

**UNITED NATIONS DEVELOPMENT PROGRAMME  
GLOBAL ENVIRONMENT FACILITY**

*Proposal for Review*

**Country:** El Salvador

**Project Title:** Enabling El Salvador to Prepare Its First National Communication in Response to Its Commitments to the UNFCCC

**GEF Focal Area:** Climate Change

**Country Eligibility:** [x] Eligible under financial mechanism of the UNFCCC  
[x] Eligible under paragraph 9 (b) of the Instrument

**Date of Ratification:** 4 December 1995

**Total Costs:** US \$ 320,000

**GEF Financing:** US \$ 320,000

**Counterpart Financing:** n. a.

**GEF Implementing Agency:** UNDP

**Executing Agency:** Government of El Salvador

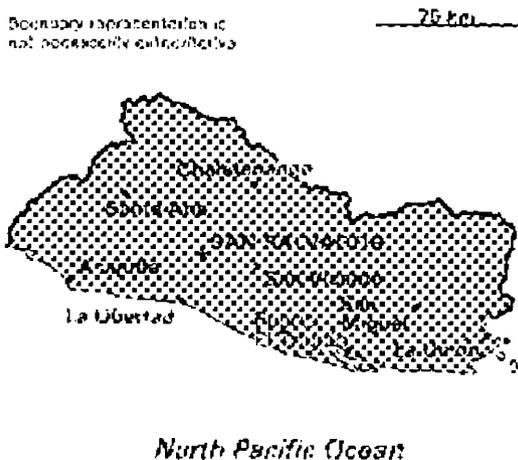
**Local Counterpart Agency:** Secretaria Ejecutiva del Medio Ambiente

**Estimated Starting Date:** April 1997

**Project Duration:** 2 years

## BACKGROUND AND PROJECT CONTEXT

El Salvador is located in Central America between 13° 9' and 14° 27' North latitude and 87° 41' and 90° 8' West longitude. It has an approximate surface area of 20,640 km<sup>2</sup>, with the largest land section characterized by mountains and volcanoes; most of El Salvador's territory consists of its maritime zone in the Pacific Ocean. Its neighbors are Guatemala and Honduras.



Administratively, El Salvador is divided into 14 departments. These are grouped into 4 geographic zones: Occidental, Central, Paracentral and Oriental, with San Salvador, the country's capital in the Central zone.

In 1996, El Salvador's population was estimated at 5.8 million people, with an estimated growth rate of 2.9%, making El Salvador the most densely populated country in the Western Hemisphere. Although the population is primarily rural, the recent civil war induced significant migration towards cities and towns. Twelve years of civil war resulted in an enormous loss of life (73,000

people), as well as losses of production and institutional capacities.

### *Economy*

The agricultural sector accounts for 24% of GDP, employs about 40% of the labor force, and contributes about 66% to total exports. Through various incentive programs, the government is encouraging foreign investment, including "maquila" type export processing zones. Other economic sectors are manufacturing, food processing, financial services, and construction. Annual per capita income is about US\$1,320 (1993), one of the lowest in Latin America and the Caribbean.

In 1992-94 the government made substantial progress toward privatization and deregulation of the economy. Growth in national output in 1991-94 averaged almost 5%, exceeding growth in population for the first time since 1987. Inflation decreased from 19%, in 1993 to 10%, in 1994.

### *Environment*

The climate in El Salvador is characterized by a dry season (December through April) and a rainy season (May through November). The average annual temperature in the capital is 23°

C, with slightly higher temperatures on the coast. The prevailing winds are northeasterly with localized sea and land breezes along the coastal zones.

El Salvador has jurisdiction over a marine area six (6) times larger than its land surface. The coastal zone includes some of the world's largest uninterrupted sand beaches, representing an important tourism resource.

As El Salvador's population grows at an accelerated rate, its natural resources, including forests and agricultural lands, are deteriorating or disappearing. The country loses an estimated 45 million cubic meters of fertile soil, annually. This loss of topsoil contributes to loss of production capacity, as well as to a decrease in water retention in subsurface aquifers; this affects the water supply for towns, farms and industry, as well as for hydroelectric power generation. Ecosystem degradation also produces micro-climatic changes and generates loss of tourism, recreation and educational opportunities.

Atmospheric pollution affects all of the country's urban centers; air pollution originates from vehicular and industrial emissions, and dust and particulates from construction and infrastructure sites. Principal pollutants are lead, carbon oxides, sulfur oxides and nitrogen oxides. The National Environmental Strategy recommends the elimination of lead from gasoline and reduction of suspended particles.

Coastal and marine resources are threatened by pollution from terrestrial sources. Sources include human settlements along the coast, unregulated industrial and community fishing practices, and untreated waste spills. Pesticides, sewage and other wastes are discharged into estuaries, reducing the productivity of coastal and marine ecosystems. In 1989, 26,000 ha of mangroves remained along the coast, down from 100,000 ha in the 1950s.

In addressing these environmental concerns, the Government of El Salvador is developing policies and programs through the Renewable Natural Resource Directorate of the Ministry of Agriculture, the Office of Fossil Fuels of the Ministry of Economics, and the Environmental Secretariat (SEMA). The government is currently developing an environmental law (expected to be approved by the year's end); a law to institutionalize environmental management; a new forestry law; and a new law for water resources. El Salvador is Party to the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, and the Montreal Protocol.

### *Energy*

El Salvador is totally dependent on petroleum and gas imports. In 1995, the nation imported 5.6 million barrels of crude oil, 66,000 barrels of propane gas and 728,000 barrels of propane-butane gas. Crude oil is refined locally by a private company.

Electricity consumption in El Salvador during 1995 was 3,070.9 GWh, of which 48% was produced by hydropower, 39% from fossil fuel generation and 13% from geothermal energy. The main power company is the Hydroelectric Commission of the Rio Lempa (CEL), a state run monopoly.

Residential consumption of fuelwood links energy use to the forestry sector. The country has a fuelwood demand equal to 4.9 million cubic meters per year, far beyond the sustainable yield of its remaining forests. Rapid deforestation is occurring in the major watersheds, thereby reducing hydroelectric potential.

### *Agriculture, Forestry and Fishing Sectors*

El Salvador initiated development of its agriculture exports in the 1800's. Largely a rural economy until recent years, it still produces coffee, sugar cane, cotton, corn, rice and beans, as well as cattle and pigs. Approximately 53% of agricultural cultivation in the country takes place in areas which are classified as unsuitable for this type of land use. Due to diminishing agricultural yields, there is a growing decline in conventional cereal and vegetable production.

At present, the country possesses only 8% forest cover, divided as 2% primary forest and 6% secondary forest. Because of topography and soil type, it is estimated that up to thirty-six percent (36%) of all lands used for other purposes are better suited for forestry. There is evidence of desertification in the northern part of the country. Efforts by government have resulted in reforestation of 4,842 ha.

Fishing suffers from over-exploitation and contamination by agrochemicals. Between 1975 and 1989 the average CPUE (capture per unit of effort) per day dipped 22%, including a 37% drop for the shrimp industry.

### *Industry*

The industrial sector has concentrated on food and beverage processing but also contains petroleum, nonmetallic products, tobacco, chemicals, textiles and furniture. Manufacturing accounts for 19% of GDP and 15% of employment. The recent drive toward competitiveness within the global market has led to the creation of export processing zones, bonding zones, legislation for currency management and other incentives.

## **INSTITUTIONAL FRAMEWORK AND PRIOR INITIATIVES RELATED TO CLIMATE CHANGE**

El Salvador ratified the United Nations Framework Convention on Climate Change (UNFCCC) on 4 December, 1995. By becoming a Party to the Convention, the country committed to prepare a national communication to the Conference of the Parties (COP) within

three years of the entry into force of the Convention, or according to the availability of financial resources as established in article 4, paragraph 3 of the Convention.

A working group on climate change has been organized with delegates from the Ministry of Foreign Affairs - responsible for the group's coordination - the Ministry of Agriculture, Ministry of Economics and the Environmental Secretariat (SEMA). The group has as its main purpose to guide and develop activities which will allow the government of El Salvador to fulfill this national commitment. This document proposal has been prepared in coordination with this working group..

The Ministry of Foreign Affairs (MIREX) represents El Salvador in international negotiations related to climate change. This includes the COP and its subsidiary bodies. MIREX is also the political focal point for GEF.

SEMA is the national entity in charge of environmental management for El Salvador. Currently, the government is reviewing SEMA's institutional structure, authority and functions in the context of the political modernization of the state. SEMA is also the operational focal point for GEF.

The coordination of energy sector regulations and policies falls under the responsibility of the Directorate of Energy and Mineral Resources under the Ministry of Economics.

The Directorate of Renewable Natural Resources, of the Ministry of Agriculture, is responsible for the protection and management of renewable natural resources in the country. Its organizational structure includes the Meteorology and Hydrology Division. This Division has been responsible for the national coordination of three vulnerability studies supported by the US Country Study Programme. These studies focused on the potential impacts on agriculture, coastal zone and water resources, but did not deal with forestry, natural ecosystems or health impacts. Also, no analysis of potential adaptation options was done. The study was carried out simultaneously in seven Central American Countries under the overall coordination of the Central American Commission on Environment and Development (CCAD) and the Regional Committee of Water Resources (CRRH).

In a broader sense, environmental concerns are being shared by all sectors of society. Private development organizations, which are part of the NGO movement in El Salvador, have access to resources from local foundations such as FONAES (Fondo Ambiental de El Salvador) and FIAES (Fondo Iniciativa de las Americas para El Salvador). Through programs directed towards forestry, soil protection, water quality and education, the independent sectors are contributing to the reconstruction of the country, and play an important role in that regard.

## **PROJECT OBJECTIVES**

The immediate objective of the project is to facilitate the preparation of the first national communication of El Salvador to the Conference of the Parties (CoP) in accordance with the Article 12 of the UN Framework Convention on Climate Change, and following the guidelines adopted by the CoP for the preparation of initial national communications by Parties not included in Annex I to the Convention.

Beside meeting the communication obligations, the project can be seen as an essential exercise to enhance general awareness and knowledge of climate change related issues in El Salvador, thus enabling it to take those issues into account in general planning and strategy formulation for different economical sectors. It will also strengthen El Salvador's role in international scientific fora and negotiation processes related to climate change. A part of this task is to facilitate dialogue, information exchange and cooperation among all relevant players in the field including governmental, non-governmental, academic, private and "grassroots" sectors.

Last but not least, the project will establish an institutional framework, and build endogenous capacity by preparing the ground for the fulfilment of eventual additional communication obligations, and for further development and implementation of the identified response measures addressing climate change and its adverse impacts.

## **PROJECT DESCRIPTION**

During project preparation, the following components have been identified to respond to the objectives of the project and to implement the project successfully:

1. Organize the work by: (i) identifying and hiring a competent project manager; (ii) establishing a Project Steering Committee (PSC); (iii) preparing a detailed work plan for the project; and (iv) organizing a project initiation workshop with participants from all the relevant sectors to present the objectives of the project, to clarify links to other relevant ongoing national and international activities, and to clarify the institutional and other practical arrangements to facilitate successful implementation of the project.
2. Strengthen the links to both national and international sources of information, and eventually establish an information center/network with adequate equipment and personnel to facilitate effective exchange of information between the participating institutions at the national level, as well as to assist them in gaining internationally available information on climate change related issues (e.g., from the USCSP and other bilateral programs, UNEP, IPCC, CC:TRAIN, international research institutes, ongoing enabling activities in other countries etc.). The potential to use Internet/World Wide Web has been evaluated and, to the extent feasible, it will be used to save travel costs and enhance the geographical coverage of available information. In that context, the project will cooperate, to the extent feasible, with the UNDP's SDNP (Sustainable Development Network Programme) and UNFCCC's Secretariat's CC:INFO/Web initiatives.

It is foreseen that the network will continue to operate after the project, thus permitting interested parties in El Salvador to learn about other national or international activities, and allowing interested individuals and institutions outside El Salvador to get information on ongoing, planned or finalized climate change related activities in El Salvador.

3. Organize and undertake a national inventory of greenhouse gases in 1994 following the guidelines adopted by CoP2. Atmospheric gases to be addressed in the study will include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). Other greenhouse gases included in the IPCC methodology will be addressed, as appropriate.
4. Organize and undertake an analysis of potential options to abate the increase in greenhouse gas emissions and enhance sinks.
5. Study the potential impacts of climate change on forestry, natural ecosystems, and public health (being sectors not covered by the regional US Country Study project)
6. By building on the results of the vulnerability assessment undertaken by this and the US Country Study project, analyze potential options to adapt to climate change with respect to the specific geographical and climatological characteristics of El Salvador.
7. Organize a workshop (with wide local participation and relevant international partners) to present the results of the project, together with results or status of other ongoing national projects relevant to the issue, and to discuss the results with the objective of formulating a national action plan for effective response measures to climate change (focusing on “win-win” abatement and adaptation measures).
8. Prepare a national action plan for effective response measures to climate change including measures to facilitate adaptation to climate change, as well as measures to abate the increase in greenhouse gas emissions and to enhance removals by sinks.
9. Based on the results of the studies, compile and prepare the additional information that the country wants to present in its national communication including, *inter alia*: a) financial and technological needs and constraints associated with the implementation of the Convention under articles 4 and 12; b) projects for financing; and c) material relevant for calculation of global emission trends.
10. Using the outputs of this project, as well as results from other ongoing projects, prepare, translate (as appropriate), and publish the first national communication of El Salvador following the guidelines adopted by CoP2.

The activities will be carried out in sequence so that tasks building on the results of prior activities are only undertaken if these prior steps have been taken. For instance, the GHG abatement

analysis will build on the results of the inventory, and the adaptation analysis will build on the results of the vulnerability assessment. Based on the results of the studies, a national action plan for effective response measures to climate change will be formulated.

With these activities the project is expected to cover all the steps needed to prepare the first national communication of El Salvador to the CoP

## **RATIONALE FOR GEF SUPPORT**

The project is consistent with the GEF Operational Strategy and GEF Operational Guidelines for Expedited Financing of Initial Communications from Non-Annex I Parties to provide coordinated and timely assistance to countries to fulfil their commitments to the UN FCCC. The project responds to such objectives by implementing an activity needed to enable El Salvador to prepare its first national communication to the CoP.

## **SUSTAINABILITY AND PARTICIPATION**

The Government of El Salvador fully supports the objectives of this Project and gives high priority to it. The Government has also agreed that the output of the project will be the national communication in compliance with the UN Framework Convention on Climate Change, and guidelines adopted by the CoP for the preparation of initial national communications by Parties not included in Annex I to the Convention. In financial terms, the Government is contributing “in-kind,” covering costs of office and project support staff .

To facilitate coordination, participation and sustainability of the results of the project, a Project Steering Committee (PSC) will be established with representation from the key government ministries, academic institutions, environmental NGOs, and private sector representatives. The final composition of the PSC will be decided during the further preparation of the project, but a “short list” of potential candidates for the PSC have been identified as follows: SEMA, the Ministry of Foreign Affairs, the Ministry of Agriculture (including the Meteorology and Hydrology Division), the Ministry of Economics, a member from the Salvadoran Chamber of Industry and Commerce representing private sector; a member of a network of environment and development NGOs, such as COAMBIENTE, a member of Salvadoran research and academia, CONACYT (Commission for Science and Technology), and UNDP.

In determining the final composition of the PSC, specific efforts will be made to ensure that all key sectors are equally represented in the PSC, while, at the same time, maintaining a limited number of seats to keep the PSC operational.

It is expected, that after successful completion of the Project, the Project Steering Committee will continue to address UN FCCC-related matters on a permanent basis. Also, as already mentioned,

specific attention will be paid to the dissemination of, and public access to the available information.

## **LESSONS LEARNED**

The importance of involvement and cooperation of all the relevant stakeholders including key government ministries, NGOs, academic institutions and private sector has been noted and duly reflected in the proposal. The project recognizes the importance of exchange of information and experience at the national level, as well as regionally and internationally.

## **PROJECT FINANCING AND BUDGET**

As an enabling activity related to the communication obligations of El Salvador under the UNFCCC, the “agreed full costs” of the project will be funded by GEF. A detailed project budget for expedited processing of the proposal is presented as Annex II.

## **INSTITUTIONAL FRAMEWORK AND PROJECT IMPLEMENTATION**

The Executing Agency of the project will be the Environment Secretariat (SEMA), on behalf of the Government of El Salvador. SEMA will also be Chair of the Project Steering Committee. The Project Steering Committee will be charged with overseeing and advising project execution and will have decision making power over all aspects of the project. The project will also collaborate closely with all relevant ongoing projects in El Salvador, both through the Project Steering Committee and between the relevant research teams to enable effective information exchange between the projects and full utilization of their results.

Regarding international collaboration, working links will be created with relevant regional and international expert institutions, and these will be consulted when selecting the methodologies for, and implementing the specific activities of the project. The project will also utilize results and lessons learnt from other ongoing or finalized international projects such as the UNEP Country Case Studies on Climate Change, Impacts and Adaptation Assessments, CC:TRAIN and the US Country Study Programme to avoid duplication of effort. As means of identifying and disseminating information, the project will utilize, to the extent feasible, electronic networks such as the Internet, and cooperate with the CC:INFO initiative of the FCCC Secretariat.

Regarding regional cooperation, links will be created to other Latin American countries with ongoing or finalized enabling activities (e.g., Costa Rica, Guatemala, Honduras, Mexico, Brazil and Venezuela), and areas for collaboration, such as regional training or information exchange workshops, will be identified and evaluated.

In implementing the different activities, the project will follow the internationally adopted guidelines and use existing methodologies and tools whenever available. Technical assistance will be provided by regional and local experts whenever possible.

The detailed content and target audience for the workshops will be determined during further preparation of the project. However, a general strategy is to open the “policy-oriented” workshops to a wider audience including both policy makers and technical experts from the governmental as well as civil sectors, while targeting the technical training/coordination workshops more at the people who are actually conducting the studies or which need to be involved as providers of the data for the studies.

## **MONITORING AND EVALUATION**

After the detailed work plan has been prepared, an external review on it will be undertaken by an expert with experience in this type of project. The purpose of the review is to identify, in the early stages, of the project the eventual gaps, overlaps and other risks to successful implementation, as well as to identify potential partners and sources of information from which the project could benefit.

The executing agency together with the Project Steering Committee will be responsible for monitoring the project on a continuous basis. In order to do this, the project manager, with the help of the leaders of the research teams, will prepare regular reports on the progress of the project as whole as well as its different sub-tasks.

The project will rely on common UNDP monitoring and evaluation practices including a midterm evaluation and a tripartite review to be held within the first 12 months of the start of the full implementation of the project, as well as periodic monitoring (e.g., bimonthly) by the Country Office.

**COVERAGE OF THE ACTIVITIES IN EL SALVADOR TO PREPARE  
THE INITIAL NATIONAL COMMUNICATION**

<i>Information to be included in the national communication</i>	<i>Enabling activity to produce the information needed</i>	<i>Type of Activity<sup>1</sup></i>		
		<i>Planning<sup>2</sup> and execution</i>	<i>Capacity Building</i>	
			<i>Institutional</i>	<i>Human</i>
<b>1. National circumstances</b>	Compilation of the information from existing sources	X	X	X
<b>2. Greenhouse gas inventory (incl. CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) for:</b> - all energy sources - industrial processes - agricultural processes - land use change and forestry - other sources	Data gathering and inventory of GHG emissions from: - all energy sources - industrial processes - agricultural processes - land use change and forestry - other sources	X X X X X	X X X X X	X X X X X
<b>3. General description of steps taken or envisaged to implement the Convention including, as appropriate:</b> (a) programs related to sustainable development, research, public awareness, etc.; (b) policy options for monitoring systems and response strategies for impacts; (c) policy frameworks for implementing adaptation measures and response strategies; (d) building capacity to integrate climate change concerns into planning; (e) programs to address climate change and its adverse impacts, including the abatement of increase in GHG emissions and enhancement of sinks	An assessment of potential impacts of climate change in the country	X [US]	X [US]	X [US]
	An analysis of potential options to adapt to the impacts of climate change.	X	X	X
	An analysis of potential options to abate the increase in GHG emissions and enhance the sinks.	X	X	X
	Formulation of programs and policy frameworks for implementing the identified response measures.	X	X	X
<b>4. Other information including, as appropriate:</b> a) Financial and technological needs and constraints associated with the implementation of the Convention under articles 4 and 12. b) projects for financing c) material relevant for calculation of global emission trends	Based on the results of the studies, compilation and preparation of the additional information that the country wants to present in its national communication	X	X	X
<b>5. Compilation and production of the initial national communication</b>	Preparation, translation and publication of the national communication (incl. the preparation of an executive summary)	X	X	X

**BUDGET FOR EXPEDITED PROCESSING OF THE ENABLING ACTIVITY PROPOSAL  
FOR PREPARING THE INITIAL NATIONAL COMMUNICATION OF EL SALVADOR**

<i>Information to be included into the national communication</i>	<i>Enabling activity to produce the information needed</i>	<i>Type of Activity</i>			<i>Total Costs in US \$</i>
		<i>Planning and execution</i>	<i>Capacity Building</i>		
			<i>Inst.</i>	<i>Human</i>	
<b>1. National circumstances</b>	Compilation of the information from existing sources	-	-	-	
<b>2. Greenhouse gas inventory</b>	Data gathering and an inventory of GHG emissions	40,000	10,000	25,000	75,000
<b>3. General description of steps</b> (a) programs related to sustainable development, research, public awareness, etc.; (b) policy options for monitoring systems and response strategies for impacts; (c) policy frameworks for implementing adaptation measures and response strategies; (d) building capacity to integrate climate change concerns into planning; (e) programs to address climate change and its adverse impacts, including the abatement of increase in GHG emissions and enhancement of sinks	An assessment of potential impacts of climate change in the country	7,000		3,000	10,000
	An analysis of potential options to adapt to the impacts of climate change	20,000	5,000	15,000	40,000
	An analysis of potential options to abate the increase in GHG emissions and enhance sinks.	20,000	5,000	15,000	40,000
	Formulation of programs and policy frameworks for implementing the identified response measures.	20,000	10,000	10,000	40,000
<b>4. Other information:</b> a) Financial and technological needs and constraints associated with the implementation of the Convention under art. 4 and 12 b) projects for financing c) material relevant for calculation of global emission trends	Based on the results of the studies, compilation and preparation of the additional information that the country wants to present in its national communication	10,000			10,000
<b>5. Compilation and production of national communication</b>	Preparation, and publication of the national communication and an executive summary.	10,000	5,000	5,000	20,000
<b>Project management</b>		38,7000	10,000	12,000	60,700
<b>Monitoring/Evaluation</b>		15,000	-	-	15,000
<b>Subtotal</b>		<b>180,700</b>	<b>45,000</b>	<b>85,000</b>	<b>310,700</b>
<b>Project support services (3%)</b>		9,300			9,300
<b>GRAND TOTAL</b>		190,000	45,000	85,000	320,000
<b>Percentage of total budget</b>		<b>59%</b>	<b>14%</b>	<b>27%</b>	<b>100%</b>

- 1 X Activities covered by the proposed project  
X[US] Activities of the proposed project complementing the activities undertaken by the USCSP

- 2 including data gathering and research related to the preparation of the national communication



06583

DE-570/96

San Salvador, 2 de diciembre de 1996.

Asunto: Envío de propuesta para revisión del  
F.M.A.M.

Señora  
Joana Merlyn Scholtes  
Representante del PNUD  
en El Salvador  
Presente.

Estimada Señora Scholtes:

Con un atento saludo me dirijo a usted, con el propósito de remitirle a nombre del Gobierno de El Salvador, la propuesta de preparación de la Primera Comunicación Nacional para el cumplimiento del Convenio Marco para el Cambio Climático.

La propuesta fue elaborada por los expertos del Fondo del Medio Ambiente Mundial (F.M.A.M.) y revisada por el Grupo inter Gubernamental, integrado por esta Secretaría Ejecutiva, los Ministerio de Relaciones Exteriores, Ministerio de Economía y Dirección General de Recursos Naturales Renovables.

Al respecto, deseo informarle que el Gobierno de El Salvador incluirá el componente de mitigación y El Proyecto tendrá una duración de dos años con un costo de US \$ 320.000.

Agradeciendo la atención a la presente, quedo de usted muy agradecido.



DIOS UNION LIBERTAD

Ing. Luis Antonio González  
Director Ejecutivo