

MID-TERM REPORT



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Forest Carbon

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Note: FMT Note 2012-7 rev lays out the process for REDD Country Participants to submit, and the Participants Committee (PC) to review, mid-term progress reports and requests for additional funding of up to US\$ 5 million.

PREPARATION OF THE

El Salvador's National Strategy for Ecosystem and Landscape Restoration with a Mitigation based Adaptation approach



Team responsible for preparing

El Salvador's MID-TERM REPORT for the
Forest Carbon Partnership Facility

MARN-UEP of the FCPF Project , El Salvador

MARN-UEP of the FCPF Project Coordinator for El Salvador: Juan Arnulfo Ruiz

MARN-UEP of the FCPF Project Team for El Salvador: Juan Arnulfo Ruiz, Nelson Bolaños, Jakcquelin Bonilla, Thirza Ruballo, Salvador Orellana, Nestor Pérez, Ileana Lara, Gerardo Aguirre, Amilcar López.

Writing Team: Thirza Ruballo, Abner Jiménez, Mario García, Francisco Rodríguez, Mario Escobedo, Salvador Orellana.

Advisory Team: Mario García, Mario Escobedo, Guillermo Mayorga, Abner Jiménez, Luis Torres, Amilcar López, Giosvani Oliva, Mariano Pacas, Jorge Oviedo, Javier Magaña, Nelson Zas, Willian Guzmán, Miguel Hernández, Reynaldo López.

MARN Expert Collaborators: Sonia Baires, Silvia Larios, Margarita García Giovani Molina.

Editing and Proofreading: Thirza Ruballo

Design: Nelson Fajardo

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GLOSSARY OF ACRONYMS

KA:	Key Actions
ADESCO:	Community Development Associations
AFORCAP:	San Vicente Forest Association
ANDA:	National Aqueduct and Sewage Administration
PNA:	Protected Natural Areas
APROBCEM:	Association of Timber Forest Owners, Producers and Processors, Coffee Farmers and Ecotourists of Northern Morazán
ARDM:	Association for Municipal Reconstruction and Development
ARR:	Afforestation, Reforestation and Revegetation
CRS:	Catholic Relief Service
CAC:	Central American Agricultural Council
CACH:	Chalatenango Environmental Committee
CAFÉCIBA:	Ciudad Barrios Coffee Farmers Cooperative Association
CASSA:	Salvadoran Sugar Company
CATIE:	Tropical Agricultural Research and Higher Education Center
CCAD:	Central American Commission for the Environment and Development
CBD:	Convention on Biological Diversity
CDSA:	Social and Environmental Committee
CEL:	Hydroelectric Power Station
CENTA:	National Center for Agricultural and Forestry Technology
CLUSA:	National Cooperative Business Association
UNFCCC:	United Nations Framework Convention on Climate Change
CENIF:	National Commission on Forest Fires
CNPI:	National Coordinator of Indigenous Peoples
CNR:	National Registration Center
CONASAV:	National Council for Environmental Sustainability and Vulnerability
CONFRAS:	Confederation of the Salvadoran Agrarian Reform of Federations
CORDES:	Foundation for Community Cooperation and Development
DAGCER:	Directorate for Climate Change Adaptation and Strategic Risk Management
DEVS:	Directorate for Ecosystems and Wildlife
DGFCR:	Directorate for Forestry Management, Watersheds and Rivers
EN-REP:	National Strategy for Ecosystem and Landscape Restoration.
ENRH:	National Water Resources Strategy
MEREP:	Ecosystems and Landscapes Restoration Roundtable
ESMF:	Environmental and Social Management Framework
FAO:	Food and Agriculture Organization of the United Nations
FCPF:	Forest Carbon Partnership Facility
FIAES:	The Initiative for the Americas Fund

FUNDAZÚCAR:	Sugar Foundation
GHG:	Greenhouse gases
GIZ:	German Federal Enterprise for International Cooperation
DRM:	Disaster Risk Management
IAIF:	Forest Investment Attractiveness Index
GHGI:	Greenhouse Gases Inventory
IPCC:	Intergovernmental Panel on Climate Change
LAIP:	Access to Public Information Law
LMA:	National Environment Law
MbA:	Mitigation based on Adaptation
MAG:	Ministry of Agriculture and Livestock
MARN:	Ministry of Environment and Natural Resources
MECONFOR:	Cabañas and Cuscatlán Forest Production Coordination Roundtable
MEFORPRO:	Chalatenango Forest Production Roundtable
MESPABAL:	Bajo Lempa Permanent Stakeholders Roundtable
M-REP:	Ecosystems and Landscapes Restoration Roundtable
MINEC:	Ministry of Economy
MINSAL:	Ministry of Health
MNIMA:	National Indigenous Roundtable on Environmental Affairs
MRV:	Measurement, Reporting and Verification System
MTPS:	Ministry of Labor and Social Security
MUHNES:	Museum of Natural History of El Salvador
FREL:	Forest Reference Emission Level
FRL:	Forest Reference Level
SO:	Strategic Options
NGOs:	Non-governmental Organizations
PDD:	Project Design Document
LSDP:	Local Sustainable Development Plan
PERFOR:	Regional Program for the Management of Forest Ecosystems
GDP:	Gross Domestic Product
LSUP:	Local Sustainable Use Plans
PNGIRH:	National Plan for Integrated Water Resources Management
PNMA:	National Environment Policy
UNDP:	United Nations Development Program
PREP:	Ecosystems and Landscapes Restoration Program
PRISMA:	Salvadoran Research Program on Development and the Environment
LEON:	Local Environmental Observer Network
R-PP:	Readiness Preparation Proposal
SANP:	System of National Protected Areas
ES:	Exploitation System
SESA:	Strategic Environmental and Social Assessment
SINAMA:	National Environmental Management System
SNET:	National Service of Territorial Studies
SPS:	Sustainable Production Systems
SI:	Strategic Issues
UAM:	Municipal Environmental Units
UES:	National University of El Salvador
IUCN:	International Union for Conservation of Nature
UL:	Universidad Luterana
UNES:	Salvadoran Ecological Unit
USAID:	United States Agency for International Development
LULUCF:	Land Use, Land Use Change and Forestry
VMVDU:	Vice Ministry of Housing and Urban Development

SECTION 1: INTRODUCTION, BACKGROUND, REPORT CONTENT AND SUMMARY OF PROGRESS

1.1 Introduction

Since 1995, El Salvador has been a member of the United Nations Framework Convention on Climate Change (UNFCCC), a global initiative whose goals include finding solutions to major environmental challenge). It is also the first country in the world to support the Mitigation based on Adaptation approach (MbA).

The following medium-term report shows some of El Salvador's actions to reduce greenhouse gas emissions caused by Deforestation and Forest Degradation (REDD +) and, in a timely manner, progress in the development of the National Strategy For the Restoration of Ecosystems and Landscapes (EN-REP), which is built as a State priority.

Climate change adaptation measures are urgently needed in El Salvador, as well as reducing the environmental degradation that affects ecosystems in most of its territory, which increases the population's vulnerability. With the second highest population density in the hemisphere (after Haiti) and a highly deforested territory, El Salvador is particularly vulnerable to the impacts of extreme weather events, which threaten 90% of its population, 95% of its the national territory and 90% of its GDP¹.

El Salvador has developed priority adaptation measures to mitigate the harmful effects of climate change, which include restoring degraded or deforested ecosystems to reestablish ecological integrity through agroforestry, as well as soil management and the conservation of water sources.

To this end, the country has made a commitment to restore one million hectares by 2030, a pledge that has been reaffirmed by the launch of its National Ecosystem and Landscape Restoration Plan in June 2016². The plan specifies the first 100,000 hectares to be included, in which the main protected natural areas of the country are found, as well as mangrove ecosystems, the dry corridor and water recharge zones, etc. To achieve this goal, the government of El Salvador has US \$ 20 million distributed in several projects financed by Spain (Water Cooperation Fund), the German Federal Company for International Cooperation (GIZ), sources of income from national environmental compensation and Resources managed by the Fund of the Initiative for the Americas (FIAES) of El Salvador, among others. Projects and initiatives that are closely linked within the National Restoration Strategy that is currently being developed in the country with the financial support of the FCPF.

In this context, El Salvador has undertaken the restoring of ecosystems and landscapes as a mechanism for productive optimization, protection and the proper use of natural resources, choosing a different and novel path for avoiding GHG emissions and protecting the sinks that absorb them so it can make technical mitigation - but above all economic and social mitigation - a viable objective.

El Salvador's Mitigation based on Adaptation approach (MbA) was endorsed by the Forest Carbon Partnership Facility's Participants Committee, which in January 2014 provided the second grant of \$ 3,600,000.00 for the preparation of a National Strategy for Ecosystem and Landscape Restoration based on MbA. This document reports the mid-term progress of the EN-REP development.

1.2 Background

¹ Germanwatch, 2010, Global Climate Risk Index, <https://germanwatch.org/fr/download/2168.pdf>

² MARN, 2016, Hacia la Restauración y Reforestación de Ecosistemas y Paisajes, <http://www.marn.gob.sv/download/publicaciones/Hacia%20la%20restauraci%C3%B3n%20y%20reforestaci%C3%B3n%20de%20ecosistemas%20para%20web.pdf>

Since 2012, El Salvador has received funds from the FCPF, managed by the World Bank. These funds have been used for readiness preparation activities related to the reduction of emissions from deforestation and forest degradation plus the conservation and increase of carbon stocks and payment for performance.

Through Resolution PC/13/20/2012/1, the FCPF Participants Committee approved the financing of \$ 200,000 for the Readiness Preparation Proposal (R-PP) elaboration and, in October 2012, El Salvador concluded the R-PP formulation phase, approved by the committee during its thirteenth session (PC13).

In March 2013, the FCPF Management Team (FMT) performed a Completeness Check on the revised version of the R-PP and in January 2014, El Salvador signed the second grant agreement (Nº TF 099529) for \$ 3,600,000. Subsequently, at the end of 2015, recruitment of the consultants team for project execution began.

El Salvador's EN-REP focuses on promoting the restoration of ecosystems and rural landscapes through productive agroforestry systems aimed at conserving and increasing carbon stocks, recovering vital ecosystem services and obtaining mitigation benefits after increasing the ecosystem's capacity for carbon capture and storage.

Preliminary historical data show high levels of degradation in the country (around 75% of the territory), and a scenario in which most agricultural activities are unsustainable and make use of traditional environmentally degrading practices. This has led to a high deforestation rate (48,280 hectares between 2000 and 2010).³ A study funded by FCPF is currently being carried out to update reference levels. Results are expected by the last quarter of 2017.

El Salvador's Ecosystems and Landscapes Restoration Strategy is linked to the sustainable development goals and the agreements made at the twenty-first Conference of the Parties (COP21). Moreover, the strategy is also part of the proposal made in 2015 to the Intended Nationally Determined Contribution (CPND)⁴, under the United Nations Framework Convention on Climate Change (UNFCCC).

El Salvador has generated very few greenhouse gas emissions, but has suffered significant impacts caused by climate change. That is why the country will make its best efforts in terms of mitigation, carrying out priority actions and making contributions that lead to socioeconomic co-benefits. Also, the country will promote the MbA approach as set out in its ecosystem and landscape restoration program (PREP) and other forest-related initiatives.

El Salvador's National Strategy for Ecosystem and Landscape Restoration with an MbA approach, prioritizes the increase of forest carbon reserves and the change of agricultural practices. It also promotes the reduction of deforestation and degradation rates in existing forest ecosystems, which include natural forest ecosystems, forest plantations, forests in Protected Natural Areas (PNA), biosphere reserves and agroforestry systems such as coffee plantations.

In order to reach the objectives of restoration and conservation of forest ecosystems, El Salvador in its national efforts of restoration of ecosystems and landscapes bets on the following strategic components:

³ MARN, 2015, Fifth National Report on the Convention on Biological Diversity of El Salvador. http://www.marn.gob.sv/descarga/quinto-informe-nacional-para-el-cdb/?wpdmcl=15799&ind=ySn6QDUuVVMx32M6RrKAbakJtFm_C5cRXz_3pJdQr7MYCgVkpqc7MkCvvOTxjKJL2W31wdtRiOXockp13zc_yNSylji0ZXKPIZc7uOyA8JZExn3465PE5kFNBz86_CMx3PrQvQjP_IH3xbRm3wt6Ew

⁴ MARN, 2015, El Salvador's Nationally Estimated Contribution. <http://www4.unfccc.int/submissions/INDC/Published%20Documents/El%20Salvador/1/EL%20SALVADOR-INTENDED%20NATIONALLY%20DETERMINED%20CONTRIBUTION.pdf>

1. Control of Deforestation and Degradation of Forest and Agroforestry Ecosystems.
2. Conservation and Management of the remnants of Priority Forests and Ecosystems.
3. Conservation and Management of Agroforestry Systems - Maintenance of El Salvador's Coffee plantations.
4. Increase in tree cover through Restoration of mangroves, gallery forests and areas affected by forest fires.
5. Increase in tree cover through reforestation of water recharge areas, areas prone to landslides and Arborization of crops of basic grains on hillside.
6. Restoration of degraded agricultural soils and transit to climate-resilient agriculture.

1.3 Mid-term report content

El Salvador presents this report as a mid-term progress of the country's actions and measures in preparing the National Strategy for Ecosystem and Landscape Restoration aimed at reducing greenhouse gases from deforestation and forest degradation and the conservation and increase of carbon stocks through MbA.

The report presents the progress to date and the planned activities needed to develop the readiness package (R-Package) with the FCPF financial assistance. The EN-REP readiness preparation will provide the basis for El Salvador's future participation in any UNFCCC REDD+ activity⁵.

The four components and their respective subcomponents, specified in the R-PP and approved by the FCPF, are shown below:

Component 1: Organization and Consultation for REDD+ MbA Readiness Preparation.

Component 2 El Salvador's National Strategy for Ecosystem and Landscape Restoration with a MbA approach

Component 3: National Forest Reference Level / National Forest Emissions Level.

Component 4: National Forest Monitoring System.

This report is composed of six sections. The first section gives a general summary of the progress made in the construction of the strategy. Section two presents the level of progress of the different components of the program according to the FCPF indicators framework, specifying each component and subcomponent. Moreover, other significant works under execution are reported. The third section reviews El Salvador's compliance with the common approach. Section four summarizes the updated plan for financing the overall readiness preparatory activities. The fifth section exposes the World Bank's opinion as a strategic partner, in accordance with FCPF's standard operating policies and procedures. Finally, the sixth and final section presents a summary of the request for additional FCPF funding.

1.4 Implementation progress summary

FCPF grants have made it possible to specify mechanisms for strengthening institutional, local and territorial capacities. Basic conditions have been created to facilitate the implementation of development policies and the sustainable management of natural resources, prioritizing actions in the agricultural and forestry sectors, which have the best conditions and opportunities to develop agroforestry systems capable of substantially increasing forest cover. This ecosystems will allow to capture and store significant amounts of carbon, which in turn will help to maintain high levels of agricultural production and guarantee food sustainability.

⁵ UNFCCC, 2010, Report on the 16th COP sessions, held in Cancun from November 29th to December 10th 2010. <http://unfccc.int/resource/docs/2010/cop16/spa/07a01s.pdf>

El Salvador has carried out strategic actions in recent years, particularly the creation of the Environmental Sustainability and Vulnerability Office, an intersectoral coordination entity among ministries that undertakes high-level strategic and political discussions on environmental issues, including climate change. As a result of this progress, the National Council for Environmental Sustainability and Vulnerability (CONASAV) has also been created. This is an operational organism in which all government institutions and a large group of civil society stakeholders participate.

The CONASAV is a multisectoral advisory body that coordinates dialogues among civil society representatives, academics, business people, financial institutions, religious leaders and the media. The council also counts on the participation of governmental and municipal institutions, international organizations and other stakeholders interested in increasing sustainability and reducing the country's vulnerability due to climate change.

As a concrete result of its work, the CONASAV has created the Ecosystems and Landscapes Restoration Roundtable on January 17, 2017, with more than 60 social and economic representatives from different organizations located in several parts of the territory. Since its creation, the Roundtable has based its work on the Ecosystems and Landscapes Restoration Program promoted by the Ministry of the Environment and Natural Resources (MARN), an essential component of the National Ecosystem Restoration Strategy currently under construction.

This platform is being developed as a result of the Strategic Environmental and Social Assessment (SESA) implementation, which is still under development. The CONASAV's Ecosystems and Landscapes Restoration Roundtable is in charge of planning, consulting and executing the national ecosystem restoration and conservation actions. This organism is being strengthened by the inclusion of population sectors involved in the execution of the National Restoration Strategy designed by the country with FCPF funds Project, under the MbA approach.

The current normative framework that guides the EN-REP has been defined in the National Strategy for Ecosystem and Landscape Restoration document. In addition, some legal gaps have been identified and, in this sense, there is a need for elaborating, modifying and approving some priorities in the current legislation.

As a result of the FCPF funded activities, El Salvador has carried out a study to reach a definition of the term *forest* and a 2011 forest and non-forest map has been developed for its various uses. In addition, RapidEye images have been purchased to establish the national reference level for forest emissions, an activity that will be carried out by the Tropical Agricultural Research and Higher Education Center (CATIE). Capacities are being developed to set up an integrated national forest monitoring system, which will be systematized through periodic registration of maps generated by satellite images and consolidated with information obtained from the national forest inventory survey, currently at pre-sampling stage.

El Salvador has a proposal for a National Strategy for Restoration of Ecosystems and Landscapes - document for consultation - with significant progress in establishing the Reference Levels, the Information System on Safeguards and the Monitoring and Reporting System and Verification. Institutional arrangements are already in place and operating, mechanisms for effective participation for relevant actors, including the proposed complaints office and conflict resolution. The Indigenous Bureau has been strengthened - installed since 2013 and made official in 2014 -, local tables and a platform of Local Environmental Observers have been established that will support the management and control of Drivers of deforestation and forest degradation.

The MARN has developed a computer platform that monitors restoration actions throughout the country. To date, this system has reported 60,000 hectares undergoing restoration processes. These efforts will enable El Salvador to have the necessary Measurement, Reporting and Verification (MRV) system with thorough and sound information for the EN-REP implementation, a necessary resource in order to estimate emissions reduction.

Joint actions have been undertaken with the Initiative for the Americas Fund El Salvador (FIAES), which is the financial counterpart responsible for operating the incentives and compensation system that will pay for restoration techniques implemented by different organizations, cooperatives and organized sectors involved in the EN-REP. The mechanism starts by formulating a Local Sustainable Development Plan (LSDP), which is an

intervention instrument developed by stakeholders of a given territory that analyzes environmental and socioeconomic aspects in order to determine actions and techniques to be used, and their respective cost, all aimed at undertaking timely interventions and providing adequate funding.

In addition to the exposed progresses, El Salvador presents this progress report and requests FCPF additional funds to improve fundamental aspects of the National Strategy for Ecosystem and Landscape Restoration, in line with the MbA approach.

These additional funds will serve to improve citizen consultation processes regarding the implementation of the National Strategy for Restoration of Ecosystems and Landscapes strategic options; carry out the EN-REP communication strategy; assess the cost of implementing restoration techniques; strengthen the strategy's incentives and compensation within the Local Sustainable Development Plans; set up a deforestation projection model; establish monitoring and reference levels with higher accuracy; and develop the safeguards information system.

1.4.1 Progress in Implementation of the Ecosystems and Landscape Restoration Program

1. Identification of priority sites for Restoration

Based on information and data from the Map of Arboreal Coverage and Land Use, updated using RapidEye Imagines 2011 (MARN / IUCN / PRCC USAID), the Restoration Opportunities / Needs Maps have been obtained that define social, economic and ecological feasibility and The total scope of the restoration opportunity in the country - estimated at 1,253,077 hectares, which are particularly focused on agroecosystems. For this analysis, the following six criteria were used: Soil Conservation and Agriculture; Wildlife conservation; Protection of surface and groundwater and adaptation to drought; Adaptation: storms and floods; Provision of firewood; Regulation of climate in urban centers. There is a prioritization at the level of municipalities.

2. Costs and Benefits of Restoration and Financial Analysis

Also with the support of IUCN, a 20-year financial and economic assessment of the current use and use of "suggested PREP" - proposals for land use transitions - was carried out through a calculation of profitability and income analysis (Monetary benefits) and the environmental and social benefits generated (co-benefits) between land uses. Additionally it was calculated in marginal Net Present Value (NPV) and Incremental Profit by determining the difference between the net benefit of each transition - difference between the net benefit of the "PREP suggested" use and the net benefit of the current land use. This analysis allowed to show that the highest marginal values are evidenced in the coffee transitions <900 m.s.n.m. Towards agroforestry systems of cacao; The transition from Café> 1200 m.s.n.m. Towards a high coffee renovation; And the transition from natural grass to silvopastoral system. Being the least profitable - monetary - the transition from crops to restoration to gallery forest because it is not associated to a productive use of the soil, although it focuses on conservation and protection of critical ecosystem for maintenance of river flow.

3. Territorial level planning

The Restoration Program adopts a Landscape-scale intervention model, with a comprehensive restoration of the territory, restoring and conserving forested areas, promoting the establishment of biological corridors and the transformation of agricultural areas through soil restoration and restoration. The adoption of sustainable practices, including agroforestry, with a holistic approach including ecological rehabilitation of ecosystems and recovery of ecosystem services, improvement of livelihoods, encouragement of local economies, capacity building and protection of Biodiversity - all in a highly participatory and inclusive way. For the implementation of activities to control deforestation and restoration of ecosystems and landscapes

in the territories / landscapes identified, seven Local Restoration and Sustainable Environmental Development Plans have been formulated collectively, identifying the sites to be intervened, prioritizing restoration techniques, Institutional agreements are developed for the implementation and the actions and their impacts are monitored.

4. Nursery Network and Forest Seed Center

To support the activities of Restoration - reforestation and afforestation - MARN has established a Network of Nurseries distributed in different strategic points of the country with the availability of 1.2 million plants.

5. Restored area until June 2017 and Monitoring System

Thanks to the National Program, approximately seventy-five thousand hectares have already been restored. MARN has set up a Specialized Technical Unit to support the implementation of the Program, which, among other responsibilities, will provide specialized advice and present proposals for guidelines for the design, preparation and implementation of the Plans, and follow up on the various initiatives and Coordinate specialized studies.⁶

Currently four projects are being developed to support implementation: design of the Restoration Incentive Program; System of community monitoring of the restoration; Mechanisms to achieve greater integration of the private sector in restoration activities and establishment of the Forest Seed Center for the conservation and use of native forest germplasm in the restoration.

⁶ This Unit is responsible for implementing the Implementation Monitoring and Monitoring Program that can be viewed online through: <http://apps2.marn.gob.sv/geocumplimiento/restauracion/mapa.php>

SECTION 2:

SECTION 2: ASSESSMENT OF READINESS PREPARATION PROGRESS INDICATORS OF EL SALVADOR'S NATIONAL STRATEGY FOR ECOSYSTEM AND LANDSCAPE RESTORATION.

Table 1 below contains a summary of overall progress broken down by component and subcomponent, determined according to the assessment system suggested within the readiness package assessment framework. The indicators are followed by a brief description in line with the assessment criteria defined in the FCPF Readiness Assessment Framework.

The assessment system suggested in the readiness package is used in Table 1 and throughout this document: green = considerable progress; yellow = good progress, but more development is needed; orange = more development is needed; red = progress not shown yet. See Table 1.

The delay in submitting this report as planned at the start of the project is mainly due to the change of Government and the difficulty of finding personnel with the capacities for making up the Project Execution Unit (UEP).

Table 1. Summary of criteria in the assessment system suggested in the readiness package

No.	Criterion	Indicator
Component 1: Readiness organization and consultation		
Subcomponent 1a: National EN-REP (REDD+MbA) program management mechanisms for the National Strategy for Ecosystem and Landscape Restoration (EN-REP).		
1.	Accountability and Transparency	
2.	Operational mandate and budget	
3.	Multisectoral coordination and intersectoral collaboration mechanisms	
4.	Technical supervision capacity	
5.	Fund management capacity	
6.	Mechanism for information exchange and handling complaints	
Subcomponent 1b: consultation, participation and social dissemination		
7.	Participation and intervention by key stakeholders	
8.	Consultation processes	
9.	Information exchange and access to information	
10.	Implementation and public dissemination of results of the consultation	
Component 2: National Strategy for Restoration of Ecosystems and Landscapes formulation		
Subcomponent 2a: assessment of land use, land use change factors, forestry law, policy and management		
11.	Assessment and analysis	
12.	Prioritization of direct and indirect drivers and barriers to increasing forest carbon stocks	
13.	Relationship between barriers/causative factors and EN-REP (REDD+MbA) activities	
14.	Action plans to address rights to natural resources, land tenure and management	
15.	Implications for forestry laws and policies	
Subcomponent 2b: REDD+ strategy options		
16.	Presentation and prioritization of EN-REP (REDD+MbA) strategy options	
17.	Viability assessment	
18.	Implications of strategy options to existing sectoral policies	
Subcomponent 2c: execution framework		
19.	Adoption and implementation of legislation/regulations	
20.	Guidelines for implementation	
21.	Benefit sharing mechanism	
22.	23. EN-REP (REDD+MbA)	
Subcomponent 2d: social and environmental impacts		
24.	Analysis of issues related to social and environmental safeguards	
25.	Design of the EN-REP (REDD+MbA) strategy with respect to impacts	
26.	Environmental and social management framework	
Component 3: Reference emission levels.		
27.	Demonstration of the methodology	
28.	Use of historical data adjusted to national circumstances	

No.	Criterion	Indicator
29.	Technical viability of the methodological approach and consistency with the UNFCCC/IPCC guidelines	
Component 4: Assessment system suggested in the readiness package assessment framework		
Subcomponent 4a: national forest monitoring system		
30.	Documentation of the monitoring approach	
31.	Demonstration of the system's early execution	
32.	Institutional mechanisms and capacities	
Subcomponent 4b: information system for multiple benefits, other impacts, management and safeguards		
33.	Identification of non-carbon-related aspects and social and environmental issues	
34.	Monitoring, reporting and information exchanges	
35.	Institutional mechanisms and capacities	

Componente 1 Organization and consultation

The EN-REP relies on a comprehensive map of stakeholders with whom it has been working since drafting of the R-PP document. With the government sector particularly, this joint work sought to identify, assess and bring to consensus the key areas for harmonization of policies and regulations that promote environmental protection and reduce vulnerability in the territories.

The approach is effected through consultative structures created at a strategic level, such as the Environmental Sustainability and Vulnerability Office (⁷CONASAV⁸), with broad participation of State and municipal institutions and civil society. Another important platform is the National Environmental Management System (SINAMA).

Permanent dialogue is also maintained with indigenous peoples organizations, which has led to the formation of the National Indigenous Roundtable on Environmental Affairs (MNIMA), tasked with addressing environmental issues. A Letter of Understanding was signed with the MNIMA establishing a series of bilateral agreements, including the formulation of the EN-REP.

Cooperation agreements are being signed between the MARN's Directorate of Citizen and Institutional Services and (initially) 25 municipalities of the country aiming to contribute to the improvement of critical ecosystems and strengthen shared environmental management. The agreements are part of the strategy's framework and signed under the MARN's National Plan for Restoration of Ecosystems and Landscapes

At the inter-institutional level, the MARN has signed an agreement with the Ministry of Education for the creation of Green Networks and Classrooms, a program promoted under the communication strategy of the EN-REP as part of its knowledge management component.

The aim of the Green Networks and Classrooms program is to allow students of the public school system to become entities for the recording and monitoring of environmental data as part of their academic training. To this end, efforts are being made to train teachers to prepare teaching guides and lesson plans that include climate change, restoration and adaptation issues in several class subjects. Teaching tools that foster changes

⁷ El Salvador, , June 13, 2014, Official Gazette. <http://www.diariooficial.gob.sv/diarios/do-2014/06-junio/13-06-2014.pdf>

⁸ Presidential House of El Salvador, 2016, President Sánchez Cerén introduces the National Council of Environmental Sustainability and Vulnerabilities: <http://www.presidencia.gob.sv/presidente-sanchez-ceren-presenta-al-pais-al-consejo-nacional-de-sustentabilidad-ambiental-y-vulnerabilidad/>

in cultural patterns among new generations are an important element in encouraging more proactive climate action.

Next steps

- Strengthen institutional capacities at the CONASAV through training on climate change and the EN-REP with a MbA approach in El Salvador
- Strengthen the EN-REP's complaint handling and conflict resolution mechanism.
- Set up institutional arrangements to define responsibilities in the operational mandate and budget.
- Strengthen the multisectoral coordination and intersectoral collaboration mechanisms.
- Carry out knowledge management actions that strengthen the technical supervision capacity.
- Present the EN-REP to different stakeholders for its implementation in such a way as to increase the capacity of fund management of the national and local institutions as well as of the private sector and the civil society.
- Continue with consultation processes and facilitate participation and intervention by key stakeholders.
- Continue with the EN-REP consultation processes, safeguards, determination of reference levels and MRV.
- Strengthen the exchange of information and access to information, through the restauracion.mba.sv platform and undertake information exchange workshops.
- Continue with the implementation and public dissemination of consultation results through radio broadcast, digital media and social networks.

Additional funds

- Strengthen the capacities of indigenous peoples organizations that make up the MNIMA. Contribute to the implementation of the capacity building program and the harmonization of natural resources through workshops aimed at strengthening and applying indigenous traditional knowledge.
- Carry out communication campaigns to strengthen the capacities of the Local Environmental Observer Network (LEON) and engage communication for development efforts to improve community monitoring activities.
- Develop seven new Local Sustainable Development Plans (LSDPs) to cover the entire national territory with management tools for socio-environmental development.
- Prepare and implement a strategy for the exchange and development of restoration techniques within the framework of the EN-REP.
- Strengthen the EN-REP governance mechanisms through the CONASAV's Ecosystems and Landscapes Restoration Roundtable and implementing information exchange actions regarding the development of restoration techniques within the EN-REP framework.

Justification

During the project execution, a consultant was hired to develop a document after consultation and participation of indigenous communities identifying the recognized and unrecognized rights of indigenous peoples. This effort was led by indigenous peoples represented in the MNIMA.

During the last year, the MNIMA has formulated an action plan aimed at strengthening capacities and harmonizing natural resources in line with the EN-REP implementation. The additional funds will support the MNIMA in developing actions to bolster indigenous peoples and maintain the indigenous worldview.

The additional funds will be used to strengthen the Ecosystems and Landscapes Restoration Roundtable (M-REP), so that it is more effective in the consultation process and has enough technological tools. Sectors related to the EN-REP implementation, such as coffee and sugarcane producers, cattle ranchers, organized peasants among others, will receive support within the sectoral restoration proposals.

Community organizations such as ADESCOS, water boards, COALES, PLAS and PDLS committees will receive support in their organizational processes for the implementation of restoration actions in various territories of the country.

As part of the components defined in the EN-REP Communication Strategy, communication campaigns will be developed at territorial level, prioritizing those locations that set up Sustainable Development Plans (PLAS) and Local Environmental Observer Networks. Among the planned activities, are a series of communication for development workshops to improve information management capacities of these two territorial governance institutions considered as strategic bodies for monitoring the environmental variables defined in the EN -REP.

Among other communication actions to be developed is the development of guides and audiovisual material about the management of different restoration techniques. Informative maps will also be produced on the management of crops to be used around buffer zones of protected natural areas, as well as restoration techniques described in the ENREP to recover the territories bordering the main ecosystems and landscapes with the highest percentages of carbon capture in the country.

There will be continuous monitoring of EN-REP communication and dissemination activities related to the strengthening of the MNIMA, to consultation processes and workshops aimed at building the safeguards system and the Environmental and Social Management Framework. Particularly, communication support will be provided similarly to what has been provided to the CONASAV's Ecosystems and Landscapes Restoration Roundtable, especially regarding large-scale actions towards the restoration of ecosystems and maintaining and increasing forest cover in the country.

Subcomponente 1.A National mechanisms for management of the the EN-REP with a MbA approach

The R-PP and the SESA Work Plan were formulated with the first funding provided by the FCPF (200,000 USD). The two proposals were developed by the MARN with the participation of several relevant sectors and stakeholders brought together at the national level. These include: 1) academia and research centers; 2) international cooperation organizations and environmental and development NGOs; 3) indigenous organizations and communities; 4) forest owners; 5) government institutions; 6) forest beneficiaries and consultants, 7) coffee producers 8) farmers and non-governmental organizations involved in sustainable agriculture.

1.A.1 Progress

In order to create and establish an optimal scenario for the restoration and conservation of forests and forest ecosystems El Salvador adopts a highly participatory implementation strategy, involving all relevant actors in the territories to intervene. From the identification of the priority areas for restoration and conservation, local identification of the Drivers, to the planning and execution of restoration and conservation actions, as well as the maintenance of restored ecosystems and landscapes.

El Salvador implemented a consultation process through SESA as an essential part of the EN-REP's previous design. The results of that consultation process made it possible to diagnose the country's conditions to visualize potential scenarios for the first intervention actions and determine the relevant social sectors, territories and national management mechanisms for the preparation of the strategy.

Four thematic panels were established during the National SESA Workshop with the following tasks: a) analyzing the causes of ecosystem degradation; b) reviewing risks, opportunities and mitigation measures associated with EN-REP strategic options; c) presenting the SESA Work Plan for improvement; d) identifying 11 preliminary analyses and studies required by SESA; e) carrying out a first effort to build the Intersectoral Consultative Platform, which would evolve to become the CONASAV's Ecosystems and Landscapes Restoration Roundtable.

Following the results of engagement and consultation with the multiple stakeholders interested in the restoration of ecosystems and landscapes, El Salvador constituted the bodies responsible for conducting and implementing actions aimed at addressing the country's vulnerability and environmental and social sustainability. These include:

- a) The Environmental Sustainability and Vulnerability Office, comprising ministers of state and presidents of self-regulated companies. The office is the instance where decisions are made at the level of national strategic policies.
- b) The CONASAV, comprised of government, civil society and private sector representatives. The CONASAV has generated the Ecosystems and Landscapes Restoration Roundtable, which is the operating instance responsible for undertaking national consultations and implementing actions for ecosystems and landscapes restoration.
- c) At the sub-national level, a process of dialogue, participation and consultations has been implemented to inform the population and key sectors in each territory about the EN-REP process, climate change issues, and the Ecosystems and Landscapes Restoration Program. Consultation regarding the definition of the term *forest* and the 49 techniques for restoring ecosystems and landscapes has also been initiated within the framework of the EN-REP, based on the Marrakesh agreements.

A total 63⁹ workshops have been developed under this consultation and dialogue process, involving 206 relevant entities at national and territorial levels; 33 were for disseminating information and conducting early dialogue on the EN-REP, while the remaining 30 aimed at developing dialogue and consultations on the process of building the EN-REP in practice. It is important to point out that three consultation workshops were held with indigenous peoples (one in the western zone, one in the central zone and a third in the eastern zone of the country) to review the strategic options and guarantee the participation of the different indigenous peoples in the country.

The 63 workshops were attended by a total 2,204 people, 746 of which were women. This process of broad and participatory dialogue and consultation led to the following practical outcomes:

- Ratification of the commitment by national and territorial stakeholders to participate in the dialogue and consultation process, with the following objectives: a) building the National Strategy for Ecosystem and Landscape Restoration; b) preparing the second phase of SESA; c) building the Environmental and Social Management Framework (MGAS); and d) developing the Safeguards Information System (SIS).
- Establishment of the Safeguards Facilitating Team (EFS) and the National Safeguards Committee (CNS). Training has already started with both organizations to develop a common language on safeguards and its components. A road map is also being designed for implementation in each territory.

With the funds provided by the FCPF to date for the building of the EN-REP, communication guidelines have been drawn up for this strategy based on the communication for development and social change approach. Moreover, actions have been started to guarantee the exchange and fluidity of information during the different consultation processes carried out with the sectors that make up the M-REP.

Criterion 1: Accountability and Transparency



⁹ MARN, 2017, Systematization of organizational, communication and consultation meetings

El Salvador has guaranteed mechanisms for the transparent management of public funds. The country approved its Access to Public Information Law¹⁰ in 2010, and it also relies on the National Participation, Transparency and Anti-Corruption Secretariat, which strictly supervises the exercise of public administration since its creation. This has created the necessary political conditions to raise the levels of transparency, which makes it possible to inform the public about the management of public funds and donations.

The EN-REP incorporates the safeguards mechanism established by the United Nations Framework Convention on Climate Change (UNFCCC), which states that all activities implemented should rely on appropriate levels of governance, transparency and access to information. The project presents technical and financial reports published on the FCPF website¹¹. The first independent audit of El Salvador's FCPF project's financial statement has also been concluded, with satisfactory results.

In addition, the www.restauracion.mba.sv web site has been set up and will include all studies and the systematization of all restoration activities in the country, including actions financed by the FCPF project. This site will include by September 2017, evidence of national institutions and management arrangements as operating in an open, accountable and transparent manner.

Criterion 2: Operational mandate and budget.

Salvadoran legislation addresses the National Environmental Management System (SINAMA), through which different state institutions join forces to develop actions aimed at mitigating environmental damage and tackling climate change. All public institutions must allocate a percentage of their budget for the execution of Environmental Action Plans.

Through its National Environment Law, El Salvador commits all state institutions to work in an articulated manner to reverse environmental degradation and reduce vulnerability to climate change. The Law is also the mechanism through which critical investments are proposed and financial and institutional mechanisms are developed to reduce the human and economic impact of climate variability.

The government of El Salvador determined that the MARN would be responsible for the implementation of the FCPF Project¹². A draft document of the National Strategy for Ecosystem and Landscape Restoration has been prepared with input from the PREP process, the various participation and consultation workshops held by the MARN and contributions obtained as part of the CONASAV's M-REP process.

Additional resources - local funds and international cooperation - have been mobilized to support and specify actions and initiatives for the EN-REP, and complementary funding is already available to develop the following activities:

1. Design and establishment of a System Of Incentives and financing mechanisms, starting from a financial and economic evaluation where the costs and benefits of the restoration have been determined;
2. Design of a battery of local adaptation indicators for the Monitoring System of the actions and impacts of the restoration and conservation of forests;

¹⁰ Legislative Assembly - Republic of El Salvador, 2011, Access to Public Information Law. <http://www.asamblea.gob.sv/eparlamento/indice-legislativo/buscador-de-documentos-legislativos/ley-de-acceso-a-la-informacion>

¹¹ <http://www.forestcarbonpartnership.org/el-salvador>

¹² El Salvador has the Cabinet of Environmental Sustainability and Vulnerability at strategic political level

3. Involvement and greater participation of the private sector in actions of restoration and increase of forest reserves of Carbon in the EN-REP;
4. Establishment of the National Forest Seed Center to strengthen and guarantee the use and maintenance of good quality germplasm to provide the already established Forest Nurseries Network with the involvement of local actors, including local governments and municipalities;
5. Consultation Protocol for Indigenous Organizations and Communities, designed and adopted by the Organizations and Communities in a highly participative and inclusive way.

The MARN is the national focal point for the UNFCCC. In light of the magnitude of the issue, it has signed interinstitutional cooperation agreements with the Ministry of Agriculture and Livestock (MAG) and established a permanent joint work and communication mechanism with the General Directorate for Forest Management, Watersheds and Irrigation and the forest roundtables operating under coordination of the MAG. The ministry also monitors the activities for the formulation of the definition of the term forest and the survey of forest and non-forest areas that have been mapped under the EN-REP.

Criterion 3: Multisectoral coordination and intersectoral collaboration mechanisms

El Salvador has strengthened its institutional capacities over the last two years, including structures such as the Environmental Sustainability and Vulnerability Office¹³, created by executive decree on June 2014. The office is led by the MARN and features representatives from six ministries, a Presidency secretariat and autonomous government agencies and is the political instance created to draw up, integrate and bring to consensus the environmental policies promoted at the national level.

The CONASAV¹⁴, also created by executive decree, was conceived with the goal of discussing and celebrating short, medium and long-term agreements and commitments on environmental issues to promote sustainability, reverse environmental degradation and reduce vulnerabilities to climate change and natural phenomena.

The CONASAV features representatives from government agencies, political parties, academia, think tanks, research centers, private companies, municipalities, non-governmental organizations, churches and people with training and experience in the area of sustainability and environmental vulnerability. Its actions, which include the development of adaptation plans and the Ecosystem and Landscape Restoration Plan, aim to foster growth and sustainability through dialogue and consultation.

The CONASAV has a plural, inclusive and participatory structure, within which is the M-REP. The M-REP comprises State institutions and representatives of various sectors related to the restoration of ecosystems, and meets to discuss annual targets and plan strategic interventions in furtherance of El Salvador's commitment to restore one million hectares.

Moreover, Article 6 of the National Environmental Law created the National Environmental Management System (SINAMA).¹⁵The system is coordinated by the MARN, specifically through its General Directorate for

¹³ Republic of El Salvador, June 13, 2014, Official Gazette . <http://www.diariooficial.gob.sv/diarios/do-2014/06-junio/13-06-2014.pdf>

¹⁴ Presidential House of El Salvador, 2016, Creation of the National Council of Environmental Sustainability and Vulnerability, CONASAV. <http://www.marn.gob.sv/descargas/decreto-no-8-creacion-del-consejo-nacional-de-sustentabilidad-ambiental-y-vulnerabilidad-conasav/>

¹⁵ MARN, May 1998, National Environmental Management System, called SINAMA, created by Decree No. 233 of the Legislative Assembly pursuant to Title II of the Constitution referring to Environmental Management

Citizen and Institutional Services, and comprises the environmental organizations of each ministry, as well as autonomous government agencies and municipal governments.

Regarding academia and research centers, agreements have been made with two universities. The one with the University of El Salvador (UES) in particular plays an important role in preparing the logistics framework and institutional arrangements required for MRV by providing laboratory analyses to determine aspects such as soil and litter carbon content, offering technical assistance for the collection of national forest inventory samples, among other activities.

The Green Networks and Classrooms project, developed in partnership with the Ministry of Education (MINED), is part of the actions carried out under the knowledge management subcomponent of the EN-REP's communication strategy. The project officially started on June 5, 2017 through an interinstitutional agreement between the Ministry of Education (MINED) and the MARN.

The Green Networks and Classrooms project aims to integrate climate change themes as core curriculum components in public school syllabi. The project will work to increase levels of knowledge and awareness within the educational community, in the process helping to improve citizens' education on these issues, allowing them to make better decisions to improve local sustainable environmental management and adapt better to extreme weather phenomena by building more resilient and sustainable communities.

The Green Networks and Classrooms project has three components:

- 1) Teacher training: strengthen the current National Teacher Training Program promoted by the MINED through the design and development of two additional modules in Risk Management and Restoration and Adaptation to Climate Change. The modules will be taught by a group of experts who are being certified by the Ministry of Education. These experts will in turn work as teacher trainers and outreach the materials to public school teachers. The modules are being developed by technicians of the General Directorate for Ecosystems and Wildlife, with assistance from the Environmental Education Unit of the MARN.
- 2) Creation, design and replication of Methodological Guides: teaching tools to be developed for each school grade on the national school curriculum with a cross-cutting approach to climate change adaptation. Consultant services have been hired for this purpose, and the work is currently being undertaken.
- 3) Restoration of degraded ecosystems in different territories: includes specific climate actions such as the building of school nurseries, reforestation days and environmental variable observations, including the possibility of doing actual construction work for soil conservation and water catchment structures. The activities will be defined according to the needs of local ecosystems in different municipalities.

In addition, an agreement was signed with the Presidency's Secretariat of Culture, specifically through the Herbarium Department of the Natural History Museum (MUHNES), to identify forest species of the forest inventory. The agreement is part of the EN-REP.

In addition, the CATIE has also been hired to develop a greenhouse gas inventory, determine reference levels, establish a system of indicators for the monitoring of co-benefits and strengthen institutional capacities.

Joint work areas have been identified with the assistance of non-governmental organizations involved in sustainable development to build partnerships aimed at reinforcing actions in the EN-REP territories. At the communication level, good practices were systematized in these territories so that knowledge thereof could be replicated with other sectors that have similar ecosystems.

On the other hand, the MARN has signed an agreement¹⁶ with the FIAES, a financial institution selected to be the mechanism for channeling resources from compensations and voluntary donations to the strengthening

¹⁶MARN, Agreement No. 31 of March 21, 2014. http://www.marn.gob.sv/descarga/acuerdo-ministerial-n31/?wpdmdl=16541&ind=fZmQ80IHd3SLmHovk8DbKTAR9OwqzWjsGzrTS_hfyW9bTIUsqcBHhDk_O-i1HFDS

of the National System of Protected Natural Areas. Actions developed by the FIAES include the formulation and implementation of seven Local Sustainable Development Plans (LSDPs) in the five priority conservation areas identified by the MARN. It is estimated that seven additional PDLs will be required to cover all areas identified with this type of planning.

The instruments above form the theoretical and legal basis for environmental management in El Salvador and strengthen the Ecosystems and Landscapes Restoration Program, which is responsible for the formulation and implementation of the EN-REP. For the concretion of the EN-REP, El Salvador has the Cabinet of Environmental Sustainability and Vulnerability at strategic political level and as the main mechanism of governance for CONASAV, which has as a platform for multi-sector consultation to the Bureau of Restoration of Ecosystems and Landscapes.

Criterion 4: Technical supervision capacity

The Environmental Sustainability and Vulnerability Office is the highest-level strategic body that monitors all inter-institutional agreements. The office meets twice a month, and all the government institutions involved must be represented by the head minister and only in exceptional cases a deputy minister can sit in. This guarantees that the decisions taken are of the highest decision-making level and, therefore, are included in the working of each ministry.

The CONASAV thematic roundtables comprise a diversity of specialists from different sectors of the country and with diverse interests, each one independently representing their opinions and make recommendations aimed at enriching and fostering the implementation of national policies and plans. They may also develop studies, reports and/or assessments on the implementation of environmental policies, plans and programs and contribute to the achievement of the country's priorities in an appropriate and timely manner. Within this instance, the Ecosystems and Landscapes Restoration Bureau was created exclusively as the main mechanism of governance and multisectoral participation for the national plans and actions that are promoted in the field of restoration

In addition, a Multidisciplinary Expert Consultant Team was created under the EN-REP framework. The Team comprises 25 representatives of public institutions, cooperation agencies and non-governmental organizations who discuss a number of issues, including safeguards, drivers of deforestation, strategic options, reference levels and MRV. This expert group provides support to complex monitoring activities, such as CATIE's, which works on several relevant topics. Four times the expert group have met to validate progress of the work agenda, MTR contributions and other series of bilateral meetings to address specific issues ¹⁷.

The institutions that currently make up this multidisciplinary technical team are the following: CATIE; GIZ; FIAES; MAG; USAID-PRCC; MOP; UES, MUHNES, CARE, REDES, UNES, FECORACEN, CONFRAS, MNIMA and the Protected Natural Areas and Biological Corridor team of the MARN that make up the PREP in coordination with the with the Project Management Unit of the MARN for the FCPF project.

Criterion 5: Fund management capacity

The cooperation efforts by the German Federal Enterprise for International Cooperation (GIZ) and its Landscape and Regional REDD/CCAD Programs, the United States Agency for International Development (USAID) through its Regional Climate Change Program (PRCC), the International Union for Conservation of Nature (IUCN) and the United Nations Development Program (UNDP) have all been crucial for the development of the EN-REP.

¹⁷ This information can be consulted from September 2017 onwards on the website restauracion.mba.sv

Some of the most advanced experiences include the processes promoted by the GIZ in coordination with the PREP technical team, namely those to develop methodologies for the planning of landscapes, multipurpose forest inventories and emission baselines, and the creation of monitoring systems for the restoration of landscapes at different levels. These tools have already been validated in two successful projects developed at Barra de Santiago (department of Ahuachapán) and the Cerrón Grande wetland (department of Cuscatlán).

As for the specialists from the Regional Climate Change Program of the United States Agency for International Development (USAID), their contribution was focused on the generation of instruments to support the ROAM-based assessments and the use of ecosystem and landscape restoration techniques proposed by the MARN as a national restoration strategy. Specifically, the USAID's work was instrumental for the building of financial mechanisms that could be used to execute the EN-REP project and for the development of a capacity building program on monitoring, reporting and verification practices. Their support has also been substantial for the establishment and implementation of the road map that will consolidate the National Safeguards Committee.

The UNDP, in turn, is contributing with technical assistance to strengthen policies that make it easier for farmers to transition to new diversified farming practices (focused on soil conservation and expanding forest areas) that can reduce greenhouse gas emissions. It has also contributed to enabling the work of and strengthening the CONASAV Ecosystems and Landscapes Restoration Roundtable, an effort that led to the "I am Green, I support the Plantatón" Sponsorship Program. The Program has (as of reports from the first half of June) raised over US\$ 30,000 from donations by private companies and the population, all of which decided to exercise social and environmental responsibility by supporting the restoration actions driven by this multisectoral body.

In addition, the Spanish Agency for International Development Cooperation (AECID) has provided financial assistance to the recovery of watersheds and aquifers through the Water Cooperation Fund. The effort has led to the establishment of El Salvador's Water Policy and Strategy, under which an Integrated Water Resource Management Master Plan will be developed aiming to guarantee the improvement of water sources and the conservation of soils in priority microwatersheds and to strengthen the Integrated Water Resource Management Observatory.

The Project Management Unit of the MARN for the FCPF project is made up of the technical staff made up by coordinator; social specialist; communications specialist; national forest inventory coordinator; procurement specialist; financial specialist; legal expert; specialist in project monitoring and evaluation; social technician; technician measurement reporting and verification; administrative assistant.

Criterion 6: Mechanisms for information exchange and handling complaints

The intersectoral dialogue component - initiated during the SESA processes and strengthened through the CONASAV's M-REP multi-stakeholder platform - has contributed to the development of institutional and governmental policies to build the main mechanisms for handling complaints in a broad and participatory manner.

Similarly, through the open government system and the Information and Response Office, the MARN continues to provide assistance to citizens connecting them with all relevant government and self-regulated institutions so those can provide timely responses to the population's complaints and grievances.

Any citizen can access the MARN's information system on a web platform. Also, at the Information and Response Office (OIR), people can request specific information that is delivered in a classified manner and in clear terms for the petitioner's comprehension.

Relying on the technology transfer conducted by GIZ to the FIAES for the development of seven local sustainable development plans, the Project Management Unit of MARN for FCPF was able to provide the EN-REP with the results and methodologies used to estimate compensations, exchange information and draw up safeguards related to the five activities put into effect during the UNFCCC's Sixteenth Conference of the Parties (COP) held in Cancún, Mexico (2010).

The Municipal Environmental Units (UAM) coordinate inspections following environmental misconduct allegations received by the MARN to provide more detailed information on the issues reported. This mechanism is part of the EN-REP complaints and grievances follow-up system.

New tools and channels are being established to strengthen consultation, information exchange and report collection processed during the implement of the EN-REP. Those include:

A) The MARN complaints system

The MARN has a continuously improving tool to address complaints and grievances. In addition, it monitors and provides technical assistance to complaints filed by the population, which are transferred to the new environmental courts that began functioning in 2016 in San Salvador and that will be available in 2017 in western and eastern El Salvador.

1.A.2 Complaints System

a) Channels

Telephone: Call 919

E-mail: denuncias@marn.gob.sv

Website: <http://apps.marn.gob.sv/denunciaspublicas>

Social networks: www.facebook.com/marn.gob.sv

Twitter: @MARN_Oficial_SV

Face to face: Complaint centers

b) Offices have been set up in three regions of the country to monitor complaints related to ecosystem restoration. These offices have hired three territorial specialists with FCPF funds that can respond to and monitor reports related to the EN-REP, documenting the processes and identifying any gaps or inconsistencies.

c) Consultancy services were hired to design the office for handling complaints and grievances related to EN-REP activities. Meetings were held during this process with representatives from the Directorate for Citizen and Institutional Services, the Directorate for Ecosystems and Wildlife, the Environmental Observatory, the General Directorate for Assessment and Compliance, the Environmental Units of some municipal governments and part of the Project Management Unit of MARN for FCPF

Subcomponente 1.B Consultation, participation and dissemination.

Criterion 7: Participation and intervention of key stakeholders in the formulation of the EN-REP with a MbA approach

The MARN developed a series of awareness raising and information dissemination activities for a period of six months¹⁸ during the first stage of the process. These included meetings organized to debate and design the consultation process that would be held with different groups of key and relevant stakeholders in the country connected with the theme areas related to El Salvador's EN-REP and which would interact during the EN-REP formulation stage.

¹⁸ The systematization of the meetings can be consulted from September 2017 on the website restoration.mba.sv

The participatory methodology conceived focused mainly on a cross-sectoral dialogue component whose aim was to develop spaces of dialogue between the different levels of governance (national, regional, global) of the Salvadoran EN-REP to consult, validate, modify and build sectoral and governmental policies to reduce deforestation, which in turn would inform the design of the EN-REP.

To achieve this purpose, a broad map of potential stakeholders for the REDD+MbA process was developed to identify key decision-makers and sectors which, due to their scope of performance, would play an important role in the formulation and implementation of the EN-REP.

This effort aimed to create a list of relevant producers, indigenous peoples, women's organizations, agricultural producers, especially sugarcane, coffee and cattle farmers, community development associations, agricultural cooperatives, co-managers, peasant organizations and other environmental organizations with technical experience in project development at the national level, among others.

1.B.1 Breakdown of stakeholders in territorial consultation platform

First phase (developed until December 2012)

- Government institutions or agencies (11)
- Forest conservation organizations and associations, Protected Natural Areas (30)
- Farmer associations/organizations and agricultural/livestock NGOs (16)
- Associations/organizations of indigenous peoples/communities (22)
- Trade unions of the agriculture sector (20)
- Academia and Research Institutions (others) (15)

1.B.2 Second phase (September 2015 to November 2016)

- Forest Management Roundtables (6)
- Territorial Networks (3)
- Original Communities (16 organizations)
- Universities (2)
- Cacao Alliance (10,000 peasant families)
- Ciudad Barrios Coffee Farmers Cooperative Association (850 members)
- Confederation of the Salvadoran Agrarian Reform Federations (7 Federations of Cooperatives and 11 Farmer Associations, 11,562 members)
- Private sector (coffee and sugarcane agribusiness)
- As of January 2017, with the addition of the CONASAV Ecosystems and Landscapes Restoration Roundtable, the platform added a total of 60 sectors represented in this instance.

At the national and strategic level, participation is ensured through the CONASAV M-REP. In the territories, local stakeholders participate through the regional committees that execute the Local Sustainable Development Plans and Local Sustainable Use Plans, as well as Water Councils, Watershed Defense Committees, Biosphere Committees etc.

Criterion 8: Consultation processes

Early consultations were carried out during 63 national and territorial consultation events and four assemblies held during the plenary session of the CONASAV's M-REP¹⁹. One substantial achievement was the formation

¹⁹ The systematization of the meetings can be consulted from September 2017 on the website restoration.mba.sv

of the National Indigenous Environmental Roundtable, with which a Letter of Understanding and a Plan of Action were subsequently signed, the latter developed by the Roundtable's members themselves.

A work mechanism has been established between the Ministry of Agriculture and Livestock (specifically through its General Directorate for Forestry, Watersheds and Irrigation) and the forest roundtables established at the national level. This relationship has allowed for the participation of three forest roundtables in the discussions: 1) the Chalatenango Forest Production Roundtable; 2) the Cabañas and Cuscatlán Forest Production Coordination Roundtable (MECONFOR); and 3) the Forest Association of San Vicente (AFORCAP)

1.B.3 Results of the institutional consultation mechanisms:

- Preliminary identification of the EN-REP strategic options, geographic territories prioritized, stakeholders (stakeholder mapping).
- Joint coordination and planning of the strategic actions proposed in the EN-REP.
- Gender considerations that need to be taken into account in the three phases of the EN-REP process (preparation, implementation and payments for results) were approached and defined in advance.

1.B.4 Indigenous peoples communities and organizations

In 2012, preliminary work was initiated on a proposal for a 2013 Capacity Building Plan for Indigenous Peoples. This led to the identification of nine priority themes defined, consolidated and proposed by indigenous leaders from the three zones of the country, with participation from a total 76 leaders (31 women and 45 men).

The interactions led to the creation (through Executive Agreement No. 23) of the National Indigenous Roundtable on Environmental Affairs, a venue for ongoing coordination and dialogue on relevant environmental issues.

The indigenous peoples submitted a project proposal to the Secretariat for the Convention on Biological Diversity (CBD) and based on the Nagoya Protocol (at a national level) requiring capacity building for their communities in El Salvador. The proposal seeks to assure effective participation of indigenous and local communities, recognize their contributions to the objectives of the convention and strengthen the capacities of indigenous organizations and communities, particularly the Nahua, Lenca and Kakawira peoples. The proposal was approved and developed under the coordination and monitoring of the MARN.

National Indigenous Bureau of the Environment

In order to establish a permanent mechanism for coordination and dialogue between the Indigenous Communities and the Ministry of Environment and Natural Resources, the National Indigenous Bureau of the Environment was formed, which is constituted by leaders of different Indigenous Communities and Organizations elected In Assembly. In order to form the Bureau, indigenous organizations and communities appoint representatives and alternates in the Assembly and communicate it to MARN through an Act duly signed by the representatives of the organizations. The process of forming this Bureau was officialized by the MARN, through Agreement No. 23 dated March 4, 2014 in the field of Environment and Natural Resources. The MARN serves as the Executive Secretariat of the Bureau and logistically supports its operation, also providing adequate follow-up to coordination and dialogue activities.

The Indigenous Roundtable of Environment is a space for dialogue between the organizational structures of the Indigenous Peoples of El Salvador that allows for an active participation and participation in the formulation and implementation of Policies, Strategies, Programs and Projects in the medium environment. Since 2012, MARN has established a dialogue process with Indigenous Communities that initially aims at socializing the National Environment Policy, as well as opening a space for full participation in the process of formulating the National Strategy for Environment.

The working agenda includes a series of meetings in the western, eastern, central and paracentral regions of the country, which aims to involve the greater representation of the different communities. Among other actions, the Bureau, with the support of MARN, has formulated a Work Plan on Biodiversity and Climate Change, which includes proposals for actions and activities for restoration and inclusive conservation of critical ecosystems and adaptation to climate change and risk reduction. In May 2016, the Roundtable and MARN

have signed an Agreement - Letter of Understanding and Cooperation - to improve and deepen the processes of Dialogue and Coordination, as well as to promote the incorporation of the indigenous worldview into the Policies, Programs and Projects of Environment.

1.B.5 Farmer cooperatives sector

At the national level, staple grain crops occupy around 571,000 hectares in acreage, while cattle raising accounts for an additional 254,000 hectares used for natural and cultivated pasture²⁰.

Following an analysis of opportunities, a dialogue process was initiated with the Confederation of the Salvadoran Agrarian Reform Federations (CONFRAS), an organization with nationwide presence effected through seven cooperative federations under its membership. These federations, in turn, comprise 175 agricultural cooperatives and associations, which bring together 11,562 members (2,862 women and 8,900 men) who own their land.

1.B.6 Large-scale sugar cane producers

A working team (relying on professionals from the MARN's Directorate of Ecosystems and Wildlife and the Directorate of Citizen and Institutional Services) was created by the ministry to establish a dialogue with sugarcane farmers aiming to reduce the environmental and social impacts of sugarcane farming.

A good practices handbook was prepared in coordination with the Sugar Foundation (FUNDAZUCAR) and the Salvadoran Sugar Company (CASSA)- which together represent over 7,000 sugarcane farmers - with the aim of promoting a culture of corporate responsibility in the sugarcane production chain.

1.B.7 Specific consultations

A consultation process was carried out to formulate the National Climate Change Plan: "Eleven national workshops were held between December 2013 and May 2014, one of which specifically for the integration of the gender approach. The workshops were structured to give an orderly response to the objectives the plan must meet, according to the National Environment Law (LMA)"²¹.

The next step is the presentation of the EN-REP to the M-REP and territorial stakeholders, for which end three territorial workshops will be held in July this year and a national one in August.

After reaching the results of the consultation regarding the EN-REP, the SESA will be completed and, based on this evaluation, the subsequent Environmental and Social Management Framework (MGAS) will be developed.

1.B.8 Roundtables of Conservation and Local Development, and the Roundtables of Agreement of Forest Development of the Ministry of Agriculture and Livestock

The Conservation and Local Development Roundtables are established based on a Mapping of actors identifying the people and organizations relevant to the planning, design and implementation of actions to reduce and control deforestation and restoration of landscapes in the territories / landscapes Identified.

These Roundtables collectively construct Local Restoration and Sustainable Environmental Development Plans following the following steps: mapping of relevant local actors at the territorial level; Participatory analysis of

²⁰ MARN, 2017, El Salvador Land Use Map 2017 with RapidEye imagery from 2011.

²¹ MARN, 2015, National Climate Change Plan.

<http://www.marn.gob.sv/download/Plan%20Nacional%20de%20Cambio%20Clim%C3%A1tico.pdf>

the dynamics of environmental degradation; Development of a local development plan where restoration techniques are prioritized, institutional arrangements for implementation are developed, and actions and their impacts are monitored.

In the same way, articulate and coordinate with the Forestry Development Coordination Roundtable established and coordinated by the Ministry of Agriculture and Livestock, through the General Direction of Forestry, Watersheds and Irrigation. These Roundtables are constituted by representatives of forest producers, governmental entities, Municipal Environmental Units and Local Tourism Offices, community associations and cooperatives. These tables are forums for discussion and analysis of the development of the forest sector, and among the topics and issues discussed is the incentive program and mechanisms of environmental compensation.

Criterion 9: Information exchange and access to information

Compliance of this criterion is done mainly through workshops (63 developed to date) during which information is exchanged, contributions are systematized and analytical summaries of the results are established. Other sources of information include the MARN and the M-REP websites. . (marn.gob.sv; restoration.mba.sv)

In relation to the website, the site was initially created: mba.sv to systematize all the efforts made in the FCPF project process and particularly in the design of the Strategy for Restoring of Ecosystems and Landscapes.

Based on the recommendations made by the World Bank and FCPF mission team (during its November-December 2016 visit) and with the formation of the National Bureau of Restoration of CONASAV, the initial approach of the website evolved to a more extensive information tool with greater coverage of information. Currently being rebuilt with the name of the site: restauración.mba.sv.

In the restoration.mba.sv portal. all restoration actions carried out in the country include study documents, public consultation workshops, news, forest cover maps, forest maps, restored and audiovisual parcels, documents, reports, will be public. Also cross-sectoral activities carried out at the national level from CONASAV, such as the Plantatón initiative. From September 2017 the site will be fully operational.

The process relies on a communication strategy developed through five consultation workshops held in different areas of the territory for the exchange of information on communication issues.

Part of the information and dissemination activities carried out during this consultation process were undertaken through master classes on themes defined at the request of the different stakeholders and working groups that encouraged discussion of relevant issues.

The master classes and working groups have identified issues of interests to the main sectors involved in the environmental area and in the activities of the EN-REP. Some consultation events also included a written question session with attendees to assess levels of information, expectations and satisfaction with the progress achieved thus far.

The different sessions of the CONASAV have also contributed by consolidating this information exchange mechanism and strengthening the communication capacities of the stakeholders represented in this multisectoral entity. The sections are part of the specific actions carried out as part of the EN-REP communication strategy with the aim of consolidating it as a space for consultation, dialogue and permanent and sustainable climate action over time.

To ensure that the actions and activities of the project are informed in a timely manner, the MARN web portal tool is currently being used to publish information and photographs on events related to the progress of the EN-REP.

A dedicated website (restauracion.mba.sv) publishes information related to the development of the EN-REP and documents related to the restoration processes. The content is managed by a group of territorial

managers that includes at least one representative of each CONASAV Restoration Roundtable established in the zones covered by the EN-REP.

In parallel (and as part of the information management component of the strategy's communication guidelines), information is being sent to the databases of the Environmental Sustainability and Vulnerability Office institutions and to all strategic sectors and partners that have a web platform and may be interested in joining the dissemination network.

In addition, FCPF funds have been used to conduct a National Survey, the results of which offered a first insight of the impact of the MARN's communications and will be used as input for the design of the EN-REP with an MbA approach.

The guidelines of the EN-REP communication strategy include the management and development of knowledge from the perspective of communication for development and social change, the component that gave rise to the Green Networks and Classrooms project (developed in partnership with the MINED).

Local Environmental Observer Networks (LEONs) are local stakeholders groups based on LSDPs. They feature local leaders who serve as multidisciplinary networks in each of the intervention areas and play an important role in disseminating information in the territories and simultaneously collecting feedback from them.

Criterion 10: Implementation and public dissemination of consultation results

Another element of the communication guidelines defined for the design, implementation and dissemination of the EN-REP was the conceptualization of a graphic identity that could further promote the communication strategy. The purpose of the brand is to visualize and bring this issue to the public agenda with a concrete visual identity that identifies and differentiates the actions and achievements of the country as a result of its restoration of ecosystems and landscapes and its protection of forest cover.

With regard to communication, emphasis has been given to reinforcing dialogue processes during the information and consultation workshops held with local stakeholders, communities and indigenous organizations. In this sense the necessary mechanisms have been created to maintain permanent feedback channels.

To date, the main achievements in terms of communication are:

- Training of more than 200 people on communication for development.
- Local radio campaigns on the main drivers of deforestation and degradation to raise awareness on the issue and promote participation in the search for solutions.
- National survey on the perception of communities regarding the MARN communication strategy.
- Strengthening of institutional capacities regarding the management of communication for development.
- Assistance provided to the CONASAV Restoration Roundtable for the conceptualization, formulation and implementation of national volunteer and sponsorship programs for the PLANTATÓN initiative, an effort that will be replicated annually on June 5 with practical application of EN-REP restoration techniques.

The next steps in the communications process are the following:

- Strengthening communities in the areas in which the LSDPs and LSUPs will be developed in order to establish efficient community communication that allows greater population engagement in the face of environmental problems.
- News management to inform the population of the restoration efforts undertaken by the country
- Informational and playful educational media campaigns on issues related to adaptation to and mitigation of climate change.

- Communication strategy impact assessment²²

Componente 2 NATIONAL STRATEGY FOR ECOSYSTEM AND LANDSCAPE RESTORATION WITH AN MBA APPROACH.

Through the work carried out by the MARN PREP team and the SESA process, the main drivers of deforestation and degradation in El Salvador have been identified and specified, which will be described below in this section.

Likewise, with the funds provided by the FCPF, a study of the existing legal framework was carried out, through which it was verified that El Salvador has been a member of the United Nations Framework Convention on Climate Change (UNFCCC) since 1995. As part of these efforts to find solutions to major environmental challenges and carry out global actions to mitigate the effects of climate change, it is the first country in the world to adopt the MbA approach.

With the second highest population density in the hemisphere (after Haiti) and a highly deforested territory, El Salvador is particularly vulnerable to the impacts of extreme weather events, which threaten 90% of its population, 95% of its the national territory and 90% of its GDP²³.

The main causes of deforestation and degradation at the national level are the expansion of agroecosystems, mainly no-shade crops, which account for 65% of the territory, plus urban settings (which already represented 4.3% of the territory by 2010)²⁴. Degradation is also caused by forest fires, which burned more than 22,000 hectares between 2013 and 2016 according to data from the National Commission on Forest Fires (CENIF). Logging for timber and firewood is also a major contributor.

One of the great challenges facing Salvadoran society is the reduction of the country's vulnerability to the climate threat, proposing actions and measures to make the territories more resilient, to protect livelihoods and productive activities, in order to Achieve a more sustainable economy. Restoration and conservation of forests and forest ecosystems is an urgent and necessary step towards reversing the high degree of environmental degradation, maintaining biodiversity and restoring critical ecosystem services for disaster risk reduction and adaptation to climate change.

Thus, in order to reverse environmental degradation and reduce vulnerability to climate change, the National Environment Policy is committed to, among other things, deepening protection, rehabilitation and conservation of functional forest ecosystems, in order to maintain The ecological and evolutionary processes that sustain biodiversity, guarantee a permanent provision of important ecosystem services, and maintain the resilience and capacity to adapt ecosystemic to daily threats and extreme events.

Adapting to weather events is urgent for El Salvador; the country intends not only to reduce the risks associated with climate change but also to reverse the environmental degradation suffered by most of its territory and its ecosystems. In this sense, the EN-REP activities will rely on the accumulated experience of indigenous peoples and peasant populations; 49 restoration techniques and instruments already used in different parts of the country have been identified, compiled and studied by the PREP/MARN.

²² MARN, 2017, Communication Strategy.

²³ Germanwatch, 2010Global Climate Risk Index, <https://germanwatch.org/fr/download/2168.pdf>

²⁴ MARN, 2010, land use map 2010.

The National Program for Restoration of Ecosystems and Landscapes is presented as one of the key instruments of the Policy and is part of the National Plan for Climate Change and the Five-Year Development Plan - planning of the Government of El Salvador for the period 2014 - 2019, Which recognizes that Climate Change is a reality that diminishes the development options of the country, so it is necessary to promote a competitive, sustainable and resilient economy to the effects of climate change. With a goal of restoration of one million hectares The National Program of Restoration of Ecosystems and Landscapes of El Salvador, is organized in three strategic axes:

1. Restoration, reforestation and inclusive conservation of critical ecosystems such as gallery forests, water recharge areas, slopes, mangroves and other forest ecosystems;
2. The restoration of degraded soils, through the forestation of agricultural systems, the adoption of resilient agroforestry systems and the development of sustainable and climate-resilient and biodiversity-friendly agriculture;
3. Synergistic development of physical infrastructure and natural infrastructure.

The National Program of Restoration fulfills the Cost-Benefit conditions and integrates the Agendas of Climate Change (Adaptation and Mitigation), Biodiversity, Water Resources and Reduction of Risks, which allows to reach the goals and commitments of El Salvador under the corresponding Conventions, Nationally determined contributions under the United Nations Framework Convention on Climate Change; The AICHI Goals 7, 14 and 15 of the Convention on Biological Diversity; And the National Voluntary Goals to Achieve Neutrality in Land Degradation (LDN) established under the United Nations Convention to Combat Desertification and Drought (UNCCD).

El Salvador has adopted a number of adaptation actions to mitigate the harmful effects of climate change. Among those, it has prioritized initiatives aimed at recovering its degraded or deforested systems to recover ecological integrity through forest and agroforestry regeneration, soil conservation/improvement and the conservation of water sources. To this end, the country has made a commitment to restore one million hectares by 2030, a pledge that has been reaffirmed by the launch of its National Ecosystems and Landscapes Restoration Plan in June 2016²⁵. The plan defines actions to restore the first 100,000 hectares through interventions in the country's main Protected Natural Areas, mangrove areas, the dry corridor and water recharge zones, among other strategic actions.

In this context, El Salvador understands the restoring of ecosystems and landscapes as a mechanism for productive optimization, protection and the proper use of natural resources, choosing a different and novel path for avoiding GHG emissions and protecting the sinks that absorb them so it can make technical mitigation - but above all economic and social mitigation - a viable objective.

El Salvador has made progress in developing policies, strategies, plans and adaptations of national legislation to address the climate change approach. It has also committed to the sustainable development goals and the agreements made during the twenty-first Conference of the Parties (COP21). It is also party to the proposal made in 2015 to the CPND²⁶ under the UNFCCC.

While El Salvador has not generated high levels of greenhouse gas emissions, the impacts of climate change have caused severe losses in the country due to its geographical location and its current vulnerability. Seeking to reverse environmental degradation and reduce its vulnerability to climate change, the EN-REP aims to

25 www.marn.gob.sv/download/publicaciones/Hacia%20restauraci3n%20y%20reforestaci3n%20de%20ecosistemas%20y%20paisajes

26 MARN, 2015, El Salvador's Nationally Estimated Contribution. <http://www4.unfccc.int/submissions/INDC/Published%20Documents/El%20Salvador/1/EL%20SALVADOR-INTENDED%20NATIONALLY%20DETERMINED%20CONTRIBUTION.pdf>

modify and enforce existing environmental protection and climate change legislation, consolidate the PREP and strengthen the incentive and offset program, doing so with actions that go increasingly beyond the MARN to involve other parts of the State.

Five territories have been prioritized as areas for intervention. They were selected after taking into account the analysis of restoration opportunities; El Salvador's updated land use map²⁷ and the areas' status regarding water management, biological diversity, soil management, adaptation to extreme climatic events, microclimate regulation and co-benefits offered. The territories chosen are: Apaneca - Ilimatepec; Trifinio - Cerrón Grande; Cordillera del Bálsamo; Bajo Lempa; and Goascorán-Golfo de Fonseca. However, restoration actions will take place throughout the Salvadoran territory as other sectors are added to the intervention zones.

Some of the main allies of the strategy include municipal governments, the MAG; the Ministry of Public Works (MOP); the MINED; the Ministry of Defense (MD); the Ministry of Tourism (MITUR); the National Aqueduct and Sewage Administration; International Cooperation; FIAES; NGOs; the private agroindustrial sector; the National Indigenous Roundtable on Environmental Affairs; representatives from academia; and local organized communities.

Governance for the EN-REP implementation rests primarily with CONASAV and is driven by the M-REP, which is the advisory operational entity that approves restoration actions.

Next Steps

- Evaluation and analysis of degradation and deforestation processes, mainly due to livestock activity.
- Strengthen actions plans to address rights to natural resources, land tenure and management.
- Continue social, economic and environmental analysis to assess the feasibility of strategic options.
- Continue analysis on the implications of strategy options to existing sectoral policies.
- Adoption and implementation of legislation/regulations.
- Define the guidelines for the EN-REP implementation.
- Strengthen the benefit sharing mechanism.
- Continue the REDD+MBA national registration and REDD+ monitoring system activities.
- Analysis of issues related to social and environmental safeguards.
- Continue the EN-REP design regarding the impacts of funding 49 restoration techniques proposed within the strategic options.
- Establishing a Safeguards Information System.
- Formulate the Environmental and Social Management Framework.

Additional funds

- Formulate the Fire Control Strategy.
- Develop seven new LSDPs to cover the entire national territory with management tools for socio-environmental development and develop the Local Sustainable Use Plans (LSUPs) in the planned territories.

Justification

Develop a fire control and prevention strategy to enhance the capacity of local stakeholders. Establish protocols together with municipalities, local NGOs, ADESCOs, LSDP management committees and central government authorities in the territories, mainly the Resource Guard. The National Forest Fire Commission

²⁷ IUCN- USAID, 2015, Spatial Analysis to Identify Priority Restoration Areas.

(CNIF) shall coordinate the strategy, which will include prioritization of intervention areas, update of fire management plans in priority zones and consultation and validation workshops.

The objectives achieved to date with the creation and development of the Local Sustainable Development Plans and the Local Sustainable Use Plans implemented by the MARN and FIAES are in line with the EN-REP objectives. Its replication within the EN-REP is important as a visible proof so that people in other territories can repeat their actions, since they are two validated methodologies that have been successfully applied to bolster local governance and the citizens' commitment to monitor, preserve, and carry out concrete climate restoration actions. This will reduce the possibilities of leakage within the territories and increase the levels of social and environmental resilience in face of climate change.

Subcomponente 2.A Assessment of land use and land use change factors

El Salvador has joined the global collective effort of countries committed to reducing greenhouse gas emissions during the COP16 in Cancun (December 2010). For this end, it has begun the preparation of its EN-REP based on the UNFCCC-defined REDD+ safeguards that make up the common global framework of safeguards that must be applied in all REDD+ activities.^{28 29}

Criterion 11: Assessment and analysis

El Salvador' Constitution establishes the following: **"Article 105.-** *The State recognizes, promotes and guarantees the right to private property over the rustic land [tierra rústica], whether individual, cooperative, communal or in any other associative manner, and may not, by any concept, reduce the maximum extent of land established by this Constitution as subject to a right of property.*

The maximum extent of rustic land belonging to the same natural or legal person may not exceed 245 hectares. This limitation shall not apply to cooperative or communal peasant associations.

The new reform of the Forestry Law promoted by the MAG, currently pending approval by the Legislative Assembly, proposes (in Title Four, Chapter One) a series of changes to forest protection which extend restricted use areas in properties that do not have management plans, which would significantly increase the restoration territories of protected areas and, consequently, protect aquifers and soils and increase carbon storing levels.

An analysis based on satellite images conducted by the MARN and the University of El Salvador shows that the surface area used for sugarcane crops increased by more than 30,000 hectares between 2000 and 2010, especially in San Miguel, Sonsonate, La Paz, San Vicente, Usulután and Chalatenango.³⁰

Considering all of the above conditions, the EN-REP is the ideal mechanism to consolidate the restoration of ecosystems with climate change-resilient native species and through ecosystem and landscape restoration techniques promoted by the PREP/MARN.

²⁸UNFCCC, 2010, Decision 1/COP16

²⁹ MARN, 2016, Legal Analysis of the Current Regulatory Framework for a EN-REP Implementation

Criterion 12: Prioritization of direct and indirect drivers/barriers to increasing forest carbon stocks



The Open Standards for the Practice of Conservation methodology was used for the definition of the causes and agents of deforestation and the dynamics of environmental degradation in the priority territories.

The direct causes are actions that have immediate influence on the degradation of natural resources. These are chiefly human activities and natural phenomena. The elements contained in this analysis are the identification of critical causes (threats), and the assessment/ranking in order of relevance of direct causes.

The criteria for the assessment of causes are the following: a) scope or extent of the threat, b) severity of the impact; and c) reversibility or permanence of the threat. Finally, a conceptual map was developed to create a visual representation of the relationships between the different factors.

The causes identified in the Sustainable Local Development Plans (LSDPs) within each territory in general are: i) expansions of the agricultural frontier; ii) extensive cattle ranching; iii) forest fires; iv) logging for timber and firewood; v) urban area increase; and vi) pests and diseases.

Both the results of the SESA obtained during the development of the R-PP (and presented in the last revision of September 27, 2013) and the information gathered during the consultation and dialogue activities carried out for the design of the EN-REP have allowed to collect a variety of important information and data for a better determination of the pre-defined drivers.

2.A.1 Agricultural activities of no-shade crops

Throughout the country, 82% of all farmers (325,000 small-scale producers) are subsistence farmers planting on less than three hectares of land, located mainly on slopes with acclivity greater than 20 degrees; over 96% of these farmers use fertilizers and/or chemical herbicides in their plots. Most alarming is that less than 10% practice soil conservation techniques.³¹

Deforested areas used for the cultivation of staple grains, pastures and sugarcane account for 28.3%, 12.8% and 4.5% of the territory respectively, covering more than 970,000 ha³².

Sugarcane cultivation increased from 82,000 hectares in 2006 to 108,917 in 2013³³, with losses of forest between 2000 and 2010 of 48,280 hectares. This allows us to assume that some of the deforested areas were cleared to make room for new sugarcane crops, mainly in the coastal zone.

Pasture for extensive livestock farming covers 271,000 hectares³⁴/ Its impact on deforestation is significant, although specific data is not available.

2.A.2 Logging for timber and firewood

In El Salvador, 13.1% of households use firewood as fuel³⁵. Although 97.8% of the population in urban areas has access to electricity, 5.1% still use firewood for cooking, a figure that increases to 27.7% in rural areas.

³¹ MAG, 2006, El Salvador Forest Strategy Paper.

³² MARN, 2017, 2017 Land Use Map with RapidEye imagery from 2011.

³³ MARN, 2015, Fifth National Report on the Convention on Biological Diversity.

³⁴ MARN, 2017, 2017 Land Use Map with RapidEye imagery from 2011

³⁵ Ministry of Economy, 2014, Multipurpose Household Survey 2014.

According to studies developed by the MARN, it is estimated that mangrove losses have totaled around 60,000 hectares in the last 50 years, while new areas have been cleared for agrosystems every year.

2.A.3 Urban growth

El Salvador has urbanized more rapidly than most of Central American countries. The physical expansion of its cities (especially secondary ones) has been swift in comparison with both Latin American and international averages. This has been influenced by demographic changes such as the high rate of urban migration and the huge flow of remittances to the local economy (by way of example, the Santa Ana Department grew by almost 14% between 2001 and 2010).³⁶

Urban area perimeters increased by 2,551.40 hectares between 2002 and 2016, amounting to 10% growth in 14 years (Table 2).

Table 2. Urban growth in major Salvadoran cities.

Municipality	Surface (ha)		Increase (ha)
	2002	2016	
San Salvador	16,570.82	18,279.72	1,708.9
Santa Ana	2,784.92	3,183.52	398.6
San Miguel	2,702.71	2,841.23	138.52
Sonsonate	1,002.68	1,225.11	222.43
Metapán	269.60	352.55	82.95
TOTAL	23,330.73	25,882.13	2,551.40

Source: Prepared by Vinicio López Quezada - MRV Technician of the Project Implementation Unit of the FCPF (2017)

Urban areas already represented 4.3% of national territory by 2010,³⁷ with growth only accelerating.

2.A.4 Fires and forest fires

Average temperatures in El Salvador increased by over 1.3 °C in the last six decades, with climatic scenarios pointing to additional increases of between 2 °C and 3 °C in the following six decades depending on global efforts to mitigate global warming, according to the National Climate Change Strategy (2013).³⁸

According to information provided by the National Commission on Forest Fires (CENIF), over 22,000 hectares of forest were burned between 2013 and 2016.

Forest fires and agricultural fires are a recurring problem, affecting the country's already scarce forest resources, causing destruction and serious damage to natural forests, forest plantations and protected natural areas. The problem increases during dry season, mainly due to the use of unsustainable agricultural practices

³⁶ UNDP, 2014, Human Development Report 2013-2014. "Citizen Security with a Human Face: Evidence and Proposals for Latin America". United Nations Development Program.

³⁷ MARN, 2010, El Salvador Land Use Map.

³⁸ MARN, 2013, National Climate Change Strategy. <http://www.marn.gob.sv/wp-content/uploads/Estrategia-Nacional-de-Cambio-Clim%C3%A1tico.pdf>

such as the uncontrolled burning of crop stubble, grassland burning, garbage burning, pruning and weed burning.

2.A.5 Pests and diseases

Although some pests have a "natural" non-anthropogenic cause, it is noteworthy that the first semester of 2016 saw the reemergence of the Southern Pine Beetle (*Dendroctonus frontalis*) and other pests that affected about 326 hectares of pine forest in El Salvador³⁹. This pest also affected neighboring countries; although control measures have been taken in each country, it is clear that there is no comprehensive policy in the region that considers this driver as a threat and envisages a good forest management plan to ensure healthy and productive forests.

Criterion 13: Relationship between drivers/barriers and the EN-REP activities

A few barriers were identified during the development of the R-PP that could hinder the application of identified strategic options aimed at tackling deforestation drivers⁴⁰.

- Some institutions may not take responsibility.
- Conflicts over land ownership.
- Political differences that hinder processes.
- Altercation and conflict over access, use and management of restored resources.
- Political changes
- There is a technical gap in the agricultural sector (no technical assistance).
- Legal uncertainty over property rights.
- Temporary reduction in agriculture.
- Higher costs for the State to strengthen institutional control.
- Obtaining permits to conserve a protected ecosystem.
- Resistance by settlers, owners and industry to comply with measures that limit their traditional "exploitation".
- Loss of income and jobs if farm profitability decreases due to their abandonment, with consequent job losses.
- Embargoes.

Consultations on restoration techniques and their application in the territories continued to be held in 2015 and 2016. A summary table of the consultation activities is presented below (Table 3).

Table 3: Summary of consultation events

Description	Amount
Territorial stakeholders and entities	206
Consultation Events	63
Female participants	746
Men who participated	1,458
People who participated in the activities	2,204

³⁹ MARN, 2017, National Report on outbreaks and prevention and control measures of Southern Pine Beetle.

⁴⁰ MARN, 2012, SESA Environmental and Social Assessment.

Below are the results of the National survey to understand the impact of MARN's communication as an input for the design of EN-REP with an adaptation-based mitigation approach, conducted nationally:

Forty percent (40%) of the population answered positively to the question "Do you know what Climate Change is?" Respondents were also asked "How much do the following aspects affect you?", and responded as follows:

- Water scarcity: 65%
- Floods/droughts: 61%
- Forest fires: 61%
- Sugarcane burning: 56%
- Landslides: 51%

The elements raised are the result of degradation processes, and the survey indicates that more than 50% of the total population reports being affected by these processes.

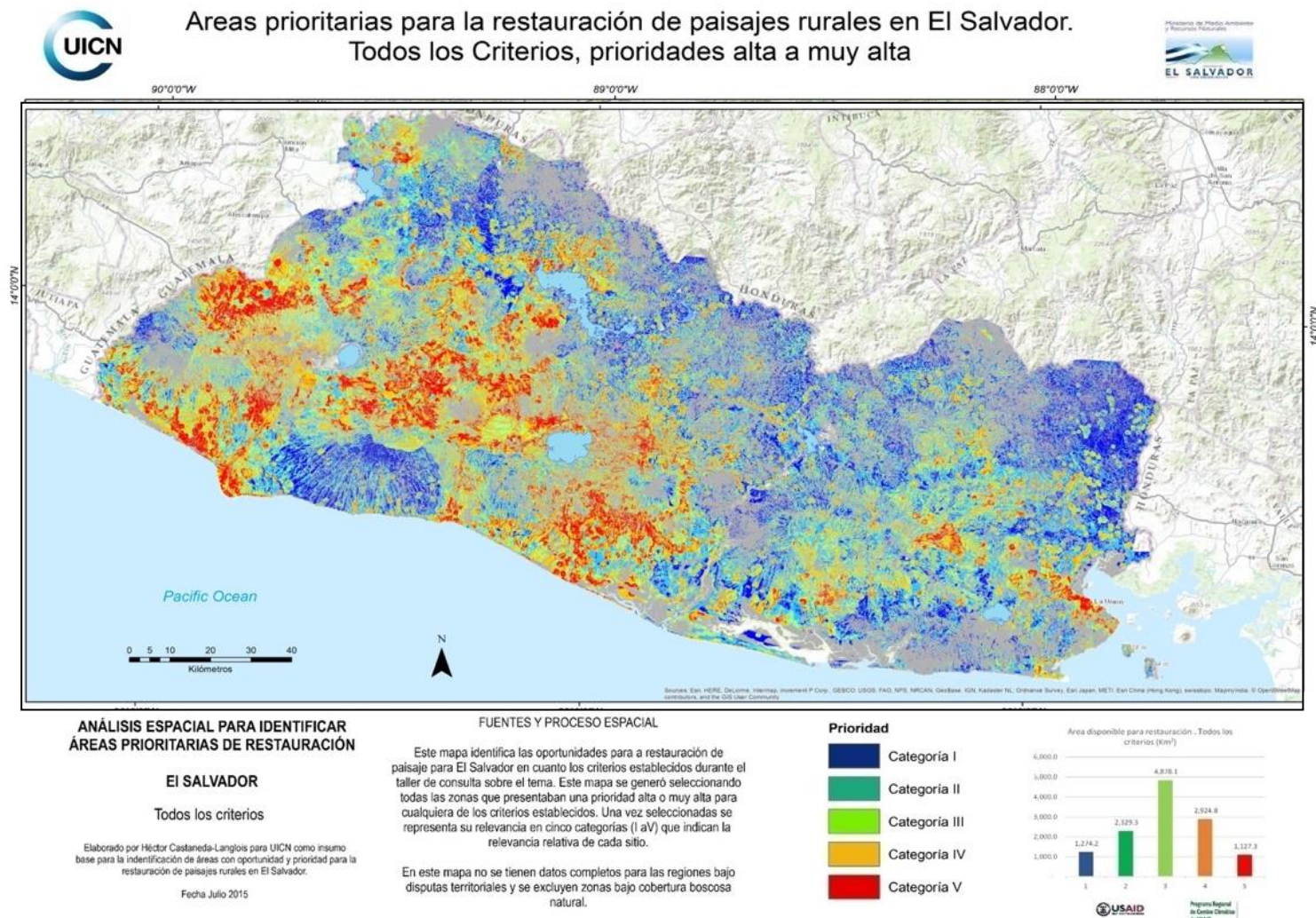
With the support of the International Union for Conservation of Nature (IUCN), an analysis of opportunities for restoration was conducted based on El Salvador's new land use map, which led to the definition of priority areas, sites and ecosystems for the EN-REP.

2.A.6 The following aspects were considered for the analysis:

- The ability to adapt to droughts and surface and groundwater management
- Biological diversity and firewood consumption
- Soil conservation and restoration
- Adaptation to extreme weather events
- Climate regulation in urban areas

Based on the application of these criteria, a map of priority areas for the restoration of rural landscapes in El Salvador was prepared. It revealed an area of 1.25 million hectares with opportunities for restoration, broken down into categories I to V, the latter being the highest priority (urgency) to start the process (red on Map 1)

Map 1. Priority restoration areas



Criterion 14: Action plans to address rights to natural resources, land tenure and land tenure management/studies



El Salvador has legal frameworks that give legal grounding to national plans and strategic actions focused on reducing forest degradation and deforestation. These national commitments have led to the following plans:

- National Climate Change Plan
- National Protected Natural Areas Plan
- Local Sustainable Use Plans (LSUP)
- National Integrated Water Resource Management Plan (PNGIRH)

The PREP articulates actions focused on the restoration of critical ecosystems (including the recovery of degraded soils and the management of water resources) through the adoption of climate-resilient agroforestry systems, the synergistic development of physical and natural infrastructure, new actions consisting of the joint coordination of ministries and local stakeholders to promote governance over natural resources.

At the local level, efforts have been made to improve plans to manage natural resources in both private and protected areas. These plans are managed by local structures, such as the structures for management of LSDPs/LSUPs and local advisory committees, to support the implementation of management plans for protected areas. Other local organizations (ADESCOs, cooperatives, water management boards, watershed committees etc.) also participate in each of the territorial structures.

Criterion 15: Implications of forestry laws and policies



The Salvadoran government created the National Environmental Policy (PNMA) at a meeting of the Council of Ministers on May 30, 2012. The PNMA establishes that the "the national environmental policy shall guide the actions of the central and municipal public administrations in the execution of development plans and programs".⁴¹

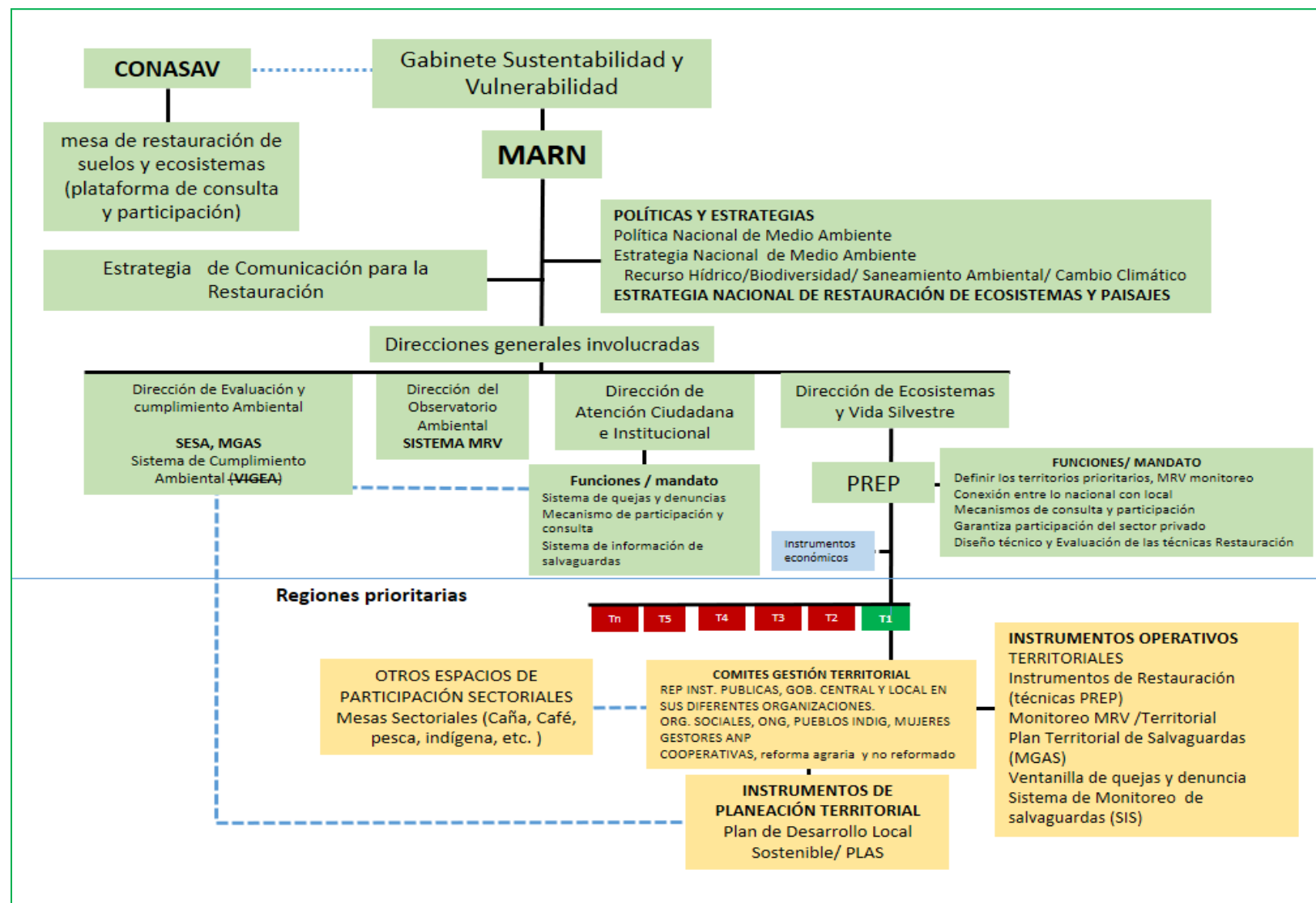
The National Environment Strategy was published in June 2013 to implement the provisions of the law, which proposes critical investments and the development of national financial and institutional mechanisms to reduce human and economic impact of climate variability affecting El Salvador.

The strategy focuses on the mitigation of climate change with co-benefits to be established through the PREP, which represents the flagship program with which the country seeks to face, in a planned and aggressive manner, the severe deterioration of ecosystems and the loss of key ecosystem services that have led to El Salvador's high environmental and social vulnerability in the face of a growing climate threat.

Layout 1 illustrates the organizational and functional structure that has been built for the implementation of the EN-REP.

⁴¹ Legislative Assembly, 1998, Environment Law.

Layout 1. Execution structure of the EN-REP



Subcomponente 2.B EN-REP Strategy Options

2.B.1 Strategic option 1: Harmonizing the legal framework and sectoral land use policies

Criterion 16: Introducing and setting priorities for the EN-REP strategy options

El Salvador's legal framework supports restoration processes. In fact, the Constitution's Art. 117 establishes the "duty of the State to protect natural resources, related to the ruling of unconstitutionality" (5-93 of 2-VII-98).

There is also a National Environment Law in El Salvador, which provides the specific framework for this topic. Art. 50 of this law stipulates that "the MARN shall draft the guidelines for environmental zoning and land use."

The first Forestry Law was enacted in 1973 to lay the groundwork for developing a forestry policy in line with public interests. It is designed to conserve, enhance, restore, and augment forest resources and move towards rational use and management of the nation's forests and lands. This law created the Forestry and Fauna Service as the entity responsible for all duties and activities related to forestry.⁴²

The EN-REP is predicated on the National Environment Policy^{43 44} approved in 2012 by the Council of Ministers. That same year, the National Environment Law (LMA) underwent a reform to add in the concept of climate change. Among other actions, this reform stipulates the drafting of a National Climate Change Plan and prioritizes building a low-carbon and climate change-resilient society and economy with the inclusion of Title VI bis Climate Change Adaptation.

Other strategic instruments include: the National Environment Strategy⁴⁵ and the Biodiversity/Water Resources/Climate Change/Environmental Clean-Up Strategies, all of which are instruments to help develop efforts to restore the country.

At present, El Salvador has already completed and conducted consultation for the Forestry Law reforms and is currently formulating and conducting consultation for the first Climate Change Law, which will regulate and foster reforestation activities and actions related to climate change adaptation and mitigation, respectively.

- El Salvador's National Climate Change Plan
- Local Sustainable Use Plans (LSUP)
- Local Sustainable Development Plan (LSDP)
- National Integrated Water Resource Management Plan (PNGIRH)
- Protected Natural Areas Management Plan

The primary aim of El Salvador's National Climate Change Plan, launched June 5, 2015⁴⁶ is to build a climate change-resilient and low-carbon society and economy, while also, in turn, attending to the country's greatest

⁴² FAO, 2004, Summary of the Current Status of Forestry Management and Planning in El Salvador, available at <http://www.fao.org/docrep/008/j2628s/j2628s10.htm>

⁴³ MARN, 2012, National Environment Policy. <http://www.marn.gob.sv/descarga/politica-nacional-del-medio-ambiente-2012-3/>

⁴⁴ Legislative Assembly, 2012, Reformed pursuant to Legislative Decree No. 158. <http://www.diariooficial.gob.sv/diarios/do-2012/11-noviembre/12-11-2012.pdf>

⁴⁵ MARN, 2012, National Environment Strategy. <http://www.marn.gob.sv/estrategia-nacional-del-medio-ambiente/>

⁴⁶ MARN, 2015, National Climate Change Plan, <http://www.marn.gob.sv/download/Plan%20Nacional%20de%20Cambio%20Clim%C3%A1tico.pdf>

challenges, such as implementing the Territorial Planning and Development Law, approving the General Water Law, and planning for urban development, all of which are essential to making the country more climate-resilient in support of the environmental sustainability called for in the 2014-2019 Five-Year Development Plan.

LSUPs are a viable way to make a positive contribution to natural resource conservation and to improve quality of life in communities, especially for the most environmentally vulnerable groups of people. A governance mechanism known as a Social and Environmental Committee (CDSA) democratizes natural resource management, paving the way for ecosystem restoration and better organization of productive activities. LSUPs are an extremely interesting and novel governance tool to manage coastal marine resources. The government has been able to use the results derived from their implementation to issue ministerial decrees on fishing bans.

By contrast, the LSDPs⁴⁷ published to date include the following: a) vision, scope, and key intervention targets; b) threats, viability analysis of the key intervention targets, and situation analysis; c) objectives, strategies, and goals of the intervention; d) monitoring plan; and e) operating plan. Institutional agreements to implement these plans are written in coordination with local stakeholders. LSDPs are used to select the key actions to implement in the territory; once these actions have been defined, an open call for proposals is released in order to invest in the key conservation targets.

As part of the National Environment Strategy, the MARN decided to base the National Water Resource Strategy (ENRH)⁴⁸ on an Integrated Water Resource Management approach with a view to developing public policy, striving to reconcile economic development interests and social and environmental objectives and goals related to protecting fragile and water-generating ecosystems.

One aspect of water resource management actions involved formulating the National Integrated Water Resource Management Plan⁴⁹ (PNGIRH), which seeks to implement territorial planning and reduce deforestation in the upper reaches of watersheds, whose effects are felt in rising water runoff and the displacement of soil down to the lower areas, aligned with the priorities set out in the EN-REP, in order to cultivate the conditions necessary to ensure water sustainability.

Moreover, consultations have begun to draft a climate change act to regulate adaptation and mitigation actions. This piece of legislation would govern adaptation and mitigation activities with the participation of diverse stakeholders.

La Ley de Medio Ambiente contenida en el Decreto Legislativo No. 233, creó el Sistema de Áreas Naturales Protegidas (SANP). Las áreas se encuentran inmersas en grandes espacios denominados Áreas de Conservación, que de acuerdo al artículo 4 de la Ley de Áreas Naturales Protegidas (El Salvador, 2005), son los “espacios territoriales que contienen Áreas Naturales Protegidas, zonas de amortiguamiento, corredores biológicos y zonas de influencia...” La mayoría de las áreas naturales protegidas cuentan con un plan de manejo que se enfocan en la restauración de las mismas.

⁴⁷ MARN, 2016, Local Sustainable Development Plan for the El Imposible-Barra De Santiago Conservation Area, El Salvador

⁴⁸ MARN, 2017, El Salvador's National Integrated Water Resource Management Plan, with an emphasis on priority areas. <http://www.marn.gob.sv/plan-nacional-de-gestion-integrada-del-recurso-hidrico/>

⁴⁹ MARN, 2017, El Salvador's National Integrated Water Resource Management Plan, with an emphasis on priority areas.

Currently, 46 management plans have been drafted for 101 protected areas, keeping in mind that an individual management plan may cover one or more protected areas. The following table (Table 4) details the EN-REP's target actions.

2.B.2 Strategic option 2: Restoration tools and techniques.

Table 4. Summary of EN-REP target actions

ACTION	YEAR 2020		YEAR 2025		YEAR 2030		TOTAL		COST PER
	AMOUNT	COST	AMOUNT	COST	AMOUNT	COST	AMOUNT	COST	UNIT
Restore 5,000 hectares of mangrove forests	1,000	\$2,130,000.00	2,000	\$4,260,000.00	2,000	\$4,260,000.00	5,000	\$10,650,000.00	\$2,130.00
Restore 35,000 hectares of gallery forests	5,000	\$15,000,000.00	15,000	\$45,000,000.00	15,000	\$45,000,000.00	35,000	\$105,000,000.00	\$3,000.00
Restore 140,000 hectares of land with staple grains	20,000	\$3,500,000.00	60,000	\$23,800,000.00	60,000	\$23,800,000.00	140,000	\$51,100,000.00	\$365.00
Restore 90,000 hectares of grasslands	10,000	\$7,000,000.00	40,000	\$28,000,000.00	40,000	\$28,000,000.00	90,000	\$63,000,000.00	\$700.00
Cultivate 10,000 hectares of shade-grown cacao	2,000	\$4,000,000.00	4,000	\$8,000,000.00	4,000	\$8,000,000.00	10,000	\$20,000,000.00	\$2,000.00
Maintain 719,887.31 hectares of the forest, agro-forest, and secondary forest remnants*	720,000	175,000,000.00	720,000	175,000,000.00	720,000		720,000	\$350,000,000.00	
Restore 22,000 hectares of burned lands	4,000	\$7,200,000.00	9,000	\$16,200,000.00	9,000	\$16,200,000.00	22,000	\$39,600,000.00	\$1,800.00
TOTAL RESTORED PER YEAR	42,000	\$213,830,000	130,000	\$300,260,000	130,000	\$125,260,000	1,000,000	\$639,350,000	

*Coffee forest (300 million) ANP Management (50 million), the forest hectares do not add up because the goal is to keep them maintained throughout the implementation of the EN-REP.

2.B.3 Strategic option 3: Design economic instruments to foster restoration

By 2006, El Salvador was looking at five potential financial mechanisms,⁵⁰ such as the Environmental Credit Fund (FOCAM), the Forestry Bond, private financing initiatives without external support, FIAES, and the El Salvador Environmental Fund (FONAES).

FIAES was chosen from among these mechanisms as a viable option. It has been around for a while, and although it is not specifically a mechanism to finance forestry development, it does finance ecosystem restoration efforts.

FIAES also furnishes a wealth of knowledge about the stakeholders and leaders involved in environmental projects in the territories, with accredited models based on a safeguards approach. In its 23 years of existence, it has helped shore up the national protected areas system and has contributed to consolidating at least 15 conservation areas and three biosphere reserves in El Salvador. Its funding is primarily channeled into territorial management, ecosystem management, and pollution prevention and control.

As the body running the incentives and compensation mechanism identified in the EN-REP strategy, FIAES will rigorously enforce the safeguards. The idea is to link up the LSDPs and the organizations from the areas where the interventions will take place with the restoration activities seeking financing. Seven plans have been drafted thus far.

Art. 20 of the Forestry Law⁵¹ stipulates the following: "The MAG, in coordination with the Ministry of the Economy and the Forestry Commission, shall devise incentive programs to encourage forestry development pursuant to the purpose of this law." The Forestry Law reform bolsters the implementation of a compensation mechanism envisaged to boost forestry production and proposes tax breaks in the fifth chapter, empowering the Directorate for Forestry Management, Watersheds, and Rivers (DGFCR), in conjunction with the Forestry Commission and in consultation with the relevant institutions and organized sectors, to draft, update, and manage an incentives plan to foster sustainable forestry development pursuant to Article 77 of the National Environment Law.

It moreover states that the incentives may be fiscal, economic, or natural. Furthermore, they shall be allotted to increasing forest cover, including the planting of natural secondary forests, forestry management, seed source management, and recognition of ecosystem services.

The compensation mechanism requires drafting an LSDP with the involvement of all sectors engaged in restoring a given region, beginning with the areas identified on the restoration opportunities map, with the goal of restoring one million hectares by 2030.

In order to set fair and accurate compensation categories, the MARN, via PREP and with technical assistance from IUCN, is working on estimating the costs to determine the appropriate reimbursement amounts to include in the EN-REP strategy.

The compensation mechanism that El Salvador has developed for restoration activities involves the following:

- Prioritize the zones to be restored, beginning with the restoration opportunities map.
- In priority territories, identify relevant stakeholders and formulate the LSDPs with them.

⁵⁰ FAO, 2006, National Forestry Financing Strategy . <http://www.fao.org/forestry/12080-0d0fc1e0ee28b85c5667f62ea8afd2490.pdf>

⁵¹ Legislative Assembly, Forestry Law, 2002. http://publica.gobiernoabierto.gob.sv/institutions/ministerio-de-agricultura-y-ganaderia/information_standards/ley-principal-que-rige-a-la-institucion

- A portion of the mandatory compensation for economic activity is handled by FIAES thanks to an agreement between the MARN and FIAES. Nevertheless, FIAES also handles trusteeship funds from other sources and donations.
- Once the territorial planning is complete and FIAES has worked out resource availability, the calls for proposals are published with MARN's endorsement.
- Local organizations bid in the competitive tenders. The winners perform the projects as previously defined in the planning phase.
- Because coffee is El Salvador's top agroforestry system commodity, efforts to create mechanisms to encourage coffee farming come from as high up as the Presidency of the Republic and other sectors.

2.B.4 There are also ongoing efforts to:

- Finance the coffee sector's debt.
- Extend and further the renewal of coffee farming lands with rust-resistant coffee varieties.
- Make more resources available to expand coffee farms and purchase new farmlands.
- Support producers in creating added-value mechanisms for coffee production.
- Find resources for environmental production in the coffee forests.
- Promote a more participatory role for the various coffee farming associations.
- Encourage loans to revive coffee farming with low interest rates and long-term loans.

The Rainforest Alliance has certified at least 104 coffee farms in El Salvador⁵². On the one hand, this is a sign that the international community has recognized the country's quality coffee farms, able to compete for scores in excellence and negotiate preferential prices. On the other hand, farms that have earned this certification can garner a premium on every quintal exported.

2.B.5 Sub-national pilots

Sub-national efforts have been undertaken in the El Imposible Barra de Santiago conservation area where degraded ecosystems and the actions to implement in them have been identified, leading to the implementation of an LSDP. The MARN and FIAES have implemented this model with the technical and financial support of GIZ. The progress made and capacity-building completed for this model are both suitable for replication in other zones throughout the country.

Criterion 17: Viability assessment

The EN-REP will serve El Salvador well in honoring the international commitments it has made in the 2011-2020 Strategic Biodiversity Plan; the AICHI targets, and the Convention on Biological Diversity, in particular those pledges related to sustainably managing areas zoned for agriculture, aquaculture, and forestry (target 7); restoring key ecosystems, specifically those involved in the provision of important ecosystem services, like water resource availability and livelihoods (target 14); and making ecosystems more resilient to climate change and increasing carbon stocks through the conservation and restoration of at least 15% of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification and drought (target 15), to name a few.

It bears mention that in order to achieve the expected outcome, it will be necessary to unite all of the stakeholders in any given territory or setting, and to put in place the institutional agreements required to coordinate activities and measure progress made in restoration, which entails forging the inter-institutional synergies that will be essential to the restoration process. The M-REP/CONASAV are being consolidated for this purpose.

⁵² Rainforest Alliance, 2016, List of Certified farms and CoC operations October. <http://san.ag/web/wp-content/uploads/2014/11/List-of-Certified-Farms-and-CoC-Operations-October-31st-2016.pdf>

Criterion 18: The implications of the strategy options for existing sectoral policies

The first Forestry Law was enacted in 1973 to lay the groundwork for developing a forestry policy in line with public interests. It is designed to conserve, enhance, restore, and augment forest resources and move towards rational use and management of the nation's forests and lands. This law created the Forestry and Fauna Service as the entity responsible for all duties and activities related to forestry.⁵³

Work has begun to draft El Salvador's Climate Change Act bill, which will align other regulations tied into restoration.

One of the key findings of the investigation into the legal framework conducted to identify the sources of support and gaps in environmental matters was related to efforts to complete territorial zoning and planning, which should be concluded nationwide by 2020.

Subcomponente 2.C Implementation framework

Criterion 19: Adopting and implementing legislation/regulations

In March 2011, the Legislative Assembly approved the Territorial Planning and Development Law, which regulates land use in the country and governs all public and private investment in El Salvador starting in 2012. The law sought to guarantee land use pursuant to its vocation, foster territorial articulation, and provide basic services to human settlements, such as natural resources protection and conservation.

The law calls for creating the National Territorial Planning and Development Council composed of the Ministers of Health, Agriculture, Public Works, and the Environment, and the Autonomous National Aqueduct and Sewage Administration. This inter-institutional body shall coordinate the Regional Territorial Planning and Development Councils, tasked with spearheading the development plans in each region of the country, in cooperation with the mayor's office of each municipality.

Moreover, Title V and Chapter III of the National Environment Law mention pollution prevention and control. Section A of Article 50 stipulates that the "Ministry shall draft the guidelines for environmental zoning and land use."

Given this mandate, the Salvadoran government, via the MARN, issued three executive decrees to establish a suite of guidelines for sustainable management in the territories and prevent over-exploitation of natural and economic resources, which in the long term could cause impairment, loss, or even extinction. These decrees are grounded in ecosystem management and take into account environmental vulnerabilities, the urgency of sustainable management, and holding accountable the territories where the most pressing emergency situations have been identified.

Executive decrees 5, 6, and 7 enacted in June 5 mandate the suspension of administrative procedures related to granting environmental permits for urban development and construction projects along the entire Bálsamo mountain range, the San Salvador Volcano zone, and the coastline.

The ATLAS,⁵⁴ as these directives have come to be known, is meant to help with the upkeep of efforts to protect and conserve biological diversity, underpinned by the ecosystems they harbor. Likewise, these guidelines

⁵³ FAO, 2004, Summary of the Current Status of Forestry Management and Planning in El Salvador, available at <http://www.fao.org/docrep/008/j2628s/j2628s10.htm>

⁵⁴ MARN, 2013, Environmental Zoning Directives. <http://www.marn.gob.sv/directrices-para-la-zonificacion-ambiental/>

were fashioned to ensure comprehensive management of the environmental units in the municipalities, focused on protecting watersheds, especially the upper reaches, due to their importance as water sources and the role they play in the hydro-biological balance.

In short, environmental zoning makes it easier to consider the environmental dimension in territorial planning and development, which in turn makes it easier to effectively implement the EN-REP.

In 2012, the El Salvador environmental law suffered a reform, where “Adaptation to Climate Change” was included. It established that the State needs to strengthen the institutional framework to prevent the negative impacts of climate change. Also, this issue needs to be incorporated in the Environmental National Policy. In the same way, it mentions that it is necessary to elaborate a Climate Change National Plan, as an inter-institutional coordination framework to evaluate the politics, impacts and vulnerability of the different sectors and systems behavior in the face of the adaptation of climate change.

The actual Environmental National Policy (2012) has as an objective to revert the degradation of the environment and reduce the vulnerability due to climate change. Your specific objectives, include environmental management of land use, revert the ecosystem and landscape degradation and reduce the climate risk.

After the Environmental National Policy, in 2012 the Environmental Ministry elaborated a “Program to restore the ecosystems and landscapes (PREP)”. This program includes REDD+ activities in El Salvador. Its aim is to reduce and capture the emission of the greenhouse gas in the native forest management and expansion of the vegetation area through agroforestry systems, with social benefits and adaptation. The starting point is the adaptation, and the REDD+ program in El Salvador is the first that adopts the focus on “mitigation based in adaptation” (MbA).

Recently, the Environmental Ministry is elaborating the “National Strategy to Restore Ecosystems and Landscapes” (EN-REP), where specific measures are mentioned related to REDD+. To revert the environmental degradation and reduce the vulnerability of the country facing climate change. This Strategy modifies the regulation related to the environment protection and climate change, set-up the “Program to restore the ecosystems and landscapes (PREP)”, strengthen a compensation program for conservation, with activities that involve not just the Environmental Ministry, but also other institutions.

Also, this Strategy has as an Action Plan, to make an analysis of the social and environmental safeguards, by the creation of a Committee. This Committee will create a Monitoring and Information System for Safeguards, which was established on the 16 Conference of the Parties from the Climate Change Convention.

In addition within the forest sector framework, the Agriculture Ministry recently created policies and strategies with the objective of fostering sustainable land use management, ecosystems restoration and the expansion of the forest area, protection and reduce the forest vulnerability, and strengthen the forest management (for example, the Forest Policy, 2016 and Forest Strategy, 2017). These new policies and strategies are reforming the actual forest law, which is being reviewed for approval of Congress.

Criterion 20: Guidelines for implementation

The earliest initiatives developed in various social and environmental contexts throughout El Salvador have evolved, leading to valuable experience in technical and financial sustainability to define a viable, secure, transparent, and timely benefit-sharing mechanism for the EN-REP.

The Forestry Law reform also bolsters the implementation of a compensation mechanism envisaged for the EN-REP, as the fifth chapter of the new regulations provide for tax breaks, empowering the Directorate for Forestry Management, Watersheds, and Rivers (DGFCR), in conjunction with the Forestry Commission and in consultation with the relevant institutions and organized sectors, to draft, update, and manage an incentives plan to foster sustainable forestry development pursuant to Article 77 of the National Environment Law.

It moreover states that the incentives may be fiscal, economic, or natural. Furthermore, they shall be allotted to increasing forest cover, including the planting of natural secondary forests, forestry management, seed source management, and recognition of ecosystem services.

The compensation mechanism begins with defining an LSDP with the involvement of the sectors engaged in restoring a given region on the country's priority map, looking to PREP's restoration techniques as a reference.

One of the broader scopes expected with the EN-REP involves support for implementing schemes and mechanisms to financially offset effective efforts to protect forests and degraded areas. The specific scopes are described by way of Strategic Issues (SI) and Key Actions (KA), which are tied to the Ministry of the Environment and Natural Resources' Strategies and Action Plans.

As evidence of this State commitment, the Forestry Law draft is in the Technical Secretariat of the Presidency, to be submitted to the Legislative Assembly for review and approval. Once ratified for implementation, the forest incentives will be elaborated, which will contain their respective mechanisms of benefit distribution.

Criterion 21: Benefit-sharing mechanism

In order to set fair and accurate compensation categories, the MARN, via the Protected Natural Areas and Biological Corridors Management PREP team and with technical assistance from RCCP/IUCN, is working on estimating the costs to determine the appropriate reimbursement amounts to include in the EN-REP.

Moreover, FIAES has made strides forward as the most suitable fiduciary entity, fiscally and financially speaking, to distribute the incentives and compensations throughout the territories in which the EN-REP will work. In terms of the incentives and compensation mechanism, the Salvadoran government has in place the National Environment Law stipulating the compensations that companies must make to offset environmental harm derived from productive activity. The mechanism and dynamic will be applied in EN-REP processes. The compensation system is already in use, with FIAES collecting the funds and distributing them to restoration efforts at priority sites.

Criterion 22: National EN-REP registry and monitoring system activities

Sub-national efforts have been undertaken in the El Imposible Barra de Santiago conservation area where degraded ecosystems and the actions to implement in them have been identified, leading to the implementation of an LSDP. The MARN has developed this model as a pilot project with support from GIZ. The progress made and capacity-building completed for this model are both suitable for replication in other zones throughout the country.

El Salvador's priority is to draft LSDPs to cover the entire territory in order to plan actions and fund restoration.

Subcomponente 2.D Social and environmental impact

Criterion 23: Analyzing matters related to social and environmental safeguards

To date, as a result of the consultation process, a committee has been formed to build the Monitoring and Reporting System for dealing with the safeguards. The EN-REP has put together a road map with this committee, containing the following activities: i) consolidate a national safeguards roundtable; ii) set the objectives and the scope of the national safeguards approach; iii) develop the mechanism to address claims; and iv) develop the Safeguards Information System. Currently under development.

The EN-REP also has the safeguarding mechanism established by UNFCCC, which requires that all activities performed be carried out with an eye to governance, transparency, and access to information. The project

has released both technical and financial reports published on the FCPF's page. Also, the first independent audit of the El Salvador FCPF REDD+ project's financial statements took place.

Criterion 24: Designing the EN-REP in terms of impacts

The process to design the EN-REP involved consultation since the very first phase of the SESA process. As such, a substantial map of stakeholders has been developed from the priority conservation areas. Interviews have been held with them and with other key voices, as well as meetings and workshops with various sectors and groups pertaining to the EN-REP and representatives from minority groups, most notably indigenous peoples.

As a result, a preliminary analysis is in place, which has served to channel efforts towards visualizing actions to mitigate potentially adverse environmental and social impacts that could result from implementing EN-REP activities. It has also enhanced the program's strategic orientation and helped make the necessary adjustments to national policies and strategies. Some of this progress has already been incorporated into the LSDPs led by FIAES as part of the ongoing restoration actions in El Salvador.

Criterion 25: Environmental and social management framework

Implementing the EN-REP's strategic options will lead to greater mutual benefits for diverse sectors of the Salvadoran population. The wide-ranging consultation process conducted through SESA and CONASAV has served to identify the potential impacts and environmental risks that could emerge from implementing the EN-REP, all of which are fundamental inputs to build the MAGAS.

The MARN PREP team has identified and conducted a preliminary analysis of the potential negative impacts that could result from implementing the activities entailed by the EN-REP strategic options. These themes were included in the consultation workshops in the second phase of the SESA process, which kicked off on June 30, 2017, as part of the work plan and road map to consult on the strategic options and restoration techniques defined in the EN-REP. Six workshops have been scheduled as part of the work plan for the second phase of SESA. The schedule is as follows:

Table 5: 2017 Consultation Workshops on the SESA Road Map

Events	Dates
National Indigenous Roundtable on Environmental Affairs	June 30, 2017
Xirigualtique Biosphere	July 7, 2017
Fonseca Gulf – Guascorán River	July 7, 2017
Trifinio, Monatóna, and Cerrón Grande	July 14, 2017
Ilamatepec- Apaneca- Imposible	July 17, 2017
Bálsamo Mountain Range	July 25

Componente 3 NATIONAL FOREST REFERENCE LEVELS/FOREST REFERENCE EMISSION LEVELS

Out of all the different mechanisms related to reducing CO₂ emissions caused by deforestation and forest degradation, one of the biggest challenges looming ahead for El Salvador will be to understand, develop, and adopt the forest concept pursuant to guidelines and parameters set by the appropriate bodies.

At the sub-national level, as a preliminary measure, the MARN, with the aid of GIZ, has conducted work to validate the methodology used to map out the changes. This methodology was used in the El Imposible Barra de Santiago conservation area. Once it is validated in the pilot program territory, it can be extended to the entire nation.

The country has taken considerable and historic steps in determining for the first time its forest cover with high resolution images and establishing its reference level for the 2011-2016 period, however, there is a lack of complementary activities that improve estimates and information about forests' trends and dynamics.

NEXT STEPS

- Develop the Greenhouse Gas Inventory for the AFOLU sector in 2014. The inventory will be ready by the last quarter of 2017.
- Put together the National Forest Inventory, which will be released in June 2018.
- Design the National MRV System, based on existing institutional platforms, to be completed in the second semester of 2018.
- Develop the non-carbon benefits monitoring system, which should be created by the last quarter of 2017.

ADDITIONAL FUNDS

- Develop and apply a national deforestation projection model based on historical trends analysis.
- Measure forests degradation.
- Establish the baseline of each defined co-benefit.
- Establish a system for registering plantations (forest and fruit) and agroforestry systems. That includes the strengthening of technical and technological capabilities (software and hardware).

JUSTIFICATION

The use of additional funds includes hiring experts to analyze projections who will also be in charge of creating national technical and technological capacities; establishing a system for registering plantations (forest and fruit) and agroforestry systems. The consolidation of a sustainable and sound registration mechanism among the competent authorities (MAG and MARN) will contribute to generate forest maps with higher quality. Moreover, a company with co-benefit monitoring capabilities will be hired to establish the baseline of each co-benefit in the monitoring system. Finally, a consultant will be hired to analyze forests degradation.

Since El Salvador's strategy is based on MbA, in which monitoring of co-benefits is essential, the funds provided will allow to identify these co-benefits and design a monitoring system and establish a baseline of each co-benefit. The additional funds requested will be necessary to conclude this endeavor by means of hiring a provider with the capacity to undertake this task.

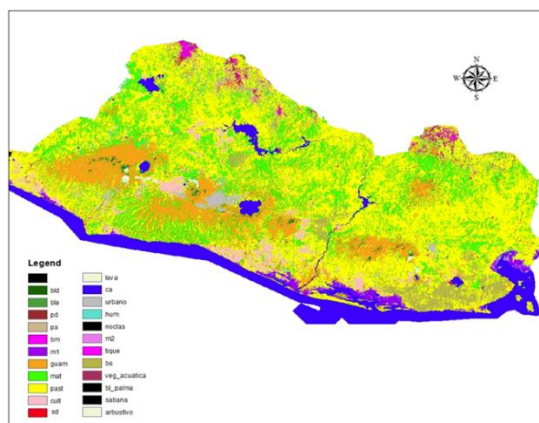
With regard to forest degradation, the country has shown no progress, so it is fundamental to take some significant steps forward in 2018 to 2019. Due to the lack of experience in this area, it will be necessary to carry out this activity through consulting.

The need for a system to register plantations (forest and fruit) and agroforestry systems is based on the fact that the maps generated have not been sufficient to spot forest plantations and so far there is no record of these plantations. Therefore, the hope is to be able to create a sound and sustainable registry mechanism among the competent authorities (MAG and MARN) and contribute to generating forest maps of higher quality.

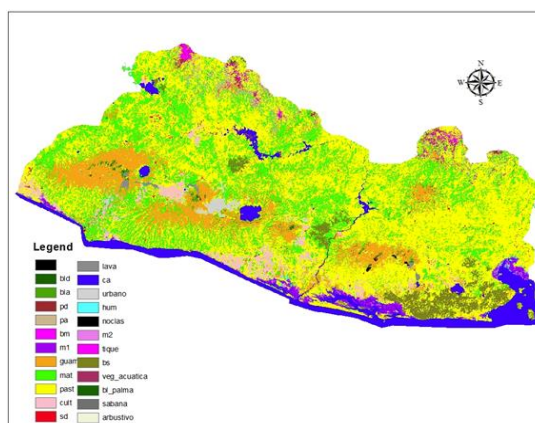
3.A Methodological approach

The idea is to establish a nationwide reference level. The methodology involves a historical analysis of evolving forest cover over time using two data sources. The first source consists of Landsat images used to develop maps for the years 2000, 2005, and 2010, as an initial approach to nationwide forest dynamics and trends. Greater accuracy is then obtained in mapping the dynamics.

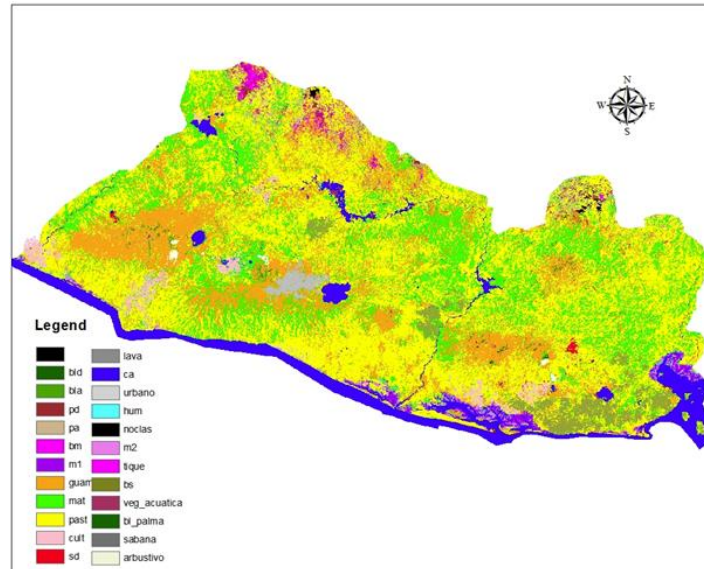
Map 2.
Land use map in 2000



Map 3.
Land use map in 2005

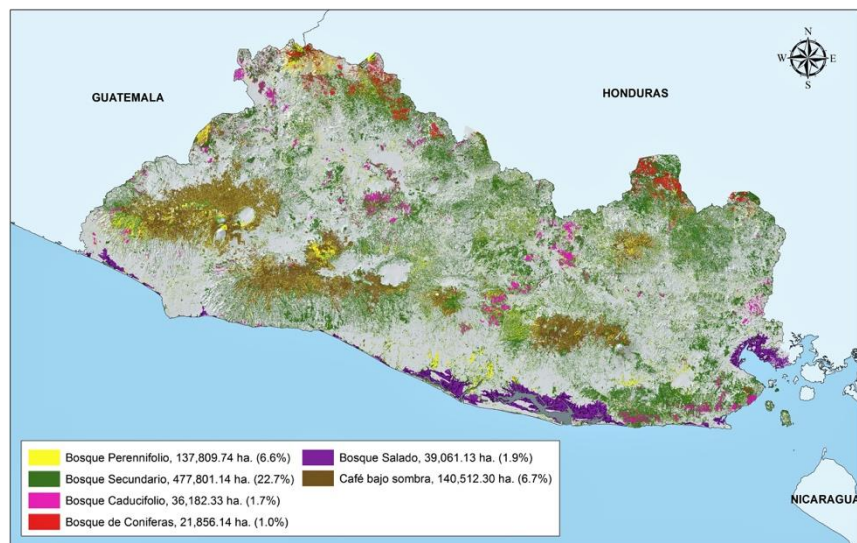


Map 4.
Land use map in 2010



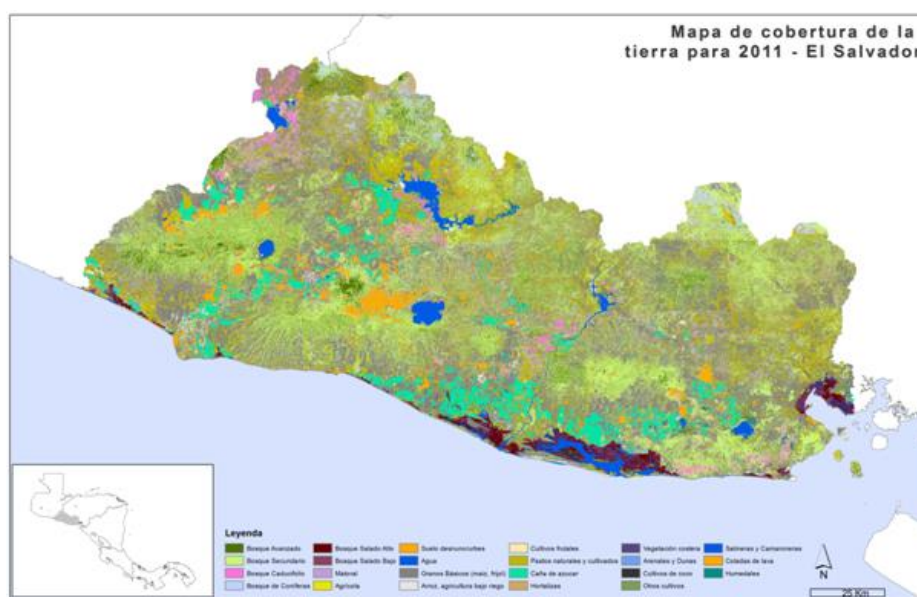
El Salvador has completed a forest and non-forest map with the various forest covers using RapidEye images from 2011. CATIE has been hired to develop the forest cover map with the RapidEye images from 2016, acquired by the MARN, for purposes of comparison and to analyze the changes between the two maps (2011 to 2016), in order to obtain forest cover reference levels. CATIE is also at the helm of efforts to build the National Greenhouse Gas Inventory with information from 2014.

Map 5
Forest Map 2011.



Map 6

Coverage Map 2011.



With the input of the FCPF, El Salvador devised a definition of the term *forest*. This conceptualization is essential to conducting the following activities:

- Establishing reference emission levels and/or a reference level.
- Developing the National Forest Inventory (INB).
- Developing the National Greenhouse Gas Inventory (GHGI).
- MRV for the forests and GHGs.

The parameters taken into consideration for the EN-REP in its definition of forest include: i) height of the trees; ii) percent canopy cover (%CC); and iii) minimum surface within the ranges set in the Marrakesh Agreement,⁵⁵ defining forest as land with:

- Minimum surface area between 0.05 and 1.0 hectares (ha);
- Canopy cover (or equivalent population density) between 10% and 30%; and
- Minimum full-growth potential tree height of two to five meters in situ.

The proposal for the forest concept came about in two phases:

Technical proposal of the forest concept for El Salvador

The proposal was drafted through an advising process financed by the FCPF project, whose main output was a **technical proposal of the forest concept** for the country. It sets forth the technical rationale behind this concept and the social, environmental, and economic implications of adopting such a concept. Different sectors involved in the topic were then invited to consult on this definition of the concept.

Decision-makers officially validate the forest concept

⁵⁵ FFPRI, 2012, How to Measure and Monitor Forest Carbon.

http://redd.ffpri.affrc.go.jp/pub_db/publications/cookbook/_img/cookbook_all_low_es_20140214.pdf

The ministries, NGOs, private institutions, and civil society organizations involved in the FCPF project reached a technical consensus as to the forest concept. The technical definition of the forest concept will be presented as soon as possible to the highest-level decision-makers and endorsed through a ministerial decree.

Below is the proposed methodology to develop the reference levels:

1. **Define forest.**
2. **Define the land use and cover classification system.**

In the understanding that the country is opting for an adaptation-based mitigation approach, the land use categories included go into greater detail than those recommended as part of the IPCC framework, although the former are still compatible with the latter.

The classification system began with the Corin Land Cover system, which had already garnered widespread consensus in El Salvador since 2002. It was adapted to the discrimination capabilities of the RapidEye images.

3. Defining the type of satellite images to use

Considering how highly fragmented El Salvador's forests are and that there are many small surface areas where coverage changes exist, the choice was made to work with higher-resolution satellite images than had ever been used before (30-meter Landsat images). To do so, various high-resolution imaging alternatives were considered. The best results in terms of cost and mapping capability were obtained with the RapidEye images.

4. Pre-processing the satellite images

The images were acquired with a high degree of pre-processing, including radiometric and geometric corrections. Once acquired, they went through additional topographic and atmospheric correction procedures. The geometric correction was based on data, references, and the digital elevation model from the National Registration Center (CNR), with the results validated by said entity.

5. Processing, classification, and validation

The processing method used to classify the images combines pixel- and segment-based classification procedures. To do so, semi-automated algorithms were developed to obtain an initial level of classification that is subsequently adjusted and corrected based on field data using a grid of points every 3,000 meters as a validation tool in order to ensure that all classified images adhere to the minimum mapping error, which in this case was set at 15%.

6. Analyzing historical trends

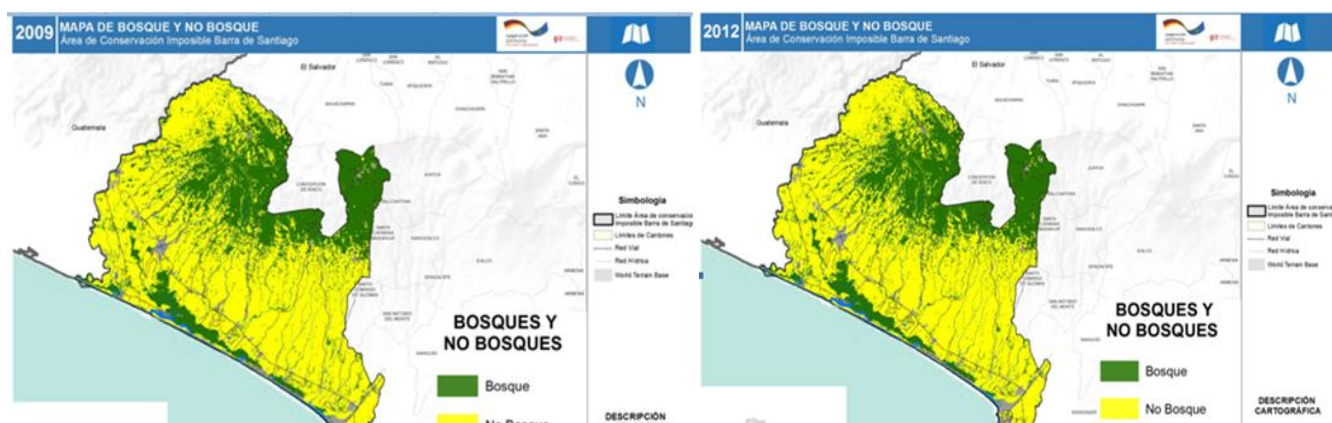
As mentioned before, an initial approach to the dynamics of historical change was conducted using Landsat images for the years 2000, 2005, and 2010.

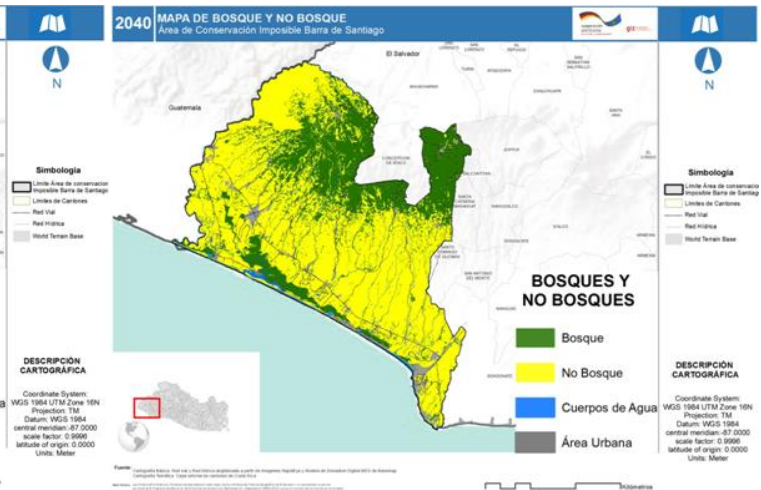
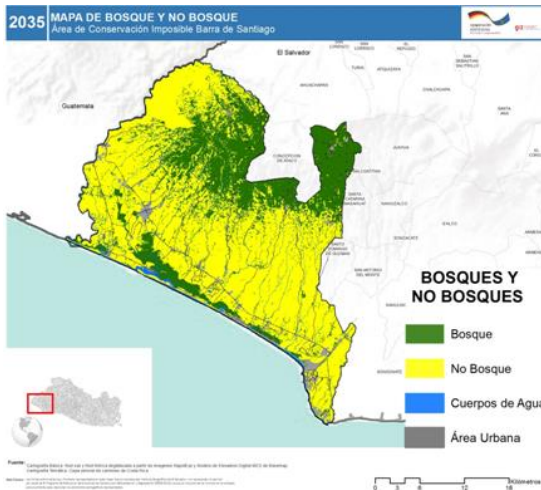
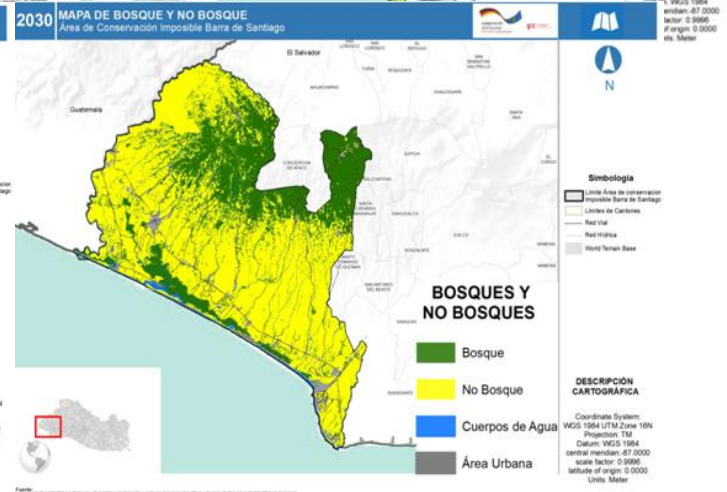
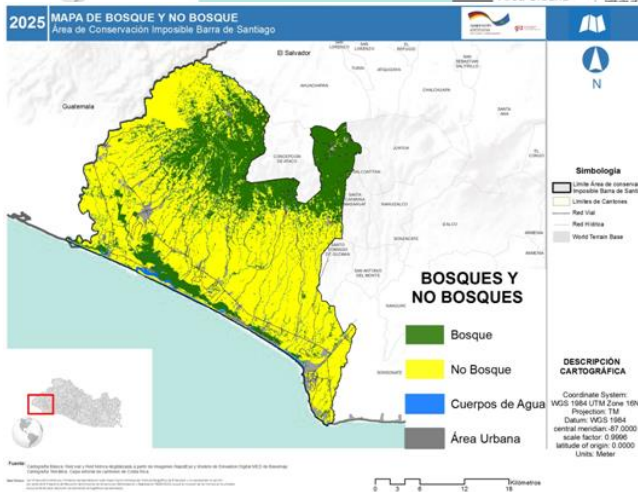
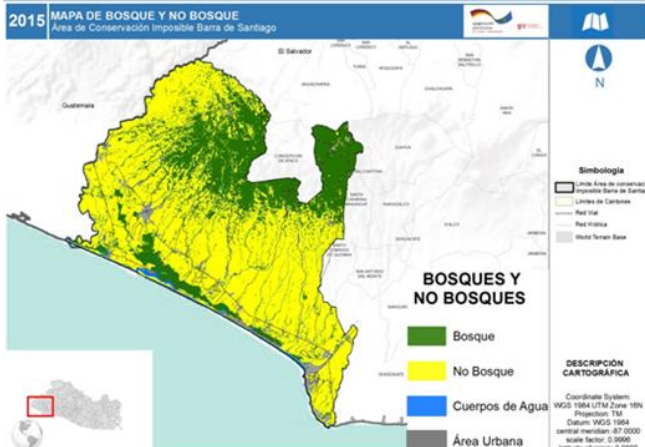
This input relies on a first approximation to the trend, which will be used to build a preliminary national reference level; however, the expectation is for the final reference level to consider the results of the change dynamics obtained using the RapidEye maps as input.

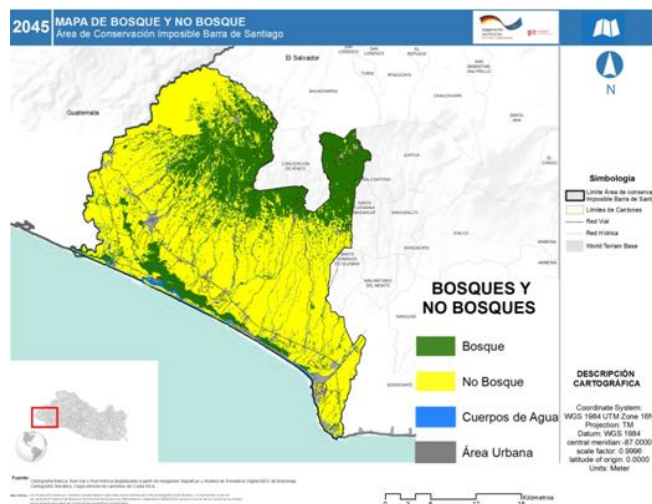
7. Modeling future deforestation

To validate this methodology, changes in land use in the pilot area of Imposible - Barra de Santiago were modeled using the Land Change Modeler software, which has been optimized to estimate carbon based on deforestation, as required in REDD+ pursuant to international standards. The maps below contain the results.

Series of maps from nine simulations







8. Adjustments for national circumstances

The modeling done in the pilot zone did not involve adjustments for national conditions; however, the expectation is that in the process of developing the national reference level, certain special conditions bound up in reforestation processes could be considered. These include, for example, expected impacts from the cacao program, the coffee farming revival, and the expansion of the coastline highway.

9. Defining activities to increase the carbon stock as part of the PREP program

In addition to deforestation, the REDD+ MbA approach entails a series of activities in pursuit of increasing carbon stocks by implementing measures to restore landscapes; these activities include, but are not limited to, the following: agroforestry systems, shrub enrichment, and riverbank and headwater restoration.

In this phase of the process, it is time to map out the various restoration actions defined in each of the territories. The inputs in this stage consist of the results of the planning developed in priority territories with PREP where actions have already begun to be implemented using FIAES funding for advisory services on the GIZ REDD Landscape program. Refer to the attached document to learn more about the method used, the participatory process to define actions, and their mapping.

10. Estimating emission factors

The design posited is to conduct a stratified systematic sampling for the sake of obtaining controlled sampling errors in each of the strata. The maximum sampling error has been set at 15%. As an input for the pre-sampling, there are results from an incomplete forestry inventory that the MAG conducted in 2005.

Moreover, there are also data from plots of land collected in the mangrove forests and information from specific inventories gathered in various zones throughout the country. These data will be supplemented with 120 land plots where data are being collected in the strata for which the least information was available.

These results were used to design the second phase of the National Forest Inventory with the number of definitive plots, which could be adjusted during the process. As of the date of this report, 24 plots have gone through the pre-sampling stage, and the idea is for this first phase to be complete by July 2017.

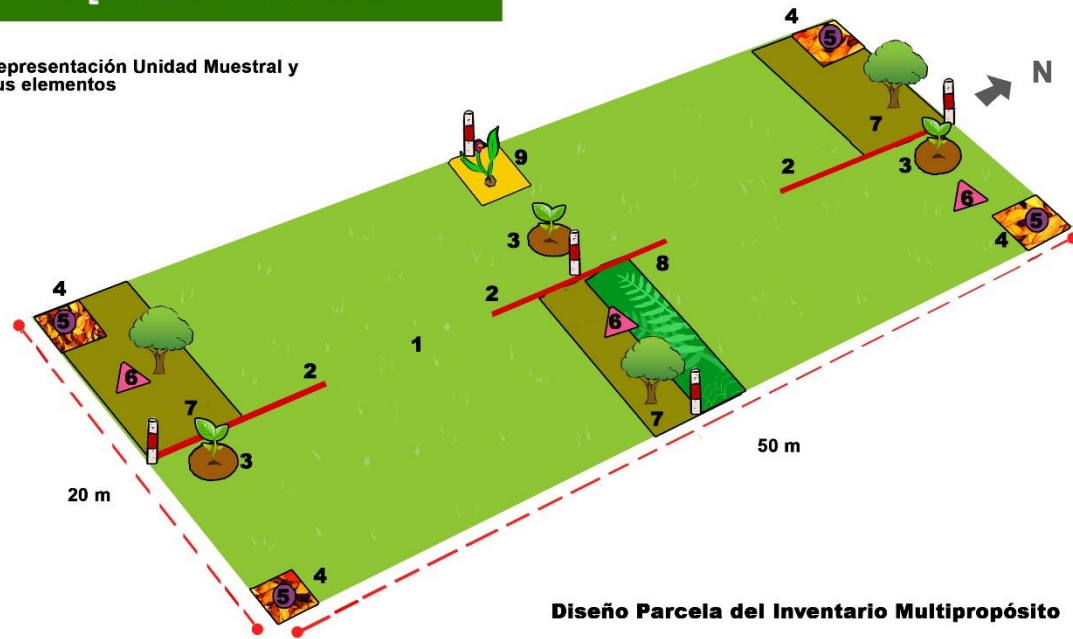
In parallel, the first survey of emission factors has been carried out. They were used to estimate the carbon stock in the pilot zone of Imposible - Barra de Santiago. The fact sheet summarizing the emission factors gathered can be found in the attached documents. In addition, the TdRs are in place to complete the database of emission factors for the entire country.

Figure 1 below shows the main plot and nested plots to determine the carbon stock for each component recognized as a carbon sink.

Figure 1

ESQUEMA GENERAL

● Representación Unidad Muestral y sus elementos



Diseño Parcela del Inventario Multipropósito

1		Parcela principal	4		Subparcela de Hojarasca	7		Subparcela DAP 2-9.9 cm
2		Línea de transecto	5		Punto Muestreo Suelo	8		Diversidad de Arbustos, Lianas, Cañas, Helechos, etc.
3		Subparcela Regeneración	6		Muestreo de densidad aparente	9		Diversidad Herbácea

11. Calculating the carbon stock and its future projection

This is the last step in the methodology to construct the reference level. It entails associating activity data with emission factors to estimate the carbon stock and include it in the land use change model to calculate future forecasts.

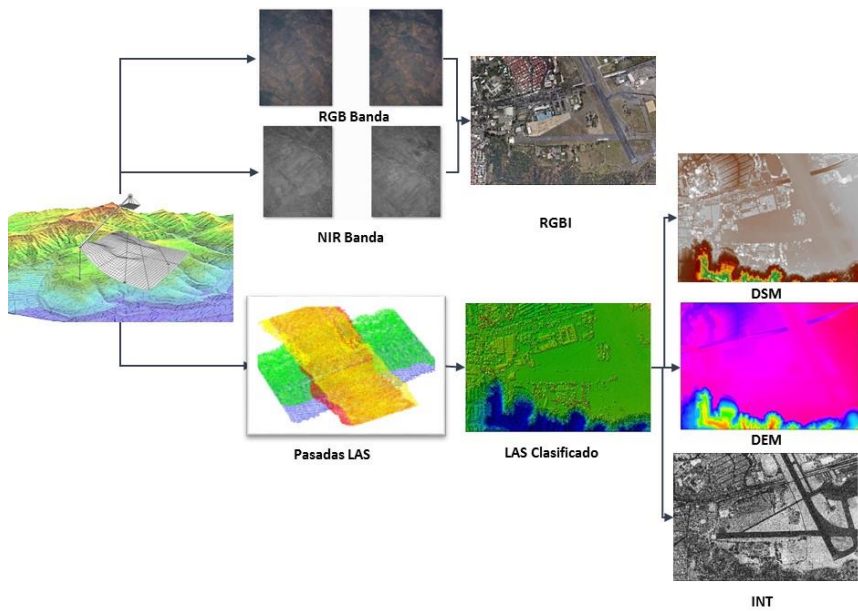
12. Summary of LIDAR products

To date, El Salvador has gathered 100% of the raw and processed data from the LIDAR Imaging and Photometry to Develop Digital Elevation and Orthophoto Surface Models project, 95% validated for the entire country.

The final products are distributed across 21,685 tiles, with each tile representing an area of 1 km x 1 km of the Salvadoran territory. The following products are ready for each square kilometer:

- RGBI Multispectral Image
- DEM Elevation Model
- DSM Surface Model
- Intensity Image
- LAS Point Cloud (Level 2 of the classification)

Layout 2



The point cloud is classified at the level of ground and non-ground, which is necessary to generate DEM. Still pending is to extend the classification so that the vegetation is classified at such a level that it is possible to differentiate between short, medium, and tall vegetation as defined by height.

Applying the LIDAR data in La Montañona, Chalatenango

The software FUSION + lastools was used to process the data. It is an open-source, free, and fairly user-friendly software program that uses code written on Windows NotePad. The objectives of this work are to generate the following products (and corresponding programs):

- Elevation model (DEM)
- Surface model (DSM)
- Relief model (see Fig. 2)
- Canopy height model (see Fig. 3)
- Biomass model (and carbon in the biomass)

Products 1-4 listed above are almost ready. A few issues in the overlaps between the mosaic tiles still need to be corrected.

The process has begun to hire a company to, one, calibrate El Salvador's LIDAR information with other types of images and, two, based on this information, to calculate the biomass using existing data in order to create annual biomass maps; this would be a second source of biomass information.

Figure 2

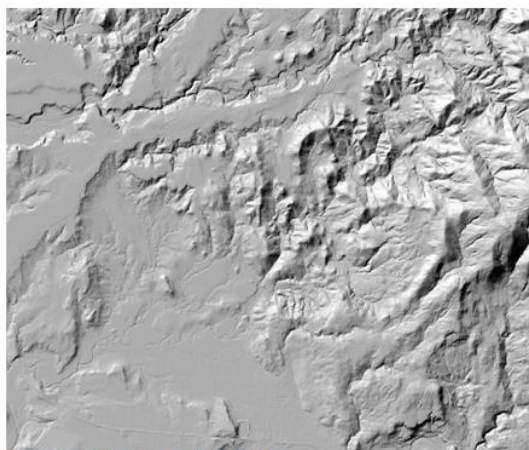
Below is an example of the lastools code with FUSION (in Notepad)

```

15
16 :: Create folders if they don't exist
17 IF NOT EXIST %f_out% MKDIR %f_out%
18 IF NOT EXIST %f_out%\1_pts_sorted MKDIR %f_out%\1_pts_sorted
19 IF NOT EXIST %f_out%\2_tiles MKDIR %f_out%\2_tiles
20 IF NOT EXIST %f_out%\3_tiles_filtered MKDIR %f_out%\3_tiles_filtered
21 IF NOT EXIST %f_out%\4_tiles_classified MKDIR %f_out%\4_tiles_classified
22 IF NOT EXIST %f_out%\5_tiles_DTM MKDIR %f_out%\5_tiles_DTM
23 IF NOT EXIST %f_out%\6_tiles_norm MKDIR %f_out%\6_tiles_norm
24 IF NOT EXIST %f_out%\6_tiles_norm\filtered MKDIR %f_out%\6_tiles_norm\filtered
25 IF NOT EXIST %f_out%\7_norm_nb MKDIR %f_out%\7_norm_nb
26 IF NOT EXIST %f_out%\7_norm_nb\tile_list MKDIR %f_out%\7_norm_nb\tile_list
27 IF NOT EXIST %f_out%\8_rasters MKDIR %f_out%\8_rasters
28 IF NOT EXIST %f_out%\9_chm MKDIR %f_out%\9_chm
29 IF NOT EXIST %f_out%\9_chm\dtm MKDIR %f_out%\9_chm\dtm
30 IF NOT EXIST %f_out%\9_chm\asc MKDIR %f_out%\9_chm\asc
31 IF NOT EXIST %f_out%\9_chm\pitfree MKDIR %f_out%\9_chm\pitfree
32 IF NOT EXIST %f_out%\9_chm\pitfree\tmp MKDIR %f_out%\9_chm\pitfree\tmp
33 IF NOT EXIST %f_out%\10_metrics MKDIR %f_out%\10_metrics
34 IF NOT EXIST %f_out%\11_plots MKDIR %f_out%\11_plots
35 IF NOT EXIST %f_out%\12_plot_metrics MKDIR %f_out%\12_plot_metrics
36 REM pause
37
38
39 :: Sorting ::
40 :: Sort points first to make the processing faster. Pointcloud is stored as LAZ
41 REM lassort -i %f_in%\*.laz -lcc 500000.00 295809.184 meter 13.78333333333334 -89.000 13.31666666666667 14.250 -ellipsoid 5 -odir %f_out%\1_pts_sorted
42 REM pause
43
44 :: Tile pointcloud ::
45 REM lastile -i %f_out%\1_pts_sorted\*.laz -odir %f_out%\2_tiles -o tile.laz -files_are_flightlines -tile_size %tile% -buffer 40
46 REM pause
47
48 :: Filtering ::
49 REM lasnoise -i %f_out%\2_tiles\*.laz -step_xy 2 -step_z 1 -isolated 15 -odir %f_out%\3_tiles_filtered -olaz -cores 2
50 REM pause
51
52 :: Classify ground ::
53 :: Important here is the step size. If there are many artifacts in the result try increasing it.
54 :: step = 2 was better to avoid missing ridgetops but classified veg as ground in flat areas)
55 :: See manual here: http://www.cs.unc.edu/~isenburg/lastools/download/lasground\_README.txt
56 :: It is very important to check results at this stage and modify parameters in case of any problems.
57 REM lasground_new -i %f_out%\3_tiles_filtered\*.laz -ignore_class 9 -odir %f_out%\4_tiles_classified -olaz -cores 2 -all_returns
58 REM pause
59
60 :: Create DEM ::
61 :: Here the step value indicates the resolution of the DTM (Digital Terrain Model)
62 :: Decided on step = 5 to reduce file size and match RapidEye
63 :: Alternatively a fusion command can be used here, let me know if needed.
64 :: Now pulling from fusion classified, must change to tiles filtered if using pre-classified files
65 REM lasdem -i %f_out%\4_tiles_classified\*.laz -keep_class 2 -step 5 -kill 200 -use_tile_bb -odir %f_out%\5_tiles_DTM -otif -cores 2
66 REM pause
67

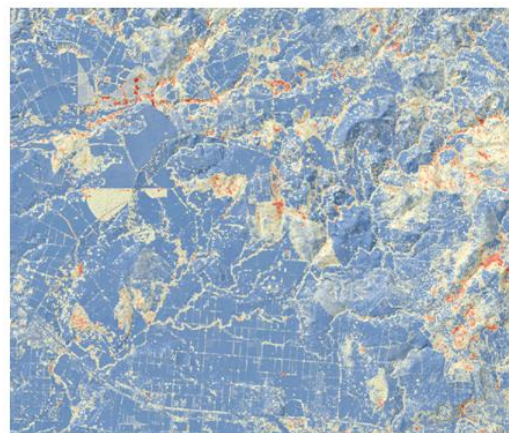
```

Map 7



Un modelo de 'hillshade', a resolución de 5 m

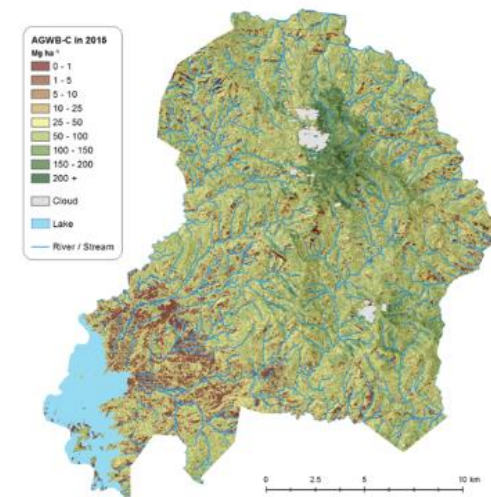
Map 8



Un ejemplo del modelo de canopy, a resolución 5 m

Map 9

Carbon Stored in Aboveground
Woody Biomass (AGWB-C)
2015



Borrador de un mapa de biomasa usando LiDAR+RapidEye (5 m) por la Montañas

Criterion 26: Demonstrating the methodology

In the Impossible - Barra de Santiago pilot zone, an initial reference level has been created as part of the efforts to draft the PDD for the project pursuant to the requirements of the Gold Standard voluntary carbon market standard, and also taking into account the development of methods and protocols that provide inputs to develop the national reference level pursuant to IPCC guidelines.

The subnational reference level has led to the development of the protocols that will be needed for the national reference level. These protocols were tested in the pre-sampling stage of the project, currently under way this quarter (April-June 2017).

CATIE has been contracted to develop training modules about the reference levels and how to obtain them with training days to fortify skills so that the institutions involved will be better prepared for measurements coming up in the future.

3.B Means of verification

Activities to increase the stock, which entail applying Afforestation, Reforestation, and Revegetation (ARR) methods, shall basically be verified in highly degraded forest and non-forest areas. For their part, more generic protection and conservation actions, and generally speaking, actions related to overall area management, will lead to emissions reductions by ensuring that deforestation is not prolonged over time.

Criterion 27: Using historical data and data adjusted to national circumstances

As mentioned before, an initial approach to the dynamics of historical change was conducted using Landsat images for the years 2000, 2005, and 2010. This input provides a first approximation of the trend, which can be used to build a preliminary national reference level.

However, the idea is for the final reference level to draw on the results of the change dynamics obtained from the RapidEye (2011-2016) maps, which is why CATIE has been hired to develop the RapidEye 2016 forest cover map and the historical change trend as compared to the 2011 map, which is already in place.

The ultimate objective is to define and validate the methodology developed subnationally in the pilot zone with a multi-timeframe analysis using RapidEye images for the years 2009, 2011, and 2015.

The process and methods used to develop the reference scenarios will be documented transparently, and when everything is complete, the final results should be published at the end of 2017 on the MARN and M-REP websites. The information will be made available to the public to search or use in building other byproducts.

Criterion 28: Technical viability of the approach and alignment with the UNFCCC's/IPCC's orientation and guidelines

Reference levels are based on transparent, complete, accurate and compatible information. The final version of the FREL document will be submitted to the UNFCCC for revision and approval in January 2018 using the RapidEye products. Moreover, the reference levels will be submitted to the UNFCCC so that experts can carry out a technical review.

- The land use coverage maps reflect the minimum categories mandated by the IPCC: forestry lands, wetlands, farmlands, and grasslands in a single class, settlements, and other lands.
- The Monte Carlo method will be used to calculate uncertainties.

3.C Training and capacity-building

A technical team has been assembled with representatives from the institutions engaged in the topic, including: the MAG, universities, environmentalist NGOs, the Ministry of the Environment, and more. The Technical Team has undergone eight training sessions since 2012 in matters relating to REDD+, MRV, and Reference Levels. To date, 27 professionals have gone through training.

Under the auspices of the REDD/CCAD/GIZ program, a diploma course was offered in forestry monitoring. Two people from the Ministry of Agriculture and Livestock have taken part.

Table 6: Summary of training

#	Training	Num. people trained	Women	Men
1	Defining REDD Forests	17	2	15
2	Methods for the National Forest Inventory	27	2	25
3	Automated RapidEye Image Management	13	2	11
4	REDD and MRV Background	19	3	16
5	Inputs to Design and Implement an MRV	21	5	16
6	MRV Team Planning	16	4	12
7	MRV Team Operational Meetings	18	4	14

8	Deforestation Trend Analysis Methods	18	3	15
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Componente 4 FOREST MONITORING AND SAFEGUARDS INFORMATION SYSTEM

Subcomponente 4.A National forest monitoring system

The National Forest Monitoring System generates information to compare changes in forests' size and carbon content (as well as associated GHG emissions) vis-à-vis the baseline estimates used to calculate NERFs/NRFs. This is a robust and transparent system that bolsters forest management and brings about additional measures to tackle deforestation and forest degradation.

Non-carbon aspects identified by the country as priorities have been specified on the R-PP and will be monitored. The information system for multiple benefits, other impacts and safeguards management is capable of reporting on how safeguards are addressed and followed during the implementation of REDD+ activities, with special attention given to the specific monitoring provisions in the country's ESMF. In this regard, CATIE has been requested to develop a co-benefit monitoring system that the country can use for future measurements.

Next steps

- Conclude the monitoring system designed for the EN-REP and make it a part of a comprehensive national monitoring system, which includes keeping track of national landscape restoration measures.
- Develop and apply the monitoring system based on remote sensing.
- Design an initial methodology and protocols for monitoring degradation using variables associated with co-benefits generated within the framework of PREP actions. These will be delivered by CATIE by September 2017.
- Design a capacity-building plan after assessing current capacities to keep improving the country's monitoring capabilities.
- Strengthen the EN-REP monitoring system, which includes keeping track of national landscape restoration measures.
- Conduct a pilot project to implement the MRV system.

Additional funds

- MRV piloting.
- Integrate the Safeguards Information System with carbon monitoring and co-benefits monitoring.
- Carry out communication campaigns to strengthen the capacities of the Local Environmental Observer Network (LEON) and adopt a communication for development approach to improve community monitoring activities.

JUSTIFICATION

The consolidation of a monitoring, reporting and verification system will be funded to integrate the different modules of information and monitoring systems (co-benefits, forest management, carbon, safeguards and financial) as well as activities aimed at monitoring territorial and national levels.

Most of these activities will be undertaken by consultants, with the condition of generating national capacities and obtaining tangible products in the form of a comprehensive system capable of linking different existent systems so that different national and international users can perform searches of temporal, dynamic and static information concerning forests, activities and stakeholders.

Although the ecosystems and landscapes MRV system is currently in the design phase of the Terms of Reference, once it is functioning at national and subnational levels, adjustments would have to be made for its operation.

4.A.1 Scope

The co-benefits monitoring system is being designed by CATIE, with the support of other institutions that are also working to respond to Project Implementation Unit of the MARN project requirements, such as IUCN and the World Resources Institute (WRI). This implies that, in addition to the monitoring of emissions related to REDD+ activities, the system also keeps track of the landscape restoration measures executed within the PREP framework. In this sense, monitoring is being carried out at two scales: national and subnational levels.

4.A.2 Components

Following the IPCC guidelines, the monitoring system combines monitoring with field data collection.

The first component corresponds to monitoring based on remote sensing in which two sources of satellite images are used: 30-meter resolution Landsat images and 5-meter resolution RapidEye images. RapidEye images are being used to draw the national land cover map and the forest type map aimed at obtaining accurate information regarding cover changes at national and subnational levels with a 5-year periodicity.

Landsat images are being used to know the historical behavior of forest cover before 2010. The main reason is because, before this year, there are no higher resolution images available. To date, there are some historical analyses based on Landsat imagery for the years 2000, 2005 and 2010 and the plan is to continue with these analyses with a 2-year periodicity.

The objective is to be able to count on intermediate measurements on areas of change and undertake early actions without having to wait for the high resolution map developed every 5 years. With these remote sensing measurements, the activity data component would be estimated in accordance with the IPCC definitions.

The second monitoring component is that of emission factors which will combine field data extracted from the National Forest Inventory (INB) and secondary data sources. This will make it possible to obtain factors that are not initially available, such as allometric functions. In these cases preference will be given to the use of secondary data available in the Central American region.

A third component is the monitoring of co-benefits, which will use part of the information generated by remote sensing and that in the INB, but also considering modeling components and the use of other field data collection tools. As mentioned earlier, CATIE is responsible for designing this mechanism.

4.A.3 Measurements and variables

The EN-REP activities will be monitored through changes in carbon stocks expressed in CO₂ equivalents emissions from the five deposits established in the IPCC guidelines: aerial biomass, underground biomass, dead wood, litter and soil organic matter.

Regarding activity data, although changes will be detected in detailed categories for reporting purposes, they will be grouped according to the six land use categories established in the 2006 IPCC guidelines: forest land, cropland, grassland, wetland, settlements, and other land.

Activities related to carbon stock changes will be focused on monitoring deforestation and increasing forest cover through reforestation and the implementation of agroforestry systems.

4.A.4 Accuracy

Accuracy in carbon stock estimation corresponds to level-2 accuracy on the IPCC classification, which refers to the use of country-specific data, in other words, data compiled within national boundaries. Regarding the National Forest Inventory specifically, a sampling error of no more than 15% is expected for each CO₂ equivalent measurement. Similarly, the forest type mapping is expected not to exceed 15% of error. There will be no accuracy target for co-benefits measurements, as they will depend on the available information sources.

4.A.5 Monitoring REDD+ activities

EN-REP activities to be monitored:

Implementation:

Measuring changes in carbon stocks at the national level:

The monitoring system to be implemented in the country is based on the UNFCCC guidelines regarding forest monitoring systems and the monitoring of GHG emission and removal.

Currently, an inter-institutional technical team, led by the MARN and the MAG's Forestry Directorate together with the UES, is working on a national monitoring system design primarily based on an emission and removal baseline. In addition, the team also proposes different technical and administrative instruments aimed at monitoring changes in land use and emission factors in a robust, transparent and sustainable manner. By doing this, it shall comply with EN-REP and landscape restoration requirements, based on reference levels set out in component 3.

The Geographic Information Visualizer for Environmental Assessment (VIGEA)

<http://mapas.marn.gob.sv/vigea/login.aspx> is used for monitoring restoration actions and their impacts. This tool displays the restored areas, the type of restoration carried out and the restored ecosystem services.

The proposal is based on a step-by-step approach to evaluate and calculate GHG emissions for the Land Use, Land Use Change and Forestry sector (LULUCF) at both national and subnational levels. This gradual approach will allow to develop a national data registry with official data from subnational areas.

To achieve this, clear protocols shall be defined in order to ensure coherence of information gathered in different areas. In addition, emission monitoring throughout the national territory shall be carried out every ten years, using as its main tools the national land cover map and the National Forest Inventory. Currently, the National Forest Inventory protocol has already been validated.

In summary, the steps for each monitoring event are the following:

- Elaborate a national land cover and forest type map by October 2017. This is the basis for defining sampling strata and detecting changes in land cover in relation to previous monitoring events.
- Distribute sampling units within each stratum, using a systematic sampling method with equidistant plots. Scheduled for August 2017.
- Process information to select the most interesting variables for each stratum in the INB. To do this, a computer platform with statistical analysis capacity should be used. The platform should be available by July 2018.
- Estimate carbon stock differences with respect to previous measurements and calculating emissions and absorptions within this period. Results should be available by June 2018. As an additional measure, National Forest Inventory data will be correlated with 2014 LIDAR data mapping available for the entire national territory.

4.A.6 Defining institutional roles and key players for monitoring

In the process of collecting and analyzing data, the roles of relevant institutions have been clearly identified and described below:

Table 7: Institutions and roles

INSTITUTION	ROLE
MARN	<ul style="list-style-type: none"> • Coordinate and conduct the monitoring process. • Elaborate and update the national land cover map. • Coordinate the National GHG Inventories. • Prepare and submit reports to the UNFCCC.
MAG, through the Directorate for Forest Management, Watersheds and Irrigation.	<ul style="list-style-type: none"> • Implement the IFN, incorporate guidelines for the monitoring of emissions established in the protocols agreed with the MARN. • Validate the national land cover map. • Monitor the different field activities related to forest monitoring.
University of El Salvador (UES)	<ul style="list-style-type: none"> • Participate in the elaboration and update of the methodological protocols for emissions monitoring, as well as supervision and quality control. • Provide technical support for soil and litter carbon analysis.
Museum of Natural History (MUHNES)	<ul style="list-style-type: none"> • Support species identification • Help with the storage of samples.
National University of El Salvador (UES)	Process samples to obtain information, especially regarding soil density and soil and litter carbon content

Different institutional supports have been formalized by agreements and Letters of Understanding. To date, the following agreements have been signed: MARN-UES LOU; designation of a MAG official for the INB and a MARN-MUHNES LOU.

To ensure monitoring system sustainability, a capacity-building plan will be developed based on a diagnosis of current capacities, which will provide a clear short-, mid- and long-term perspective of how to enhance the country's monitoring capacity.

4.A.7 Monitoring of co-benefits of EN-REP with MbA approach.

El Salvador is committed to developing a comprehensive system to monitor the country's vegetation resources and their multiple benefits as part of an environmental monitoring system capable of integrating data from different sources and providing a clear picture of the country's environment and natural resources with respect to official indicators.

Emissions-related indicators, as well as those linked to multiple benefits, will be integrated in a computerized system. This information system will be connected to different platforms and will extract relevant information and integrate it into a single data warehouse. In other words, there will be a certified institutional database from which different indicators will be tabulated and then made available to different types of users, including a web platform where the general public will be able to see the current and historical status of each indicator in a transparent manner.

The co-benefit monitoring system is being designed by CATIE as an integral part of this comprehensive monitoring scheme. The works have started in 2017 and, besides identifying the variables and protocols for monitoring of co-benefits, a capacity-building plan shall be developed and executed to ensure the system's sustainability.

Criterion 29: Documentation of the monitoring approach

Within the framework of the FCPF Project, the *Monitoring System Guidelines* have been developed, which will serve as a basis for designing the National MRV System. A consulting firm is being hired to support the government in designing this system.

The National MRV System is expected to provide information on an ongoing basis with regard to the qualitative and quantitative variables of GHG emissions, non-carbon benefits, management and applicable safeguards of EN-REP measures. This should be done in a transparent manner under the Environmental and Social Management Framework (ESMF).

The exchange of information will be carried out by a system connected to different platforms, which will extract relevant information and integrate it into a single data warehouse. In other words, there will be a certified institutional database from which different indicators will be tabulated and then made available to different types of users, including a web platform where the general public will be able to see the current and historical status of each indicator in a transparent manner.

During the National MRV System design, the methodology and its improvement over time have been justified analytically by combining remote sensing and inventory systems, resolution, coverage and accuracy of the systems, among others. It will also identify possible sources of uncertainty as far as possible.

Criterion 30: Demonstration of the system's early execution

A first level of capacity has been created and needs to be strengthened to establish a mechanism for monitoring the EN-REP's priority activities. The definition of indicators for co-benefits monitoring is not yet considered within the early execution.

In the Ahuachapán Sur subnational area, numerous methodologies have been applied in pilot projects coordinated by the MARN and GIZ. There are national forest cover maps with RapidEye 2011 images, which will be compared with RapidEye 2016 maps, currently under construction.

Criterion 31: Institutional mechanisms and capacities

During data collection and analysis, the roles of relevant institutions have been clearly defined. The formalization of different institutional supports is being carried out through agreements and letters of understanding. To ensure monitoring system sustainability, a capacity-building plan will be developed based on a diagnosis of current capacities, which will provide a clear short-, mid- and long-term perspective on how to progressively enhance the country's monitoring capacity.

Different institutional supports have been formalized by agreements and Letters of Understanding. To date, LOUs have been signed between the MARN and the MAG and between the MARN and the MUHNES.

Subcomponente 4.B Information system for multiple benefits, other impacts, management and safeguards

Criterion 32: Identification of relevant non-carbon aspects and social and environmental issues

With the FCPF's financial support, CATIE has been hired to help with the National MRV System design, including a co-benefits monitoring system.

This National MRV System will address issues related to GHG emissions, non-carbon benefits and REDD+ management and safeguards. The system is being designed in coordination with other institutions involved in the FCPF project in order to ensure its institutionalization and approval. The National MRV System will be under the Ministry of Environment and Natural Resources' responsibility.

With respect to the implementation of FCPF's Common Approach to Environmental and Social Safeguards, the National Team for the Safeguards System Coordination has been working since November 2016. The team is composed of different social sectors, government institutions, MNIMA representatives and PREP technical staff, with whom workshops were held to improve safeguards management capacities for the EN-REP.

Also, in March 2017, the National Safeguards System Committee was formed with representatives of private companies, government institutions, women's organizations, farmers, academics, indigenous people, among others, who worked on a road map for setting up this national system. As part of the plan, a workshop on the implementation of FCPF's Common Approach to Environmental and Social Safeguards was held in June this year and two more are scheduled for July aimed at strengthening their capacities.

The CARE regional program was hired through a consultancy contract to assist the EN-REP technical team in developing the SESA process and setting up the ESMF and the National Safeguards System.

Criterion 33: Monitoring, reporting and exchange of information.

The methodology and activities for establishing the MRV system are shared with the responsible institutions and all documents are publicly accessible.

The MARN has a system based on the Environmental Observatory, which provides information through social media, websites, national and commercial TV and radio stations regarding water resource management and vulnerability.

Criterion 34: Institutional mechanisms and capacities

Institutional improvement needs have been identified for developing and implementing initiatives related to co-benefits, as well as the themes that need to be addressed in order to increase the knowledge of the experts and stakeholders responsible for the system's implementation.

Participant institutions (MARN, MAG, FIAES and UES) are working on defining indicators for co-benefits monitoring with the support of CATIE, IUCN, WRI and PRISMA.

The promotion of initiatives for restoration and conservation of forest ecosystems, afforestation and reforestation activities, as well as actions to address the causes of deforestation and the degradation of forest ecosystems in the intervened landscapes will require coordination among different institutions and actors at different scales, to ensure full participation and support. The Ecosystems and Landscapes Restoration Program is led by the Environmental Sustainability and Vulnerability Cabinet, which is coordinated by the Minister of the Environment and Natural Resources, and is composed of key Ministries such as the Ministry of Agriculture and Livestock, Ministry of Tourism, Ministry of Public Works, Ministry of Interior, Secretary of Vulnerability, President of the National Association of Aqueducts and Sewers, and Director of Civil Protection.

It is a platform of political advocacy and inter-ministerial coordination of high level, that will allow to attend and follow better to the international commitments and to the national agenda of Climate Change and Risk Management, and looks for synergies in the actions of reduction of the Social and environmental vulnerability and building resilience and adaptation. The Cabinet is coordinated by the Minister of Environment and Natural Resources, who reports to the President of the Republic and is composed of the Heads of State institutions already mentioned.

In order to create and establish an optimal scenario for the restoration and conservation of forests and forest ecosystems, the Restoration Program adopts a highly participatory implementation strategy, involving all relevant actors in the territories to intervene. From the identification of priority areas for restoration, to the planning and execution of restoration actions, as well as the maintenance of restored ecosystems and landscapes. The President of the Republic, Salvador Sánchez Cerén, officialized the National Council on Environmental Sustainability and Vulnerability (CONASAV) as an independent, consultative, dialogue and consensus-building body on environmental sustainability and vulnerability, with the objective of reaching and signing agreements and commitments Of short, medium and long term, in the areas of environmental sustainability and vulnerability.

CONASAV is made up of leaders and representatives from different sectors of society, such as political parties, academia, think tanks and research centers, private companies, municipalities, nongovernmental organizations, churches and people with capacity and experience in the area of sustainability and Environmental vulnerability, in addition to representatives of the Central Government and has the support and support of International Organizations and Cooperation Agencies.

The Environmental Sustainability and Vulnerability Council (CONASAV) established a work agenda that included work on eight themes: risk management, water security, climate change, sanitation, environmental management of the territory, environmental education, green economy and restoration of forest ecosystems And landscapes. In order to implement the relevant agenda and initiative, CONASAV has set up thematic roundtables, composed of members of the Council and its technical teams. CONASAV identified the Ecosystems and Landscapes Restoration initiative to promote articulation among sectors and carry out actions in the territory and established the Reforestation Table so that, under a collective construction process, a Reforestation Plan for critical and priority sites for the country. This plan was launched on June 5, 2017, with an initial goal of planting 1,000,000 in the months of June and July. The goal has been met with a mobilization of 186 organizations, institutions and companies, more than 15,000 participants and 97 sites reforested throughout the country.

SECTION 3: REVIEW OF EL SALVADOR'S COMPLIANCE WITH THE COMMON APPROACH

El Salvador is compliant with FCPF's Common Approach regarding the application of environmental and social safeguards. This approach mandates the use of the following four instruments:

- SESA/ESMF
- Principles for effective participation of main stakeholders
- Information disclosure policies
- Mechanisms for managing feedback and complaints and enforcing accountability

Section II of this report details how El Salvador has been applying these instruments. A summary of each instrument is presented below.

3.1 SESA/ESMF

When drafting the R-PP document, meetings were held to develop the SESA based on the activities initially proposed. During this period, the SESA work plan was also formulated. To do that, the MARN summoned relevant national sectors and players: 1) academy and research centers; 2) international cooperation institutes and environmental and development NGOs; 3) indigenous organizations and communities; 4) forest owners; 5) government institutions; 6) forest beneficiaries and consultants; 7) coffee farmers 7) sustainable agriculture NGOs and farmers.

3.2 Principles for effective participation of main stakeholders

Following up on the results of consultation meetings with various stakeholders involved in ecosystem and landscape restoration, El Salvador has established the parties responsible for conducting and implementing actions pursuant to the country's environmental and social vulnerability and sustainability. These include the Environmental Sustainability and Vulnerability Office and the CONASAV. Also a dialogue process has been implemented at the subnational level. These dialogues and consultations have resulted in 63⁵⁶ activities involving 206 nationally relevant entities.

It is important to point out that three consultation workshops were held with indigenous peoples (one in the western zone, one in the central zone and a third in the western zone of the country) to review the strategic options and guarantee the participation of the different indigenous peoples.

During the 63 activities, 2204 people participated, of which 746 are women.

At the inter-institutional level, the MARN has signed an agreement with the Ministry of Education for the creation of Green Networks and Classrooms, a program promoted under the communication strategy of the EN-REP as part of its knowledge management component.

The ratification of the commitment by national and territorial stakeholders to participate in the dialogue and consultation process took place, with the following objectives: a) building the National Strategy for Ecosystem and Landscape Restoration; b) preparing the SESA; c) building the Environmental and Social Management Framework (MGAS); and d) developing the Safeguards Information System (SIS).

The Safeguards Facilitating Team (EFS) and the National Safeguards Committee (CNS) was established. Training has already started with both organizations to develop a common language on safeguards and its components. A road map is also being designed for implementation in each territory.

⁵⁶ MARN, 2017, Systematization of organization, communication and consultation meetings

3.3 Information disclosure policies

Communication guidelines have been drawn up for this strategy based on the communication for development and social change approach. Moreover, actions have been started to guarantee the exchange and fluidity of information during the different consultation processes carried out with the sectors that make up the CONASAV's Ecosystems and Landscapes Restoration Roundtable.

With regard to communication, emphasis has been given to reinforcing dialogue processes during the information and consultation workshops held with local stakeholders, communities and indigenous organizations. In this sense the necessary mechanisms have been created to maintain permanent feedback channels.

To date, the main achievements in terms of communications are:

- Training of more than 200 people on communication for development.
- Local radio campaigns on the main drivers of deforestation and degradation to raise awareness on the issue and promote participation in the search for solutions.
- National survey on the perception of communities regarding the MARN communication strategy.
- Strengthening of institutional capacities regarding the management of communication for development.
- Support to the CONASAV's Restoration Roundtable in elaborating, developing and executing the national volunteer programs and sponsorship for the PLANTATÓN initiative. This effort will be replicated every year on June 5th, applying EN-REP restoration techniques through a practical approach.
- Communication strategy impact assessment⁵⁷

3.4 Mechanisms for managing feedback and complaints and enforcing accountability

Through the open government system and the Information and Response Office, the MARN continues to serve citizens and remains connected to public and self-regulated institutions in order to guarantee a timely response to complaints and allegations of misconduct.

Any citizen can access the MARN's information system on a web platform. Also, at the Information and Response Office (OIR), people can request specific information that is delivered in a classified manner and in clear terms for the petitioner's comprehension.

The Municipal Environmental Units (UAM) coordinate inspections following environmental misconduct allegations received by the MARN to provide more detailed information on the issues reported. This mechanism is part of the EN-REP complaints and grievances follow-up system.

New tools and communication channels are being developed to improve the processes of consultation, information transfer and to better address citizens' complaints during the EN-REP implementation, namely the following:

MARN complaints system

The MARN has a continuously improving tool to address complaints and grievances.

⁵⁷ MARN, 2017, Communication Strategy.

3.4.1 Complaints system

Channels

Telephone: Call 919

E-mail: denuncias@marn.gob.sv

Website: <http://apps.marn.gob.sv/denunciaspublicas>

Social networks: www.facebook.com/marn.gob.sv

Twitter: @MARN_Oficial_SV

Face to face: Complaint centers

An office has been set up in three regions of the country to handle complaints related to ecosystem restoration. This office has three territorial experts hired with FCPF funds to address and follow up any complaint related to the EN-REP. They are responsible for documenting the process and identifying gaps and inconsistencies.

SECTION 4: UPDATED FINANCING PLAN FOR GENERAL READINESS ACTIVITIES

FCPF funds have been essential in moving forward with the project's five components, organizing and making consultations aimed at REDD+ readiness, developing the EN-REP, establishing reference levels, setting up the national forest monitoring system and the framework for monitoring, assessing and managing donations, as described in this report. The project has secured 64% of committed investment.

In addition, GIZ has provided support on issues related to developing the tools used for the national forest inventory survey. It has also helped to develop subnational models regarding reference levels, MRV and the incentives and compensations mechanism used in southern Ahuachapán. Moreover, GIZ has contributed to institutional strengthening by providing regional training in different REDD+ and MbA approach issues.

Resources from the RCCP project have been used in developing a restoration opportunity map and assessing sustainable ROAM practices. At present, support is focused on coordination with CATIE to establish the co-benefits monitoring system. The project has worked specifically with CARE on organizing the Safeguards Committee and a road map for the safeguards information system.

The following table (Table 8) describes the use of funds

Uses of Funds (in US\$ thousands)							
R-PP Component	Total needed (A) ^[1]	Funds pledged (B) ^[2]	Funds used ^[3]		Funds available (= B – C) ^[4]	Financing gap (= A – B) ^[5]	Request to FCPF ^[6] (if any)
			Funds Committed (C)	Funds Disbur-sed			
(A) Organization and Consultation for REDD+ Preparation							
(i) National readiness management arrangements	318.00	\$213.00	\$213.00	\$163.00	\$00.00	00.00	
(ii) Exchange of information and early dialogue with key stakeholders.	730.00	\$251.00	251.00	\$187.00	\$00.00	479.00	\$450.00

^[1] Total needed is the amount of resources necessary to complete a given component. All numbers in this table should be the latest numbers, which may not necessarily match the numbers in the original R-PP that was presented to the PC.

^[2] Funds pledged encompass the amount of funds promised by different donors and / or the national government to fund a specific component and available to the country.

^[3] Funds used refer to the amount of funds committed in signed contracts, and the portion of the funds committed that has already been disbursed.

^[4] Available funds equal pledges minus commitments.

^[5] Financing gap equals total needed minus pledged funds.

^[6] Request for additional funding from the FCPF (up to US\$ 5 million, subject to conditions set by Resolution PC/10/2011/1.rev being met).

(iii) Consultation and participation process and citizen assistance mechanism	810.00	\$410.00	291.00	\$264.00	\$119.00	400.00	\$200.00
(b) National Strategy for Landscapes and Forest Restoration (REDD+ Strategy)							
(i) Causes of deforestation and ecosystem degradation	150.00	\$149.00	\$117.00	\$32.00	\$32.00	1	
(ii) Options for the National Strategy for Landscapes and Forest Restoration (REDD+ Strategy)	450.00	\$150.00	\$30.00	\$30.00	\$120.00	300.00	\$200.00
(iii) REDD+ implementation framework	600.00	\$150.00	\$42.00	\$32.00	\$108.00	450.00	\$40 0.00
(iv) Social and environmental impacts (SESA and ESMF)	365.00	\$300.00	\$113.00	\$113.00	\$187.00	0.00	
(c) National Forest Reference Level / National Forest Emissions Level							
(i) Forest definition	12.00	\$12.00	\$12.00	\$12.00	\$0.00	0.00	
(ii) Inventories	663.00	647.00	\$647.00	\$173.00.	00.00	0.00	
(iii) Institutional capacity	680.00	\$180.00	\$180.00	\$122.00.	00.00	400.00	\$400.00
(d) National Forest Monitoring System							
(i) National Forest Monitoring System (NFMS)	760.00	\$360.00	\$302.00	\$100.50	\$58.00	300.00	\$300.00
(ii) National information system for multiple benefits, other impacts, safeguards and governance	1050.00	\$496.800	\$0.00	\$0.00	\$496.80	553.20	550.00
(e) Grant monitoring, assessment and management framework							
(i) Design of a monitoring and assessment framework for readiness phase	55.20	\$55.20	\$22.50	\$20.20	\$32.70	0.00	
(ii) Institutional strengthening for donation implementation	186.00	\$191.00	\$186.00	\$164.00	15.00	0.00	
(iii) External evaluations and audits	25.00	\$25	\$6.78	\$0.00	\$18.22	0.00	
TOTAL	6854.20	3600.00	2413.28	1412.70	1201.72	2882.20	2500.00

Table 9 summarizes the source of the funds. This table does not go into these details because these resources were provided in kind.

Table 9 Sources of Funds

Sources of Funds (in thousands of US dollars)				
	Funds pledged (B)⁵⁸	Funds used⁵⁹		Funds available (= B – C)⁶⁰
		Funds Committed (C)	Funds Disbursed	
FCPF [specify activities being supported by the FCPF]	3,600.00	2,240.28	1,117.70	1,359.72
Government [specify activities being supported by the Government]	1,580.00	1,580.00	1,580.00	-
UN-REDD Programme (if applicable) [specify activities being supported by the UN-REDD]	-	-	-	-
Other Development Partner 1 (GIZ)	1,647.00	1,647.00	1,647.00	-
Other Development Partner 2 (USAID) [and activities being supported by the Development Partner]	200.00	200.00	150.00	-
TOTAL	7,027.00	5,667.28	4,494.70	1,359.72

⁵⁸ Funds pledged encompass the amount of funds promised by different donors and/or the national government to fund a specific component and available to the country.

⁵⁹ Funds used refer to the amount of funds committed in signed contracts, and the portion of the funds committed that has already been disbursed.

⁶⁰ Available funds equal pledges minus commitments.

SECTION 5: GRANT REPORTING AND MONITORING REPORT (GRM)⁶¹ (OR EQUIVALENT DELIVERY PARTNER REPORT, AS PER DELIVERY PARTNER'S STANDARD OPERATIONAL POLICIES AND PROCEDURES)

⁶¹ *Grant Reporting and Monitoring* is the format and system that is used for reporting on FCPF activities where the World Bank is the Delivery Partner.

SECTION 6. SUMMARY STATEMENT OF REQUEST FOR ADDITIONAL FUNDING TO THE FCPF

Additional funds

The following table (Table 10) details the additional funds required by El Salvador in order to complete the REDD+ Package.

TABLE 10 1. DETAIL OF ADDITIONAL FUNDS FOR DEVELOPING EL SALVADOR'S NATIONAL STRATEGY FOR ECOSYSTEM AND LANDSCAPE RESTORATION

FUNDS REQUESTED	\$ 2,500,000.00
1COMPONENT 1	
<i>Strengthen the capacities of indigenous peoples organizations that make up the MNIMA. Contribute to the implementation of the capacity building program and the harmonization of natural resources through workshops aimed at strengthening and applying indigenous traditional knowledge.</i>	350,000.00
<i>Strengthen the EN-REP governance mechanisms through the CONASAV's Ecosystems and Landscapes Restoration Roundtable and implementing information exchange actions regarding the development of restoration techniques within the EN-REP framework.</i>	350,000.00
COMPONENT 2	
<i>Formulate the fire control strategy.</i>	200,000.00
<i>Develop seven new Local Sustainable Development Plans (LSDPs) to cover the entire national territory with management tools for socio-environmental development and develop the Local Sustainable Use Plans (LSUPs) in the planned territories.</i>	350,000.00
COMPONENT 3	
<i>Develop and apply a national deforestation projection model based on historical trends analysis.</i>	400,000.00
COMPONENT 4	
<i>MRV piloting.</i>	300,000.00
<i>Integrate the Safeguards Information System with carbon monitoring and co-benefits monitoring.</i>	300,000.00
<i>Carry out communication campaigns to strengthen the capacities of the Local Environmental Observer Network (LEON) and adopt a communication for development approach to improve community monitoring activities.</i>	250,000.00

Additional funding needs are related to the processes detailed below under each component. It is necessary to consolidate some processes, as well as to achieve an articulation and integration of the different proposals and initiatives in the construction of EN-REP.

The rational for additional funds is mentioned below:

Components 1 and 2. Request is for USD 1.25 Million.

Component 1.

Strengthen the capacities of indigenous peoples organizations that make up the MNIMA. Contribute to the implementation of the capacity building program and the harmonization of natural resources through workshops aimed at strengthening and applying indigenous traditional knowledge. The specific actions in this process are:

- Working on increasing knowledge about indigenous peoples' rights and their exercise.
- Strengthening indigenous cultural identity and its relationship with Mother Earth and its natural resources.
- Implementing a pilot experience on the application of indigenous peoples' traditional knowledge regarding agriculture, livestock, fishing and forest systems.

These actions are part of El Salvador's Program for Capacity Strengthening, Healing and Harmonization of Natural Resources through the Strengthening and Application of Indigenous Peoples' Traditional Knowledge. This is a document written as a contribution from MNIMA to El Salvador's indigenous peoples, namely the **Nahua/Pipiles** located in the western, central and paracentral zones; the **Lencas**, located in the eastern part of the country and the **Kakawira** people from the Cacaopera municipality, located in Morazán.

Strengthening the EN-REP governance mechanisms through the CONASAV's Ecosystems and Landscapes Restoration Roundtable and implementing information exchange activities regarding the development of restoration techniques within the EN-REP framework. This includes the following actions:

- Strengthening local stakeholders related to the EN-REP framework governance, especially local advisory committees (COALES) and LSUP committees
- Strengthening the committees for LSDP management.
- Promoting information exchange among stakeholders on restoration techniques.

Component 2

Component 2 proposes EN-REP activities to facilitate the fight against fires that cause deforestation and base territorial planning on LSDP.

Develop a fire control and prevention strategy to enhance the capacity of local stakeholders. Establish protocols together with municipalities, local NGOs, ADESCOs, LSDP management committees and central government authorities in the territories, mainly the Resource Guard. The National Forest Fire Commission (CNIF) shall coordinate the strategy, which will include prioritization of intervention areas, update of fire management plans in priority zones and consultation and validation workshops.

Develop seven new Local Sustainable Development Plans (LSDPs) to cover the entire national territory with management tools for socio-environmental development and develop the Local Sustainable Use Plans (LSUPs) in the planned territories. This planning will allow to cover the entire national territory in terms of EN-REP execution.

To complete the activities described, consultants will be hired, workshops will be developed and materials and equipment will be purchased.

Components 3 and 4. Request is for USD 1,250,000

Component 3

Develop and apply, at a national scale, a deforestation projection model based on historical trends, which uses historical data adjusted to the national circumstances. This includes the contracting of consultants and the purchase of necessary images to complete the analysis.

Component 4

Integrate the Safeguards Information System with carbon monitoring and co-benefits monitoring.

During project execution, MRV elements have been put together. With the additional funds, all the elements should be integrated into a robust system aimed at strengthening the key stakeholders for MRV management (MARN, MAG, UES and MUHNES).

MRV piloting: Once the system is integrated, a pilot will be carried out to evaluate the accuracy of the results and the feasibility of obtaining reliable information.

Carry out communication campaigns to strengthen the capacities of the Local Environmental Observer Network (LEON) and adopt a communication for development approach to improve community monitoring activities.

This includes hiring consultants and purchasing equipment required to strengthen the institutions responsible for system management.