



MARN

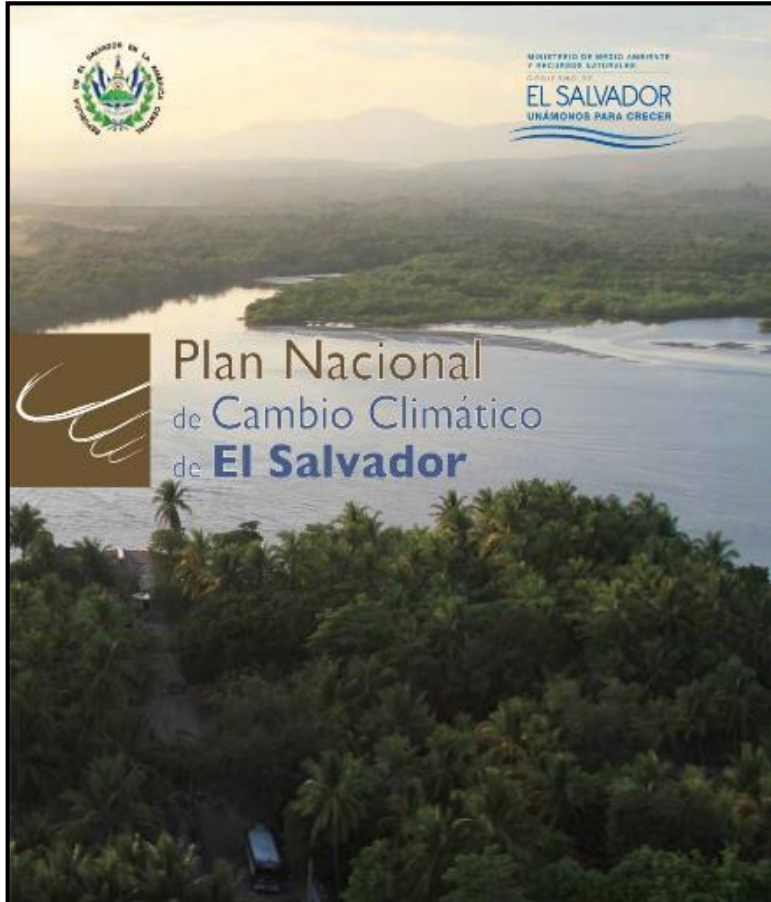
Ministerio de Medio Ambiente
y Recursos Naturales

El Salvador REDD+ AbM Program - Midterm Progress Report PC24 FCPF -

Lina Pohl - Minister

Laos, September 25th, 2017

Our Climate Agenda includes



Restore and Conserve Biodiversity and Forest Ecosystems and build greater resilience to the effects of Climate Change

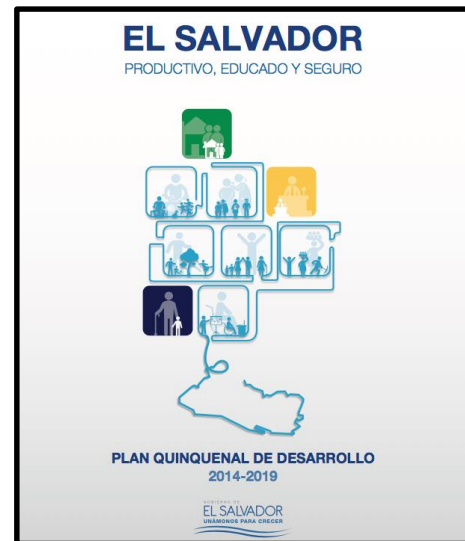
Reduce the country's vulnerability associated with forest degradation and tree cover loss in critical areas.

Restore degraded lands and increase agricultural productivity in a sustainable way.

Ensure water supply; reduce soil degradation; enhance livelihoods; reduce flooding risks

National Action Plan for reduction of GHG Emissions related with Agriculture, Forestry and Other Land Use (AFOLU) (El Salvador NDC UNFCCC; AICHI Targets CBD; LDN UNCCD; SDG 15)

Political Framework



National Landscape and Ecosystem Restoration Program

REDD+ Adaptation based Mitigation approach



Restore and Conserve critical ecosystems through socially inclusive processes to recover key ecosystem services



Restore highly degraded lands, through establishing a climate resilient and biodiversity-friendly agro-forestry system



Establish a synergistic integration of physical and natural infrastructure.

Component 1

Readiness Organization and consultation

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	



Cabinet for Environmental Sustainability and Vulnerability



National Council for Environmental Sustainability and Vulnerability (CONASAV)



**Committee for Restoration
of Soils, Ecosystems and
Landscapes**

Reforestation Plan CONASAV

Launched June 5th, 2017

Participatory methodology to identify, planning and realize actions on the ground

Roundtable for Restoration of Soils, Ecosystems and Landscapes

The roundtable is constituted by 46 institutions and civil society organizations

Weekly meetings during one year, with an attendance average of 30 people per session.



National Reforestation Plan - CONASAV

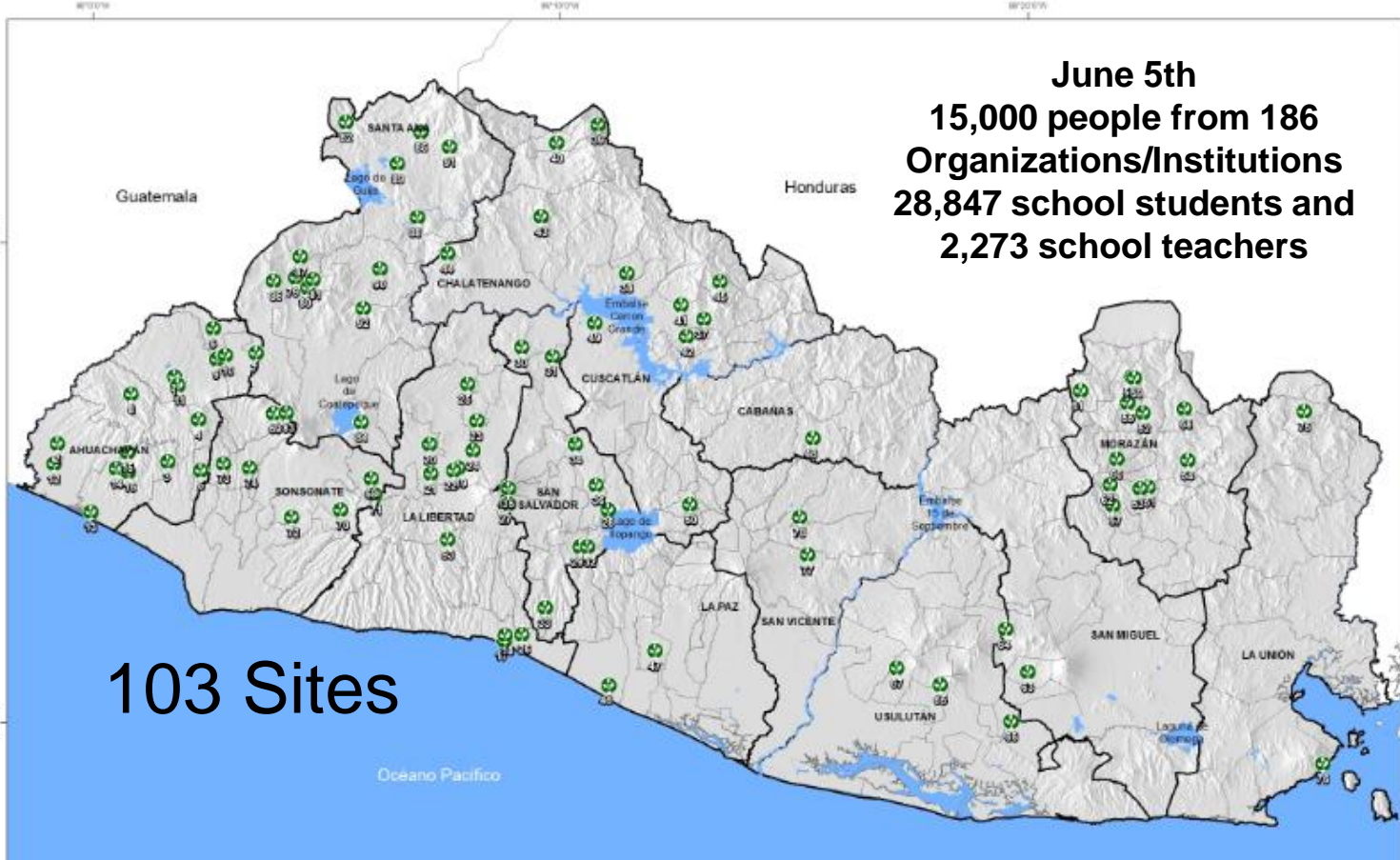
**Ecosystem
restoration and
conservation**

**Land associated with
areas of water
recharge**

**Restoration of areas
affected by forest
fires**

**Land prone to land
slides**

**Restoration of areas
affected by the
outbreak of Pine
bark beetles**



June 5th
15,000 people from 186
Organizations/Institutions
28,847 school students and
2,273 school teachers

103 Sites

Establishing a Plant Nursery Network and Seed Center to support the implementation of the National Reforestation and Restoration Plan

48 Nurseries at national level for the production of one million plants and the participation of different local organizations, municipalities, and government institutions.

Simbología

-  viveros
-  Cuerpos de agua
-  Límite departamental



Roundtables with different Stakeholders



Roundtable with Sugar Cane Producers and Mills



Indigenous Table



Local Roundtables - Landscapes



Committees for Biosphere Reserves



Coffee Sector Roundtable

Work Between the Ministry of Environment and Natural Resources "MARN" and the National Indigenous Table for the Environment "MNIMA"

October 17, 2013, the National Indigenous Table for the Environment "MNIMA" is created.

March 4, 2014, MARN makes the creation of the MNIMA official by issuing Executive Order No. 23

March 2015, Mapping of native seeds at the community level was carried out, in coordination with indigenous organizations.

May 19, 2016, MARN and MNIMA, signed a letter of understanding, which contributes to strengthen the work and coordination between both institutions.

During 2016, indigenous organizations participate in the process of early dialogue and consultation for the elaboration of the National Strategy for of Ecosystems and Landscapes Restoration "EN-REP".

Currently, the MNIMA participates in the Facilitative Safeguards Team and in the National Safeguards Committee.

A dialogue session is held on the Nagoya Protocol, and it is projected by the end of 2017, MNIMA will have a Biocultural Protocol.



Communications Strategy REDD+



MEDIDAS PARA MANTENER TU VIVIERO EN BUEN ESTADO

FACTORES FUNDAMENTALES PARA EL DISEÑO DE UN PLAN DE MANEJO

ESPECIES FUNDAMENTALES PARA EL DISEÑO DE UN PLAN DE MANEJO

MITIGACIÓN BASADA EN ADAPTACIÓN

PRESERVACIÓN DEL SUELO

CAMBIO CLIMÁTICO

MANTENIMIENTO ALERTA

EL CAMBIO CLIMÁTICO

LAS CONDIICIONES DE UN PLAN DE MANEJO

REDD+

MANTENIMIENTO ALERTA

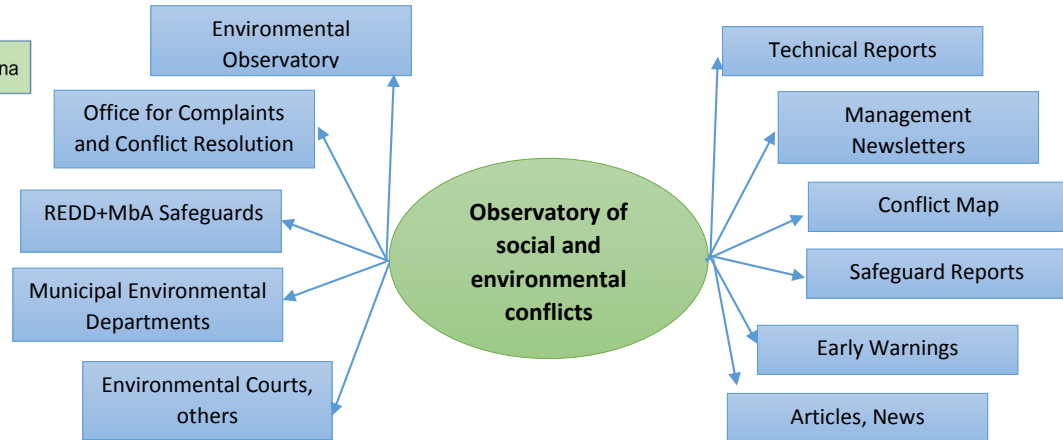
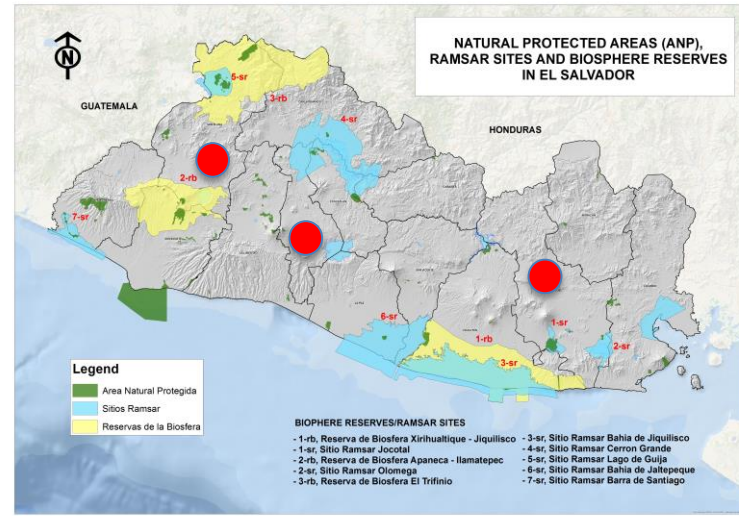
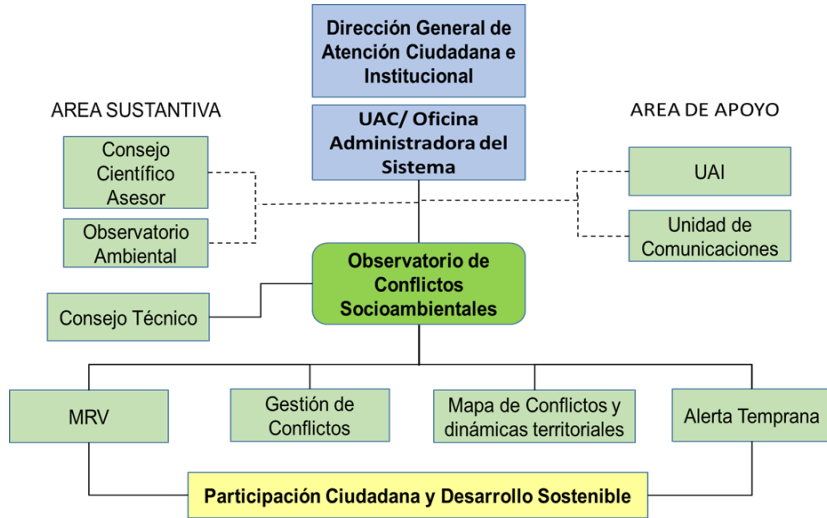
EL CRECIMIENTO URBANO

DEGRADANTES DEL SUELO

INCENDIOS FORESTALES

CAUSAS DE LOS INCENDIOS FORESTALES

Grievance Redress Mechanism



Environmental complaint system

Sistema de Denuncia Ambiental



MENÚ

[Ingresar su denuncia](#)

[Estado de la denuncia](#)

[Información y estadísticas](#)

[Que es una denuncia ambiental](#)

¿Que es una denuncia ambiental?

El proceso que está a punto de realizar permite a toda persona e institución por medio de una herramienta informática interponer una denuncia sobre situaciones que produzcan o pueden producir daños al medio ambiente o a los recursos naturales de El Salvador.

Antes de interponer su denuncia ambiental es importante que determine y conozca lo siguientes aspectos:

Categorías de denuncias



Manejo inadecuado de desechos sólidos



Manejo inadecuado de sustancias, residuos y desechos peligrosos



Descarga o vertido a medio receptor



Contaminación por actividades productivas



Generación de ruidos por actividades industriales



Tenencia de vida silvestre

Sistema de Denuncia Ambiental



MENÚ

[Ingresar su denuncia](#)

[Estado de la denuncia](#)

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[Que es una denuncia ambiental](#)

Ingreso su denuncia

Fecha en que ocurrió *

Municipio donde ocurrió *

Empresa o entidad denunciada

Dirección o lugar de los hechos *

Descripción de los hechos *

Adjuntar archivos

Datos del Denunciante

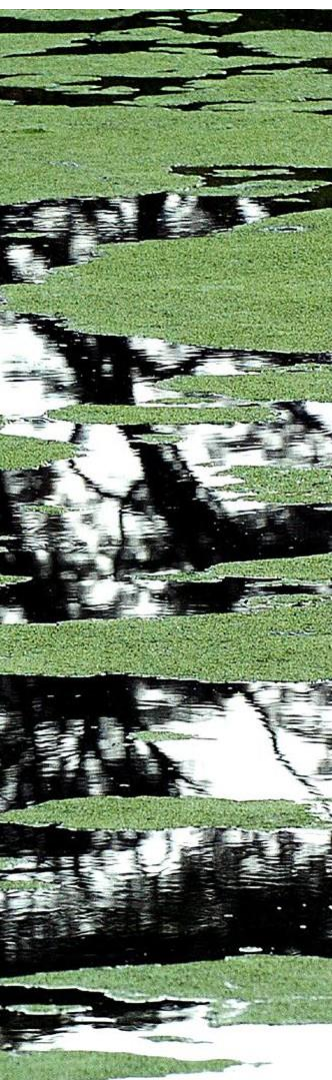
Nombre

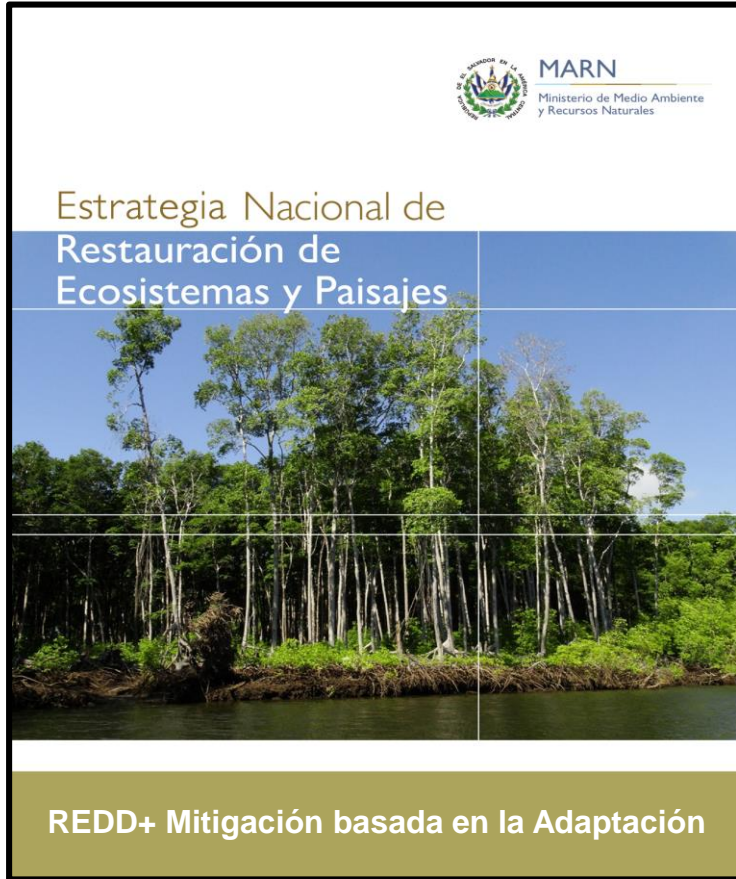
DNI

Component 2

National Strategy REDD+MbA

No.	Criterion	Indicator
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	Yellow
12	Prioritization of direct and indirect drivers and barriers to increasing forest carbon stocks	Yellow
13	Relationship between barriers/causative factors and EN-REP (REDD+MbA) activities	Yellow
14	Action plans to address rights to natural resources, land tenure and management	Orange
15	Implications for forestry laws and policies	Green
Subcomponent 2b: REDD+ strategy options		
16	Presentation and prioritization of EN-REP (REDD+MbA) strategy options	Yellow
17	Viability assessment	Yellow
18	Implications of strategy options to existing sectoral policies	Orange
Subcomponent 2c: execution framework		
19	Adoption and implementation of legislation/regulations	Yellow
20	Guidelines for implementation	Yellow
21	Benefit sharing mechanism	Yellow
22	23. EN-REP (REDD+MbA)	Orange
Subcomponent 2d: social and environmental impacts		
24	Analysis of issues related to social and environmental safeguards	Orange
25	Design of the EN-REP (REDD+MbA) strategy with respect to impacts	Yellow
26	Environmental and social management framework	Orange





Strategic Framework

Control Deforestation and Forest Degradation

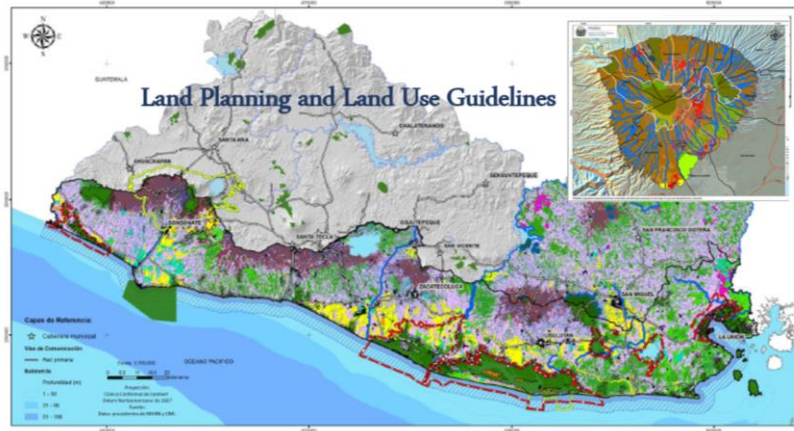
Conservation and Management of Forests and Natural Ecosystems

Conservation and Management of Agro forestry Systems – Coffee plantations

Increase Tree Cover and Carbon Stocks

Soil degraded recovery and Sustainable Agriculture adoption

Address Deforestation and Forest Degradation Drivers



Estrategia Nacional de Manejo del Fuego
El Salvador 2016 - 2025



Key actions

- Land Planning and Land Use Guidelines
- Review of Forest Law and Forest Policy
- Guidelines for legal wood logging
- National Strategy to combat Forest Fires
- National Action Plan to combat the Pine bark beetles
- Establish a Monitoring System and Early Warning System
- Adoption of good practices in Sugarcane Crops and Sector for a NAMA.

Action Plan to address Pine bark beetles outbreak



Strategic Alliances



Ministries of Environment and Agriculture, and CEL



FIAES, Germany and Ministry of Environment



Ministries of Environment and Education -“Aulas Verdes” Program



MARN Local Governments– 70 municipalities



INJUVE MARN – youth involvement



2016-2017 Biennial Plan: National Reforestation and Restoration Actions

Goal: Restore One hundred thousand hectares

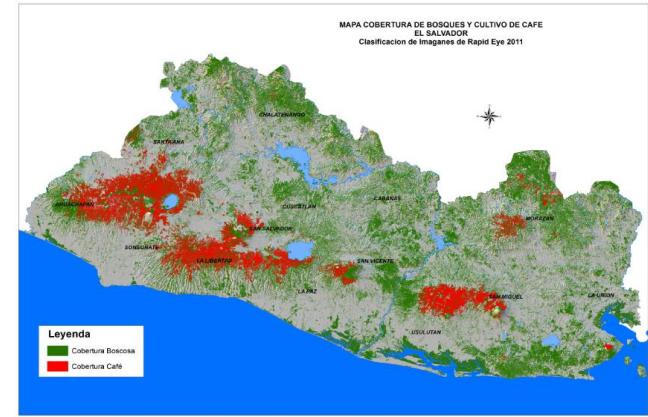
- Coordinate and reorient investment, donations and Cooperación
- Focus investment in the territories to achieve greater investing coordination and synergy to create local impact with restoration activities
- Intervention in 62,500 hectares with a total investment of USD \$ 23,550,000 million



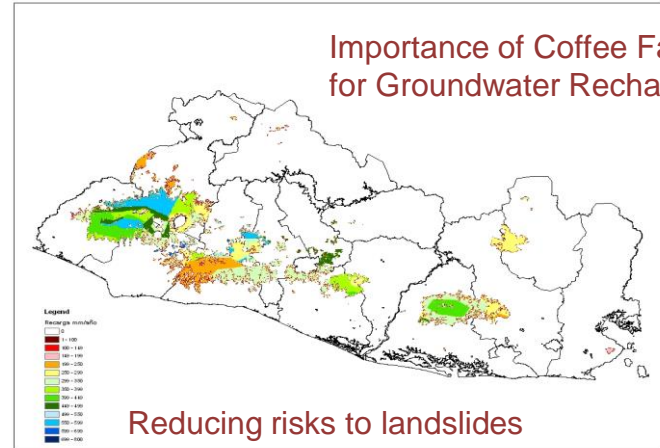
High Level Political “Coffee Agreement”



Restore and Maintain Coffee Agroforestry Systems



Importance of Coffee Farms for Groundwater Recharge



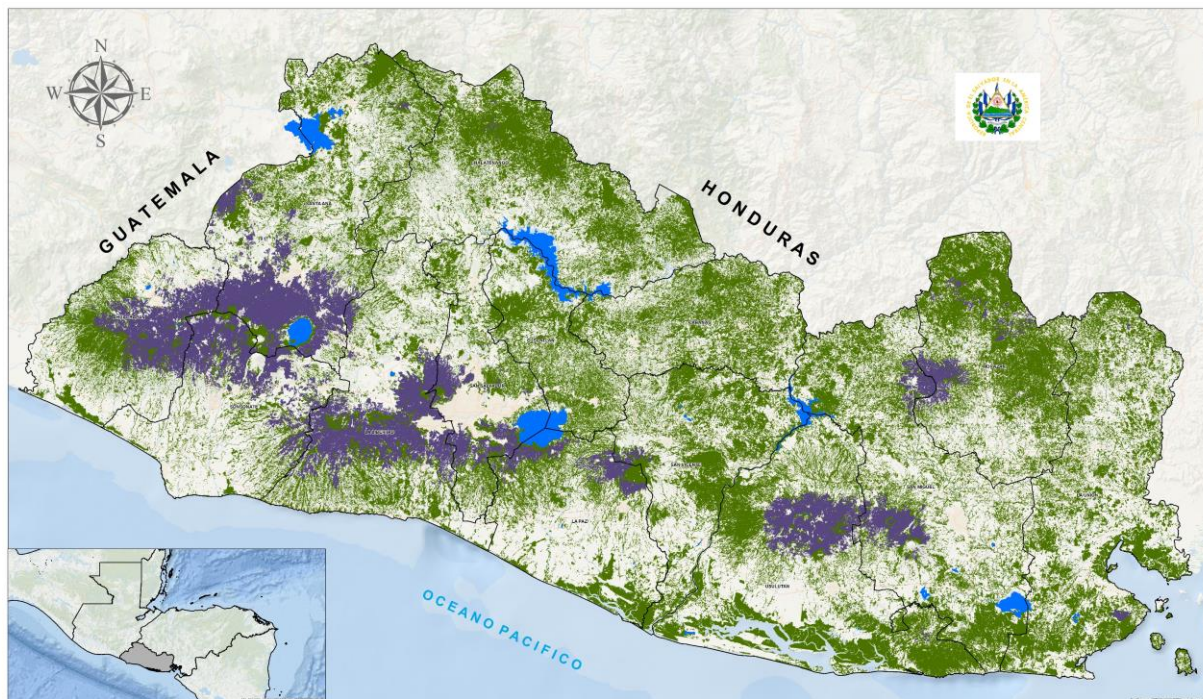


Component 3

Forest Reference Levels and National Forest Emission Levels

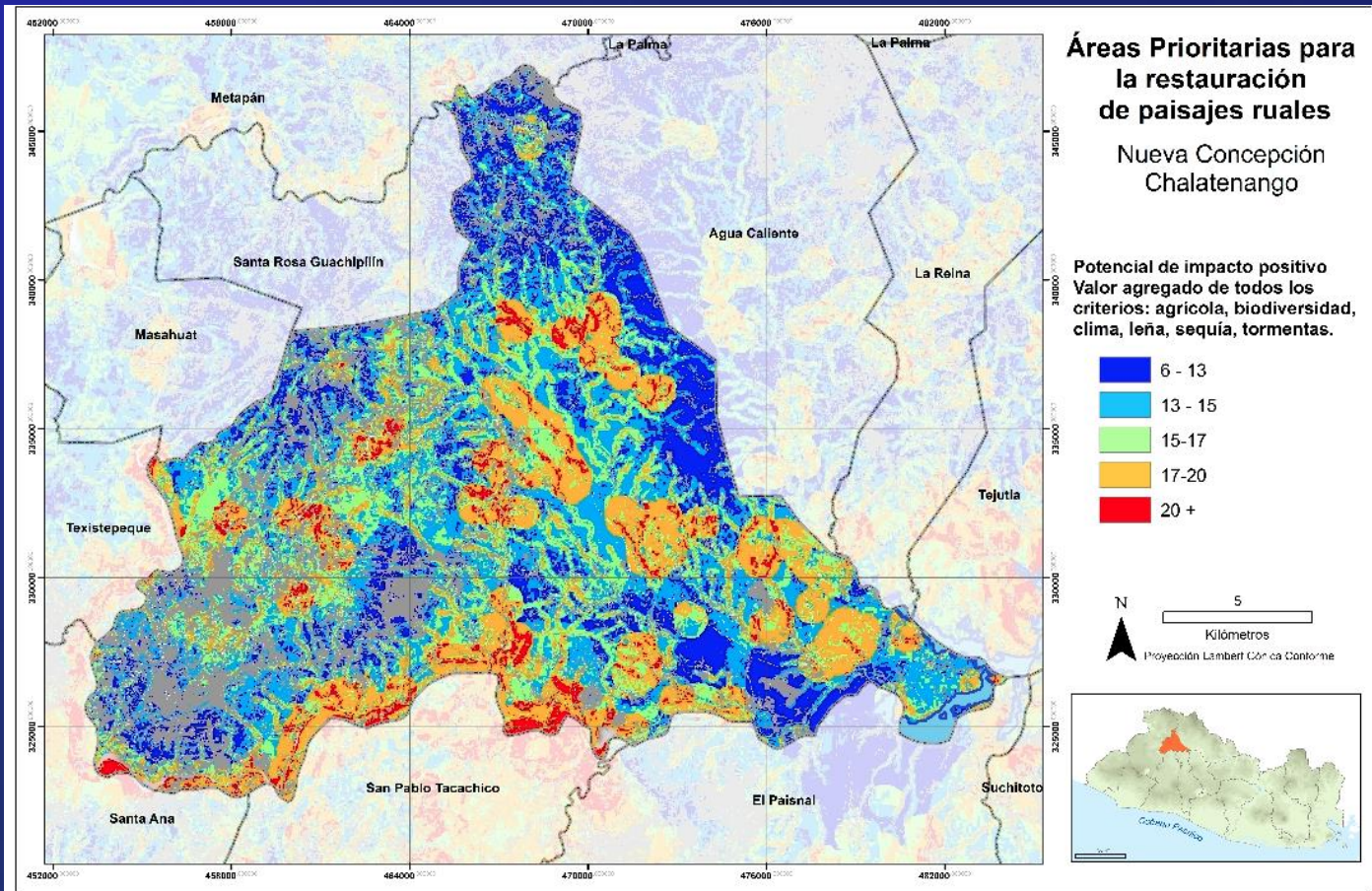
No.	Criterion	Indicator
Component 3: Reference emission levels.		
27	Demonstration of the methodology	
28	Use of historical data adjusted to national circumstances	
29	Technical viability of the methodological approach and consistency with the UNFCCC/IPCC guidelines	

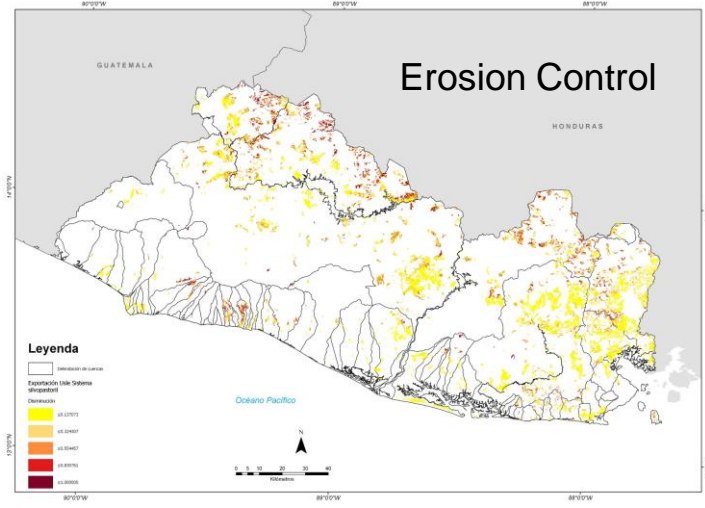
Forest Map of El Salvador 2017



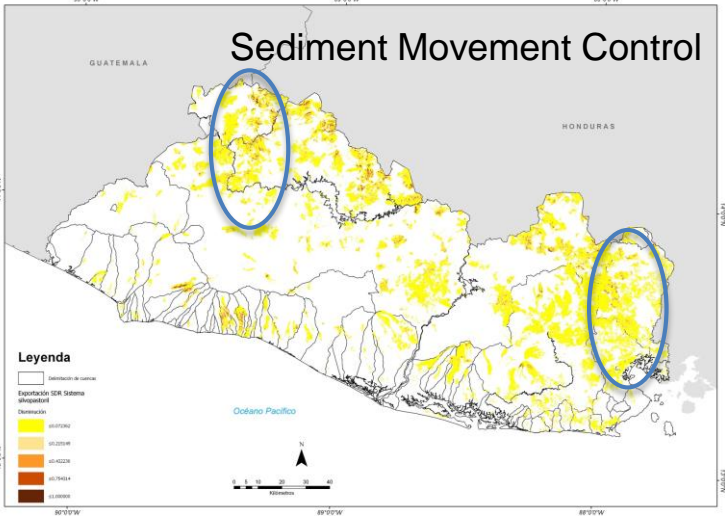
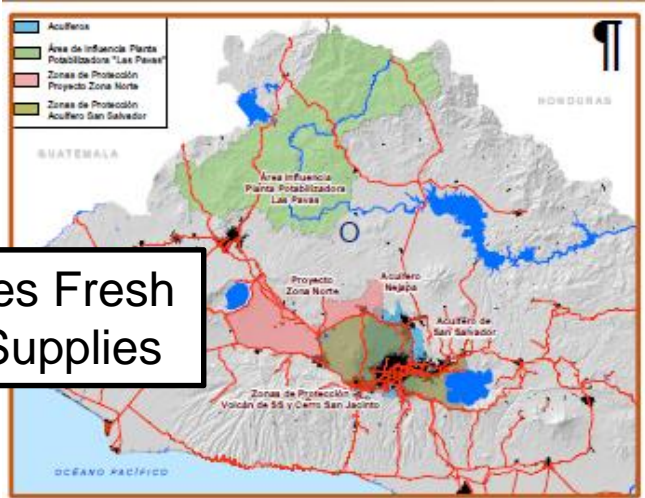
<p>MINISTERIO DE MEDIO AMBIENTE Y RECURSOS NATURALES</p> <p>PROYECTO REDD+Mba EL SALVADOR "Preparación de Propuesta Readiness de El Salvador para el Fondo Cooperativo del Carbono de los Bosques TF 099529"</p> <p>PROYECCIÓN CÓNICA CONFORMAL DE LAMBERT DATUM NORTE AMERICANO DE 1927</p> <p>1:240,000</p> <p>0 5 10 20 30 40 Kilómetros</p>	<p>Legenda</p> <ul style="list-style-type: none">BosqueCafé bajo sombraLimite departamentalLagos y lagunas	<p>ÁREA TOTAL DE BOSQUE: 642,381.01 HA. (30.45 % DEL TERRITORIO NACIONAL)</p> <p>LA SUPERFICIE MÍNIMA CONSIDERADA COMO BOSQUE ES DE 0.20 HA.</p>	<p>MINISTERIO DE MEDIO AMBIENTE Y RECURSOS NATURALES</p> <p>EL SALVADOR</p> <p>Mba</p> <p>Restauración de Ecosistemas y Paisajes REDD+ EL SALVADOR</p> <p>ELABORADO POR MARN, MAG, GIZ EL SALVADOR AJUSTADO POR PROYECTO REDD+Mba EL SALVADOR BASADO EN IMAGENES RAPIDEYE 2011 CON 6 METROS DE RESOLUCIÓN AÑO 2017</p>
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(Based on RapidEye 2011 images)





Enhances Fresh Water Supplies



Protect Infrastructure
Halt sediment accumulation

Type of transition on Restoration Program

1. Maize and Beans crops to Agroforestry Systems (Intercropping beans/maize)

2. Pasture to silvopastoral system

3. Mosaic of crops and pasture to agro-silvopastoral system

4. Mosaic of crops, pastures and vegetation <900 m.s.n.m. to Agroforestry systems of cocoa (1)

5. Sugarcane with burning practice towards the green harvest (Zafra)

6. Coffee Growing <800 m.a.s.l. towards Cocoa agroforestry systems

7. Coffee Growing <800 m.a.s.l. towards a low height coffee renovation

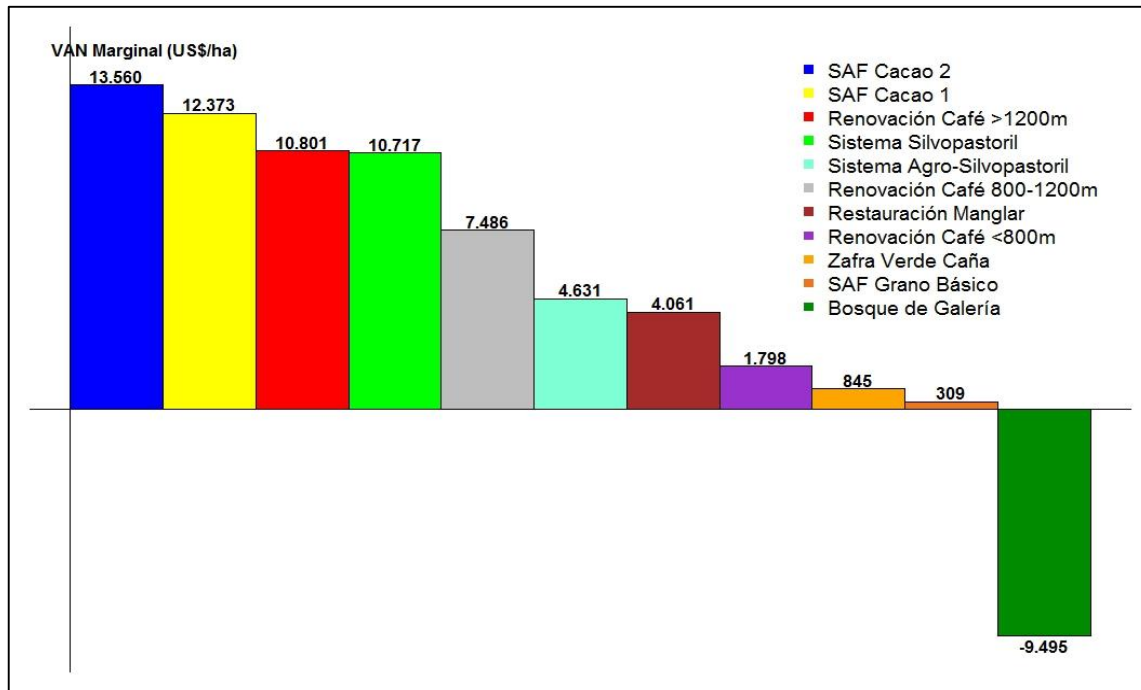
8. Coffee Growing 800 - 1200 m.a.s.l. towards renovate Coffee medium height plantation

9. Coffee Growing > 1200 m.a.s.l. towards renovate Coffee height plantation

10. Mosaic of Crops towards Riparian Forest

11. Degraded Mangrove towards Restored Mangrove

Net Present Value of Land Restoration (US\$/ha)



PRIORIZATION OF RESTORATION TECHNIQUES

Código: 08002	Esquema de la técnica
Definición: Los Sistemas Agroforestales (SAF) para cultivos de Granos Básicos consisten en la incorporación del componente arbóreo en sistemas tradicionales de cultivos (maíz, frijol, hortalizas, etc.) que puedan resultar en beneficios al sistema. Los árboles y cultivos pueden ser establecidos en forma de hileras de árboles (CATE/GTZ, 2001).	
Sistemas Agroforestales (SAF) para cultivos de Granos Básicos	Etapas para la aplicación de la técnica: <ol style="list-style-type: none"> 1. Identificar el grano básico que se cultivará (maíz, frijol, hortalizas, etc.). 2. Establecer los cultivos y el número de hileras de árboles que se plantarán. 3. Seleccionar las especies arbóreas con aprovechamiento forestal. 4. Plantación de especies arbóreas. 5. Mantenimiento de especies arbóreas.
	Fuente: CATE/GTZ, 2001.
Análisis especiales: <ul style="list-style-type: none"> - Es una técnica de amplio espectro, que puede ser utilizada en todas las áreas de producción de granos básicos. 	
Nivel de Restauración (según MARN, 2015): Nivel de Restauración / Agroecosistema con suelo en recuperación (Incremento gradual de materia orgánica y humedad), biodiversidad del suelo escasa, manejo de cobertura de residuos vegetales, asociación y rotación de cultivos preliminar; disminución de agrotóxicos.	

Technical Sheet and specific restoration cost

- Name of technique
- Stages for the implementation of the technique
- Special notes on the implementation of the technique
- Visualization of the technique

FONDO INICIATIVA PARA LAS AMÉRICAS EL SALVADOR-FAIES:									
COSTOS POR TÉCNICA DE RESTAURACIÓN									
EXTENSIÓN: Ha (1.4 Mz)									
Técnica: Sistemas Agroforestales (SAF) Sistema 1									
Insumo :	Establecimiento			Mantenimiento de extensión por el periodo de 4 años			GRAN TOTAL		
	Unidad de	Precio Unitario	Cantidad	Costo Total US \$	Unidad de	Precio Unitario		Cantidad	Costo Total US \$
Financiamiento									
Plantas Forestales (Sombra)	plantas	\$ 0.35	100	\$ 35.00					\$ 35.00
Plantas de Café	plantas	\$ 0.40	1111	\$ 444.40					\$ 444.40
Plantas frutales (Incorporar 4 tipos de frutales)	plantas	\$ 3.00	20	\$ 60.00					\$ 60.00
Plantas de plátano y guineo	plantas	\$ 0.75	280	\$ 210.00					\$ 210.00
Insumos orgánicos líquidos (plagas, enfermedades y biofertilizantes)	Litros	\$ 4.00	15	\$ 60.00					\$ 60.00
Harina de fosa	Quintal	\$ 6.00	4	\$ 24.00					\$ 24.00
Microorganismos de montaña	Libras	\$ 1.50	10	\$ 15.00					\$ 15.00
Journales Chapoda	di ahombre	\$ 6.00	10	\$ 60.00					\$ 60.00
Journales de Siembra	di ahombre	\$ 6.00	10	\$ 60.00					\$ 60.00
Journales de ahogado	di ahombre	\$ 6.00	16	\$ 96.00					\$ 96.00
Journales de Abonado	di ahombre	\$ 6.00	2	\$ 12.00					\$ 12.00
Journal de acarreo de Plantas	di ahombre	\$ 6.00	8	\$ 48.00					\$ 48.00
Cromatografía de suelos (Capacitación y materiales)	Grupo de 20	\$ 700.00	1	\$ 700.00					\$ 700.00
Sub - Total Financiamiento:				\$ 1,872.40				\$ -	\$ 1,872.40
Contapartida									
Cuma	Unidad	\$ 5.00	2	\$ 10.00	Unidad	\$ 5.00	2	\$ 10.00	\$ 20.00
Corvo	Unidad	\$ 14.00	2	\$ 28.00	Unidad	\$ 14.00	2	\$ 28.00	\$ 56.00
Pirocha	Unidad	\$ 9.00	2	\$ 18.00	Unidad	\$ 9.00	2	\$ 18.00	\$ 36.00
Azadón	Unidad	\$ 7.00	2	\$ 14.00	Unidad	\$ 7.00	2	\$ 14.00	\$ 28.00
Barra	Unidad	\$ 12.00	2	\$ 24.00	Unidad	\$ 12.00	2	\$ 24.00	\$ 48.00
Pala doble	Unidad	\$ 20.00	2	\$ 40.00	Unidad	\$ 20.00	2	\$ 40.00	\$ 80.00
Bomba de Mochila	Unidad	\$ 85.00	1	\$ 85.00	Unidad	\$ 85.00	1	\$ 85.00	\$ 170.00
Journales Chapoda (Mantenimiento)					di ahombre	\$ 6.00	36	\$ 216.00	\$ 216.00
Journales de Abonado (Mantenimiento)					di ahombre	\$ 6.00	4	\$ 24.00	\$ 24.00
Sub - Total Contapartida:				\$ 197.00				\$ 437.00	\$ 634.00

- Establishment Costs
- Maintenance Costs
- Investment Amounts
- Counterpart Amounts
- Required Inputs Detail



REDD+ LANDSCAPE
CCAD-GIZ
Promoviendo la Restauración de Paisajes en Centroamérica

PUBLICACIÓN
FICHAS TÉCNICAS DE RESTAURACIÓN DE PAISAJES PARA EL
ÁREA DE CONSERVACIÓN EL IMPUSIBLE-BARRA DE SANTIAGO,
EL SALVADOR



MARN
Ministerio de Medio Ambiente y Recursos Naturales



MbAC
Ministerio de Ambiente y Recursos Naturales
El Salvador



GIZ
German Development Cooperation



CCAD
Comunidad Centroamericana de Desarrollo

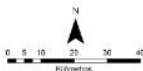
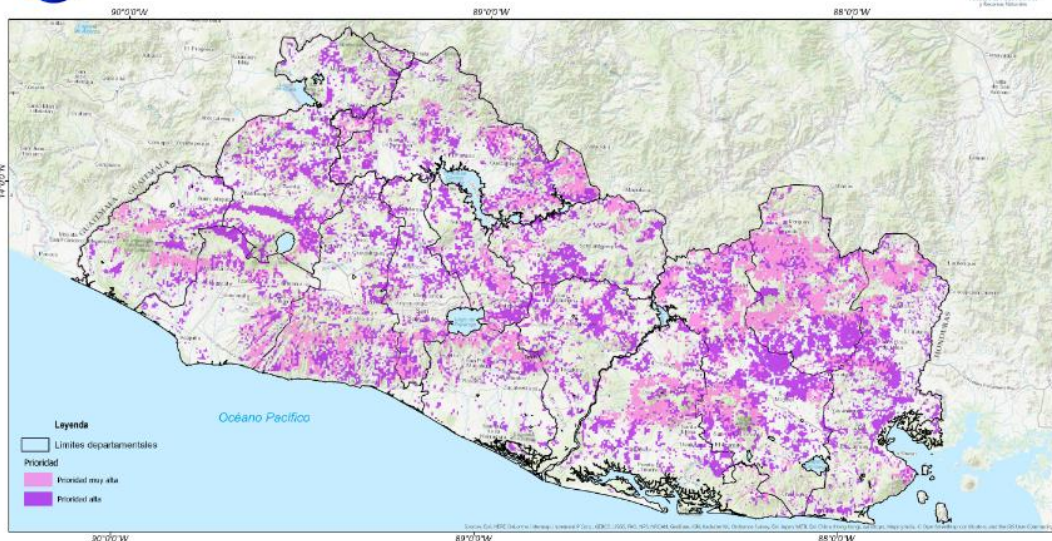
Por encargo de:
Ministerio Federal de Medio Ambiente, Protección de Recursos, Urbanismo y Espacio Público
de la República Federal de Alemania

Action Plan for Ecosystem and Landscape Restoration 2018 - 2023



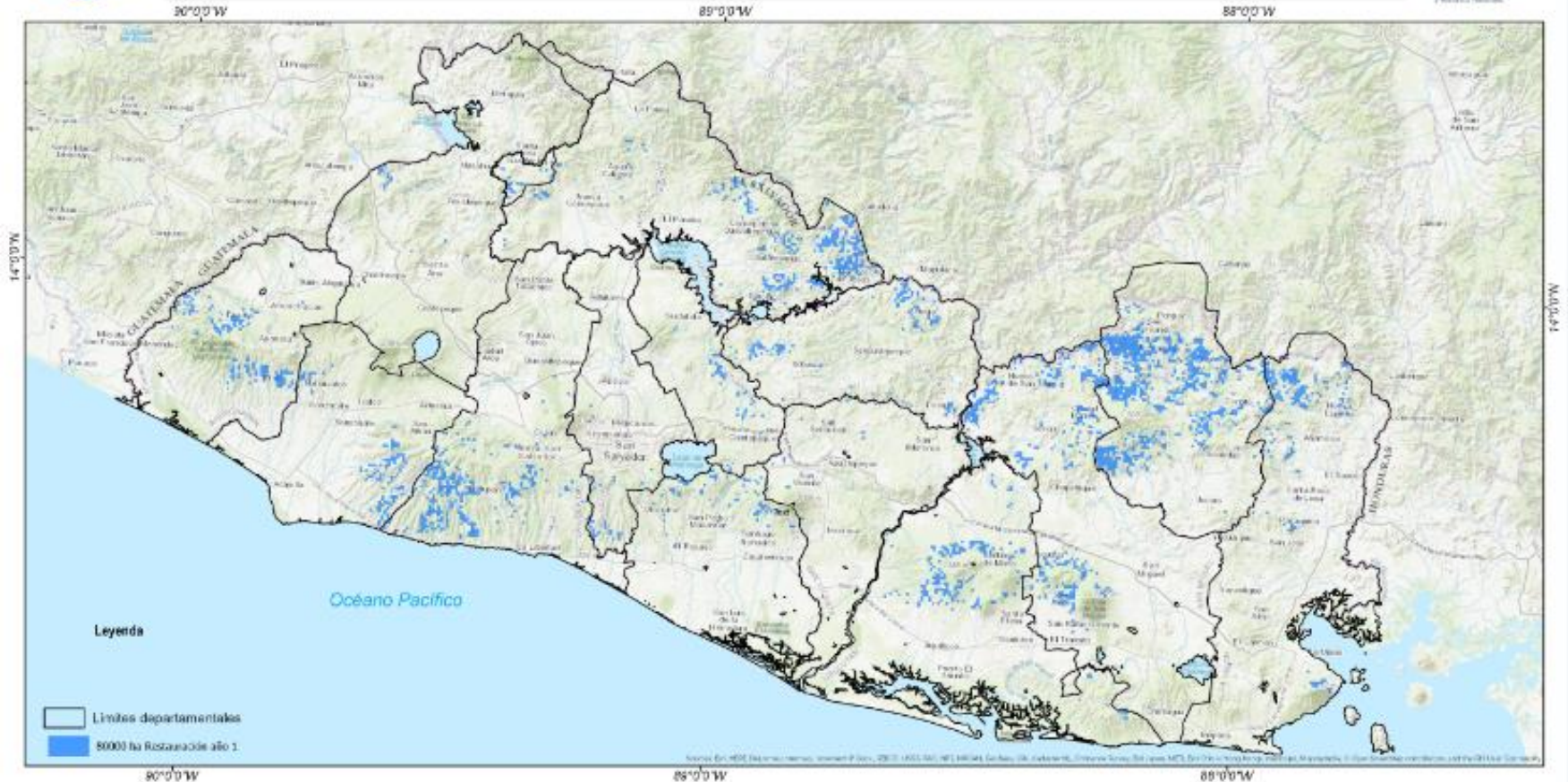
Action Plan for Ecosystem and Landscape Restoration Period 2018 – 2023

Prioridades alta y muy alta de restauración del paisaje productivo en El Salvador





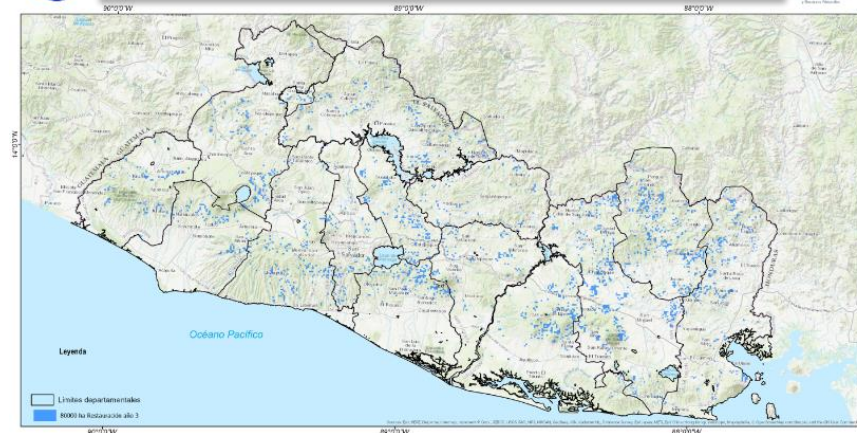
Intervention Area. Year 1 Restoration of Productive Landscapes in El Salvador



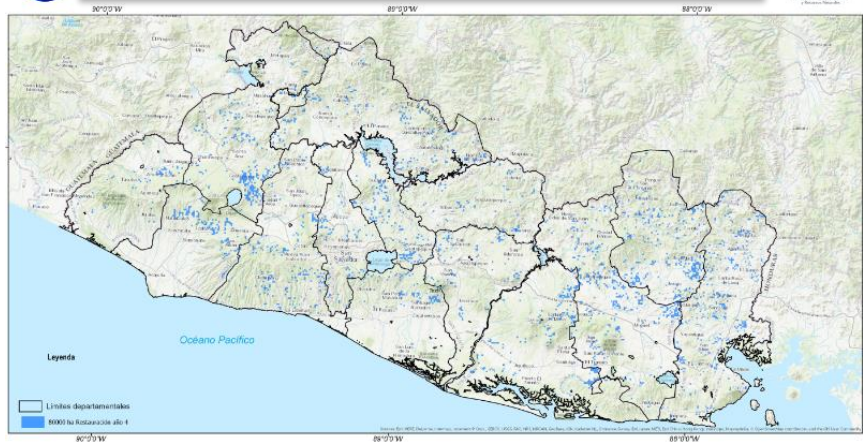
Intervention Area. Year 2 Restoration of Productive Landscapes in El Salvador



Intervention Area. Year 3 Restoration of Productive Landscapes in El Salvador



Intervention Area. Year 4 Restoration of Productive Landscapes in El Salvador



Intervention Area. Year 5 Restoration of Productive Landscapes in El Salvador



Restoration Techniques and Priority area to restore at national level

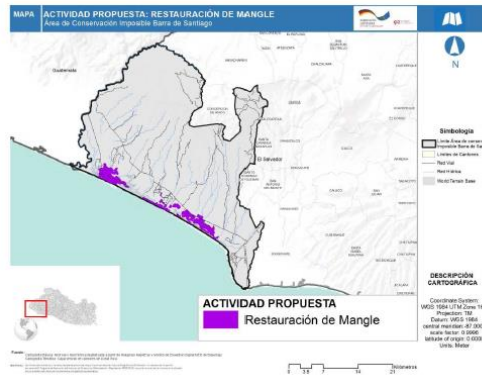
Restoration Techniques	Current Land Use	Opportunity Area (ha)
1. Mangrove Restoration	Degraded Mangroove-sedimentation	2.000
2. Gallery forest restoration	Staple grains	5.653
	Natural Pasture	2.995
	Sugar cane	3.821
	Crop and pasture mosaic	3.158
	Mosaic of crops, pastures and vegetation	4.298
3. Agroforestry system for staple crops	Staple Grains	375.133
4. Silvopastoral System	Natural Pasture	197.353
5. Agrosilvopastoril system	Crop and pasture mosaic	162.850
6. Green Sugarcane Harvest	Burning of sugar cane	81.389
7. Cocoa Agroforestry system (1)	Coffee<900 m.a.s.l.	66.369
8. Cocoa Agroforestry system (2)	Mosaic of crops, pastures and vegetation	234.686
9. Coffee renovation	Coffee<800 m.a.s.l.	47.615
	Coffee 800<1200 m.a.s.l.	41.000
	Coffee >1200 m.a.s.l.	26.000
Total		1.187.951

Modeling enhanced Carbon Stoks related with restoration activities In the Conservation Area “Imposible- Barra de Santiago”

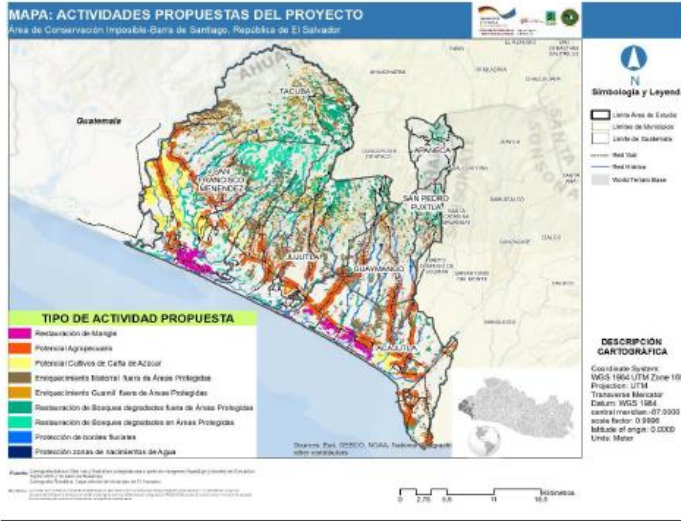
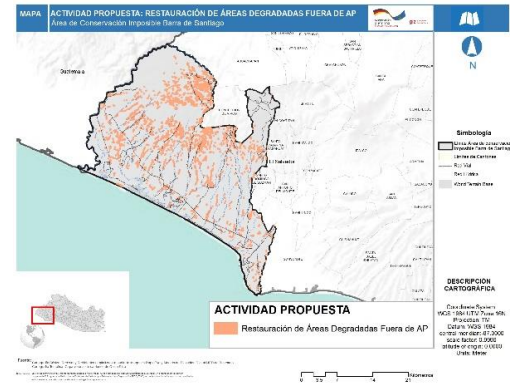
Riparian ecosystems restoration



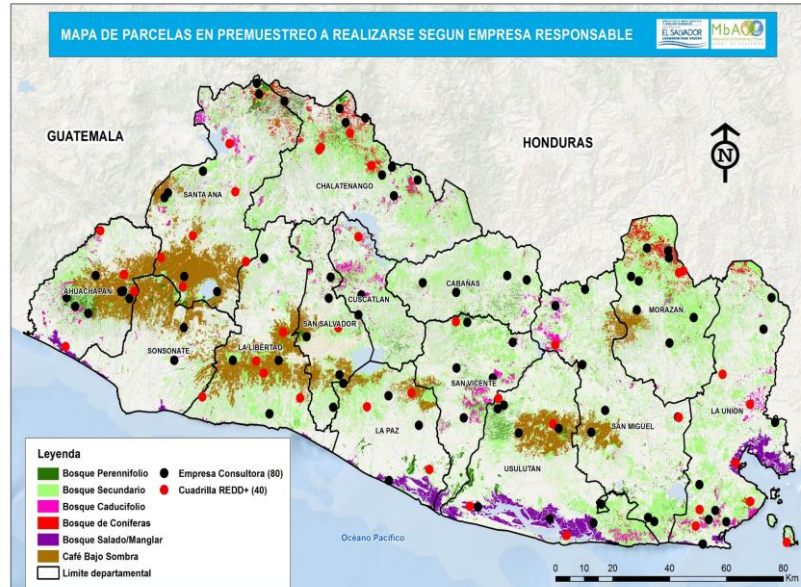
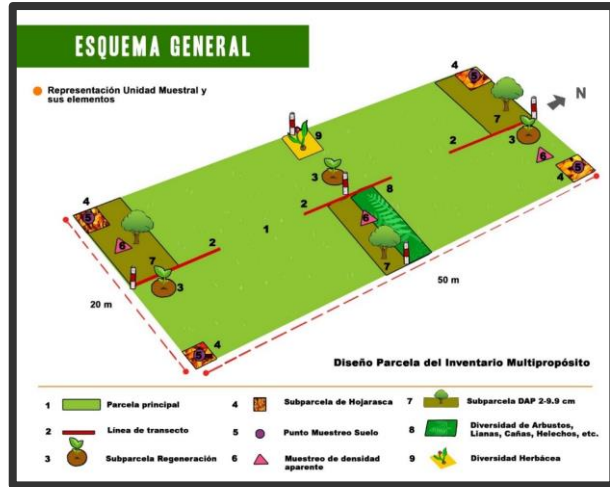
Mangroves restoration



Degraded areas recovery



The first National Forest Inventory of El Salvador in development



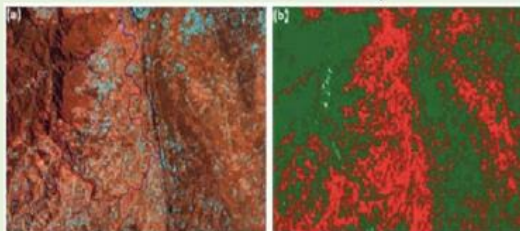
Monitoring Emissions at a National Level

DATOS DE ACTIVIDAD

Línea base histórica del uso del suelo generada mediante el uso de imágenes satelitales.



Imágenes satelitales de alta resolución para el mapeo del cambio de uso del suelo histórico y actual.

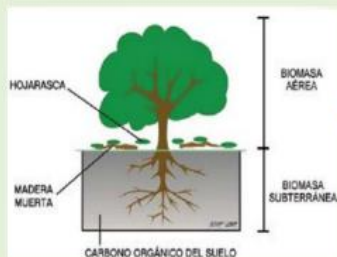


Proyecciones de la dinámica del cambio de la cobertura y uso del suelo (cada 5 años).

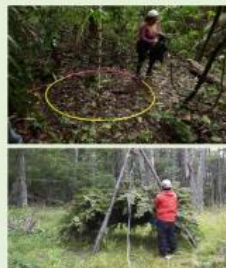
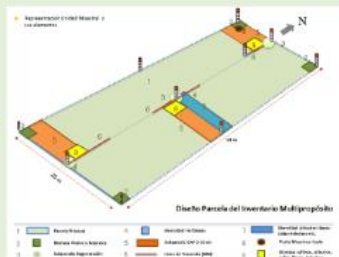


FACTORES DE EMISIÓN

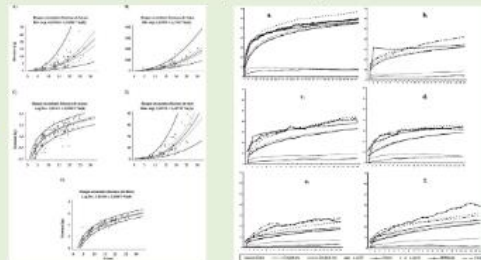
Contabilidad de carbono: Medir la densidad de carbono en los bosques



Inventario multipropósito: Medir la densidad de carbono en los diferentes usos del suelo



Factores de expansión: Fuentes de información de estudios internacionales, nacionales y locales.



MARN

Ministerio de Medio Ambiente y Recursos Naturales

Restoration Actions Monitoring System

National Landscape and Ecosystem Restoration Program



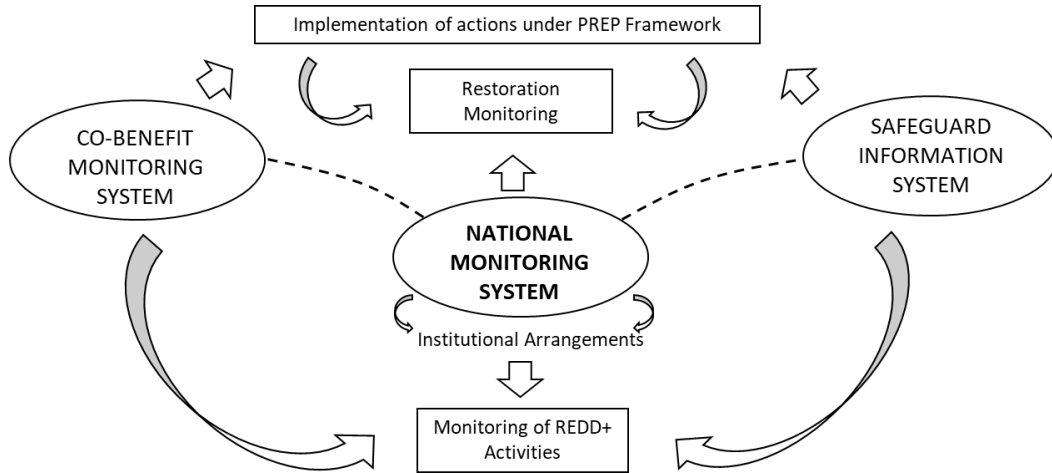


Componente 4

Assessment system suggested in the readiness package assessment framework: forest and safeguard information monitoring system

No.	Criterion	Indicator
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	

Forest Monitoring System



Interagency technical team led by Ministry of Environment, Agriculture and the University of El Salvador, which coordinates 25 representatives of civil society and public institutions to work in the national monitoring system.



Workshop with the National Safeguards Committee

Co-Benefit and GHG Emissions Inventory Monitoring System



Workshop to collect co-benefits inputs

This system will keep track of the landscape restoration measure executed within the Ecosystem and Landscape Restoration Program framework.

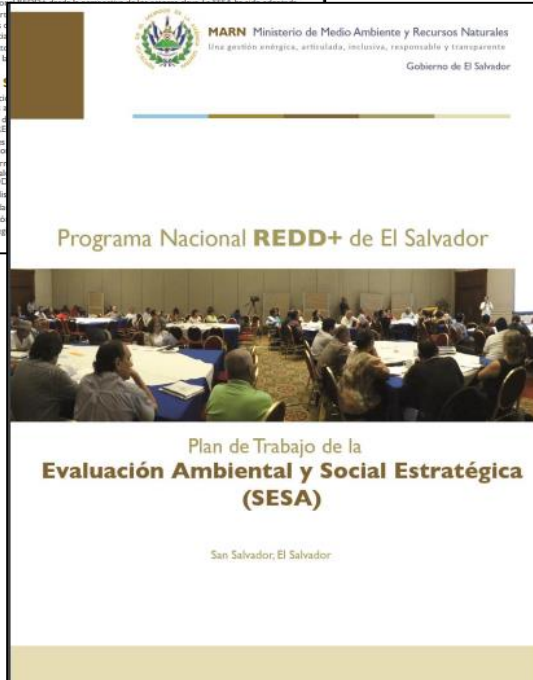


¿Qué es la SESA?

La Evaluación Ambiental y Social Estratégica (SESA, por sus siglas en inglés) es una metodología analítica que incluye un proceso participativo, la cual apoya la fase de preparación y contribuye al diseño de la Estrategia Nacional por el Comité de Partes interesadas global de más los ambientales y sociales REDD+ y su producción (en inglés), el cual garant

¿Qué hace la SESA?

- Evalúa los beneficios y sus implicaciones
- Analiza opciones estratégicas de REDD+
- Identifica acciones que superen las barreras del REDD+
- Crea una plataforma de comunidades locales para la estrategia REDD+
- Aporta en el análisis de la estrategia REDD+
- Analiza la capacidad de las comunidades locales
- Provee información de la estrategia REDD+



Objectives:

- In process, Design the National Safeguards Information System under a methodological approach that allows the participation of multiple stakeholders.
- In progress, the implementation of the Social and Environmental Strategic Assessment (SESA) process, and as a result, the elaboration of the Environmental and Social Management Framework (ESFM) for El Salvador

Additional Funds Request

Component	Priorities	Requested Funds USD
Component 1	Strengthening of REDD governance	525,000
	Formalize and implement the Participation and Consultation Strategy with Indigenous Peoples	
	Strengthening the capacity of stakeholders to implement the EN-REP	
	Scale the regional scope of the Communication Strategy of the EN-REP	
Component 2	Start of strategic actions of EN-REP in key territories and support the implementation of ESMF	500,000
	Strengthening and Consolidation of Grievance Redress Mechanisms	
Component 3	Establish Base Line of Forest Degradation	730,000
	Additional modeling on the projection of Deforestation based on historical trends and national circumstances	
Component 4	Consolidate an Integrated Monitoring System that includes the MRV and Co-benefits.	745,000
	Design the Monitoring system of forest degradation, and its integration into the national MRV.	
	Establish the Base Line for Co-benefits	
Total		2,5000,000