

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: 35419

Project Name	Environmental Services
Region	LATIN AMERICA AND CARIBBEAN
Sector	Forestry (90%);General agriculture, fishing and forestry sector (10%)
Project ID	P087038
GEF Focal Area	B-Biodiversity
Global Supplemental ID	P089171
Borrower(s)	Secretaría de Hacienda y Crédito Público (SHCP) Unidad de Crédito Público Palacio Nacional Patio Central 3er piso, oficina 3010 Colonia Centro 06000 México, D.F.
Implementing Agency	Comisión Nacional Forestal (CONAFOR) Periférico Poniente esquina carretera a Nogales Jalisco Mexico Tel: 013331565108 elopez@conafor.gob.mx
Environment Category	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
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1. Country and Sector Background

Since the 1994 economic crisis, Mexico has undertaken impressive reforms leading to a major political and economic transformation. The government's National Development Plan includes a substantial agenda for further progress, including very important goals in poverty reduction, improved competitiveness, environmental management, and institutional change.

Water quality/supply and deforestation are two important environmental challenges facing Mexico, which is experiencing rapid environmental degradation, including some of the region's most extensive deforestation. This degradation is aggravating already severe water quality, reliability, and contamination problems, threatening current and future economic activity and the welfare of Mexico's people, and leading to the loss of globally important biodiversity.

Water. Water consumption patterns in Mexico are unsustainable. According to the National Water Commission (CNA), although less than 16 percent of Mexico's 653 aquifers are considered overexploited, 66 percent of all groundwater used comes from only 188 of those

aquifers, and 57 percent of all groundwater used is from overexploited aquifers. In addition, the UN considers Mexico a country under high water stress as measured by the amount of mean natural water availability used. While water scarcity is not directly related to deforestation, forest conservation may help ameliorate water scarcity pressures by improving the quality of available water, regulating seasonal flows, and increasing rates of aquifer recharge.

Deforestation. In the 1990s only four countries (Brazil, Zambia, Indonesia, and Sudan) had more deforestation than Mexico, according to the FAO's 2005 Forest Resources Assessment. While the amount of deforestation in Mexico (631,000 hectares per year) was only one-quarter of that in Brazil, it was more than twice as much as the next nearest country in the Americas, and its annual rate of deforestation (1.1 percent) was nearly four times greater than in Brazil. Various assessments indicate that both the amount and rate of deforestation in Mexico is highest in tropical forests, including areas of high biodiversity value. According to one analysis, between 1993 and 2000 about 3.1 million hectares of forest in Mexico were converted to agricultural uses and 5.1 million hectares were converted to pasture, with only 1.7 million hectares being reforested or regenerated.

Water problems and land use change are closely related. Rapid deforestation has adversely affected the regulation of water flows and the sedimentation of reservoirs. Scientific work highlights the role that montane cloud forests play in providing surface water flows during the dry season in Mexico's Veracruz watersheds. There is also evidence that dry tropical forests provide the environmental service of reducing the risk of floods during storms in western Jalisco and that the Sierra Gorda's forests are fundamental for water recharge in the aquifers that supply the cities of Queretaro and San Juan del Rio.

Critical Ecosystems and Globally Significant Biodiversity. Mexico is one of the megabiodiversity countries in the world, with second place in reptilian diversity, third in mammal diversity, and fifth in both amphibian and plant diversity. Its plant diversity exceeds that of the United States and Canada combined. Mexico is regarded as one of the world's most important centers of genetic diversification in plants and one of the areas where agriculture originated. Some 120 cultivated plant species (belonging to 39 families) originated in Mexico, including cocoa, kidney beans, maize and tomatoes.

Land use change is eroding Mexico's extraordinary biological wealth. One-third of birds and nearly two-thirds of amphibian, reptile and mammal species are at risk. In total, 2,582 species and subspecies are at risk (161 more than under the previous 1994 standard), of which 41 are already extinct in the wild, 1,215 endangered or threatened with extinction, and 1,326 subject to special protection. Although the 154 federally administered natural protected areas (NPAs) cover almost 19 million hectares, many areas with important biodiversity do not have protected status.

Rural Poverty and Forests. Mexican forests are located almost entirely in common property lands, the owners of which are among the poorest in the country. Nearly 85 percent of localities in forested areas have a "high" or "very high" marginality index. This has two important implications. First, poverty is one of the driving forces in deforestation. Second, poor households are highly dependent on forest resources, so degradation of these resources hinders their ability to sustain their livelihoods. The indigenous people of Mexico have an important presence in forested areas. Indigenous households account for a large majority of households in the 20

percent of *ejidos* or communities that have more than 100 hectares of forest, but are the majority in only 2 percent of the *ejidos* without forests.

Government Strategy. The Government of Mexico (GOM) has taken a number of legislative, institutional, and budgetary actions to address daunting environmental challenges. In 1986 the government created the National System of Protected Natural Areas (SINAP) to safeguard some of Mexico's richest habitats and most important biological diversity. With help from the GEF and World Bank, an endowment fund was created to provide long-term financial support for SINAP. The Mexican government is also committed to a "zero deforestation" target and in April 2001 it created the National Forest Commission (CONAFOR) to support sustainable production and conservation of forest resources based on the Strategic Forestry Program for 2000–2025, which articulates specific priorities, goals, and strategies in areas such as community forestry, commercial forestry, soil conservation, forest management, and reforestation. This forest strategy is part of an overarching approach to national development that also includes formal sector strategies for water, rural development, and biodiversity. To help support and implement these strategies, the government recently passed or extensively modified laws on water resources, forests, and sustainable rural development. These sectoral initiatives are complemented by the Sustainable Development Program, which seeks to build synergies and complementarities among different government policies and instruments. The introduction of a fiscal instrument (the water fee) and the PSAH and CABSAs environmental services programs are further examples of the government's serious commitment to conservation and sustainable use of natural resources.

PSAH and CABSAs. The Payments for Hydrological Environmental Services Program (PSAH), started in October 2003, was designed to complement other initiatives by providing economic incentives to avoid deforestation in areas where water problems are severe, but where commercial forestry was less profitable to landholders in the short or medium term than converting forests to agriculture or cattle ranching. PSAH consists of direct payments to landowners with forests in good state of conservation. Payments are made for watershed conservation, management, and restoration aimed at preserving temperate and tropical forests (and in particular, montane cloud forests) associated with the supply of water to communities. An innovative aspect of this approach is that it is funded by the water fees collected under the Federal Rights Law (LFD).

Despite the program's achievements, there remains room for improvement in (i) targeting of PES contracts to emphasize areas of priority conservation and high risk of deforestation, (ii) removing obstacles and increasing participation of smaller and more marginalized communities and *ejidos*, (iii) long-term sustainability of financing, and (iv) increased training and capacity building.

In 2004, as a complement to the PSAH, Mexico created CABSAs (Program to Develop Environmental Services Markets for Carbon Capture and Biodiversity and to Establish and Improve Agroforestry Systems). CABSAs supports reforestation activities and land use changes in Mexico and links them to national and international markets/financing for carbon capture and biodiversity. While the program has had initial success in attracting proposals, it also faces some challenges: (i) sustainability is constrained by the 5-year limit on the length of contracts, (ii) international carbon and biodiversity markets are new and lack well-established prices and rules, (iii) transaction costs may be high, and (iv) there is not adequate information and clarity on how communities will benefit from CABSAs.

The proposed project will address weaknesses in the PSAH and CABSAs by seeking to (i) secure the long-term sustainability of the PES programs by developing new, sustainable long-term financing mechanisms based on payments from service users; (ii) increase the programs' efficiency and cost-effectiveness by focusing on the areas at greatest risk of deforestation and on areas with water quality or regulation problems; (iii) improve their contribution to poverty reduction; (iv) increase their contribution to the conservation of globally important biodiversity by focusing on critical ecosystems.

Market-Driven Payments for Environmental Services (PES).

Farmers, forest dwellers, and landowners often profit from land uses that adversely affect the environment but do not benefit directly from environmentally friendly ones. The PES approach seeks to provide incentives for desired land uses by creating markets through which the users of environmental services can compensate providers of those services. These include global services such as biodiversity preservation and carbon sequestration, and national and local services such as improvement in water quality, control of land degradation, reduction of erosion and sedimentation, prevention or attenuation of landslides and flooding, and scenic preservation or enhancement.

Market-driven PES programs are the most likely to be sustainable because they depend on the self-interest of the affected parties rather than taxes, tariffs, philanthropy, or the whims of donors. By providing payments on an ongoing basis, PES programs avoid the pattern of short-term adoption followed by rapid abandonment that has characterized past approaches. They can also help reduce poverty because the areas that provide environmental services (and receive payments) correlate highly with areas of rural poverty. The project builds on previous experience with the use of PES, including a successful nationwide program in Costa Rica supported by the Bank and GEF, and a wide range of small-scale initiatives throughout the region, including several in Mexico itself.

2. Objectives

The **project development objective** is to enhance the provision of environmental services of national and global significance and secure their long-term sustainability. This would be done by strengthening and expanding the PSAH and CABSAs programs and supporting the establishment of local PES mechanisms in selected pilot areas.

The objective will be achieved through the following key outcomes and outputs (i) strengthening the capacity of CONAFOR, community associations, and NGOs to increase flexibility and improve efficiency of existing service provision to support long-term development of the PSAH program in Mexico; (ii) establishing and securing sustainable long-term financing mechanisms; (iii) establishing legal, institutional, and financial arrangements to pilot market-based mechanisms for PES, (iv) documenting links between land use changes and water services improvements and biodiversity conservation, and (v) defining good practices to replicate, scale up, and sustain market-based PES programs.

The **global environment objective** of the project is to enhance and protect biological diversity and preserve globally significant forest and mountain ecosystems.

This objective will be achieved through the following key outcomes and outputs: (i) improving the targeting of the existing PSAH program; (ii) piloting a market-based system to contract

environmental services; and (iii) establishing an endowment fund for biodiversity conservation to provide long-term financing for payment for environmental services. The project will ensure that only sites with globally significant biodiversity will receive GEF funds under the national or local programs in the project area. In addition, these sites are recognized as part of the national protected areas system. Furthermore, all land management systems with PES support under the project (from any funding source) will be biodiversity-friendly.

All eight of the pilot sites where PES systems would be established, strengthened, or continued under the project were chosen to overlap with at least two of the following high-priority biodiversity conservation designations: (i) existing Natural Protected Areas; (ii) Priority Terrestrial Ecoregions established by CONABIO; (iii) Important Bird Areas that are vital to the survival of endemic species or to protecting key bird breeding, feeding, and migration areas; and (iv) Ramsar Wetlands of International Importance.

3. Rationale for Bank Involvement

The World Bank has considerable experience in the design, implementation, and support of PES programs in developing countries. Several Bank projects that use PES are under implementation with GEF cofinancing, and others are under preparation. In parallel, the Bank has been undertaking research on PES and providing the results to practitioners through capacity-building efforts. No other institution has the same depth of experience in implementing PES approaches.

GEF support is warranted because the project would help (i) conserve globally significant biodiversity and critically endangered endemic species, (ii) enhance the Mexico portion of the MBC, (iii) pilot PES as a sustainable, long-term conservation instrument that could be scaled up and replicated in Mexico and other countries, (iv) research links between land use change and environmental services; and (v) increase carbon sequestration and knowledge about biocarbon sinks. Without the GEF increment, environmental services payments might not be sufficient to foster land uses that yield global benefits in addition to local and national benefits.

4. Description

Fixed-Spread Loan (FSL). The proposed project would be financed through an IBRD loan of US\$45.00 million, a GEF grant of US\$15.00 million, government counterpart funds of US\$80.66 million, project beneficiary contributions of US\$15.00 million, and other funding US\$0.90 million for a total project of US\$156.56 million.

The proposed project would substantially increase the development of markets for environmental services in Mexico by (i) developing new, sustainable financing mechanisms for environmental services, which could be channeled either through the existing PES programs or through new, stand-alone, local PES mechanisms; (ii) strengthening and improving the efficiency of existing PES programs (PSAH and CABSAs); (iii) stimulating the development of stand-alone local PES programs; and (iv) assisting local communities in service provision. Component 1 focuses on developing sustainable financing mechanisms. Component 2 activities support the development and strengthening of PES delivery mechanisms. Component 3 supports environmental service providers. Component 4 manages the actual flow of payments to environmental service providers

and for the ongoing operational costs of the program. Finally, Component 5 focuses on project and program management mechanisms, including monitoring and evaluation.

Component 1: Developing Sustainable Financing Mechanisms (\$14.47 million, of which \$7.68 million from GEF)

The main objective of this component is to develop new, sustainable financing sources based on payments from service users, which could then be channeled either through the PSAH or through stand-alone local PES mechanisms, as appropriate. To achieve this objective, this component will help develop financial mechanisms based on the main types of environmental services: water quality and regulation, biodiversity conservation, and carbon sequestration. These financial mechanisms would be piloted in eight promising sites identified by CONAFOR. Some sites might focus on a single financing mechanism while others include multiple financing mechanisms, depending on the services being generated and the interests of users.

Component 2: Developing and Strengthening PES Delivery Mechanisms (\$3.51 million, of which \$1.30 million from GEF)

The objectives of this component are to strengthen the existing PSAH and CABSAs delivery mechanisms and to support the development of new, stand-alone delivery mechanisms for local PES markets. Having financing is not sufficient; mechanisms are needed to act as intermediaries between service users and service providers. These mechanisms must undertake functions such as determining how best to generate the services that users are paying for, identifying critical areas and land use practices to be targeted, negotiating with and contracting service providers, monitoring compliance, making payments, and monitoring impacts. CONAFOR has already created the PSAH (and on a smaller scale CABSAs) to undertake this role. However, both PSAH and CABSAs are young mechanisms that require considerable strengthening and improvement to increase their efficiency and their capacity to handle the greater and more complex demand generated through component 1.

Component 3: Supporting Environmental Service Providers (\$9.56 million, of which \$3.70 million from GEF)

This component would focus on removing obstacles that may prevent communities from participating in either national PES program or local PES mechanisms, with a particular focus on problems faced by poor communities.

Component 4: Payment to Service Providers (\$127.00 million, of which \$1.58 million from GEF)

The objective of this component is to finance and make actual payments to environmental service providers and ensure that they are being compensated properly. This component will channel payments from the financing mechanisms developed in component 1, through the delivery mechanisms developed and strengthened under component 2, and to the service providers supported through component 3. While the bulk of project financing is allocated to this component, most of the activities to actually arrange, structure, and monitor this flow of financing are carried out under other project components.

Component 5: Project and Program Management (\$1.90 million, of which \$0.74 million from GEF)

This component focuses on project management mechanisms including planning and monitoring and evaluation (M&E). It would help new and existing entities and mechanisms in the national government conduct project coordination and supervision and strengthen the effectiveness and quality of project operations.

5. Financing

<i>Source:</i>	<i>(US\$ million)</i>
Borrower/Recipient	80.66
International Bank For Reconstruction And Development	45.00
Global Environment Facility	15.00
Beneficiaries	15.00
Other	0.90
Total	156.56

6. Implementation

Institutional and implementation arrangements

The Ministry of Finance and Public Credit (SHCP) is the official recipient of the loan and grant. SHCP is the only entity of the Federal Government that has the capacity to obtain external loans and receive donations from international financing agencies and it also assigns the financial agent for the project..

The National Forestry Commission (CONAFOR) will execute the project and have responsibility for all technical and fiduciary matters, monitoring, and evaluation of the project, and overall management and supervision of the grant and loan. Direct implementation will be undertaken by staff in CONAFOR's Department of Production and Productivity, Office of Forestry and Management (GSM), which operates the existing PES programs in Mexico (PSAH and CABSA). CONAFOR's administration department will provide financial management and procurement support. In addition to the project staff at CONAFOR's headquarters in Guadalajara, key functions will be carried out by program coordinators and regional promoters in CONAFOR's regional/state offices. Community promoters, selected by the communities themselves to facilitate interactions with CONAFOR, will receive stipends from the project but are not employed by CONAFOR.

Nacional Financiera (NAFIN), a federal development agency responsible for managing the administration of many different projects receiving both national and external financing, will provide overall financial management of the project and the Special Accounts, if utilized, for the loan and grant. NAFIN would also be responsible for all formal correspondence with the Bank, including prior review for consultants and other procurement as well as all matters pertaining to the Loan and Grant Agreements.

The highest decisionmaking body for the project will be CONAFOR's Governing Board, which will approve the Annual Implementation Plans and Quarterly Project Reports. It includes representatives from the National Water Commission and the ministries of National Defense,

Finance and Public Credit, Social Development, Environment and Natural Resources, Economy, Agriculture, Agrarian Reform, and Tourism.

Implementation of the project will also benefit from the guidance of an Advisory Committee that was formed informally at the outset of the PSAH program in 2003. The committee usually meets every six to eight weeks to review program activities, achievements, implementation schedules, and national and international experiences in PES programs. The committee has 17 members from government, the private sector, NGOs, and academic bodies. This committee includes institutions with technical oversight for biodiversity aspects of the PES programs. Representatives of local PES schemes will also be invited to join the Committee. The Committee will also include a subgroup called the Scientific and Technical Advisory Group (STAG), which will provide guidance for the PES monitoring program.

74. The CONAFOR staff responsible for project implementation will include a program coordinator, 3 subcoordinators, 12 technical specialists, an administrative assistant, a financial management specialist, a procurement specialist, 8 pilot-area liaisons, 13 regional liaisons, 16 regional promoters for pilot areas, and 50 regional promoters for the national program. The regional promoters, based in the regional/state offices of CONAFOR, will maintain close links with local communities and leaders and play a key role in addressing community problems and concerns and tailoring the program to local conditions. The work of the regional promoters will be facilitated by community promoters selected by the communities themselves from among their own members. The community promoters may receive stipends from the project, but are not considered staff of CONAFOR.

Key stakeholders, and participating government agencies, and other actors will receive training to facilitate coordination, increase understanding of the PES system, and help them assume their roles in the system. The CONAFOR staff will be responsible for processing environmental service contracts with private landowners, signing environmental services purchase agreements with the private and public sector, monitoring contract compliance, and preparing project reports. Some of these functions will be carried out or facilitated by the staff in the regional offices (with assistance from the community promoters), as well as by federally recognized Technical Service Providers, NGOs, and other actors contracted by CONAFOR. The project Operational Manual will include all rules and regulations for implementation of each project component.

Monitoring and evaluation of outcomes/results

A key objective of the project is learning. During project implementation special semiannual reports will be prepared on the lessons learned during the previous semester and year, and on plans for incorporating those lessons into future activities. There will also be semiannual learning workshops planned to coincide with Bank supervision missions. A critical weakness of many PES programs is that the links between land use changes and specific services provided are poorly documented. For that reason, the project will include an intensive monitoring and evaluation program, mainstreamed into the various components, for which about 2 percent of the project budget is allocated. The results and learning from the eight initial pilot sites will provide valuable guidance and insights for replication within Mexico and for PES programs in other countries.

7. Sustainability

Ensuring long-term sustainability is a major objective of the project. Current funding is only guaranteed for five years at a time, and its future is dependent on continued government support. The project will pilot the development of new financing mechanisms that have the potential for being highly sustainable, as they depend on the mutual self-interest of service users and service providers. The project devotes considerable attention to both *ex ante* technical studies (to ensure that payments are carefully targeted to generate the desired services) and *ex post* monitoring (to demonstrate that services are being generated, and make adjustments if they are not). Sustainability also requires credible and effective institutions acting as intermediaries between service users and providers, and the project supports considerable capacity building to ensure this.

Conserving biodiversity benefits through PES poses particular challenges. The project addresses these in part by piloting the development of financing mechanisms based on demand from the local, nature-based tourism industry. It also supports creation and capitalization of an endowment trust fund to provide sustainable long-term financing to PES targeted at biodiversity conservation.

New financing mechanisms developed at pilot sites will lead to a replication strategy for the additional mechanisms throughout the country. Experience from the project should allow such replication to occur rapidly and on a large scale by identifying conditions conducive to their development and potential pitfalls. It will also lead to an array of standardized instruments that could easily be used in new settings with appropriate adaptations to local conditions. A replication strategy will be developed along with project evaluation and lessons learned at the mid-term and end of project, which will be widely disseminated in Mexico, the region, and globally through workshops, seminars, trainings, publications and website.

8. Lessons Learned from Past Operations in the Country/Sector

The main lessons used to enrich project design are from three broad sources: (i) Mexico's current PSAH and CABSAs program; (ii) other payment for environmental services initiatives, including in particular Costa Rica's *Pago por Servicios Ambientales* (PSA) program; and (iii) other GEF-supported biodiversity and sustainable use projects, including the Biodiversity Conservation and Sustainable Use in Productive Landscapes Project in Chiapas and the Consolidation of the Protected Areas System Project (SINAP II) in Mexico.

- *Need for sustainable, long-term financing mechanisms.* Sustained provision of environmental services requires a sustained flow of program funding and sustained payments to landholders to maintain the desired land uses over the long-term. To the extent possible, PES programs should be less dependant on the political process and more directly linked to financing mechanisms that correspond to the users of environmental services, both nationally (water and local ecotourism) and globally (carbon markets). Since no method has been developed for generating sustained payment streams specifically for biodiversity conservation, the proposed project will establish and capitalize an endowment fund for that purpose. Preparation of the SINAP II project was particularly valuable in analyzing lessons related to such trust funds, including the importance of structuring government commitments and incentives to avoid having government funding decrease as a result of the fund, matching funds to the type of need, and having a clearly defined mission and goals that are relevant to donor.

- *Need for robust monitoring and evaluation.* The credibility of environmental service programs relies not only on fiduciary monitoring but also on quantification of the impacts of environmental services: financing will only be sustainable if service users are satisfied that they are receiving the services for which they pay. Therefore, monitoring and evaluation of socioeconomic and environmental impacts should be an integral part of PES projects.
- *Need for differentiated payments.* Because the value of environmental services and the cost of providing them vary tremendously from case to case, payment systems should be tailored to meet local conditions. The current approach under the PSAH and CABSAs programs is to pay the same amount nationwide, which results in significant inefficiencies by paying more than would be necessary in some areas while offering too little in others.
- *Need to remove barriers to participation by the rural poor and marginalized groups:* While the primary objective of PES programs is to generate environmental services, they can also contribute directly to poverty reduction because potential service providers often include poor and marginalized groups. Appropriate training and capacity building activities can help marginalized and less-organized groups overcome barriers to participation in PES schemes, providing benefits for both poverty alleviation and provision of environmental services.

9. Safeguard Policies (including public consultation)

Consultations with stakeholders and analysis of issues and risks have been carried out to help select potential sites for local PES programs. An environmental assessment (EA), environmental management plan (EMP), social assessment, (SA), and indigenous peoples development plan (IPDP) were completed during project preparation and are available through InfoShop and on CONAFOR's website.

Risks and mitigation. The risk of negative socioeconomic impacts on both service users and service providers is mitigated by the very dynamic that underpins local, market-based environmental service payments—that these systems, and their long-term sustainability, rely on voluntary participation grounded in the perceived self-interest and well-being of the participants. In addition, provisions for ongoing consultation and participation are included throughout the project components to ensure relevancy, feedback, and compliance. While there are risks related to overcoming obstacles to participation and equitable distribution of benefits, the PES payments are expected to have positive socioeconomic impacts by providing additional income and encouraging land uses that yield greater long-term benefits and security.

The participatory social consultation included (i) extensive interviews at pilot project sites which included ejido and indigenous community leaders, NGO representatives, community/ejido technical field workers, and local managers and staff of the protected areas and CONAFOR, and (ii) participatory workshops with diverse stakeholders and participants, including three workshops specifically for women. These consultations helped craft a project design that emphasizes strong indigenous community and ejido participation in a detailed action strategy that helps integrate the social and environmental aspects of the project and increase local community capacity to participate in decisionmaking and project management and compliance.

Ongoing community liaison and consultation arrangements. The project also has strong, ongoing community liaison and consultation arrangements, including regional and community-based

program promoters to promote the project, disseminate information and knowledge, provide feedback, assist communities and environmental service providers to participate in the program and develop PES proposals, and help tailor PES mechanisms to local needs and conditions. The regional promoters will also have a range of other administrative and technical responsibilities on behalf of the project, while the community promoters will focus mainly on representing local needs and interests and must have especially strong ties and rapport with the communities they represent.

Environment

Positive Environmental Impacts. The project is expected to be overwhelmingly positive from an environmental standpoint, by using PES to induce rural landowners to maintain the forests or other natural vegetation thereby (i) conserving globally significant biodiversity, (ii) maintaining or improving hydrological functions, and (iii) reducing greenhouse gases by storing carbon. In addition to the eight proposed pilot sites, the project would support the national PES program and promote establishment of local PES systems at other sites of conservation interest. No civil works are expected to be procured under the project. The main on-the-ground environmental impacts associated with project expenditures would thus be the maintenance of desired vegetative cover on the rural landholdings of PES recipients.

The only possible adverse environmental impacts would be strictly unintended; they could possibly involve (i) tradeoffs between different environmental objectives; (ii) misallocation of PES funds; or (iii) perverse incentives, such people moving onto lands so they can apply for PES benefits. The Environmental Management Plan (EMP) for this project is intended to prevent these types of unintended negative impacts, by incorporating within the project’s Operational Manual and the PSAH and CABSAs operating rules: (i) eligibility and prioritization criteria for the types of lands and landowners that could receive PES contracts and (ii) review procedures and specific responsibilities within CONAFOR to ensure that all contracts are awarded, administered, and supervised in accordance with these criteria. PES eligibility criteria are expected to require (i) no clearing of forests or other natural habitats to establish new agricultural systems; (ii) any reforestation must be with species native to the site; and (iii) all eligible landowners will need to present evidence of legally secure land tenure and long-term residence in the PES eligible area.

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Natural Habitats (OP/BP 4.04)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pest Management (OP 4.09)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cultural Property (OPN 11.03, being revised as OP 4.11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Involuntary Resettlement (OP/BP 4.12)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Forests (OP/BP 4.36)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Safety of Dams (OP/BP 4.37)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Projects in Disputed Areas (OP/BP/GP 7.60)*	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Projects on International Waterways (OP/BP/GP 7.50)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties’ claims on the disputed areas

10. List of Factual Technical Documents

Project Reports and Studies

- Technical Assistance for the Coordination of the Design of the Project, José Armando Alanís de la Rosa
- Technical Assistance for the Coordination of the Design of the Project, Jaime Baray Terrazas
- Technical Assistance for the Determination of Areas of Eligibility of Environmental Services (six separate studies) by:
 - Shatya Quintero Gradilla
 - Jesús Gutiérrez Cacique
 - Rodolfo Valdez García
 - Erika del Rocío Martínez Guevara
 - David López Ramírez
 - Victor Tejada Vázquez
- Preparation of the Project Information Note (PIN) for the Biocarbon Fund for the Mexico Environmental Services from the Forest Project in Mexico, Edgar Ortiz Malavasi
- Environmental and Social Assessment for the Project Information Note (PIN) for the Biocarbon Fund for the Mexico Environmental Services Project, Hilda Elizabeth Hesselbach Moreno
- Social Study, Jorge Franco López
- Social Study -Phase 2, Jorge Franco López
- Indigenous Peoples Development Plan, Jorge Franco López
- Identification of experiences relative to the development of environmental service markets of the forest in Mexico (case study), Sergio Madrid Zubirán
- Environmental Assessment of the Impact of the Environmental Service Project of the Forest, Marco A. Zambrano Chávez
- Formulation of the Procurement Plan and Operational Manual of Procurement, Bernardo Madriz
- Specialist in Procurements and Procedures, Alma González
- Technical Assistance for Financial Control during the design of the Project for the Development of Environmental Services Markets in Mexico, Ana Ma. Rosales Monroy
- Study for the Formulation of the Logical Framework, Julio Córdoba
- Case Study on the Development of Environmental Services Markets in Mexico (eight separate studies, in progress) for:
 - Scolel-Té, Chiapas
 - San Pedro Chichila-Taxco, Guerrero
 - Copalita-Huatulco, Oaxaca
 - Cofre de Perote-Coatepec, Veracruz
 - Cerro Grande-Colima, Colima y Jalisco
 - Café de Sombra, Oaxaca
 - Amanalco-Valle de Bravo, México
 - San Pedro Atlapulco-Ocoyoacac, México
- Operational Manual for the Environmental Services Project

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