



PROJECT IDENTIFICATION FORM (PIF)¹

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT IDENTIFICATION

Project Title:	Conservation of coastal watersheds to achieve multiple global environmental benefits in the context of changing environments		
Country(ies):	Mexico	GEF Project ID: ²	4792
GEF Agency(ies):	WB (select) (select)	GEF Agency Project ID:	TBD
Other Executing Partner(s):	Comisión Nacional de Áreas Naturales Protegidas (CONANP), Comisión Nacional Forestal (CONAFOR), Fondo Mexicano para la Conservación de la Naturaleza (FMCN), Instituto Nacional de Ecología (INE)	Submission Date:	2012-03-28
GEF Focal Area (s):	Multi-focal Areas	Project Duration (Months)	60
Name of parent program (if applicable): ➤ For SFM/REDD+ <input checked="" type="checkbox"/>		Agency Fee (\$):	3,951,819

A. FOCAL AREA STRATEGY FRAMEWORK³:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
(select) BD-1	1.1 Improved management effectiveness of existing and new protected areas	Two new protected areas and coverage (in 8 existing protected areas) of unprotected ecosystems	GEFTF	15,815,810	30,993,000
(select) BD-1	1.2 Increased revenue for protected area systems to meet total expenditures required for management	Sustainable financing plans (10 plans for 10 protected areas) including adaptation strategies	GEFTF		34,226,000
CCM-5 (select)	5.1 Good management practices in LULUCF adopted both within the forest land and in the wider landscape	Carbon stock monitoring systems established in six watersheds (4.101 MtCO ₂ e avoided in 5 years, up to 16.406 MtCO ₂ e in 20 years)	GEFTF	730,000	7,746,000
CCM-5 (select)	5.2 Restoration and enhancement of carbon stocks in forests and non-forests lands	Forests and non-forest lands under good management practices	GEFTF	9,813,874	102,983,000
(select) LD-3	3.2 Integrated landscape management practices adopted by local communities	Integrated land management plans developed and implemented	GEFTF	3,048,936	3,017,000
(select) SFM/REDD-1	1.2 Good management practices applied in existing forests	Forest area under sustainable management, separated by forest type	GEFTF	8,786,561	50,199,000
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)	Others		(select)		
Sub-Total				38,195,181	229,164,000
Project Management Cost ⁴			GEFTF	1,323,000	10,722,000

¹ It is very important to consult the PIF preparation guidelines when completing this template.

² Project ID number will be assigned by GEFSEC.

³ Refer to the reference attached on the [Focal Area Results Framework](#) when filling up the table in item A.

Total Project Cost	39,518,181	239,886,000
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B. PROJECT FRAMEWORK

Project Objective: Ensure the integrated management of coastal watersheds that drain to the Gulf of Mexico and the Gulf of California as a means to achieve multiple global environmental objectives and mitigate climate change impacts.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Cofinancing (\$)
1. Consolidation of protected areas	Inv	Improved management effectiveness in existing protected areas Increased funding for protected areas to meet total expenditures required for management	10 protected areas (1,180,985 ha, including 2 new protected areas of estimated 560,000 ha) meet or exceed their management effectiveness targets 10 protected areas meet their targets for reducing the protected area management funding gap of their financing plans	GEFTF	11,527,810	55,292,000
2. Promoting sustainability within watersheds	Inv	Forests and non-forests lands under good management practices GHGs emissions avoided	Six watersheds under improved management in approximately 823,220 ha (not including protected areas) based on integrated land management plans 4.101 MtCO ₂ e in 5 years, up to 16.406 MtCO ₂ e in 20 years avoided and sequestered in the targeted watersheds	GEFTF	20,426,435	145,666,000
3. Strengthening capacities for monitoring land use, biodiversity, watershed management and climate change	Inv	Environmental monitoring implemented in priority coastal watersheds	Six watersheds (covering 1,609,337 ha) being monitored with remote sensing and local data gathering techniques	GEFTF	3,572,000	13,479,000
4. Piloting innovative mechanisms for inter-institutional collaboration and promoting social participation	Inv	Establish and enhance channels of coordination and learning among four key resource management agencies Lessons documented and disseminated via publications and learning communities	Institutional arrangements/mechanisms for replication of best practice in watershed management. 5 additional watersheds (not directly supported and at least 200,000 ha) incorporate lessons derived from the project	GEFTF	2,668,936	14,727,000
	(select)			(select)		
	(select)			(select)		

⁴ GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately to focal areas based on focal area project grant amount.

	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
				Sub-Total		38,195,181 229,164,000
				Project Management Cost ⁵	GEFTF	1,323,000 10,722,000
				Total Project Costs		39,518,181 239,886,000

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
National Government	CONAFOR Contribution	Grant	9,090,000
National Government	CONAFOR (through WB financing)	Hard Loan	143,750,000
National Government	CONANP Contribution	In-kind	19,308,000
Bilateral Aid Agency (ies)	German Government	Grant	34,226,000
National Government	INE Contribution	In-kind	3,503,000
Private Sector	Raised by FMCN	Grant	24,487,000
Private Sector	FMCN	In-kind	5,522,000
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Cofinancing			239,886,000

D. GEF/LDCF/SCCF/NPIF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
WB	GEFTF	Biodiversity	Mexico	16,363,636	1,636,364	18,000,000
WB	GEFTF	Climate Change	Mexico	10,909,091	1,090,909	12,000,000
WB	GEFTF	Land Degradation	Mexico	3,154,545	315,455	3,470,000
WB	GEFTF	Multi-focal Areas	Mexico	9,090,909	909,091	10,000,000
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
Total Grant Resources				39,518,181	3,951,819	43,470,000

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

² Please indicate fees related to this project.

⁵ Same as footnote #3.

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1 the [GEF focal area/LDCF/SCCF](#) strategies /[NPIF](#) Initiative:

The proposed project will support an innovative multi-institutional collaborative framework to achieve results across four GEF focal areas (Biodiversity (BD), Climate Change (CCM), Sustainable Forest Management (SFM), and Land Degradation (LD)). Strengthened management of new (2) and existing (8) protected areas along six key watersheds will enhance biodiversity protection. To address SFM, the project will focus on providing payments for ecosystem services (PES) in areas threatened by high deforestation and biodiversity loss beyond protected areas. These activities will be complemented by capacity building and support to local communities to improve management of degraded agroecosystems to reduce pressures on natural resources, consistent with the goals of the LD focal area. Support to communities will include implementation of integrated land management plans with a watershed perspective, including incorporation of agro-forestry practices, and soil conservation in degraded lands aimed at sustained livelihoods. For CCM, the project will assist stakeholders in each watershed to reduce pressure on forest resources through improved forest management, including a reduction in areas affected by fire. Activities under LD and SFM will contribute to further mitigate carbon emissions in the selected watersheds. Carbon monitoring throughout the project will ensure that mitigation targets are met at the local level. Consistent with the “GEF 5 Focal Area Strategies” document, synergies of CCM with SFM, BD and LD are explored to generate multiple global environmental benefits, as well as social and economic benefits.

A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:

Not applicable

A.1.3 For projects funded from NPIF, relevant eligibility criteria and priorities of the Fund:

Not applicable

A.2. national strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

The project includes the four strategies defined by the National Strategy for Biodiversity and incorporates lessons from the publication *Natural Capital* by the National Commission on the Knowledge and Use of Biodiversity (CONABIO). Field activities will be designed within the framework of the State Biodiversity Strategies. The protected areas component is aligned with the National Work Program for Protected Areas and the Climate Change Strategy for Protected Areas. The sustainability component follows the National Forestry Program. The project is also aligned with the objectives of the Investment Plan of the Forestry Investment Plan. Project watersheds were selected using CONABIO's *Gap and Omission Analysis of the Terrestrial Biodiversity of Mexico*. The project contributes to global climate change mitigation and adaptation under the UN Framework Convention on Climate Change (UNFCCC) through reforestation and reduction of deforestation and forest degradation. It is aligned with the 2007 National Strategy on Climate Change. Project activities encompass those identified by the National Special Climate Change Program (PECC) 2009-2012 as included in Mexico's Fourth National Communication to the UNFCCC: payment for ecosystem services, protection of forests against fires, land conservation and sustainable alternatives, conservation and recovery of vegetation in grazing areas. Project activities are aligned with Mexico's Reduced Emissions from Deforestation and Degradation (REDD+) Readiness Preparation Plan and the derived strategy for Early Actions recognized by CONAFOR, since they are scalable and replicable; can potentially access carbon markets; and include the development of local capacities. They also contribute to Mexico's REDD+ Vision, which precedes the National Strategy being

developed by CONAFOR. The project contributes to the 2004 National Action Plan (NAP) to combat Desertification and the National Strategy for the Sustainable Management of Lands through the development and implementation of integrated land management plans for the targeted watersheds to reduce land degradation in both agro-ecosystems and forests, and as such contributes directly to realizing the objectives of the UN Convention to Combat Desertification (UNCCD). The project is also included in the National Portfolio Formulation Document.

B. PROJECT OVERVIEW:

B.1. Describe the baseline project and the problem that it seeks to address:

Mexico ranks fourth among countries in biodiversity, representing 10-12% of global biodiversity, and is a major source of cultivars. Mexico's biological wealth, born of complex geography, provides natural capital supporting the health and livelihood of 112 million people. But these ecosystem goods and services are at risk. Mexico's deforestation rate is among the highest in Latin America. Soil erosion affects almost half its territory. The National Water Commission (CONAGUA) considers 38% of Mexico's rivers highly polluted. Compounding these challenges, Mexico will be disproportionately affected by climate change. Various models predict that hurricanes will intensify, and drought and forest fires will increase. Coastal communities will be more vulnerable to flooding, and communities in the mountains will suffer increasingly from landslides, drought, and fires. The most effective measures to mitigate these impacts are to reduce deforestation and ecosystem degradation caused by land use change, which is also responsible for a significant contribution to carbon emissions in the country. According to the Fourth Communication to the UNFCCC, land use and land use change in account for 10% of the national GHG emissions, whereas the agricultural sector is responsible for 6.4%. This is therefore an area of high mitigation potential.

The impacts of climate change will be most evident in the coastal areas of the Gulf of Mexico and the Gulf of California, where mountain ranges parallel the coast, and deep canyons and ravines connect the mountains with the ocean. These watersheds have served as natural refugia through geological time. They harbor important ecosystems, where globally significant biodiversity is at risk. The threat to the Gulf of Mexico and Gulf of California coastal watersheds is increasing due to poor land use planning and lack of enforcement of environmental regulations. If no action is taken, studies show a 35% additional loss of rain forests and 18% additional loss of temperate forests by 2050 in these two regions. Such forest losses would be accompanied by significant loss of biodiversity, GHGs, and other sustaining ecosystems goods and services.

In a preliminary exercise, the National Institute of Ecology (INE) analyzed those watersheds along the Gulf of Mexico and Gulf of California that have federal protected areas and high biodiversity according to CONABIO's *Gap and Omission Analysis of the Terrestrial Biodiversity of Mexico*. A pre-selection was conducted based on highest priority according to ecosystem and conservation characteristics, local capacities, matching funds and inter-institutional collaboration. The pre-selection includes 15 watersheds along the Gulf of California and 9 watersheds along the Gulf of Mexico. In large coastal watersheds (such as Grijalva-Usumacinta in Chiapas, Campeche and Tabasco), the four institutions defined sub-watersheds of highest priority to ensure the functionality of the watershed (see map in annex 1 with watersheds or sub-watersheds). During preparation, further analysis will be conducted to select 6 target watersheds with their specific sub-watersheds from this universe.

The pre-selected watersheds along the Gulf of Mexico and the Gulf of California show high variability between watersheds, degradation being more prevalent along the Gulf of Mexico. Within the transformed landscape, 59.9% is devoted to cattle ranching, 39.2% to agriculture and 1% is urban. Increasingly, natural ecosystems will yield to competing land uses: the

expansion of low intensity cattle ranching, slash-and-burn agriculture, sugar cane, hydro-electric dams, as well as coastal unplanned development. Negative externalities derived from these land use changes include high carbon emissions, significant loss of biodiversity, high erosion and other land degradation effects, and unsustainable livelihoods for the communities that live within the watersheds. To reverse these trends, a multi-institutional effort as presented in this proposal is urgently required.

The project strategy builds on advances made by the environmental sector in Mexico. The National Commission for Protected Areas (CONANP) will strengthen existing and create new protected areas. Beyond Protected Areas, the National Forestry Commission (CONAFOR) will mitigate climate change through activities aimed at reducing deforestation and degradation, as well as promoting sustainability. Through payments for ecosystem services (PES) forest remnants that would otherwise be transformed will be conserved. To reduce pressure to these forest fragments, the project will implement integrated land management plans in degraded areas, while sustainable forest management will be promoted within the watersheds. INE will join CONANP and CONAFOR to strengthen monitoring of land use change, biodiversity degradation, carbon stocks and socioeconomic factors, while FMCN will provide its administrative and fundraising expertise, as well as links with the civil society. The project baseline includes more than a decade of experience in these activities by each institution, as well as current activities being financed in the pre-selected watersheds.

The establishment and operation of federally administered protected areas ranks as the most effective conservation strategy in Mexico. CONANP manages 174 protected areas representing 12.92% of the Mexican territory. Its budget has increased from US\$0.1 million in 1994 to US\$90 million in 2011. Preliminary data show correlation of (a) funding in the protected areas, and (b) diminishing deforestation rates. Populations of monitored species have been maintained. This success can be attributed to leveraging of GEF funds, increasing capacity and performance of CONANP, and innovative public-private cooperation. The first GEF grant to Mexico in 1992 supported ten priority protected areas. The project was restructured to create an endowment of US\$16.48 million, the Fund for Protected Areas (FANP), managed by the private environmental fund FMCN. FMCN channels FANP's income either to protected area operations, or to local partners for conservation programs supporting the protected areas. While FMCN provides project oversight and raises additional funds, CONANP ensures that funds are used for strategic conservation activities. As of 2011, the number of protected areas supported by the FANP has increased to 23, with a second GEF grant of US\$31.1 million in 2002, as well as contributions from 13 other donors. FMCN and CONANP exceeded the GEF 1:1 matching requirement to its second donation, and increased the FANP capital to US\$75.89 million.

In the pre-selected watersheds of the project, CONANP presently manages 14 protected areas and is working on creating at least two new ones. These 14 protected areas have the minimum required personnel and budget needed to operate. CONANP is committed to publishing or updating their Management Programs. While CONANP has published the National Financial Gap Analysis with the general needs of these areas, specific sustainable financing plans are required for at least 10 of the 14 protected areas. Their management effectiveness compared to other protected areas (such as the ones that receive FANP support) is considered to be 30%.

CONAFOR has ample experience in promoting sustainability. Regarding payment for ecosystem services (PES), the Mexican Forest Fund within CONAFOR is the largest PES fund in Latin America. Local governments, NGOs, and private entities provide counterpart resources to the Fund. Over the past eight years, CONAFOR has supported 1,008,858 ha with PES in the watersheds along the Gulf of Mexico and the Gulf of California. CONAFOR estimates that these areas harbor 28.5 million tons of accumulated carbon. In 2006, the World Bank provided CONAFOR a US\$45 million loan and a GEF US\$15 million grant. With these funds,

CONAFOR improved the targeting of its PES program, piloted a market-based system (with direct cash payments combined with technical assistance to land owners), and established an endowment (the Biodiversity Fund) for long-term financing of PES for biodiversity-friendly land management systems in sites with globally significant biodiversity and low-income populations.

In the pre-selected watersheds CONAFOR PES program conserved 251,000 ha between 2007 and 2011 with an estimated investment of US\$31 million. CONAFOR supports conservation of forest cover in this area, as well as activities reducing the pressures from extensive cattle ranching, the creation of fire brigades and demarcation of areas under conservation. The map included in Annex 2 shows the sites presently supported by CONAFOR within the pre-selected watersheds or sub-watersheds. Without GEF support, these investments would continue in the near future, but their longer term impact would be uncertain. Further, the synergies stemming from combined activities of CCM, LD and SFM activities in all the pre-selected watersheds would be absent without GEF support.

In terms of monitoring, Mexico has made great advances with its National Forest Inventory (NFI). Through this exercise, every five years CONAFOR complements remote sensing data with ground-truthing in 25,000 permanent plots surveyed by subcontracting. Mexico has adopted a nested approach to the Reduced Deforestation and Degradation (REDD+) Initiative, which requires that sub-national monitoring is aligned with national efforts. Using advanced and accessible technology, CONAFOR is exploring how community monitoring of deforestation can contribute to the NFI. REDD+ also requires that communities measure biodiversity degradation. With FMCN and CONAFOR co-financing, CONAFOR is developing community methodologies to measure deforestation and CONABIO is defining community methodologies to monitor biodiversity degradation. National protocols will be piloted in two of the pre-selected watersheds by four local communities and by CONANP personnel in four protected areas. The first local baseline gathered under these national protocols will be entered into CONABIO's database, which will serve as the long-term national database. Co-financing from FMCN (provided by the Gordon and Betty Moore Foundation) will allow for adjustments to the deforestation and degradation protocols in 2013 and 2014, but no funds are available to ensure that community monitoring continues in the long term in the selected watersheds. Additional REDD+ initiatives in the country include investments from the Spanish, U.S., French, Norwegian Governments and the European Community. On-going coordination among these initiatives and with the project will ensure constant synergies and complementarity. Monitoring of populations of selected species is already conducted by CONANP through its System for Information, Monitoring and Evaluation for Conservation (SIMEC). Further, through CONAFOR and FMCN co-financing (which comes from the Norwegian Government and a USAID-The Nature Conservancy partnership), Mexico will establish community methodologies to measure carbon stocks per ecosystem type, but funding is still required to ensure long-term monitoring by communities.

In terms of monitoring watersheds, INE has a decade of experience, while FMCN supports community monitoring of water quality and quantity along rivers in two of the pre-selected watersheds. Using the Global Water Watch (www.globalwaterwatch.org) methodology developed by Auburn University, communities learn from certified trainers how to gather data on water quality and quantity in rivers, and then enter data into an online database reviewed remotely by experts. This EPA certified methodology has expanded into 12 states in Mexico largely due to the support from INE. INE has also an extensive database on watersheds and in-house capacity to relate community monitoring data with additional information of relevance to watershed management, such as soil erosion, pollution, social and economic variables.

Finally, Mexico has advanced significantly in complying with international environmental

conventions, but different institutions focused on distinct commitments have thus far generated inadequate inter-institutional collaboration and coordination. This has resulted in duplication of efforts, inefficient use of resources and few synergies. This project seeks to enhance coordinated action in a manner that reduces negative externalities (e.g., inappropriate land use practices that lead to deforestation and unwarranted GHGs emissions) while maximizing synergies and multiple benefits from the same landscape. Thus the project seeks to enhance biodiversity conservation, strengthen the ecosystems ability to sequester carbon and provide other services, reduce negative externalities (e.g., GHG emissions, erosion and siltation of water sources and wetlands, draining of coastal wetlands, deforestation, etc) emanating from competing land uses (cattle ranching, unplanned coastal development, sugar cane cultivation), and enhance livelihoods of local communities.

- B. 2. [incremental /Additional cost reasoning](#): describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated [global environmental benefits](#) (GEF Trust Fund/NPIF) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

Through an unprecedented coordination of four key institutions the proposed project will, through leveraging co-financing of US\$239,886,000, ensure the effectiveness of protected areas covering 1,180,985 ha (including 258,199 ha of marine areas) and increase their connectivity through the conservation and sustainable management of 6 sub- or complete watersheds (with a total area of 1,609,337 ha) inhabited by some 5 million people. The project will develop a collaborative mechanism that will enhance replication of this best practice in at least 200,000 ha in other watersheds throughout the country. Preliminary estimates indicate that the activities included in the project could reduce carbon emissions in the order of 16.406 MtCO₂e after twenty years.

Component 1. Consolidation of protected areas (US\$10.69681 mi in endowment funds and US\$0.831 mi in non-endowment from GEF (BD); US\$55.292 mi in co-financing). The project will extend the Fund for Protected Areas (FANP) support to ten additional protected areas (2 new and 8 existing ones) in selected watersheds. The GEF endowment funds included in this component (US\$10.69681 million), and 1:1 matching funds raised by FMCN, will be added to the FANP capital. Interest generated will be channeled to implement protected area annual operating plans, sub-grants to local organizations, or both, as determined by CONANP. CONANP fiscal funds will complement this investment through financing personnel, operating expenses and Management Programs. Management will be strengthened through enhanced equipment and staff training in planning and management effectiveness, emphasizing mitigation and adaptation to climate change, as well as participation and conflict resolution strategies to build the social support required for integrated watershed management. Sustainable financing plans will be developed and implemented in the ten protected areas. Management effectiveness will be increased from 30% to at least 80% (based on national standards), building on the experience of FANP supported areas. Co-financing from bi-lateral agencies will ensure that adaptation measures are incorporated into protected area planning and that capacities are developed to reduce vulnerability both to the ecosystems and livelihoods included in the protected areas.

Non-endowment funds included in this component (US\$0.831 million matched by FMCN) will support fundraising, replicating the strategy that allowed FANP to exceed the 1:1 match required by the prior project. The growth of the FANP demonstrates that the GEF funds are an important incentive to attract additional investment. The FANP showcased protected areas to exponentially increase the federal budget for CONANP in the last decade. The proposed project will create new opportunities for leverage in regions where additional support has been scarce. On the west coast, CONANP already raised US\$0.5 million in FANP endowment funds for a new federal protected area within one of the watersheds.

Component 2. Promoting sustainability within watersheds (US\$8.864874 mi in non-endowment funds (CCM); US\$2.775 mi in endowment funds (LD); and US\$8.786561 mi in endowment funds (SFM) from GEF; US\$US\$145.666 mi in co-financing). The project takes a landscape approach beyond protected areas. Within each watershed the conservation of forest fragments under high deforestation pressure will be supported through direct PES to land owners. Around these fragments, areas that show high degradation but that are essential to reduce pressure on forest fragments, will be eligible for support to improve management of agroecosystems. To increase connectivity and reduce further pressures from land use change, communities will receive support to reduce forest emissions through forest conservation, reforestation and sustainable forest management. Activities in this component are multi-focal, since they pertain to CCM, LD and SFM. They will focus on conserving forests through PES, reducing pressure for land use change through improved land management and soil conservation in degraded areas, and avoided deforestation through improved forest management.

The GEF contribution, based on endowment funds, will ensure engagement in perpetuity. In the experience of previous GEF projects in Mexico, this stable financial basis is essential to leverage substantial investments from both public and private sources. Since a conservative estimate for the return on the capital is considered and only the interest from the endowment is used, the areas directly financed by GEF funds may not seem impressive. Their value, however, rests in presenting concrete tangible results within a scalable strategy that invites additional investment and its continuity, which is a required condition for reducing emissions from forest deforestation and degradation, mitigating emissions and increasing connectivity in the wider landscape. The project therefore incorporates a considerable match in funds, area and livelihoods that will be achieved and that would otherwise not have happened without this project.

During project preparation, estimates on expected mitigation benefits will be calculated on a per watershed basis according to forest type. The following example illustrates areas under different activities and possible mitigation targets within the first five years (derived from national averages described in objective 3.6 of PECC for the period 2008 to 2012) totaling 4.101 MtCO₂e: a) 4,426 ha under sustainable forest management – 0.018 MtCO₂e; b) 815,881 ha under PES – 2.35 MtCO₂e; c) 385,607 ha in new terrestrial protected areas – 1.728 MtCO₂e (from component 1 and based on national averages for new forest protected areas, an estimate based on ecosystem type, current deforestation/degradation trends, as well as areas under restoration, and their respective carbon estimates will be calculated during project preparation when boundaries of the new protected areas will be defined); d) 2,911 ha of degraded agricultural land converted to perennial and diversified crops - 0.006 MtCO₂e; as well as additional mitigation from reducing the effect of forest fires. Considering the long term project strategy and indirect carbon benefits for a total of 20 years, the total mitigation figure could reach 16.406 MtCO₂e, especially if replication occurs in additional watersheds in the country.

CONAFOR will support PES in the 6 selected coastal watersheds in eligible sites according to CONAFOR criteria published yearly. Non eligible sites outside protected areas, where forests are threatened by high deforestation and biodiversity loss, found in the three watersheds with the least available PES sites, will be identified by the Committee of CONAFOR's Biodiversity Fund. With GEF support in SFM (allocating US\$8.786561 million in endowment from GEF and a 1:1 match from CONAFOR in endowment funds to the Biodiversity Fund), interest from the Biodiversity Fund will provide direct cash payments to land owners in these sites that would otherwise not be eligible for PES. Through the extensive experience already gained at CONAFOR, threats to PES effectiveness as identified by the STAP Advisory Document

(revised March 2010) on “Payments for Environmental Services and the Global Environment Facility” will be avoided. The PES approach taken in this project follows the STAP recommendation to co-finance PES for multiple services (e.g., above and below ground carbon, biodiversity, water) in order to help make conservation economically viable. In alignment with the recommendations contained in this document, GEF support will ensure that payments are long-term, since it will come from endowment funds. Without the support from GEF (a) only eligible sites within the 6 watersheds would receive PES support, and (b) co-financing of multiple-service strategies would not be possible. With GEF funds, CONAFOR will be able to (a) co-finance PES for multiple services, (b) cover adequately the 6 watersheds with PES over multiple federal administrations, and (c) land owners/users will have additional support to reduce pressure on forests from the surrounding landscape. CONAFOR will provide technical support to forest owners receiving PES as part of the Mexico Forest and Climate Change Project Specific Investment Loan (SIL) from the World Bank to CONAFOR.

Multiple ecosystem services in forests receiving PES can only be ensured if pressure for land use change and degradation in the surrounding landscape is reduced. Soil erosion is considered by the National Strategy as one of the main causes of environmental degradation in the country. Through LD GEF funds, improvement of practices in agro-ecosystems, such as diversified cropping, fruit trees/perennial crops, will be combined with soil conservation techniques in areas within the watersheds that show high erosion and high potential for expansion. FMCN will establish an earmarked endowment (US\$2.775 million from GEF and a 1:1 match from FMCN) to fund local groups to implement integrated land management plans, which will include land suitability analysis, improving management of agro-ecosystems, reducing soil erosion, promotion and adoption of good land management practices, developing organizational skills, developing business plans, and accessing markets for sustainable products. FMCN, in coordination with the Project Committee, will fund the best proposals, applying its 17 years of experience with more than 1,000 grants already financed. CONAFOR will provide technical assistance with funds from the SIL. Successful examples will be showcased to access support from the Agricultural Ministry (SAGARPA) in much larger areas. The combination of endowment funds managed by a private institution (FMCN) with co-financing from CONAFOR allows for a long-term initiative to trigger changes in public policies in the agricultural sector to increase recognition of the ecosystem services provided by agroecosystems.

As described above, PES will assist land owners in conserving key eligible forests in the watersheds. Local groups working on improving agroecosystems in the surrounding degraded land will reduce pressure on the forests while improving livelihoods. In addition, sustainable forest management in the areas surrounding forest fragments and connecting them is also required to reduce emissions in areas under high pressure. FMCN will channel non-endowment resources (US\$8.864874 million from GEF in CCM) to qualifying local organizations that provide on-site technical support, capacity building and investment in sustainable forest management in communities that wish to apply for sub-grants. The sub-grant selection will be the responsibility of the Project Committee supported by the reviews of external experts, following the procedures of the FMCN.

Multi-Focal Area activities concentrated in 6 distinct sites will allow for unprecedented long term results in climate change mitigation, biodiversity conservation, forest management, and sustainable land management, which would directly benefit local livelihoods and also deliver sustained global environmental benefits. Avoided deforestation and degradation in areas of global biodiversity makes this project a natural initiative to be included among the REDD+ national initiatives and to access those financial mechanisms.

Component 3. Strengthening capacities for monitoring land use, biodiversity, watershed

management and climate change (US\$2.842 (BD); US\$ 0.730 mi (CCM); US\$13.479 mi in co-financing). Through GEF funding the project will ensure that community monitoring on deforestation and biodiversity degradation is established in the six watersheds and implemented over the long term according to the protocols that are being developed as part of the baseline in two of the watersheds. CONAFOR will verify community data to ensure compliance of forest cover for PES, while CONANP will assist communities in protected areas in monitoring deforestation and biodiversity degradation. Carbon stocks will be estimated in community plots with the technical support of CONAFOR and project funds, building on the Norwegian-funded Monitoring, Reporting and Verification (MRV) project under CONAFOR. CONAFOR and INE will also assess carbon stocks in soils and relate these stocks to land degradation in the watersheds. Baseline data will be stored in CONABIO and CONAFOR databases to allow for periodic evaluation of project impact. In addition to biodiversity and carbon, communities will measure water quality and quantity (financed through co-financing) using the Global Water Watch (GWW) methodology, expanding the experience from two to six watersheds. Data will be available in the GWW site (www.globalwaterwatch.org). INE will support the integration of data to promote a watershed perspective. It will work on a detailed map of land uses and socioeconomic variables in each watershed, including local capacities and livelihood indicators, to help generate effective intervention strategies (including capacity building) and strengthen adaptive management over time.

Without GEF support community monitoring would be limited to two watersheds and to the establishment of a baseline in forest degradation and deforestation, as well as five-year data on water quality and quantity. GEF support will allow to integrate measures of four ecosystem services (biodiversity, carbon stocks, water quality and quantity) in six watersheds and relate these measures to land uses, livelihoods and local capacities within each watershed. Combining community-based and national monitoring strategies will help insure that the current piecemeal approach to monitoring is transformed into a comprehensive system that provides constant feedback for integrated watershed management nationally.

Component 4. Piloting innovative mechanisms for inter-institutional collaboration and promoting social participation (US\$1.446 mi (BD); US\$0.949 mi CCM; US\$0.273936 mi (LD); US\$2.646 mi in endowment co-financing and US\$12.081 mi in non-endowment co-financing). At the local level, participatory forums will be established in each watershed/subwatershed to allow for the construction and oversight of integrated land management plans in each watershed. The composition of the forums will be tailored to ensure adequate participation and coordination in the context of local conditions. These participatory mechanisms could build on existing CONAGUA Watershed Councils, CONANP Advisory Councils, or Planning Committees for State Development. Sub-committees could operate as needed in specific regions. Inter-municipal arrangements, such as the successful Inter-municipal Initiative for the Integrated Management of the Ayuquila River, will be explored as a means for coordinating activities of municipalities along a watershed. This component is linked to the first component of the Mexico Forest and Climate Change Project SIL focused on promoting cross-sector coordination, since participatory forums in each watershed will serve to align investments from different sectors.

Project funds and counterpart funds will support the establishment and operation of a learning community of organizations working to conserve watersheds. FMCN will draw on its experience supporting such communities in other projects. Learning communities shorten the learning curve and promote exchanging information and sharing contacts. Participatory forums in each watershed will define topics for learning and exchange. Advances in the project and the learning community will be published and disseminated, so that actors in other watersheds can benefit from project advances. It is expected that at least five watersheds (200,000 ha) will incorporate lessons learned from the project. This is in addition to those watersheds targeted by

the project within the context of the scale up plan in the short term.

In terms of project management, the framework for multi-institutional oversight and collaboration is an innovative design that combines the strength of four institutions. A Project Committee, modeled after the successful Technical Committee of the FANP, with members representing CONANP, CONAFOR, INE and FMCN, will supervise the project and coordinate its components. A Project Coordinating Unit (PCU) of technical and accounting staff hired by FMCN and accountable to the Project Committee will serve as a liaison among local governments, NGOs, communities and the Committee. Following guidance from the Project Committee, it will coordinate with CONANP and CONAFOR to ensure that proposals for financial support follow established guidelines, disbursements are timely, and goals are met. The Project PCU will be responsible for the continuous follow-up of the local participatory forums, ensuring the participation and transparency essential to building social capital. The PCU will rely on experience and guidance from the Project Committee and local stakeholders to detect public policies and investments, especially in the agricultural and livestock sectors, that hinder the project goals, and seek support from the Project Committee in re-aligning those policies and investments to support project outcomes. The PCU will be responsible for the learning community and define the mechanisms, such as workshops, electronic and in-person field exchanges, and expert advice. The PCU will also assist in fundraising and will constantly ensure that the project coordinates with other GEF and non-GEF projects in the watersheds.

Finally, the concerted actions of the four institutions implementing the project go beyond anything that has occurred to date in Mexico. Collaborating in specific sites will create many opportunities for synergy and avoid duplication of efforts, localizing the three Conventions (Convention on Biological Diversity, UNFCCC and the UN Convention to Combat Desertification) into a single project with higher impact than isolated initiatives. Through an integrated landscape approach and effective coordination, costs for conservation of biological diversity and climate change mitigation will be reduced, minimizing negative externalities derived from uncoordinated and isolated actions, such as higher emissions. CONANP, CONAFOR, INE, and FMCN have long track records in their areas of expertise, which will be leveraged with funds from traditional sources and others outside the environmental sector. Their united effort will set a precedent for aligning investments that could not occur without the proposed project.

- B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF). As a background information, read [Mainstreaming Gender at the GEF.](#)":

Socioeconomic benefits including more effective participation in public processes and enhanced access to markets and community support are discussed in section B.5. Social assessments conducted during project design will identify gender, class and ethnicity aspects to be considered. This will inform the design of participatory forums in each watershed, which will include all sectors of the stakeholders present in every watershed. Gender, class and ethnic considerations will be integrated to ensure effective participation. Strategies to bridge gaps and distribute benefits among men and women, social classes, and ethnic groups will be devised, implemented and closely monitored by the PCU. Outreach targeted at women and indigenous groups will ensure equitable benefits, as well as informed participation in the project.

- B.4 Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

Risks	Management Strategies
Lack of enforcement favors increased land use change.	The project will build social capital to ensure presence of organized groups in the selected watersheds, a proven approach to deter illegal activities. Participatory forums will facilitate authorities' response to enforcement needs.
Efforts undermined by policies contrary to project goals.	The proposed project will build a constituency to promote a long-term vision for every watershed. Inter-institutional coordination within participatory forums will align policies with a long-term vision.
Climate change has a negative impact on the project watersheds.	The project will increase landscape connectivity, thus reducing vulnerability. Participatory forums will develop disaster response measures through the coordination of public agencies and stakeholders.

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

Social assessments conducted in the selected watersheds will identify key stakeholders. Stakeholders will participate and benefit from the project through PES, support for improved management of agroecosystems and forests, and through participatory forums. Project activities will increase income and capacities of stakeholders, which include the following 17 indigenous groups: mayo, cora, huichol, pápago, pima, seri, yaqui, nahuatl, otomi, tepehua, popoluca, totonaca, chocho, mixteco, chontal, chol and maya. The project will aim at establishing sustainable partnerships among stakeholders within a watershed to build the social capital required for reducing deforestation and improving the sustainability of the watersheds. Civil society organizations and local groups will be able to access sub-grants to build organizational and technical skills (their own and their partners') required to manage natural resources sustainably and reduce vulnerability to climate change. Organized women groups will be specifically targeted through the sector representatives in the State Councils for Sustainable Development that advise the Environmental Ministry at the state level. Participatory forums in each watershed will include representatives from all sectors of society working to ensure the implementation of integrated management plans for each watershed.

B.6. Outline the coordination with other related initiatives:

The proposed Project will build on FANP's successful model for enhancing protected area management and CONAFOR's track record in PES to expand to a watershed perspective. For example, along the Tuxpan watershed, the German government will support the upper watershed, the proposed Project will support conservation in the middle watershed, and INE will consolidate advances along the coastal area through the "Adaptation to Climate Change Impacts on the Coastal Wetlands in the Gulf of Mexico" project with INE, IMTA and CONAGUA. That project is piloting adaptation measures in four important wetlands in the Gulf of Mexico addressing a range of issues related to protection of biodiversity, rehabilitation of coral reefs, mangroves and development of appropriate infrastructure to mitigate sea level rise impact, storm surges and coastal erosion, among other topics.

The project will build synergies with SEMARNAT's "Integrated Assessment and Management of the Gulf of Mexico Large Marine Ecosystems" (LME) funded by GEF. The LME project is developing a regional strategy that will serve as a framework for the proposed project. Important lessons have also been taken from the project "Integrated Management of Ecosystems in Three Priority Eco-Regions". The proposed project will work in synergy with the Mesoamerican Biological Corridor Program (funded by GEF) by increasing connectivity in transformed landscapes and through alignment of public policies. Also along the Gulf of Mexico, the national oil company PEMEX supports reforestation in key areas, which will increase with support from the Project.

The Project will build on the advances of the Mexico Forest and Climate Change SIL to CONAFOR taking advantage of the developments of tools and strategies for community strengthening, accessing improved technical assistance services, and progress in MRV aiming at REDD+ opportunities. It will establish synergies with CONAFOR's "Mitigating Climate Change through Sustainable Forest Management and Capacity Building in the Southern States" (DECOFOS) GEF project (implemented through IFAD) that seeks to build capacities for community monitoring of carbon stocks. Both projects overlap in one watershed in the state of Campeche (see map in annex 2), which will allow sharing advances in the COFOS project in capacity-building for a wider implementation through the proposed Project. This Project complements the DECOFOS Project by implementing specific measures in Campeche building on the capacity strengthening measures financed by the DECOFOS Project.

The World Bank is preparing a new operation entitled "Modernizing the National Meteorological Service to Address Variability and Climate Change in the Water Sector in Mexico" (MOMET), which will finance pilot projects in four basins: two in the Pacific coast (Yaqui River basin in Sonora and small watershed in the coast of Chiapas) and two in the Atlantic (Veracruz and Tabasco), which will improve weather forecasting and promote investments on adaptation to climate change.

CONAFOR's Biodiversity Fund already supports the western coastal watersheds. The proposed project will expand this initiative. FMCN channels US\$500,000 per year to the conservation of coastal and marine ecosystems in the Gulf of California, and is implementing a campaign to increase its regional capital from US\$9.5 to US\$30 million.

On both coasts, CONAFOR, Rainforest Alliance and UNDP have started a GEF-supported project to strengthen community capacities and markets for certified forest products. This provides an opportunity to incorporate lessons in community forest management.

With support from the Gordon and Betty Moore Foundation, FMCN is financing an initiative from CONAFOR, CONABIO and CONANP to establish and apply field methodologies and technologies to measure deforestation and ecosystem degradation at the community level. CONAFOR and CONANP participate in an Inter-secretarial committee that ensures that methodologies in different projects are aligned.

The Project will benefit from CONANP's project under preparation "Strengthening management effectiveness and resilience of protected areas to protect biodiversity under conditions of climate change", since the latter will strengthen protected areas capacities to adapt to climate change, and develop a nationwide system for monitoring impacts of climate change and reduction of vulnerability. The Project will also exchange lessons with experiences in strengthening management of protected areas and working with indigenous communities in other regions of the country, such as those derived from the "Biodiversity Conservation and Sustainable Management in the Sierra Tarahumara, Chihuahua, Mexico" project being prepared by CONANP with support from UNEP.

In terms of REDD+ initiatives, CONAFOR is receiving support from the Spanish, U.S., French, Norwegian Governments and the European Community that will develop the national capacities, which will be applied in the field. The Proposed project has all the elements to test CONAFOR advances to align national policies with local needs. In addition, the FMCN is part of an alliance with The Nature Conservancy, Woods Hole Research Center, the Carnegie Institution for Science and Rainforest Alliance to support Mexico's readiness for REDD+. This alliance is financed by USAID and will help to strengthen public policies, develop capacities in MRV, build financial models, and support pilot projects. Advances in these pilot projects will provide learning opportunities for the proposed coastal watersheds Project.

C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

The proposed project builds on the FANP and the Biodiversity Fund experiences, which were implemented by the World Bank. The World Bank is the leading agency in the implementation of environmental funds, so its selection fits well with the GEF's Comparative Advantage matrix. The World Bank has a strong program with operations in all areas addressed by this project, important synergies will produce long lasting results.

C.1 Indicate the co-financing amount the GEF agency is bringing to the project:

The co-financing will be provided by the Government and other donors. The World Bank approved a US\$350 million SIL from CONAFOR to ensure sustainable use, restoration and expansion of Mexico's forest resources. It aims to strengthen social resilience to climate change in Mexico and to lead the international effort for REDD+. This loan will be used as co-financing by CONAFOR. The other agencies involved will provide budgetary funds, and support from bi-lateral sources in the adaptation o climate change. The FMCN will raise funds from private donors.

C.2 How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

The proposed project is consistent with the World Bank's country and sector strategies. The World Bank has shown effective support and coordination in past projects with the Mexican agencies involved. The accumulated experience of the World Bank and the four agencies allows for an unprecedented opportunity of efficient and effective coordination.

The World Bank country office is well staffed and the technical staff involved in the design and supervision of the proposed project includes specialists in biodiversity, environmental services, water resources management, land tenure, social issues including gender and indigenous peoples. Financial, procurement, legal and disbursement officers are based in the country office, as well. The World Bank would also draw upon specialists working in other regions of the world on issues of integrated watershed management and conservation, thus bringing global knowledge and experience to Mexico. The Bank has sponsored a number of South-South dialogues led by Mexico –mostly in environmental services, agriculture and water resources. This Project has a lot of potential for more of this type of collaboration.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Claudia Grayeb Barata	Director	MINISTRY OF FINANCE (SHCP)	07/12/2011

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Karin Shepardson The World Bank		04/11/12	Enos E. Esikuri	202 458 7225	eesikuri@worldbank.org