• Accidents and occupational disease for project personnel performing field work.	• Accidents and occupational disease for project personnel performing field work.	**C - Low Risk**	This activity will primarily promote capacity building of financial intermediaries on the concepts, financial methodology and tools to provide products and services oriented to EbA technologies, therefore they will have tools to advise future clients on strategies to optimise their production models with measures such as conservation of wetlands, forests and agroforestry systems that, in addition to reducing losses and damage from the effects of climate change, increase the sustainable management of natural resources, improving biophysical conditions of the areas to be intervened, while increasing business productivity. In addition, this activity will allow to customise technical assistance models according to the characteristics of each PFI, so that financial instruments will have constant technical support, even during the implementation and operation of financed activities. Likewise, the establishment of constant reassessment methodologies will allow PFI to take early corrective actions in the event that any risks or impacts can be triggered by the instruments' implementation.	ESS2. Work and working conditions	• The training strategy should include topics related to biodiversity conservation, efficient resource management and pollution prevention, as well as the enhancement of benefits to reduce climate vulnerability. • The guidelines established in the Stakeholder Engagement Plan must be followed to guarantee the necessary means for full, broad and effective participation of all PFI personnel, especially those advisors who will work directly with the producers • Additionally, as part of the Stakeholder Engagement Plan, public officials of financial banks should be trained on integrated land use planning and biodiversity conservation and ecosystem services. • Occupational health and safety protocol for field work should be developed. • Likewise, a public order risk safety protocol must be developed for field work.	• Stakeholder Engagement Plan • Occupational health and safety protocol for field work • Public order risk safety protocol for field work.	• # Training developed on topics related to biodiversity conservation issues, efficient resource management and pollution prevention, as well as benefits enhancing to reducing climate vulnerability / # Total PFI of the Project. • Stakeholder Engagement Plan developed, including mechanisms to develop this activity (Yes/No) • Occupational health and safety protocol for fieldwork developed by the Project, and applied to this activity (Yes/No) Evidence must be submitted. • Public order risk security protocol for field work developed by the Project, and applied to this activity (Yes/No)	CABEI/Environmental and Social Safeguards Officer of the Project	**12**

ANNEXES TO ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

Contents

1. In relation to Environmental and Social Safeguard Standards: ESS 1

Once the actual locations and communities are confirmed, procedures for further identifying and screening in detail using actual project conditions on the environmental and social issues will be developed. Screening will have the following purposes: (i) screen for potential environment and social risks and impacts; (ii) identify applicable ESS standards / IFC PSs; (iii) determine the E&S category of the subproject; and, (iv) determine the specific instrument/s to be prepared for each subproject. A checklist is often useful in screening E&S issues.

a) Screening checklist sample

Would the project, if implemented:	N.A.	No	Yes	Unknown
ESS 1. Assessment and Management of Environmental and Social Risks and Impacts				
Include an irrigation scheme that is more than 20 hectares or withdraws more than 1000 m3/day of water?				
Include an area known or expected to have water quality problems?				
Negatively affect the legitimate tenure rights of individuals, communities or others?				
ESS 2. Labour and Working Conditions				
Respect the fundamental principles and rights at work and support the effective implementation of other international labour standards?				
Impact fall disproportionately on the disadvantaged or vulnerable (which include inequalities between males and females) and any prejudice or discrimination toward such groups in providing access to development resources and project benefits?				
ESS3. Resource Efficiency and Pollution Prevention				
Requires the use of pesticides?				
Generate dangerous or non-dangerous waste?				
ESS4. Community Health, Safety and Security				
Threats Human Security through the escalation of personal, communal or inter-state conflict, crime or violence?				
Fall disproportionately on the disadvantaged or vulnerable, and cause disadvantaged in sharing any development benefits and opportunities resulting from the project?				
Exacerbate existing tensions and inequality within society?				

ESS5. Land Acquisition and Involuntary Resettlement				
Result in a significant change/loss in livelihood of individuals?				
Compromise existing legitimate rights for land and natural resource tenure and use (including collective rights, subsidiary rights and the rights of women) or have other unintended consequences, particularly where the project supports land titling and related issues?				
ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources				
Make reasonable and feasible effort to avoid practices that could have a negative impact on biodiversity, including agricultural biodiversity and genetic resources?				
Respect access and benefit-sharing measures in force?				
Be located such that it poses no risk or impact to protected areas, critical habitats and ecosystem functions?				
GCF's Indigenous Peoples Policy				
Are there any indigenous communities in the project area?				
Have adverse effects on indigenous peoples' rights, lands, natural resources, territories, livelihoods, knowledge, social fabric, traditions, governance systems, and culture or heritage (tangible and intangible)?				
Are indigenous communities outside the project area likely to be affected by the project?				
ESS8. Cultural Heritage				
Involves excavations, demolition, movement of earth, flooding, or other changes in the physical environment?				
Designed to be sensitive to cultural heritage issues?				

b) Due diligence procedures

Since the proposal involves financial intermediation, due diligence processes must be detailed. CABEI will carry out the due diligence on its operations with the IFIs. In the case of PFIs, the IFIs will carry out the due diligence (not CABEI). However, CABEI will develop an Operations Manual for the programme where all eligibility criteria will be detailed for the selection of PFI. IFIs must follow the guidelines in the Manual to evaluate and select the PFI that would be receiving resources from the programme.

One of the basic principles governing CABEI's management efforts is that of the due diligence. Some of their guidelines are described for reference:

- Approvals from CABEI's decision-making bodies are subject to verification, analysis and proofing arising from the due diligence of the operation under bank financial technical aspects, accounting aspects and legal aspects, as well as satisfactory documentation for CABEI.
- There are procedures for due diligence, simplified due diligence and enhanced due diligence, which are implemented in accordance with the risk level of Money Laundering and Terrorism Financing of their counterparties and taking into account the nature of the business carried out.
- The personnel in charge of the relationship with the counterparties is required to apply measures of income control and monitoring indicated in the internal regulations, using the tools available at CABEI that allow documenting the due diligence carried out.

CABEI will ensure that the requirements for IFIs and that the Manual for PFIs include appropriate environmental and social management systems, based on its guidelines for the Management of Environmental and Social Risk for Financial Institutions. Main elements of CABEI's guidelines are:

- The Environmental and Social Risk Management Unit for Financial Institutions (GERSYP for its Spanish acronym) is responsible for identifying the initial environmental and social risks of the loan portfolio of the Financial Institution, analyzing the impacts and probability of occurrence, defining the category of environmental and social risk, as well as identifying the existing verification methods and recommending the more appropriate measures for mitigation or compensation, in case the risks materialize. The objective is to determine the residual risk of the operation after the application of the verification methods and thus define the required level for the Environmental and Social Action Plan.
- Three categories of environmental and social risk are defined to categorize the portfolios:
    i. Category SA: If the current or proposed portfolio includes or is expected to include substantial financial exposure to activities with potential significant adverse environmental or social risks or impacts that are diverse, irreversible or unprecedented.
    ii. Category SB: If the current or proposed portfolio consists or is expected to consist of activities with possible risks or adverse environmental or social impacts, of a limited nature, that are scarce in number, generally located in specific sites, mostly reversible and easily manageable through mitigation measures, or includes a very limited number of business activities with potential significant adverse environmental and social risks or impacts that are diverse, irreversible or unprecedented.
    iii. Category SC: If the current or proposed portfolio includes financial exposure to activities that predominantly have minimal or null adverse environmental or social impacts.

- To avoid the materialization of risks associated with the financial institution's portfolio, GERSYP must consider, as part of the mitigation measures, at least the following:
    i. Policies or formal plans for the environmental and social management of the client.
    ii. Environmental and Social Management System.
    iii. Responsibility for environmental and social management: Internal or external staff in charge and their credentials/experience.
    iv. Training received by staff.
    v. Level of implementation of the Environmental and Social Management System.
    vi. Other environmental and/or social plans of the client.

2. In relation to Environmental and Social Safeguard Standards: ESS 2

Once the programme is in execution, it will consider its impacts on working conditions, terms of employment, workers organization, non-discrimination, equal opportunity, child labour, and forced labour of direct, contracted and third-party workers. The project will ensure that labourers and sub-contractors are being paid the correct wages including respecting the minimum wage. The project will consider the impacts of project on working conditions of the labourers. The project will also consider establishing a grievance mechanism.

a) Labour Management Procedures

The main objective of the Labour Management Procedures is to establish the procedures in order to: 1) promote health and safety in the workplace; 2) promote a fair treatment, nondiscrimination and equal opportunities of project workers; 3) protect all the project workers, including vulnerable workers; 4) to prevent the use of all forms of forced labor and child labor; 5) support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law; 6) to provide project workers with accessible means to raise workplace concerns.

These Labor Procedures apply to all those employers and workers that maintain a labor relation with any activity of the programme, independently of the type and duration of the contract.

The elaboration of a Labor Management Guide will be considered during the programme execution, in order to identify the main labor needs, and associated risks, as well as the necessary resources to respond to potential labor problems. It will identify the number of workers in the project, the description of the project workers (age, women, migrants, etc.), vulnerable workers, an assessment of the main labor-related risks, the responsible personnel, terms and conditions, policies and procedures, contractors, community workers, and providers.

b) Grievance Mechanism

The establishment of a grievance mechanism will also be pondered, and if elaborated, it could follow this four-component model:

The first component refers to the processes for receiving information (complaints, claims, and others) from the workers. At this stage, the information enters the system for analysis, evaluation and allocation, according to the competencies of the entities involved. This allows generating information that supports decision-making, actions and corresponding measures.

The second component interacts closely with the first and is made up of a set of instruments and tools, of a technical and legal nature, based on a computer system which is managed by the unit for receiving and processing complaints, which collects, stores and distributes information.

The third component concerns the strategic analysis of the information, assumes the processing of complaints, grievances, and conflicts. Once this process has been carried out, the result is sent to the corresponding instance, in the form of a resolution and processes initiated, as well as the corresponding follow-up, monitoring and report.

The fourth component is to inform and communicate about the cases attended, and to systematize and define the procedures and tools. It is intended that it follows-up and supports the parties in conflict, seeking harmony between them.

3. In relation to Environmental and Social Safeguard Standards: ESS 3

As stated in the ESMF, if during the programme execution, it is observed that there is an increase in fertilizer use which could potentially harm workers or pollute natural resources, specific guidelines on the use of fertilizer will be developed to address these impacts. If necessary, the project could also identify and assess activities related to the project that produce emissions to the air and or produce effluents, if any, and how these will be managed, if any.

4. In relation to Environmental and Social Safeguard Standards: ESS 4

a) Emergency Response Plan

The preparation of an Emergency Response Plan will be pondered during programme execution. The purpose of the plan is to be ready to respond if the project sites and/or targeted communities are affected, during operational phase, by emergencies or natural disasters, such as earthquakes or flooding. Risks will be assessed, and potential impacts on the safety of affected communities to address them in a commensurate manner. Consideration will be given to potential exposure to both accidental and natural hazards.

The measures should favour prevention or avoidance of risks and impacts. The measures will need take into account differences in risk exposure and sensitivity of women and men, as well as marginalized and disadvantaged groups, including children, older persons, persons with disabilities, minorities and indigenous peoples.

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

b) Incident reporting

The elaboration of an incident reporting procedure will also be considered. It should require executing entities to inform of all serious incidents caused by or related to a project that have or could have significant negative impacts on people or on the environment. The purpose of

reporting serious incidents is to ensure that appropriate responses and corrective actions are taken in order to minimize, mitigate or remedy the impacts. A serious incident is an unplanned or uncontrolled event that has an adverse effect on project personnel and workers, community members or on the environment within the project‘s area of influence. Serious incidents include the following:

- Fatalities, serious injuries and accidents at work.
- Fatalities, serious injuries and accidents affecting local communities and others.
- Violations of human rights.
- Conflicts, disputes and disturbances leading to loss of life, violence or the risk of violence.
- Environmental impacts or public accusation of significant environmental impacts attributed to project activities that have led to or could lead to serious contamination, destruction or degradation of natural habitats or areas of high biodiversity value.

5. In relation to Environmental and Social Safeguard Standards: ESS 6

The elaboration of a Biodiversity Management Plan will be pondered during the operational phase. The following are the general guidelines that will be considered:

a) General guidelines for biodiversity management

All threats to biodiversity resulting from the programme activities should be considered. For example, habitat loss, degradation and fragmentation, invasive alien species, overexploitation, hydrological changes, pollution, and so forth. The importance of biodiversity or habitats will be determined based on their vulnerability and irreplaceable nature at the global, regional or national level, taking into account the different values that affected communities and other stakeholders place on biodiversity and habitats.

Adverse impacts on biodiversity and habitats should be avoided. When it is not possible to avoid such impacts, measures will be implemented to minimize them and restore biodiversity. Likewise, it will be ensured that specialized knowledge on biodiversity is applied to carry out the environmental and social assessment, as well as for the verification of the effectiveness and feasibility of mitigation measures. When significant risks and impacts on biodiversity are identified, a Biodiversity Management Plan must be prepared and implemented.

In the event that any species, habitat or natural resource is negatively affected due to the activities of the programme, a characterization will be included within a Biodiversity Management Plan.

6. In relation to Environmental and Social Safeguard Standards: ESS 8

The project will ensure that there is continuous access to any cultural heritage that may be restricted by the project, although none has been identified so far.

7. Information disclosure

Disclosure procedures for safeguard instruments for sub-activities to comply with the GCF's and CABEI's Information Disclosure Policy are guided by the following:

a) GCF's Information Disclosure Policy

In the case of Category B subprojects, the fit-for-purpose ESIA and an Environmental and Social Management Plan (ESMP) will be disclosed at least 30 days in advance of the approval decision. The safeguard reports will be available in both English and the local language (Spanish in this case). The reports will be submitted to GCF and made available to GCF via electronic links in both CABEI's and the GCF's website as well as in locations convenient to affected peoples in consonance with requirements of GCF Information Disclosure Policy and Section 7.1 of (Information Disclosure) of GCF Environmental and Social Policy. This would also apply to subprojects that will be identified under the components to be implemented by the IFIs and the PFIs.

b) CABEI's Environmental and Social Policy

Transparency, Stakeholder Engagement and Consultation: CABEI must promote transparency, disclosure and effective communication with regard to this Policy. This must be carried out on the CABEI web page, as well as through other media.

8. Budget

Budget for the implementation of the ESMF has been allocated throughout Activity 1.1, which will involve workshops and consultations that will ensure that interventions are site-specific and in the interest of local populations. Each country will also have a National officer in Gender, Social Engagement and Safeguards, who will have the responsibility of ensuring that the ESMF is put in place, besides from a regional one.