

The Forest Carbon Partnership Facility (FCPF) Readiness Plan Idea Note (R-PIN) Template

February 16, 2009

Guidelines:

1. The purpose of this document is to: a) request an overview of your country's interest in the FCPF program, and b) provide an overview of land use patterns, causes of deforestation, stakeholder consultation process, and potential institutional arrangements in addressing REDD (Reducing Emissions from Deforestation and Forest degradation). This R-PIN will be used as a basis for the selection of countries into the FCPF by the Participants Committee. Information about the FCPF is available at: www.carbonfinance.org/fcpf
2. Please keep the length of your response under 20 pages. You may consider using the optional Annex 1 Questionnaire (at the end of this template) to help organize some answers or provide other information.
3. You may also attach at most 15 additional pages of technical material (e.g., maps, data tables, etc.), but this is optional. If additional information is required, the FCPF will request it.
4. The text can be prepared in Word or other software and then pasted into this format.
5. For the purpose of this template, "Deforestation" is defined as the change in land cover status from forest to non-forest (i.e., when harvest or the gradual degrading of forest land reduces tree cover per hectare below your country's definition of "forest." "Forest degradation" is the reduction of tree cover and forest biomass per hectare, via selective harvest, fuel wood cutting or other practices, but where the land still meets your country's definition of "forest" land.
6. When complete, please forward the R-PIN to: 1) the Director of World Bank programs in your country; and 2) Werner Kornexl (wkornexl@worldbank.org) and Kenneth Andrasko (kandrasko@worldbank.org) of the FCPF team.

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Acronyms

GCCC	Advisory Group of Climate Change
MARN	Ministry of Environment and Natural Resources
MAG	Ministry of Agriculture
MSPAS	Ministry of Health and Social Assistance
MINED	Ministry of Education
MINEC	Ministry of Economy
MRREE	Ministry of International Affairs
FAO	Food and Agriculture Organization
PNUD	United Nations Development Programme
COMURES	Municipal Corporation of El Salvador
ANEP	National Association of Private Enterprises
FUSADES	Salvadorian Foundation for Economic and Social Development
ASI	Salvadorian Association of Industry
UCA	Central American University "Jose Simeon Cañas"
UTLA	Technical University of Latin American
SALVANATURA	Ecological Foundation of El Salvador
CEPRODE	Disaster Protection Center
MH	Finance Minister
STP	Technical Secretariat of the Presidency
CENTA	National Center for Agricultural Technology
UCAFES	Union of Coffee Cooperatives of El Salvador
PROCAFE	Foundation for Research on Coffee
RENAPES	Network of Private Nature Reserves of El Salvador
PRISMA	Salvadorean Research Program on Development and Environment
BMI	Multisectorial Investment Bank
FIAES	Fund for the Americas Initiative in El Salvador
NPA	Natural Protected Area

2. Which institutions are responsible in your country for:

a) forest monitoring and forest inventories:

1. The Ministry of Agriculture is responsible for the overall management of forestry resources including forest inventories and monitoring, through the **Forestry Division**, whose goal is to produce and provide forests information, to provide technical legal assistance on forest resources, and regulate the use in order to make a dynamic sustainable development for economic and social benefit Country (www.mag.gob.sv)
2. Ministry of Environment and Natural Resources has the responsibility of inventories and monitoring of forest ecosystems within the Natural Protected Areas (NPA), such as mangroves, cloud forest and pine forest among others.

b) Forest law enforcement:

1. The Ministry of Agriculture has the main responsibility for Forestry Law (2002) (the respective regulations) enforcement in specific cases and it works in close coordination with the National Civil Police, Attorney General's Office, among others (They are responsible of manage and permissions relating to the use of management of forest resources)
2. National Civil Police have a Environmental branch, it has the function of prevention and combat the extraction and commercialization of sweet and salty forest species, as well as prevention and combat of hunting and trafficking of wild forest and animals.
3. Ministry of Environmental and Natural Resources, is responsible for the enforcement of the Environmental Law and the Natural Protected Areas Law (It establish a set of market mechanisms that facilitate end promote the reforestation in coordination with MAG, and the protection of forest ecosystems in the Protected Natural Areas. It also has the responsibility to identify forest areas to be incorporated into the System of Protected Natural Areas, for their ecological value.
4. Attorney General's Office: has a special attention to the environmental crimes, they can act on its own to initiate and document the processes that subsequently moved to the judicial stage.

c) forestry and forest conservation:

According to the Forestry Law, the Environmental Law and the Natural Protected Law, the responsible for conservation of forests are MAG and MARN. The forestry activities are the responsibility of MAG.

d) coordination across forest and agriculture sectors, and rural development:

Intersectoral coordination is the responsibility of the Presidency Technical Secretariat, who has the primary role of planning and coordination of the central government. Since this entity is articulated agricultural policy and rural development, coordinating the actions of the Agriculture and Environment Ministries according to the National Development Plan.

As the main political body dealing with national environmental policy and considering the cross-sectoral nature of rural development and environment, the Ministry of Environment has the major responsibility on this issue, however there is also the Technical Secretary of the Presidency (which is the main planning unit within the Executive) that also provides general guidance on general national development planning particularly on cross-sectoral issues which involves both the Ministry of Agriculture and Environment on the basis of the hydrographic basins as the main planning units. However, cross-sectoral planning and coordination is probably one of the areas where more efforts should be done when dealing with REDD strategies since there is no much concrete experience in the country because most planning and implementation programs are often sectoral.

3. Current country situation (consider the use of Annex 1 to help answer these questions):

a) Where do forest deforestation and forest degradation occur in your country, and how extensive are they? (i.e., location, type of forest ecosystem and number of hectares deforested per year, differences across land tenure (e.g., national forest land, private land, community forest, etc.):

- **Types of forest affected by deforestation**

Deforestation is a national problem in the last years has focused on three types of ecosystems: broadleaf forest, mangroves and forest shaded coffee plantations.

According to the analysis of vegetation cover, from 1978 to 2002, it lost approximately 13,3000 ha. of broadleaf forest, 3,800 ha. of mangroves and 26,300 hectares of forest shade coffee (Table 1, Annex 1)

For the coffee plantations, a total of 13% of the crop area of the three coffee regions of the country was deforested between 1990 and 2000. The rate of deforestation of the land differs dramatically over the three regions. The highest occurred in the western region (17%) and lowest in the eastern region (7%).¹

Table 1. Losses of forest cover from 1987 to 2002.

Forest type	1978 (DGRNR)	1990 (Núñez y otros)	1996 (Cruz y Gómez)	2000 (MARN)	2002 (MARN)
Conifers	48,500	25,000	25,000	48,500	76,400
Broadleaf forest	90,700	52,000	52,000	90,800	77,400
Mangroves	45,300	45,000	39,200	35,800	41,500
Plantations	5,800	7,000	4,800	5,800	6,500
Sub-total	190,300	129,000	121,000	180,900	202,000
Forest shaded coffee	187,200	164,900	164,900	195,000	160,900
Overall.....	377,500	293,900	285,900	375,900	362,900

Source: Derived from "El Salvador Country Report", FAO - PRISMA
(www.elsalvadorforestal.com/pub/documentos/32InformeNacional.doc)

As this information comes from different methodologies, the analysis leads to a significant margin of uncertainty which has not been possible to calculate an estimated rate of deforestation in the country, so it is necessary to correct this information by rebuilding make comparable historical information. By the way a strategy REDD would review and matching of information.

- **Location of deforestation**

The processes of deforestation are located in specific geographical areas depending on the type of forest ecosystem.

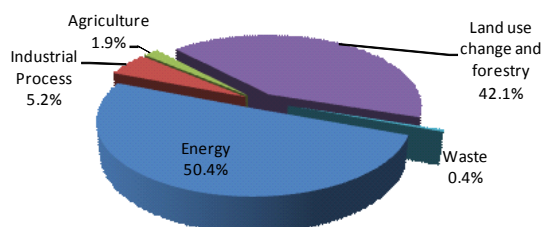
a. Salty forests or mangrove: are located in the coastal estuaries of the country, covering an area of 41,500 ha, according to the Environmental Law, the mangroves are national forest reserves that have been declared as fragile areas and ecological reserves (Art. 74, Environmental Law).

b. Tropical Broadleaf Forest includes the diversity ecosystems, including cloud forests located in the north mountains range of the country. They include private and state lands.

c. Permanent coffee plantations under shade for about 9% of national territory and are located mainly in the central volcanic mountain range, which is the principal water recharge area of the country (Annex 2, Map coverage of coffee and water network principal). Land ownership is predominantly private, and only small areas of coffee plantations are in the state belong to the Natural Protected Area.

b) Are there any estimates of greenhouse or carbon dioxide emissions from deforestation and forest degradation in your country? If so, please summarize:

National Inventory of Greenhouse Gases - year 1994



Currently there is no updated data on emissions from deforestation and forest degradation. Last figures available are for the land use change and forestry sectors for 1994 when emissions were estimated in a total of 3,930 Gg as per the first national communication to the UNFCCC, the principal sector is energy and the second is land use change and forestry with 42.1% (see the graph). This situation could change if there is confirmation that forest cover has been under a process of recovering during the last years as some studies from the Ministry of Environment and National Resources suggest.

¹ Blackman, A. et al. 2006. Pérdida de los bosques en las áreas de cultivo del café de sombra en El Salvador.

(www.rff.org/RFF/Documents/RFF-Rpt-TreeCoverLoss-Spanish.pdf)

It is a preliminary version of the inventory of 2000, but the land use change sector must be reviewed in detail, mainly because it differs from more accurate forest inventory which has not been verified. There is an ongoing process aimed at updating the National Communication for the UNFCCC which is expected to be finalized by late 2009. It will be appropriate to combine efforts to get the best approximates possible in order to design the baseline for the REDD process jointly with the national communication.

c) Please describe what data are available for estimating deforestation and/or forest degradation. Are data published? Describe the major types of data, including by deforestation and forest degradation causes and regions if possible (e.g., area covered, resolution of maps or remote sensing data, date, etc.).

The existing information from 1978 for studies of cover in El Salvador was scattered and not systematic, in this stage this kind of studies were elaborated with different methodologies so that there are some problems in their comparison. We have information on vegetation cover of the years 1978, 1996, 1998, 2000, 2002 and for 2006 only tree cover (Table 2)

Table 2. Information on forest cover and land uses available from 1978 to 2007

Year	Name	Institution	Satellite image
1978	Land use Map	Agriculture and Cattle Ministry	
1996	Land Use Map.	Agriculture and Cattle Ministry	Landsat 93/94
2000	Natural Vegetation Mapping Terrestrial and Aquatic Ecosystems	Environmental and Nature Resources Ministry, Work bank Methodology.	Landsat TM, 30 Mt. Of resolution
2002	Land Use Map.	Environmental and Nature Resources Ministry, methodology: Corine Land Cover	Landsat 1998, 30 Mt. Of resolution
2002	Map of Crops and Use of the Decade "90"	Project: Management and Territorial Development Plan (Vice Ministry of Housing and Urban Development MARN)	
2007	Map of tree cover in El Salvador	Environmental and Nature Resources Ministry	Aster 2006, 15 Mt. Of resolution

In addition, the MARN Environmental Information System has available the following satellite images:

Image type	Year	Level
Landsat 30 Mts Of resolution	1998, 2000, 2003	National
SPOT XS, 2.5 Mts Of resolution	2000	Metropolitan region
IKONOS 4, 1 Mts Of resolution	2001	Metropolitan region
RadarSat, 2.5 Mts Of resolution		The Trifinio and Fonseca Gulf areas.
IRS. 10 Mt	2000	National
Digital Elevation Model (SRTM), 90 Mt.	2002	National
ASTER, 15 Mt	2006	National

Moreover, other national institutions have their own geographical information system and generate particular studies, such as the Salvadoran Foundation for Research Coffee performing monitoring specific shade coffee agro ecosystem (<http://www.procafe.com.sv/menu/>). This is public information.

In order to reconstruct the time series data of deforestation, we will use the information from United States Geological Survey (USGS) who will provide landsat 7 images for 30 years period, with 250 shots per second and information is available for free, which will be monitored from 1970 to present.

For future studies will have images of the CBERS (China-Brazil Earth Resources Satellite, of the Brazilian Institute for

Space Research-INPE), which will monitor changes in the Earth's surface and with a resolution of 5 meters. It is planned to install an antenna to extend the coverage from Mexico to Panama, which currently only covers the countries of South America, the benefit is important because the images are freely available.

Indeed, there are also some LANDSAT (2001/2006) and ICONOS (2001) images available within different government agencies that could be used as a basis for projecting calculations on emissions in conjunction of useful information that could also be derived from the SERVIR facilities (CCAD Geographic information service supported by NASA). Updated images would also be advisable in order to have a more recent estimate.

d) What are the main causes of deforestation and/or forest degradation?

In El Salvador there is a growing socioeconomic pressure on forestry resources due to the high population density rate (+ 300 inhabitants/Km²) and a high demand of firewood for cooking as well as land use change for increasing pasturelands and crops for food security and urban housing as well as related public services development. All these factors combined result in an increasing and sustained deforestation rate.

The deforestation and forest degradation causes depending on the type of forest ecosystem and the geographic region where they occur, but generally fall into the following:

- Expansion of agricultural frontier
- Urban growth
- Logging to obtain firewood and timber
- Construction of shrimp and salt

Table 3. Main causes of deforestation and forest degradation

Forest ecosystem type	Deforestation and forest degradation causes
1. Tropical broadleaf forest	Agricultural and cattle expansion and cutting for firewood and timber.
2. mangrove or salt forest	Illegal logging for timber, housing and establishment of salt and small shrimp.
3. Shade coffee plantations	Urbanizations, cutting for timber and non-traditional agriculture (fruit and timber plantations, etc.)

About the coffee shade plantation, PROCAFE consider that urbanization was the responsible for 90% of deforestation in the western region, 70% in the central region, and 50% in the east. Also, consider that, among other uses is replaced with the use of land for the cultivation of coffee for 90 years, the subsistence crops were responsible for 5% to 10% of deforestation in each region, while the felling of timber and firewood accounted for 20% of deforestation (Blackman, A. et al. 2006).

According to current statistics, 30% of households continue to utilize firewood as the main energy source for cooking in urban areas and 63% in rural areas, but no precise studies have been carried out to determine to what extent the forested areas are providing this resource, which could be very relevant in terms of a REDD strategy.

On the other hand, even if there is a general idea on the magnitude and causes of deforestation, available information and research is not updated and more precise data is really needed to be able to develop a national strategy for reducing emissions from deforestation and forest degradation and this will be one of the initial activities to address during the implementation of the project.

e) What are the key issues in the area of forest law enforcement and forest sector governance (e.g., concession policies and enforcement, land tenure, forest policies, capacity to enforce laws, etc.?)

- Lack of approval by the Executive of the Forest Policy (which is still under consideration for approval)
- Lack of managerial, technical and administrative capacity in general within the public sector to implement and enforce forestry related legislation; in particular reduce number of forest professionals.
- Lack of knowledge, information and awareness by civil society leading to continue illegal harvesting in forested areas.
- There is no clear political commitment to define the limits of protected areas and mangroves and some areas are

been exploited by particulars.

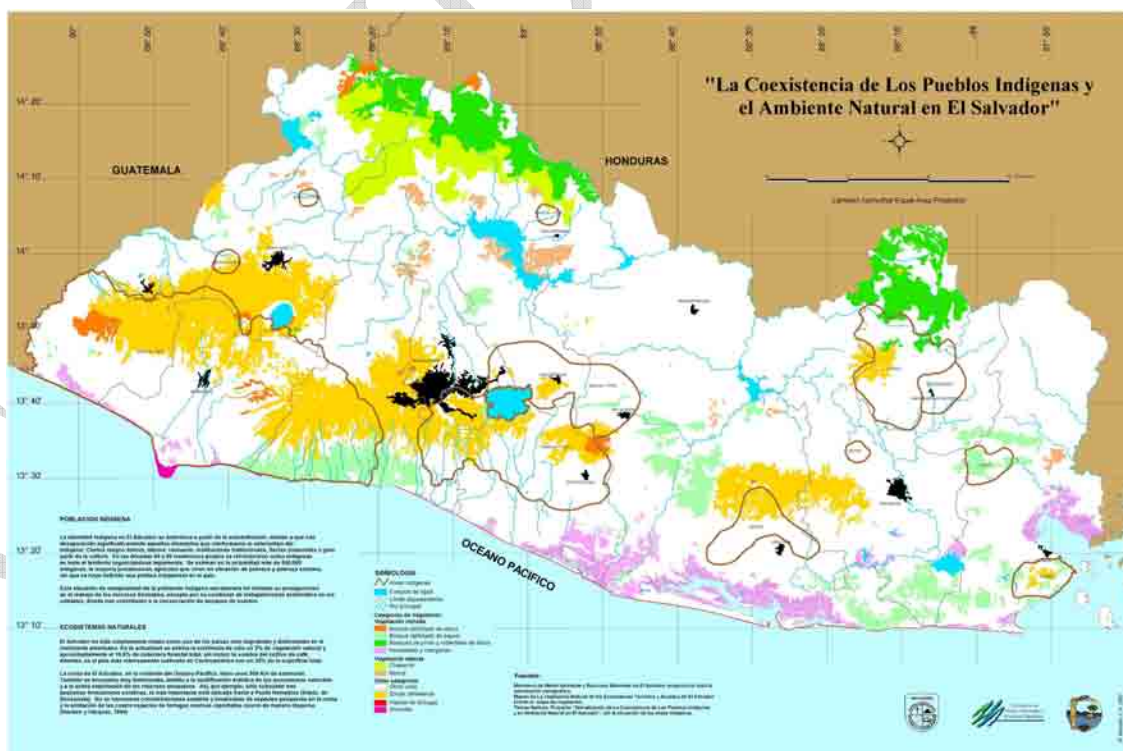
- There is a need to find ways to improve land productivity within small properties schemes such as the one prevailing in the country.
- Lack of adequate coordination among related entities, particularly Ministries of Agriculture, Environment and local governments (Municipalities) and civil society
- Lack of conditions that ensure private investments in the forestry sector and integrate forestry production into broader productive chains.
- Lack of a strategic framework that considers the role of the forest sector into national development strategies.

4) What data are available on forest dwellers in lands potentially targeted for REDD activities (including indigenous peoples and other forest dwellers)? (e.g., number, land tenure or land classification, role in forest management, etc.):

The indigenous people' issue is a particular character for El Salvador. Socio-economic processes throughout history have conditioned self-indigenous rural populations. In the past century, these people suffered persecution and ethnocide that lasted for decades after, as a result people were dressed, have physical features and speak the language Nahuatl was being persecuted, so the 'indigenous Salvadoran' was forced to be invisible in the society.

At present, one of the most sensitive when talking about the indigenous population, is to identify, locate and quantify each of the families in a place, village or area, including in areas historically recognized as indigenous, as it the risk of excluding or deny because of cultural and theoretical methodology that seeks to address.

In this context, self-identify as indigenous populations are located in several places in the country, many of them overlap in areas of permanent crops of coffee and buffer zones of ANP. Specific information on the Indigenous Profile: www.ruta.org/downloads/MIRIAM/Perfiles%20Indigenas/PerfilIndigELS/VERSION%20FINAL%201%20PI%2020_03_03.doc



In most of cases the indigenous people belongs to cooperative groups, as a small producers, in any case, these producers' associations would be linked programs or actions REDD and will be the stakeholders. Also, stakeholders will consider

other users of natural resources such as fishermen, independent producers (livestock), forestry products and artisans, among others.

Have been identified areas with potential for REDD activities, which have map information and socioeconomic status. The initial pilot activities are: (1) State Areas such as ANP, (2) Community forests - under management plans and (3) shade coffee in private land

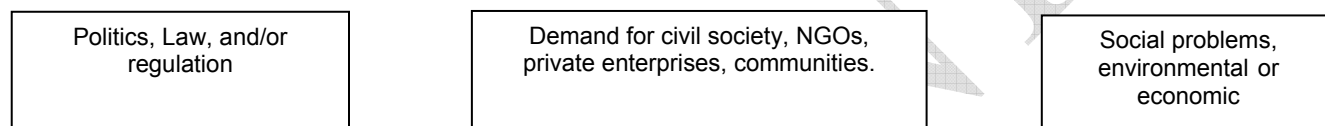
5. Summarize key elements of the *current* strategy or programs that your government or other groups have put in place to address deforestation and forest degradation, if any:

a) What government, stakeholder or other process was used to arrive at the current strategy or programs?

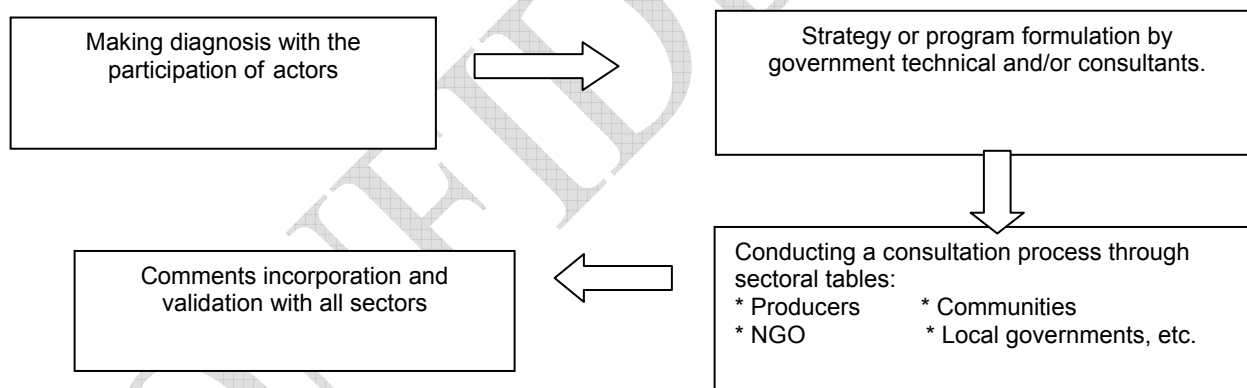
We have some program and strategies aimed, directly or indirectly, to address deforestation and forest degradation (eg, El Salvador Forest Strategy, National Strategy on Biological Diversity, etc.). Please see answer 5b.

Formulation and adoption are the product of a participatory process which involved government institutions, civil society, private enterprise, universities, local communities and local governments according to the nature and content of the strategy or program. Generally, the processes are summarized in the following diagram:

1. Formulation of the strategy or program by the government institutions arising from:



2. Strategy or program draft formulation that involves the following steps:



3. Following validation, the strategy or policy will be formalized and institutionalized through a decree or ministerial decision.

b) What major programs or policies are in place at the national, and the state or other subnational level?

The country has the following policies and programs:

- **Millennium Development Goals.** Goal 7 related to ensuring environmental sustainability, El Salvador is committed to increasing the proportion of land area covered by forests. As a result, has been assigned legal status to a list of 50 ANP.
- **National Environmental Policy:** Formulated by the Environment and Natural Resources Ministry MARN, it is based on the Republic Constitution, the Environment law and the international agreement on environmental issues ratified by the country. The National Environmental Policy is a set of principles, guidelines and actions aimed at protecting and conserving natural resources, including forest resources.

- **National Policy on Protected Areas.** Addresses the legal institutional framework for the establishment and sustainable management of the NPA, the management of natural protected areas and buffer zones, the social participation, focusing on people awareness and involvement in the management of the NPA; and market instruments, including incentives or other mechanisms that support the economic self from them.
- **Forest Strategy in El Salvador (EFSA).** It recognizes the environmental goods and services provided by forests and affect directly the economic, social and environmental elements of the population. This management tool makes direct reference to the relationship between forestry and the Conventions on Climate Change, Desertification, Biological Diversity, Ramsar and the Kyoto Protocol. EFSA has five components: (1) Organization, management and forest protection, (2) Expansion of the forest base, (3) Recovery of forest products and non-wood timber, (4) Institutional strengthening, and (5) Research, education and training.
- **National Plan for Reforestation and Ecosystem Recovery.** Have been identified priority areas to be used for reforestation, according to goals of forest conservation, aquifer recharge, recovery of habitat, soil conservation, carbon sequestration in soils Kyoto. In this identification are the buffer areas where focusing efforts toward the establishment of forestry and agroforestry systems that reduce the pressure on resource use in the PNA's.
- **Incentive Program: Forest Bono.** It is intended to help new plantations establishment and forest plantation established in areas ranging from 1 hectare, with financial support from inception to 10 years for maintenance. This bond is limited financial fund created from the privatization of national telecommunications company, therefore, should identify mechanisms to allow the sustainability of this fund, in this sense, the establishment of a REDD scheme would be appropriate to continue these actions. Additional information for the bond Forest <http://www.elsalvadorforestal.com/>
- **Coffee and Environment Trust.** Multisectoral Investment Bank (Bank of second floor) opened in 2007, an initiative that would provide incentives for conservation of coffee plantation its goals of reducing deforestation and changing land use, these reductions translate into certificates Carbon trading in the volunteers markets. Additional Information: <https://www.bmi.gob.sv>
- **Projects under the Fund for the Americas Initiative in El Salvador (FIAES).** Provides financial support for reforestation activities of conservation programs by entities that administer funds from debt-for nature with the Government of the United States. FIAES has one of its five programs devoted to natural protected areas, buffer zones and zones of influence, where projects are funded annually by community organizations, municipalities, universities and NGOs. The activities are subject to funding reforestation in agricultural buffer zones, reforestation and salty forest protection. These activities are developed and prioritized in areas with potential to support the National System of Protected Natural Areas contributing to reduce deforestation and degradation of ecosystems. The funds will be allocated annually by design, do not allow a continuation of the actions in the long term, in this sense a REDD scheme would enhance the conservation objectives. Additional Information: <http://www.fiaes.org.sv>
- **National Plan for Prevention and Control of Forest Fires.** It is a tool for planning, implementation and evaluation of prevention activities, control and mitigation of forest fires, made every five years by representative of the National Fire Corps, Ministry of Environment, Ministry of Agriculture, National Civil Police, among others. Additional information: www.ccad.ws/documentos/incendios/ES/Plan%20Nacional%20de%20Prevenci%C3%B3n%20y%20Control%20de%20Incendios%20Forestales.pdf
- **Protection Plan 10% of the eco region.** Consist in the implementation of the guidelines contained in the convention on biological diversity and the Millennium Development Goals that have been embraced by the Government and which are envisaged to protect at least 10% of eco-regions in the country. As a result, a list of protected areas has been produced and an inventory and registry is under way but the process is running very slowly due to complex land tenure conditions.
- **Land development and ordinance Plans.** Have been formulated and approved 12 of the 14 sub-regional programs and Land Development Ordinance which establishes the zoning of the country according to the vocation of land use, establishing zones of protection of state forest areas and in areas of restricted use private property with vegetation cover (<http://vmvdu.mop.gob.sv/sitdt/>)

- **Program of the Mesoamerican Biological Corridor (CBM).** It is a regional initiative at the level of Mesoamerica (from southern Mexico to Panama) which seeks the interconnectivity between the natural protected areas through the establishment of biological corridors. Particularly El Salvador implemented the CBM approach, translating the focus to a conceptual territory that was called the Conservation Area, where living spaces for multiple uses (agriculture, tourism, etc.) Buffer zone and core area (ANP)
- **Biosphere Reserve Program (MAB).** El Salvador currently has two biosphere reserves recognized by UNESCO MAB, like three Ramsar sites declared. The largest mangrove forest in the country (Jiquilisco) holds the title of Biosphere Reserve and Ramsar Site. These lands, under a scheme of management tools for implementing the REDD strategy.
- **Certification Program Coffee Rain Forest Alliance,** through the national NGO SALVANATURA. Until 2007, El Salvador has certified 231 among others farms that are doing environmental conservation practical, which means an area of 9,270 ha of forest coffee certification under the ECO-OK. More information: <http://www.salvanatura.org>

6. What is the current thinking on what would be needed to reduce deforestation and forest degradation in your country? (e.g., potential programs, policies, capacity building, etc., at national or subnational level):

We believe to contribute to efforts to reduce deforestation and forest degradation, it must create and promote programs and policies as:

- **Payment for environmental services Program** to owners of forest lands, including private and public land. There is already a proposed of national system of payment for environmental services, with pilot sites and schemes identified for implementation including institutional arrangements. Additional Information: <http://www.marn.gob.sv/?fath=171&categoria=173>
- **National Plan for Climate Change and National Policy on Climate Change,** as a result of the Second National Communication on Climate Change, including adaptation and mitigation issues in sectors such as water, ANP and biodiversity, human settlements, health and production.
- **Develop CDM-forestry projects** that can be financed by the voluntary or regulated market, by which could stimulate the reforestation and forestation in forestry land, reducing the pressure on existing forests.
- **Agricultural training programs:** to support agricultural producers living near forested areas and ANP to develop agriculture, cattle and forestry more efficient to reduce pressure on forests.
- Programs for **Capacity Building in Monitoring and Control** of natural Protected Areas. The program to build capacity of MARN to monitoring and control of natural resources by strengthening the Geographic Information System, both in the updating of equipment and tools such as human resource training in methods of monitoring and control.
- Expansion and strengthening **Program of private forest owners Reserve System ANP.** Additional Information: <http://renapes.org/>
- **Strengthening Program for the National Civil Police** (Environment Division) and the Forestry Technicians in order to prepare them technically and logistically for the performance of their duties in protecting natural resources.
- **Strengthen the capacities** of NGOs and Community Development Associations to co-operate voluntarily protected natural areas to improve the management of these protected areas and buffer zones.
- Participatory Development of ordinance and **Management of Municipal Development Plans,** which zoning land use to local scale according to their characteristics and natural course, and regulate the built of new housing and tourism development projects.

- Expand the number of **Biosphere Reserves**. Is currently proposing the Montecristo National Park and the area border with Guatemala, El Salvador and Honduras (Trifinio) as a transboundary biosphere reserve. Similarly work is underway to promote the management of this three national area under one form of management by the three countries that includes payment for environmental services and carbon credits. Additional Information: <http://www.sica.int/trifinio/>
- Review and approval of the proposed **forestry policy** should include items for mitigation and adaptation to climate change, biodiversity conservation, etc. it have to be on line with the Strategic Forestry Program for the Management of Forest Ecosystems (PERFOR) defined for the countries of the Central American Commission on Environment (CCAD) and Development of the Central American Integration System (SICA). Additional Information: <http://www.ccad.ws>
- Approval of the **National on Land Development and Orderly Law** in order to make effective land planning.
- Continue programs of poverty alleviation as **Red Solidaria**

a) How would those programs address the main causes of deforestation?

- It is expected that programs related to incentive mechanisms such as forest-MDL and Environmental Services Payment increase the profitability of forest land compared with other activities such as agriculture and cattle that are pressured to change land use. Furthermore, its could be stimulate to encourage reforestation and forestation in forestry area, reducing pressure on existing forests.
- Also, provide technical assistance to cattle, agricultural and forestry producers contribute to make efficient use of its resources on the land available for these activities, changing a production extending system by an intensively system with manage environmental friendly.
- Strengthen the technicians and official's responsible capacity for enforcement, monitoring and control of forest ecosystems also contribute to reducing deforestation and degradation of forests. The monitoring program should detect and control illegal cutting, fire control and other assets of the extraction of ANP, as a way to reduce deforestation.
- The MARN identified as strategic partners for the monitoring of ANP to NGOs and local communities through incorporation of forest guard. While this role is essential to ensure the protection of the ANP, the fund to pay forest guard are limited, coming from programs like FIAES and other government-fund, however, they aren't enough, and therefore a REDD strategy would provide resources to ensure the preservation of the quality of services of the ANP and reduce deforestation.
- The creation of Biosphere Reserve and incorporate private forest reserves will increase protection and management of forest ecosystems in the country. Some areas already have private management plans such as Forest Cinquera and Montañona.
- The adoption of the Forest Policy and would help improve forest governance as well as the adoption of the Law and Land Development Ordinance which establishes the legal basis for proper land use, including buffer zones of forest areas state and restricted use areas, on private property with vegetation. In addition, programs for poverty alleviation help improve living conditions for residents living near the forests and NPA, creating new opportunities that could reduce pressure on forests.
- Approval the Forest policy would help improve forest governance and the approval the Land Development and Ordinance Law, which establishes the legal basis for proper land use, including buffer zones of forest areas state and restricted use areas, on private property with vegetation. In addition, programs for poverty alleviation help improve living conditions for residents living near the forests and NPA, creating new opportunities that could reduce pressure on forests.

b) Would any cross-sectoral programs or policies also play a role in your REDD strategy (e.g., rural development policies, transportation or land use planning programs, etc.)?

- Currently there are government programs for poverty alleviation that have had good results by focusing on cash subsidies in return for the children of families remain in control of health and school attendance, these conditions are linked to improvements in basic services like electricity, access to water and basic sanitation. This program has the participation of Ministries of Health and Education and other social assistance such as Social Investment Fund and Local Development (FISDL). REDD articulated a strategy for these efforts would improve the environmental quality of life of these people. More information about Red Solidaria: <http://www.redsolidaria.gob.sv/>
- There is also collaboration with the Corporation of Municipalities of El Salvador (COMURES), Department of Housing and Urban Development (VMVDU), Ministry of Tourism (MITUR), MARN, MAG, the private sector (Salvadoran Chamber of Industry Construction-of-CASALCO) and NGOs, who have been part of the consultation of the Development Plans and Land Use. These plans are set according to the vocation areas of land use, protected areas of state forest areas and restricted use areas, on private property with vegetation. An important difficulty encountered by these programs is the pressure to increase the urbanizations area, in this sense a REDD strategy should support the balance in decision making in terms of compensating for the opportunity cost of urban development and the benefits of retention of appropriate land uses. Development Plans and Land Management can be found at: <http://vmvdu.mop.gob.sv/sitdt/>

c) Have you considered the potential relationship between your potential REDD strategies and your country's broader development agenda in the forest and other relevant sectors? (e.g., agriculture, water, energy, transportation). If you have not considered this yet, you may want to identify it as an objective for your REDD planning process.

Yes, there is a direct connection between any REDD strategy and the energy, agriculture and water sectors. In El Salvador the generation of hydroelectric power is quite important and it depends on the amounts of water stored in the existing dams mostly located in the Lempa and Guija rivers and it is sometimes impacted by eroded soils which are launched by the rain from the deforested areas causing problems in the generators. Soils in deforested areas also suffer from loss of productivity and impede regular filling of aquifers to provide water to urban areas. Forest cover is one of the elements directly affecting superficial and under water flows. Many ANP, are located in areas identified as recharge aquifer who supplies large urbanizations area, agricultural use area and power generation.

One of the objectives of a REDD strategy for our country, including working closely with the largest generator of hydroelectricity, Comisión Ejecutiva Hidroeléctrica del River Lempa (CEL), which is an autonomous entity of the government. CEL has an environmental program that includes reforestation activities in the Lempa River. A REDD complementary objective could be the protection of water resources.

Currently it has raised the water sector reform, including a draft Law on Waters, Water and Sanitation Subsector Law, the Irrigation and Drainage Law modification and its regulation. In particular, the Water law will be concerned with protecting aquifer recharge areas, for which a REDD strategy would complement this effort.

d) Has any technical assistance already been received, or is planned on REDD? (e.g., technical consulting, analysis of deforestation or forest degradation in country, etc., and by whom):

Not directly, however once next steps on preparing the REDD strategy an effort must be conducted in order to articulate other potential international partners towards the same objective. Conservation International (Mexico and Central American Center for Biodiversity Conservation based in Costa Rica) has offered to technically support national efforts in this area according to needs and further development of the REDD strategy.

Other organizations which could be established partnerships: German Technical Cooperation, Spain Government Cooperation and Rainforest Alliance. On the other hand there are entities in the region capable of providing technical assistance on issues such as the Tropical Agricultural Education and Training (CATIE), El Zamorano Panamerican School, Water Center for the Humid Tropics of Latin America and the Caribbean (CATHALAC), NASA and the National Institute for Space Research (Brazil); however, additional resources are needed for specific studies.

7. What are your thoughts on the type of stakeholder consultation process you would use to: a) create a dialogue with stakeholders about their viewpoints, and b) evaluate the role various stakeholders can play in developing and implementing strategies or programs under FCPF support?

The consultation process should be comprehensive and involve all stakeholders to create a dialogue within a REDD initiative possible. To do this process we will use the different management structures already established and operating within the framework of the natural protected areas, biosphere reserves and climate change, which are detailed below:

Organization	Actors	Role of stakeholders can play in REDD strategies or programs under FCPF support
National Council of Natural Protected Areas (Art. 8, ANP Law)	a. Ministries: <ul style="list-style-type: none"> • Environment • Education • Agriculture • Defense b. Institutions: <ul style="list-style-type: none"> • PNC Environment Division • Human Rights Defense Attorney • universities c. Non Governmental Organization Representative d. Representative of communities in buffer zones of the NPA	Through the Council could discuss the policy and regulatory frameworks relating to REDD in the theme of ANP, the initiatives and efforts aimed at reducing deforestation and forest degradation, as well as supporting the implementation of a strategy geared towards strengthening the REDD National and private System of Protected Natural Areas. Including the incorporation of local communities in buffer zones.
Consultative Group on Climate Change (GCCC)	Ministries: <ul style="list-style-type: none"> • Environment • Education • Agriculture • Public Health • Economy • Foreign relation Cooperating agencies FAO, PNUD Institutions: <ul style="list-style-type: none"> • COMURES, ANEP, FUSADES, ASI Universities: <ul style="list-style-type: none"> • UCA, UTLA Non governmental Organizations: <ul style="list-style-type: none"> • SALVANATURA 	<p>Inter-institutional group of entities at the most high level, they discuss the different options in mitigation and adaptation national topics in the plain and give guidance in the projects.</p> <p>The GCCC could encourage and support the creation and implementation of policies and programs that can incorporate the subject of REDD, both national and municipal</p>
Local advisor committee (COALES) (Art. 8, ANP Law)	Composed of representatives from: <ul style="list-style-type: none"> • Protected Natural Areas Management of MARN • Communities surrounding the ANP • Municipal Council of Local Governments • NGOs • Community Development Association 	<p>The COALES are participation and coordination mechanisms between the protected areas and actors that are in the social spaces nearby. Through them you can call and make the process of consultation with all stakeholders within the framework of a REDD initiative. For more information see available reports:</p> <p>http://www.marn.gob.sv/?fath=19&categoria=319&articulo=132&subcat=Y</p>

National Committee for Biosphere Reserve and local biosphere reserve Management Committees	National Committee for RB: <ul style="list-style-type: none"> • Ministries of Environment, Agriculture, Education, Tourism • Committees Representatives of the two Biosphere. • National Network of Private Reserves (RENAP) • Universities • Local Governments Environmental Units • NGOs 	The National Committee and the Local Committees can contribute to the processes of consultation with all stakeholders in a REDD initiative. In addition, as part of its functions is to manage the funds to be invested in environmental protection and conservation projects, management of the ANP, and improved quality of life for communities located in buffer zones, core area and transition zones (Annex 3)
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These organizations will create a dialogue between the most representative social and organized groups of forest-dependent or related people, such as those householders who depend on firewood, groups of farmers and forest owners. The objective of the dialogue has to be to reach agreements on the identified problems as well as on the proposed policy measures in order to have clear commitments for and from both parts and identify criteria for their participation in the strategy implementation.

Identifying and involving the most representative social and organized groups of forest-dependent or related people, such as those householders who depend on firewood, groups of farmers and forest owners. The objective of the dialogue has to be to reach agreements on the identified problems as well as on the proposed policy measures in order to have clear commitments for and from both parts and identify criteria for their participation in the strategy implementation.

On the other hand, the public sector has to develop a unique strategy to deliver the expected services to the population as per the agreements achieved and to this end will require a permanent mechanism to coordinate. In this regard, involvement of other Ministries such as Economy and Industry, Energy, Transportation, Planning and others will be of critical importance, both at the implementation and monitoring stages and also taking into account the critical role the Technical Secretary of the Presidency can play in terms of overall national planning.

a) How are stakeholders normally consulted and involved in the forest sector about new programs or policies?

El Salvador has a recent history of social consultation of forest related policies since the Forestry Strategy and a new legislation was developed in recent years. For this purpose, all relevant stakeholders were involved in order to reach agreements on the main elements of both instruments. **The Consultation processes have been explained in section 5.**

Specifically for the forest sector consultation processes are directed and coordinated by the Agriculture Ministry with the support and participation of:

- The Forestry Commission, which was created by Executive Agreement in the field of Agriculture and cattle, integrated for representatives of the government sector, independent institutions, artisans and representatives of two unions of forestry producers, it is coordinated by the General Director of DGFCR. The creation of this Commission was a historical event in terms of private participation mandated by law, giving support and assurance to the process of discussion and driving the areas mentioned. This situation however has not been fully exploited. Progress towards the role of the committee have been relatively few, highlighting the urgent need to refocus and find catalysts work done to date (2006. Forest Strategy for El Salvador)
- **Agriculture and Agro-Industrial Chamber of El Salvador (CAMAGRO)**, an organization that brings together the natural and legal persons involved in activities related to forestry, fisheries and agro-industrial, and related activities (<http://www.camagro.com>)
- **The Forestry Corporation of El Salvador (CORFORES)** and the Forest Salvadorians association AFOSALVA) that brings together forest producers in the country.

b) Have any stakeholder consultations on REDD or reducing deforestation been held in the past several years? If so, what groups were involved, when and where, and what were the major findings?:

The Advisory Group on Climate Change-GCCC was consulted in general terms. Some sectors are particularly concerned as SALVANATURA, who manages one of the most important natural parks called “El Imposible” in the southeast of the country.

As part of the preparation of the R-PIN a workshop was held in San Salvador with the participation of near 40 representatives from both governmental and nongovernmental organizations. The meeting was meant to share with relevant stakeholders the main elements of ongoing negotiations within the UNFCCC process as well as presenting the main features of the FCPF and the REDD readiness Initiative. Both the Ministries of Agriculture and Environment made presentations addressing main concerns on deforestation and forest degradation and asked for the broad participation of all stakeholders in order to guarantee fulfilling the needs of an integral strategy on REDD. Most participants agreed on the need to address the issue in a cross-sectoral fashion and affirmed their willingness to get involved actively if the opportunity is opened. Governmental officers shared the vision on the need for better coordination in order to be able to positively take advantage of this initiative. In this workshop, the participation and interest in the subject of some coffee cooperatives was very highlight. These consultations have also taken into account in the coffee sector through cooperatives and entities providing technical assistance.

Table 9. Consultation Workshop on REDD initiative

Name	Institution	Issue
Guillermo Rivera	Alcaldía de Cinquera	Municipality
Diego Salcedo	TEC SA de CV	Productive sector
Francisco Serrano	Bioproductores SA	Productive sector
Hans P. Usko	UCAFES - Union of Coffee Cooperatives of El Salvador	Productive sector
Mauricio Aguilera	Enterprise and Development Foundation	Productive sector
Luis Fernando Umaña	Cooperative Cuzcachapa	Productive sector
Mario Juárez		
Fernando Lim		
Waldo Jiménez	ANEP- National Association of Private Enterprises	Productive sector
Guadalupe Martínez		
Francisco García	UCA- Central America University “Jose Simeon Cañas”	Academic sector
Ismael Sánchez		
Leopoldo Dimas	FUSADES- Salvadorean Foundation for Economic and Social Development	Non Government Organization
Mercedes Llort	SalvaNATURA- Ecological Foundation of El Salvador Ecological Foundation of El Salvador Ecological Foundation of El Salvador	Non Government Organization
Rutilio Antonio Parada	CEPRODE – Disaster Protection Center	Non Government Organization
Cindy Castro	PROCAFE- Foundation for Research on Coffee	Non Government Organization
Baltazar Portillo	MH – Finance Minister	Government
Aida Argüello	STP- Technical Secretariat of the Presidency	Government
Mario Lobo	MAG- Ministry of Agriculture	Government
Josué Guardado		
Rodolfo Castro	CENTA- National Center for Agricultural Technology	Government
Orbelina de Palma	MSPAS- Ministry of Health and Social Assistance	Government
Guadalupe de Flores	MARN – Ministry of Environmental and Natural Resources	Government
Carlos Salazar		
Cecilia Carranza		

Rebeca Magaña
Francisco Soto
Walter Rojas
Cesar Funes Abrego
Néstor Herrera
Zulma de Mendoza
Jeannette Monterrosa
Ivy de Romero
Carolina Canales
Carlos Figueroa
Hugo Zambrana

A specific initiative to reduce emissions by avoided deforestation, has been made by the Multisectoral Investment Bank (BMI) to develop a trust to bring together a considerable amount of coffee producers, the objective is to prevent the change of land use (plantations coffee in to urbanizations). The mechanism operates through certificates via voluntary market for carbon. Additional Information: <https://www.bmi.gob.sv>

c) What stakeholder consultation and implementation role discussion process might be used for discussions across federal government agencies, institutes, etc.?

The consultation process with various cross-government institutions and ministries can be developed through the Consultative Group on Climate Change and/or the National Council of Protected Natural Areas. In both instances are present the ministries involved with the issue of deforestation and forest degradation. The process can be led by the Technical Secretariat of the Presidency, which functions as an articulator of policies, plans and programs of different ministries.

d) Across state or other subnational governments or institutions?

Consultation processes and the role definition of local governments in a potential REDD initiative can be developed by the Corporation of Municipalities of El Salvador (COMURES), which brings together the 262 municipal governments. In addition, with the Salvadoran Institute for Municipal Development who's mission is to strengthen the municipalities and provide the technical resources necessary for quality of these entities as self-promote the development and active participation of communities in harmony with the policies, plans and programs defined by the government to consult more information: <http://www.isdem.gob.sv/nueva/>

Local involvement will be a key factor for guaranteeing good forest governance, implementation of environmental laws and an equitable distribution of the potential benefits of the REDD program.

e) For other stakeholders on forest and agriculture lands and sectors, (e.g., NGOs, private sector, etc.)?

- Consultation processes should include NGOs and Associations of Local Development (ADESCOS) to ensure representation of the interests and views of civil society. These processes can be made through the Local Advisory Committees (COALES) and/or Local Management Committees of Biosphere Reserves which are represented by local actors.
- The private sector as agriculture and cattle cooperatives, small and large producers, fishers, foresters, craftsmen, among others, could be incorporated into the consultation process on two levels: National, through organizations that represent them, and a local level through direct participation in consultation workshops to be developed on their territories.

f) For forest-dwelling indigenous peoples and other forest dwellers?

There are organizations representing indigenous people, such as the Salvadoran National Indigenous Association -ANIS, Lenca Communities Association of Guatajiagua- ACOLGUA, Salvadoran National Indigenous Coordinating Council - CCCNIS among others.

These organizations work in national or local levels and have specific issues, from the political to the cultural and health and productive, and therefore can be used as a means of consultation and communication with local communities. Specific information on the Indigenous Profile:

www.ruta.org/downloads/MIRIAM/Perfiles%20Indigenas/PerfilIndigELS/VERSION%20FINAL%201%20PI%2020_03_03.doc

8. Implementing REDD strategies:

a) What are the potential challenges to introducing effective REDD strategies or programs, and how might they be overcome? (e.g., lack of financing, lack of technical capacity, governance issues like weak law enforcement, lack of consistency between REDD plans and other development plans or programs, etc.):

Table 10. Potential Challenges and way to be overcome

Potential challenges	Way to be overcome
1. Lack of integration of strategies and programs in REDD policies and plans of the various inter-governmental institutions related to the topic.	In order to overcome this possibility, appropriate information and training activities must be implemented at different levels of the Government and particularly there is a need to work closely with the planning units of the involved Ministries. This could be done through the National Council of Protected Natural Areas, the Consultative Group on Climate Change and the Technical Secretariat of the Presidency
2. Lack of detailed information on causes of deforestation and forest degradation.	It's necessary to conduct additional research studies, a step considered critical since this will be the basis for any policy design process to address causes of deforestation and degradation.
3. Lack of adequate long-term financial opportunities to forest land-owners as well as lack of sufficient financial resources at the beginning of the activities, to engage as many owners as possible.	Seek financial support from international agencies and other financial schemes as Payment for Environmental Services that can make sustainable REDD initiatives.
4. Lack of capacities financial and technical for establishing and monitoring national baselines (reference scenario), methodologies to evaluate cover, emissions, etc.	Request technical and financial support to organizations for technical cooperation to improve our capabilities.
5. Finalize the Forestry Inventory in order to have more accurate data available on the specific location of forestry resources and to be able to define monitoring strategies.	Solicit funds for the completion of the national forest inventory, or to conduct inventories at the subnational level in areas with a potential for REDD

b) Would performance-based payments through REDD be a major incentive for implementing a more coherent strategy to tackle deforestation? Please, explain why. (i.e., performance-based payments would occur *after* REDD activities reduce deforestation, and monitoring has occurred):

Performance-based payments could be implemented besides other instruments, i.e. payments environmental services in local scale and technical assistance take into account the main causes of the deforestation. The implementation stage the payments must continue while the environmental services are provided as a way to ensure the maintenance of land use.

It is essential that these mechanisms are complementary and consistent with other interventions in the territories, where pilot activities should be developed during the implementation of the REDD strategy.

9. REDD strategy monitoring and implementation:**a) How is forest cover and land use change monitored today, and by whom? (e.g., forest inventory, mapping, remote sensing analysis, etc.):**

Both the Ministries of Environment and Natural Resources as well as the Ministry of Agriculture have legal responsibilities to monitor land use change, however there is no permanent and systematic process to perform studies on a regular basis. Monitoring land use change has been made using satellite imagery available from 1978, but the studies of cover in El Salvador was scattered and not systematic, in this stage this kind of studies were elaborated with different methodologies but they did not accept its comparison. We have information on forest cover the years 1978, 1996, 1998, 2000, 2002 and for 2006 only tree cover.

No forest inventory has been developed in recent years for the Ministry of Agriculture who has the responsibility to make the inventories.

We have a digital monitoring system working on a regular basis is for forest fires detection using the SERVIR information database (located in Panama) through regular observation of hot-points, but this system is not capable to detect the current status of forests and its level of degradation.

Although we do not have a monitoring system at national level, monitoring is done to certain ecosystems, such as coverage under the shade coffee, which is done by PROCAGE at the farms. Furthermore, in the ANP that they have a Management Plan, monitoring is done in the field, an example of the kind of data that is collected is the illegal extraction of trees. Of the 50 legally declared ANP, 46 are monitored with the help of the resource guard.

b) What are the constraints of the current monitoring system? What constraints for its application to reducing deforestation and forest degradation? (e.g., system cannot detect forest degradation of forest stands, too costly, data only available for 2 years, etc.):

The constraints for application a monitoring system are:

Remote sensing monitoring	Field monitoring
Do not have sufficient personnel with the training to handle the specialized software	Deficiency of specialized equipment for georeferencing
Obsolescence and lack of equipment to handle the software	Records are manual
Lack of a methodology for conducting monitoring of degradation and deforestation	It's limited to ANP with management plan
Lack of satellite imagery available for a historical record	Do not have the forest inventory

Although there are some satellite images, the tracking system for monitoring field in the ANP is not automated in a single database, however, we are asking to access a tool to monitor both physical and financial ANP through of the Ministry of Environment of Brazil and the Inter American Biodiversity Information Network (IABIN).

As mentioned earlier, the Ministry of Environment, through its GIS unit prepared a study on "Forest Cover in El Salvador using ASTER satellite images", but the main constraint has been the lack of resources to implement the field verification of results from the image interpretation, but it could be a very important input for the REDD Project.

c) How would you envision REDD activities and program performance would be monitored? (e.g., changes in forest cover or deforestation or forest degradation rates resulting from programs, using what approaches, etc.)

A program for monitoring the results of the implementation of a REDD program will be displayed at the following levels:

- **Local Level:** a small scale taking into account the municipal boundaries as they develop the project. This would facilitate better monitoring and recording of information which would enable a more efficient identification of drivers that cause deforestation and forest degradation, as well as the social, economic and environmental impacts arising

from the REDD project.

- **The national level:** with the support of tools such as remote sensing, satellite imagery interpretation and field corroboration made locally. Also, this will allow to identify possible leakages.

The monitoring system requires the fulfillment of certain prerequisites:

- Establishing a baseline in areas with potential for developing a REDD activities.
- Structuring a system of indicators to monitor development of the quality of environmental services, biodiversity conservation, socio-economic benefits for communities, among others.
- Build local capacity to develop monitoring programs, with different actors: municipalities, comanagement of ANP, local communities and government entities.

The approach of a strategy for REDD to El Salvador, will be at national level o for projects in forested areas with potential for reducing deforestation and forest degradation. This would facilitate the lifting of the baseline and the monitoring and control.

10. Additional benefits of potential REDD strategy:

a) Are there other non-carbon benefits that you expect to realize through implementation of the REDD strategy (e.g., social, environmental, economic, biodiversity)? What are they, where, how much?

The co-benefits of developing a REDD strategy will:

- Improve the protection and conservation of biodiversity in forest ecosystems and ANP who could benefit from this initiative, such as mangroves that are important reservoirs of biodiversity, reported at least 9 logs of species new to science.
- Protection and stabilization of coastline, in the case of the mangroves, which constitute a natural barrier to protect against hurricanes.
- Protection of groundwater seepage area, regulation and sub surface flow coincide with areas with vegetation cover that may be included in a REDD initiative. For example: The main river in El Salvador, the Lempa River caters to a major aqueduct systems in the country providing over 30% of water consumed in the capital, besides supplying the two largest irrigation districts and 4 hydroelectric dams generated nearly 30% of the electricity consumed nationwide.
- Protection of soil erosion, preventing the filler of infrastructure such as irrigation systems and hydroelectric dams in addition to the channels of rivers.
- Particularly for El Salvador some permanent agroforestry (shade coffee) are large areas located in strategic areas for the conservation of soil and water, in addition to being biological corridors that interconnect some of the main areas of the country.
- El Salvador is a migratory bird corridor where the ANP and other forested areas, are feeding and resting areas.
- Protection against soil slippage and landslides, affecting rural communities living near slopes.
- Increased opportunities for ecotourism, promoting job creation and diversification of income sources of local communities.
- Other economic benefits associated with the extraction of non-timber products from the continental and coastal forest ecosystems, such as are medicinal products, subsistence hunting, fisheries, seeds and flowers for use in crafts, etc.

Box 1. List of new species for the science in salvadorean ecosystem

Despite its small land mass and high population density, El Salvador supports significant biodiversity, with a wide range of ecosystems, species, and regionally and globally important genetic resources. The country lies in the Mesoamerican hot zone spot for biodiversity proposed by scientists related to global biodiversity studies.

There are about 13 endemic plant species, most located within natural protected areas. Moreover, many new species to science have been discovered recently: four wasps from coffee forests, four marine polychaetes at Jiquilisco Bay mouth, as well as two fishes from marine and estuarine ecosystems at Gulf of Fonseca. Further research on new discoveries and records continues.

In: Gaud, Ian David et. Al. "Guía Para la Identificación de los Pimplinae de Cafetales Bajo Sombra de El Salvador (Hymenoptera: Ichneumonidae). Public London: Natural History Museum, 2002.

b) Is biodiversity conservation being monitored at present? If so, what kind, where, and how?

The National Biodiversity Strategy defines actions to monitor, among the actions have been made are:

- Wild flora and fauna inventory of in NPA of the country, supported by NGO that management the NPA, through projects funded by international agencies with technical assistance from local universities.
- Inventory of dynamics populations of commercially valuable species of aquatic fauna associated with forest-salt,

made by National Fisheries Development Center-CENDEPESCA (more information:

<http://www.mag.gob.sv/cendepesca/>)

- A technical procedures manuals developing for inventory and monitoring of biodiversity at landscape, ecosystem and species (www.marn.gob.sv)

While some progress has been made in the monitoring of species, it is necessary to develop analysis of population dynamics indicator species of ecosystem health. We currently have national and regional strategies in the context of the Mesoamerican Biological Corridor (MBC), but we have not advanced in the implementation. In this regard we consider a REDD strategy would activation mechanisms to follow up on these dynamics of species populations.

c) Under your early ideas on introducing REDD, would biodiversity conservation also be monitored? How?

Yes, a basic monitoring system needs to be designed with the aim of monitoring regularly the state of ecosystems and main species in the country, particularly those included in the RED listings (endangered species and under pressure for extinction) and also for the monitoring of mangroves which are suffering a big impact.

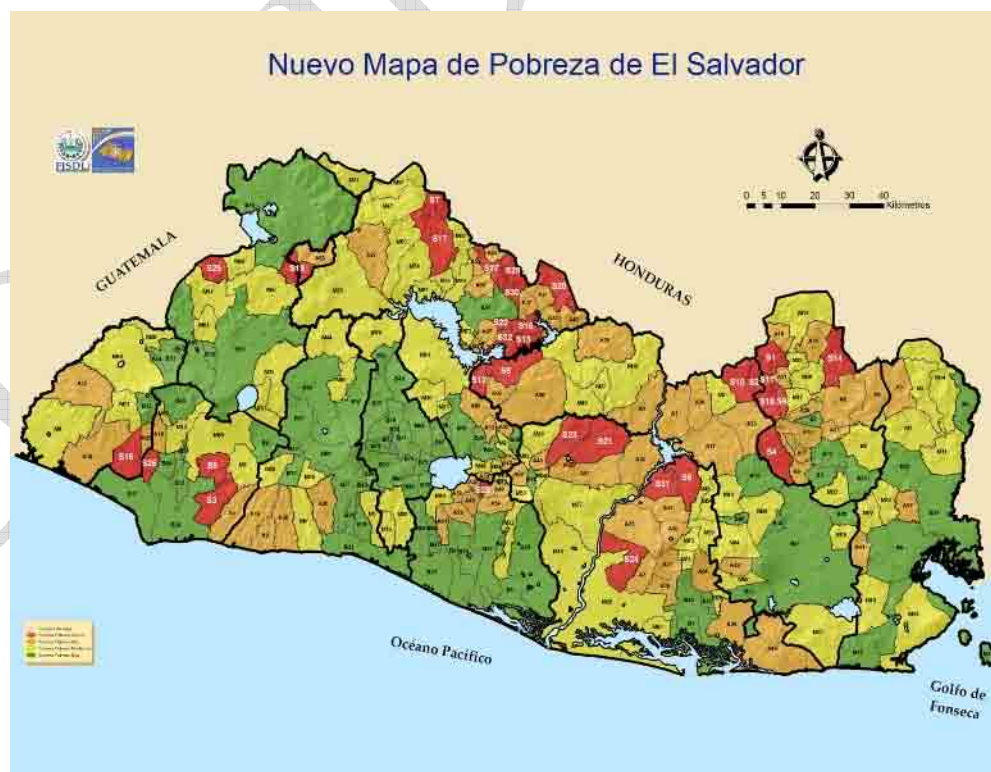
We would do the monitoring through the structuring of a system of monitoring indicators based on principles established in the National Biodiversity Strategy, including the involvement of other actors such as:

- University students, undergraduates
- Resource guard in the ANP
- Residents of local communities

These strategic actors must receive training.

d) Are rural livelihood benefits currently monitored? If so, what benefits, where, and how?

The Government of El Salvador's have a national measurement systems of the living conditions of the rural and urban populations, especially rural households who are in poverty through a social assistance program targeted to families in extreme poverty (Red Solidaria Program-<http://www.redsolidaria.gob.sv/>) providing financial assistance linked to basic education assistance and health checks.



e) Under your early ideas on introducing REDD, would rural livelihood benefits also be monitored? How?

Yes, there is a need to assess at least some variables and indicators that will show to what extent the policy measures implemented as a result of the REDD strategy (changes in use of energy patterns, access to housing services, etc.) are having a positive effect in the consumption patterns of targeted social groups and the related impact in terms of forest product use, however this should also be applied in the urban populations. Specific criteria and indicators need to be designed in order to be able to do so, which will be part of the plan implementation.

11. What type of assistance are you likely to request from the FCPF Readiness Mechanism?

- **Identify your early ideas on the technical or financial support you would request from FCPF to build capacity for addressing REDD, if you are ready to do so. (Preliminary; this also could be discussed later.)**
- **Include an initial estimate of the amount of support for each category, if you know.**
- **Please refer to the Information Memorandum and other on-line information about the FCPF for more details on each category:**

The following table presents the type of assistance they would require the FCPF Readiness Mechanism:

Description	Amount (\$)	Comments.
Consultation process with stakeholders to formulate the strategy for REDD.	30,000.00	In order to be participative strategy REDD we plans to perform a broad consultation process at the level of local communities, municipal governments, private companies, NGOs and government institutions among others. In order their views and interests are considered in this.
Review the legal and institutional framework for identifying barriers to implementation of a REDD strategy	15,000.00	Identification of regulatory gaps and institutional responsibilities for implementing a REDD strategy and proposals for legal mechanisms to their proper implementation.
Design and implementation of the baseline.	200,000.00	Historical record should include the change of use and coverage soil, the existence of changes in carbon stock in the potential areas for REDD project and a history of net emissions of CO ₂ , among other scenarios references.
Building and strengthening capacities.	50,000.00	MARN has a Geographic Information System, and only one person trained in analysis of satellite images, they require hiring new staff and strengthen the capabilities of existing staff, and it requires better hardware available and the acquisition of new equipment with greater storage capacity and information processing. In addition, training of other actors involved in REDD activities.
REDD strategy formulation.	100,000.00	Harmonizing the legal framework of the REDD project with sectoral policies, analysis of opportunity cost of potential interventions REDD, characterization and definition of priority areas for REDD among others.
REDD strategy communication	20,000.00	Graphic design and reproduction the national REDD strategy and dissemination
Design of the monitoring system.	50,000.00	This includes system monitoring carbon stock changes of forest cover, deforestation rates and forest degradation, emissions of CO ₂ , biodiversity, and living conditions of local communities, among others.
Overall.....	465,000.00	

a) Setting up a transparent stakeholder consultation on REDD (e.g., outreach, workshops, publications, etc.):

There will be a consultation to review sectoral policies and programs, and how it could be inserted and to support the REDD initiative, which will be directed to:

1. Government and autonomous institutions such as Ministries of Environment and Natural Resources, Agriculture, Economy, Health, Education, Vice-ministrie of Housing and Urban Development, Technical Secretariat of the Presidency (works as a Ministry Planning), National Civilian Police Division of Environment, Executive Hydroelectric Commission of Rio Lempa (CEL), National Water and Sewerage Administration (ANDA),

Multisectoral Investment Bank (BMI).

2. Nongovernmental organizations: Salvadoran Foundation for Coffee Research (PROCAFE), NGOs that have established agreements with comanagement MARN (Approximately 50), Community Development Associations (ADESCO) Salvadoran Ecological Unit (UNES), Technology Center appropriate (CART), Association of Indigenous Salvadorans (ANIS).
3. Local governments: We involve local governments that they have jurisdiction over potential areas of intervention of REDD activities.
4. Private sector: National Association of Private Enterprise (ANEP), agricultural cooperatives, livestock, fisheries, small farmers and ranchers, farmers associations, Forest Producers Association.
5. Cooperating agencies: Initiative Fund for the Americas of El Salvador (FIAES), Spanish International Cooperation Agency (AECID), United States Agency for International Development (USAID), Japanese Cooperation Agency (JICA), German Cooperation Agency (GTZ), World Bank, Interamerican Development Bank (IDB), Rain Forest Alliance, Other.
6. Academic and research entities: Tropical Agricultural Research and Education (CATIE), Salvadoran Foundation for Economic and Social Development (FUSADES), Universities.

In order to present results of the consultation and to define strategies aimed at supporting the REDD initiative will develop a workshop with the participation of all entities mentioned above, and it will be distributing the brochure with information on REDD initiative and contribution to reducing emissions of greenhouse gases, as well as collateral benefits in terms of biodiversity conservation, improved quality of life of the people, etc..

b) Developing a reference case of deforestation trends: Assessment of historical emissions from deforestation and/or forest degradation, or projections into the future.

The country needs technical and financial support for capacity building and develop a historical record of changing land use and forest coverage, the existence of changes in carbon stock in the potential areas for REDD project and a historical record of emissions of CO₂, baseline scenarios, among others. Historical record should include the change of use and coverage of the land, the existence of changes in carbon stock in the potential areas for REDD project and a history of net emissions of CO₂, among other scenarios references.

c) Developing a national REDD Strategy: Identification of programs to reduce deforestation and design of a system for providing targeted financial incentives for REDD to land users and organizations (e.g., delivery of payments, governance issues, etc.):

Support is needed to harmonize the legal framework of the REDD project with sectoral policies, analysis of cost opportunity of potential interventions REDD, characterization and definition the priorities areas for REDD, designing programs to reduce deforestation and degradation; well as the design of an incentive program for land users and organizations.

d) Design of a system to monitor emissions and emission reductions from deforestation and/or forest degradation:

We should design a monitoring system to include monitoring of carbon stock changes of forest cover, deforestation rates and forest degradation, emissions of CO₂, biodiversity, and living conditions of local communities, among others.

e) Other?:

12. Please state donors and other international partners that are already cooperating with you on the preparation of relevant analytical work on REDD. Do you anticipate these or other donors will cooperate with you on REDD strategies and FCPF, and if so, then how?:

Currently for the preparation of this document, we had the support of Conservation International and Economic Commission for Latin America and the Caribbean (CEPAL), further training of staff has reviewed this document has received the training provided by: Rainforest Nations Coalition, Internationale Weiterbildung und Entwicklung gGmbH (INWENT), National Forestry Agency of France.

We have identified other regional entities such as the Rainforest Alliance who has a presence in the country through the certification of coffee under shade farms as well as displaying the possible assistance of the German Technical Cooperation.

13. Potential Next Steps and Schedule:

Have you identified your priority first steps to move toward Readiness for REDD activities? Do you have an estimated timeframe for them yet, or not?

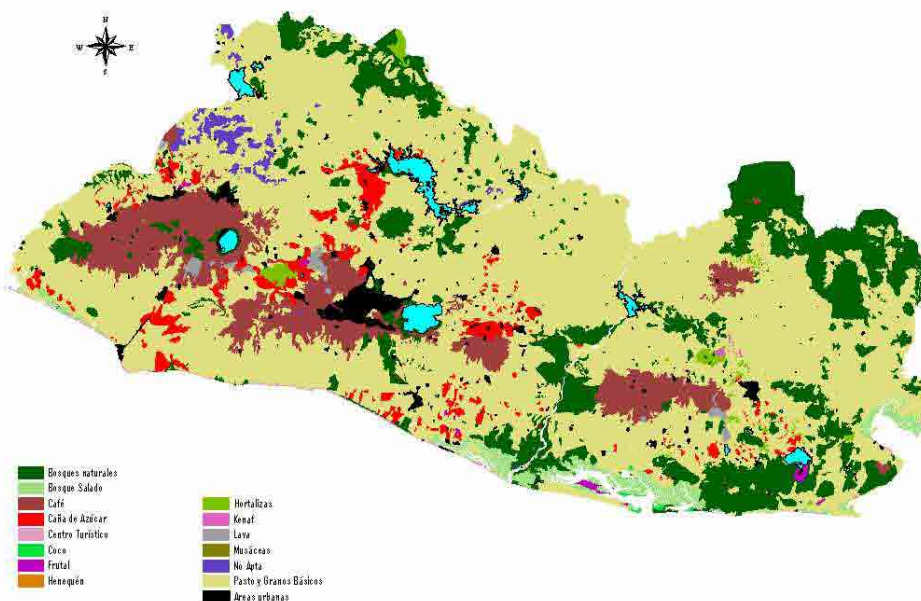
Description	Amount	Month											
		1	2	3	4	5	6	7	8	9	10	11	12
Consultation process with stakeholders and formulate the strategy for REDD.	30,000	X	X	X									
Review the legal and institutional framework for identifying barriers to implementation of a REDD strategy	15,000	X	X	X	X								
Design and implementation of base line	200,000		X	X	X	X	X	X	X	X			
Capacity building and strengthening capacities.	50,000		X	X	X								
REDD strategy formulation.	100,000								X	X	X	X	X
Disclosure of the REDD strategy	20,000											X	X
Design of the monitoring system	50,000						X	X	X	X	X	X	

14. List any Attachments included (Optional: 15 pages maximum.)

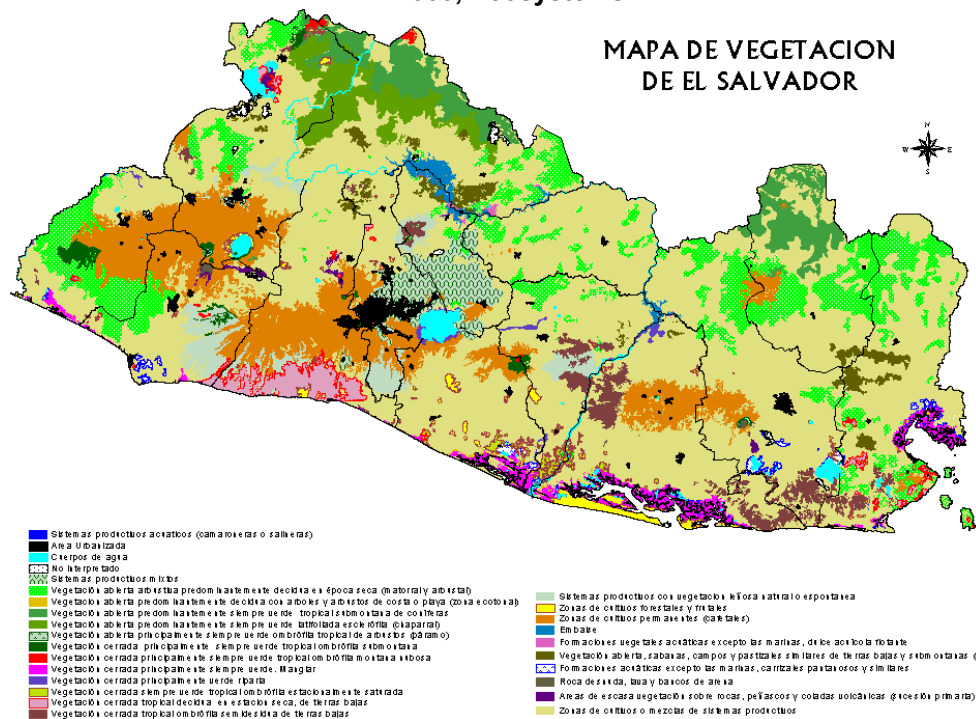
Annex 1. Maps of Land Use

1996, Land Use

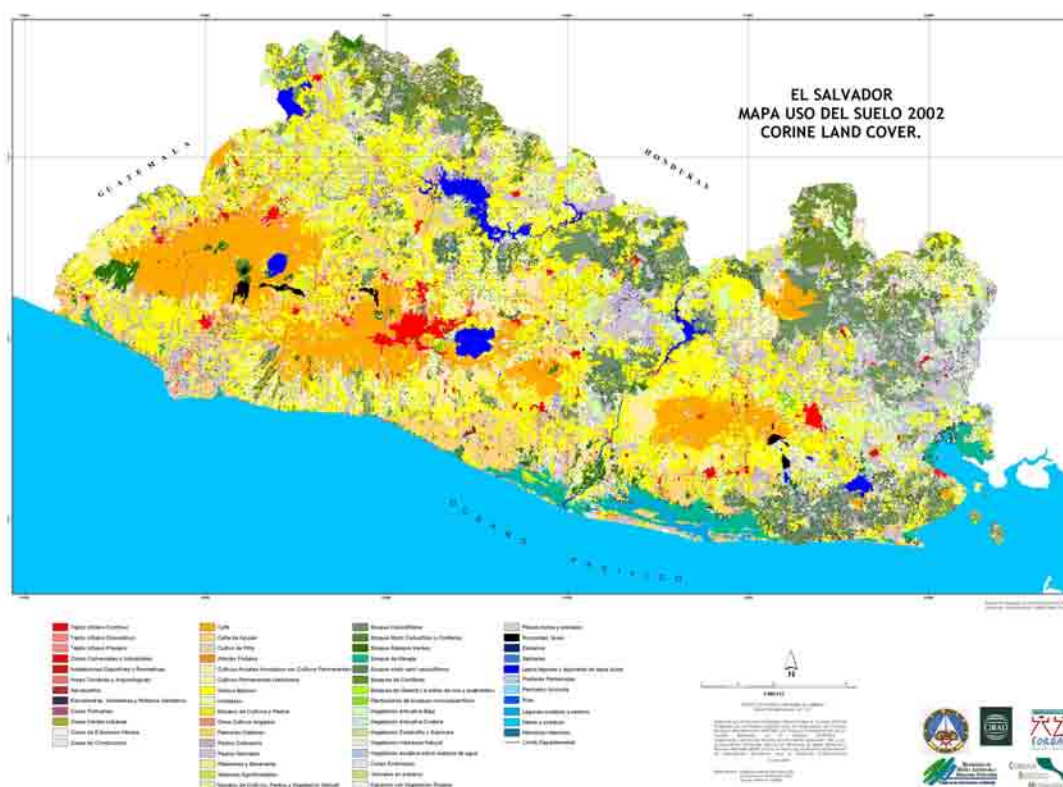
Uso del Suelo



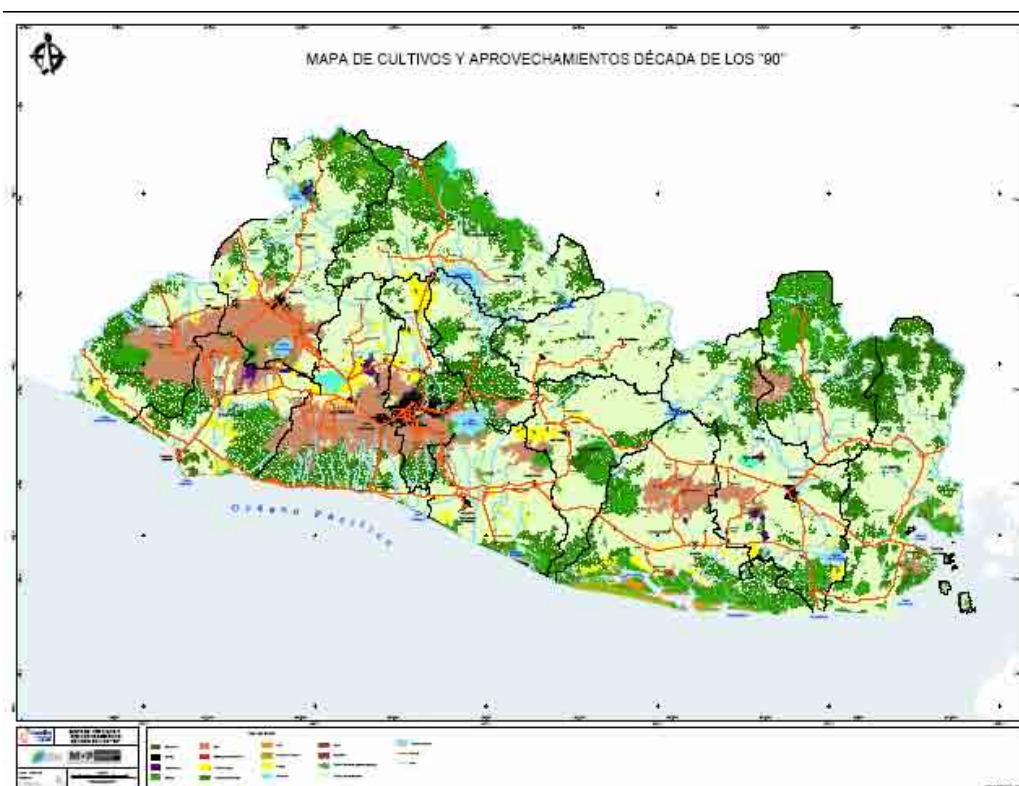
2000, Ecosystems



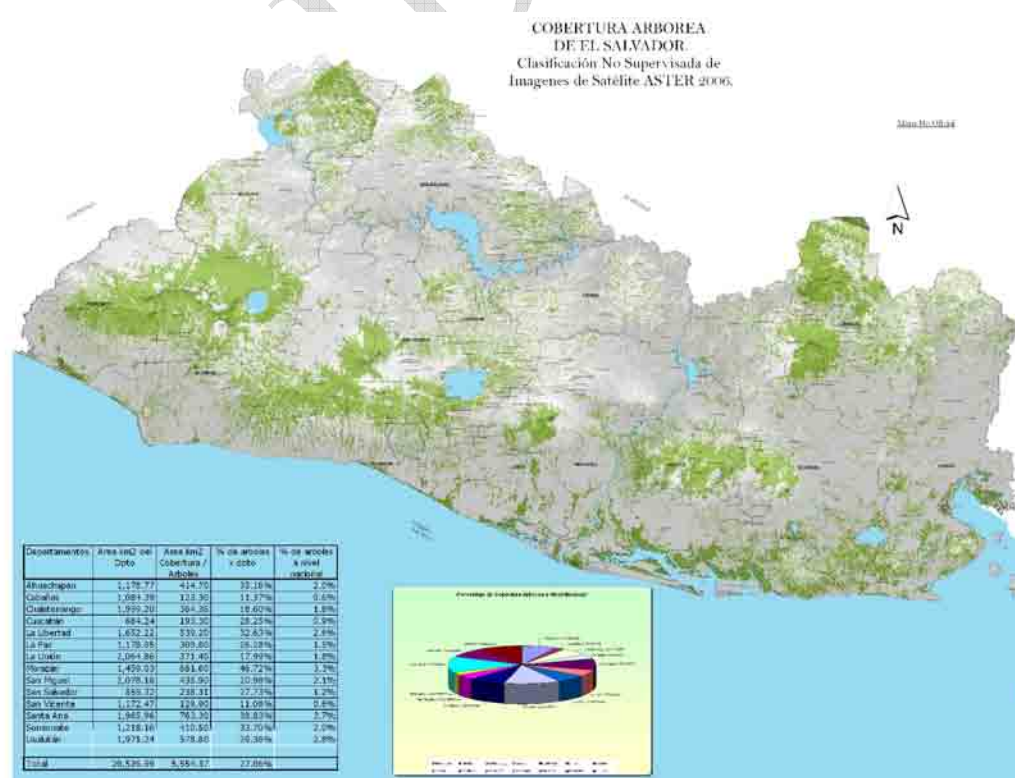
2002, Land Use, Corine Land Cover



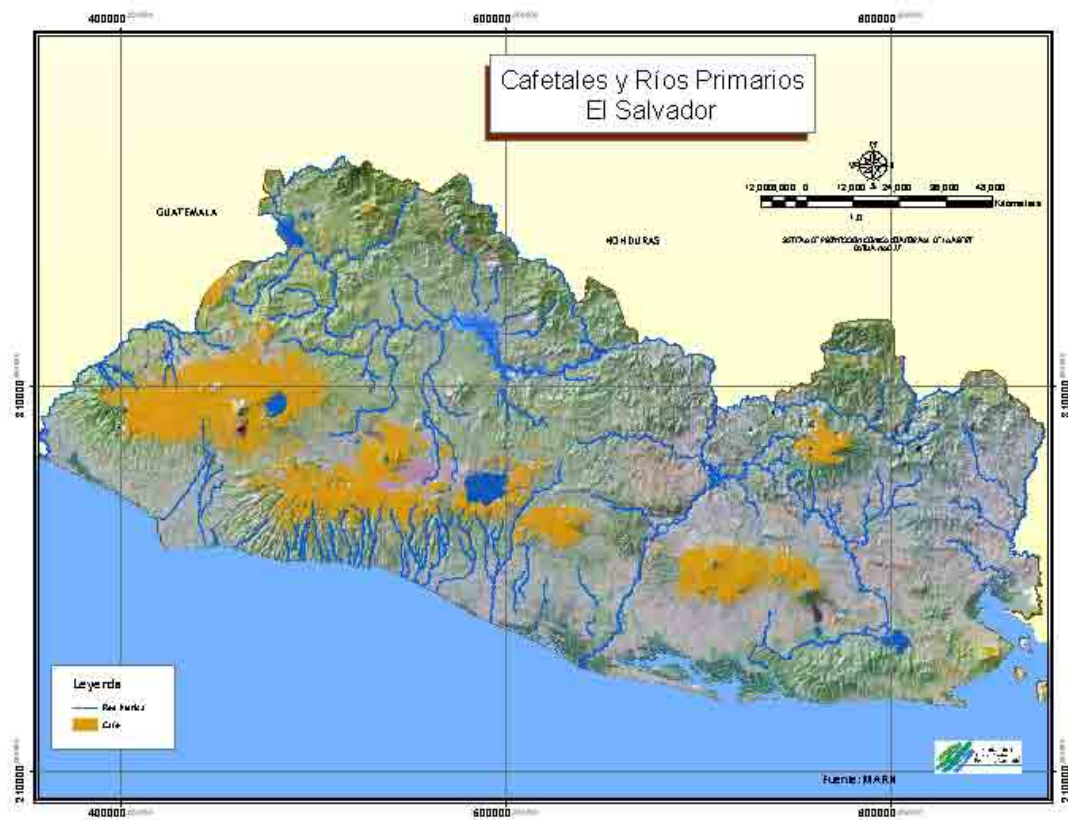
2002, Crops and Harvest



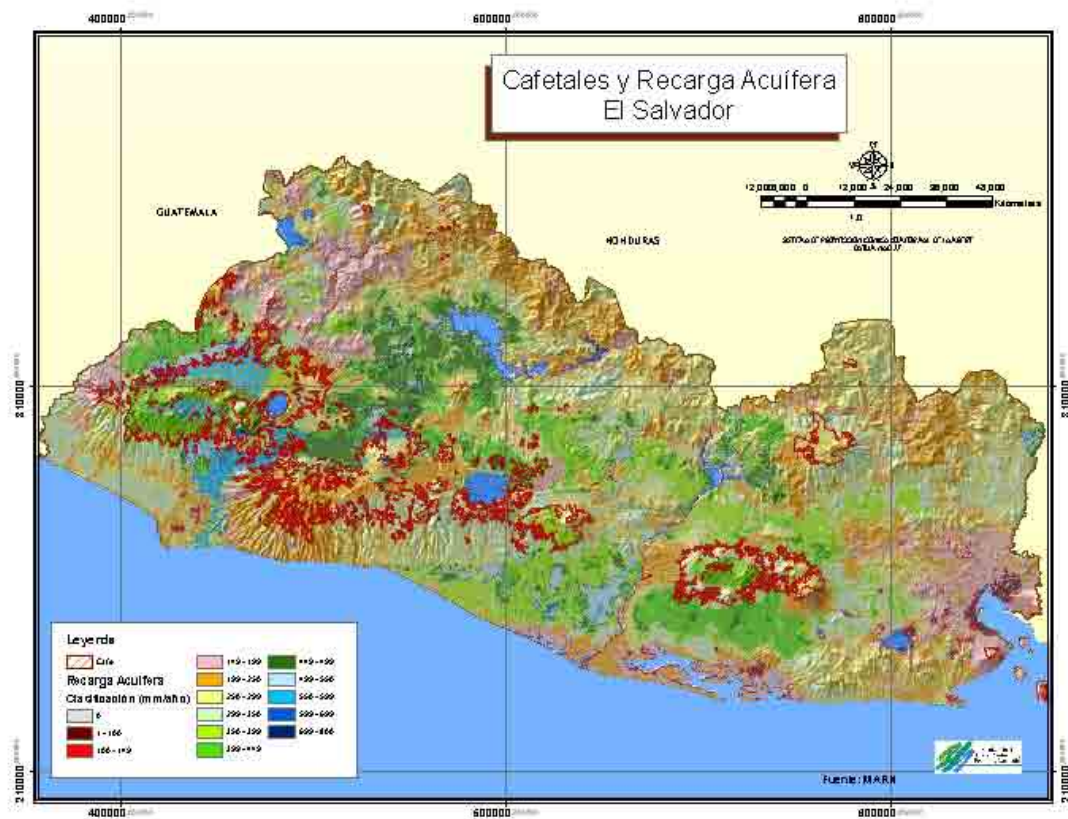
2007, Arboreal Cover



Coffee Crops and Rivers



Annex 2. Coffee Plantations Areas and Aquifer Recharge



Annex 3. Zone of biosphere reserves

