



# PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: FSP  
THE GEF TRUST FUND

Submission Date: 7 December 2009

## PART I: PROJECT IDENTIFICATION

GEF PROJECT ID: 4149 PROJECT DURATION: 60 months

GEF AGENCY PROJECT ID:

COUNTRY: Mexico

PROJECT TITLE: Mitigating Climate Change through Sustainable Forest Management and Capacity Building in the Southern States of Mexico (States of Campeche, Chiapas and Oaxaca)

GEF AGENCY: IFAD

OTHER EXECUTING PARTNER: National Forestry Commission (CONAFOR), Mexico

GEF FOCAL AREA: Climate change

GEF-4 STRATEGIC PROGRAM(s): SP-6

NAME OF PARENT PROGRAM/UMBRELLA PROJECT (if applicable): SFM

INDICATIVE CALENDAR*	
Milestones	Expected Dates mm/dd/yyyy
Work Programme (for FSP)	January 2010
CEO Endorsement/Approval	November 2010
Agency Approval Date	December 2010
Implementation Start	July 2011
Mid-term Evaluation	August 2013
Project Closing Date	June 2016

\* See guidelines for definition of milestones.

## A. PROJECT FRAMEWORK

**Project Objective.** To contribute to climate change mitigation (emission reductions, increase in carbon sequestration) in three Southern States (Campeche, Chiapas and Oaxaca) through the following main activity lines: (a) dissemination of inclusive strategies and tools appropriate to poor and vulnerable rural inhabitants; (b) strengthening of local capacities to carry out activities that will help to maintain and increase carbon capture, reduce greenhouse gas emissions and pursue capture activities in forest regions of Campeche, Chiapas and Oaxaca; (c) investments for LULUCF and SFM activities; and (d) institutional consolidation of the National Forestry Commission (CONAFOR)

Project Components	Investment, TA, or STA	Expected Outcomes	Expected Outputs	Indicative GEF Financing		Indicative Co-Financing		Total (\$) c = a + b
				(\$ a)	%	(\$ b)	%	
1. Strengthening of local capacities to monitor carbon capture (local/community level)	TA	1.1. Increased technical and organizational capacity of inhabitants of selected forest zones to monitor the existence of carbon	1.1.1. (i) Training of local inhabitants; (ii) data collection; and (iii) definition of methodologies and work tools with smallholders; 1.1.2. Awareness programme on climate change mitigation and adaptation in at least 75 municipalities of the project area; 1.1.3. (i) Better practices/guidelines for agroforestry resource management; (ii) monitoring activities; and (iii) reports disseminated in appropriate media	1,000,000	20.6	3,850,000	79.4	4,850,000
2. Increase in carbon capture potential (pilot projects)	Investment	2.1. Carbon capture through pilot forestry /agroforestry projects in marginalized localities; 2.2. Diversification of ways of increasing carbon capture potential through cost-effective forestry/agroforestry activities in marginalized forest zones; 2.3. Testing and transfer of appropriate technologies with a direct impact on climate change	2.1.1. Carbon (biomass) conservation through avoided deforestation using SFM techniques in 400,000 hectares in the project area: (i) 50 metric tons CO <sub>2</sub> /ha/year in pine forests; (ii) 33 metric tons CO <sub>2</sub> /ha/year in pine-holm oak forests; (iii) 113 metric tons CO <sub>2</sub> /ha/year in tall forests; and (iv) 57 metric tons CO <sub>2</sub> /ha/year in low forests; 2.1.2. Reforestation of at least 100,000 ha in the project areas; 2.2.1. Running of 30 pilot projects for more than three years; 2.3.1. Incorporation of techniques appropriate to project beneficiaries for the production, harvesting and processing of agroforestry products	3,700,000	31.0	8,250,000	69.0	11,950,000

3. Institution-building and administration (institutional level)	TA	3.1. Boosting of the CONAFOR's capacities to monitor CO <sub>2</sub> sinks. 3.2. Project monitoring, evaluation and management	3.1.1. Consolidation of the CONAFOR's capacity to systematize monitoring (information, analysis, remote sensing and coordination mechanisms) and achieve the strategic objectives of the Special Climate Change Programme. 3.1.2. Dissemination of the experiences of pilot projects 3.2.1. M&E in place and project properly implemented	300,000	17.4	1,425,000	82.6	<b>1,725,000</b>
<b>Total project costs</b>				<b>5,000,000</b>		<b>13,525,000</b>		<b>18,525,000</b>

## B. CO-FINANCING FOR THE PROJECT BY SOURCE (US\$)

Sources of Co-financing	Type of Co-financing	Project
Project Government Contribution	Grant	7,035,000
IFAD/GEF	Loan	5,000,000
Beneficiaries	Grant (cash-kind)	1,490,000
<b>Total Co-financing</b>		<b>13,525,000</b>

## C. FINANCING PLAN SUMMARY FOR THE PROJECT (US\$)

	Previous Project Preparation Amount (a)	Project (b)	Total c = a + b	Agency Fee
GEF financing		5,000,000	5,000,000	500,000
Co-financing		13,525,000	13,525,000	
<b>Total</b>		<b>18,525,000</b>	<b>18,525,000</b>	<b>500,000</b>

## PART II: PROJECT JUSTIFICATION

### A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

#### A.1. Background and country situation

Mexico has borders with the United States of America to the north, and Guatemala and Belize to the south, with the Pacific Ocean lying to the west and the Caribbean Sea to the east. With an area of almost 2 million square kilometres, it is the fifth largest country in the Americas and has a population of 100.6 million<sup>1</sup>. It is a federation of 31 free, sovereign states, plus Mexico City. The 31 states are divided into 2,454 municipalities.<sup>2</sup> It is the tenth largest economy in the world, with a per capita gross domestic product of US\$7,830.<sup>3</sup> However, wealth is very unevenly distributed. In 2008 there were some 19.5 million people in the country suffering from extreme poverty. The indigenous population is estimated at about 11 million from more than 60 ethnic groups, with the highest rates of poverty and vulnerability. Indigenous groups are concentrated mainly in the southern states, particularly Oaxaca and Chiapas.

The country has considerable forest resources, with 73 per cent of its land area – roughly 140 million hectares – covered with some type of vegetation. These resources are vital to the livelihoods of about 12 million people living in the country's forest regions, providing them with food, building materials, biodiversity and other services. Approximately 5 million of these people belong to indigenous groups.

These means of livelihood are under threat from deforestation, degradation and the conversion of forest ecosystems to other uses, with major consequences for global climate change. The Pew Center on Global Climate Change estimates that deforestation and degradation have led to the loss of 45 per cent of the country's original forest cover since 1950 and that an average of 348,000 hectares was lost each year in the period 1990 to 2000 alone. If deforestation continues at this rate, approximately 70 per cent of Mexico's forests are in danger of disappearing in the next 20 years.

Deforestation and forest degradation contribute to high emission levels for carbon and greenhouse gases. According to the most recent National Inventory of Greenhouse Gas Emissions (2002), emissions of CO<sub>2</sub> from the land use, land-

<sup>1</sup> II Censo de Población y Vivienda (2005). Instituto Nacional de Estadística y Geografía.

<sup>2</sup> National Institute for Statistics, Geography and Information Systems (2008).

<sup>3</sup> United Nations Development Programme and World Bank data (2007).

use change and forestry (LULUCF) sector were on average 89,850 million metric tons per year in the period 1992 to 2003, or 14 per cent of Mexico's annual total emissions. Most of these emissions (96 per cent) are generated by the conversion of forest ecosystems to other uses. In terms of changes in the use of forest land, the main processes generating carbon emissions are slash-and-burn cultivation, forest fires, unregulated felling and soil degradation.

There is an urgent need to reverse the present deforestation trends and reduce human pressure on Mexico's forests. Sustainable forest management can make a major contribution here. Natural regeneration of vegetation on abandoned land can produce a net carbon capture of 12,833 million metric tons. The National Climate Change Strategy estimates the capture potential of Mexico's forests in the period 2007 to 2012 at between 18.08 and 42.16 million metric tons of CO<sub>2</sub> in conditions of effective policy and permanent, effective financial and technical support. According to the Third Communication of Mexico to the United Nations Framework Convention on Climate Change (UNFCCC) (2006), carbon capture in the forest sector can reduce emissions, so that investments in this sector are considered to be among the most cost-effective and appropriate for the mitigation of climate change in the country. Such investments also contribute to biodiversity conservation and the rehabilitation of these ecosystems in the face of climate change.

## **A.2. Issues considered by the GEF intervention in the southern states of Campeche, Chiapas and Oaxaca**

Mexico's forests have huge potential for mitigating climate change through carbon capture and the maintenance of existing carbon stocks. However, any intervention must take account of the social context within these ecosystems, inasmuch as 80 per cent of forests are owned by farming and indigenous communities. Community forestry in Mexico is an example for the world in terms of its social and environmental benefits (carbon capture, emission reduction, biodiversity conservation and rural development), so long as technical, social and economic constraints are removed. It offers settlers economic alternatives in order to avoid the conversion of forest land to other uses, thus increasing the potential for carbon capture. A study by Masera and Sheinbaum (2000) of five community forestry projects covering a total of 375,500 hectares estimates that 64.1 million metric tons of carbon will be captured. Community activities in the forest sector therefore have a very high potential for carbon capture.

However, there has been a failure to take advantage of this potential and of the benefits of community forestry, and deforestation continues, especially in the country's southern states. According to a study by the United States Environmental Protection Agency that identified priority areas for interventions to mitigate climate change, Mexico's southern states, especially Chiapas and Oaxaca, have the highest economic, social and environmental indicators for this. Nevertheless, there are a number of constraints preventing fulfilment of the potential. These states, together with Guerrero, are the poorest in the country, containing 25 per cent of its extremely poor. Extreme poverty affects 47 per cent of the population in Chiapas, 38 per cent in Oaxaca, and 20 per cent in Campeche, the three states in which the project will be executed. Poverty is greatest in rural areas, especially forest and wooded zones, and is particularly acute among the indigenous population. The lack of economic capital and ongoing appropriate technical assistance are two of the main obstacles preventing *ejidos* [land under community control] and communities from managing their forests in an efficient manner. An additional constraint is the high cost of management programmes, especially for communities with small forest areas, a situation encouraging very high rates of illegal felling, although it has not been possible to measure these rates. Community organizational structures are inefficient and lack organizational, productive, administrative, management and monitoring capacities. Such communities also lack the capacity to take advantage of the benefits offered by carbon markets.

## **A.3. Description of the IFAD/GEF intervention**

**Project area.** The IFAD/GEF project, "Mitigating Climate Change through Sustainable Forest Management and Capacity Building in the Southern States of Mexico (States of Campeche, Chiapas and Oaxaca)", will focus its intervention on the same geographical area as the "Community-based Forestry Development Project in the Southern States" (CFDP), cofinanced by IFAD and the Government of Mexico, which seeks to generate alternatives in order to increase incomes and help reduce the marginalization of extremely poor families living in forest ecosystems in 106 municipalities in the three states (8 in Campeche, 36 in Chiapas and 62 in Oaxaca). Slightly over 900,000 people live in this area, 51 per cent of them women; 76 per cent of them (or almost 700,000) indigenous. The IFAD/GEF operation will adopt the same measures and management structure as the IFAD-led operation, concentrating activities for components 1 and 2 in at least 76 of the 106 municipalities. Those municipalities will be chosen following these criteria: 1. Forest cover; 2. Biodiversity index; 3. Poverty level; 4. Percentage of indigenous population, and 5. Socioeconomic and ecological importance of the municipality.

**Objective.** The IFAD/GEF project will contribute to climate change mitigation through better forest management, including both a reduction in emissions from deforestation, and an increase in the carbon capture potential of forests, while the adaptation and resilience to the effects of climate change of forest ecosystems is enhanced in forest regions with high levels of marginalization in the states of Campeche, Chiapas and Oaxaca. The project will operate by financing pilot projects for carbon sequestration/emission reductions, disseminating information, increasing the awareness of rural inhabitants, building capacities to monitor carbon capture, and boosting the CONAFOR in this regard. The project will encompass the following three components. The first component will focus on the local level, enhancing farmers' capacities for awareness and monitoring of activities and carbon sequestered; the second one will put into practice pilot experiences that will be systematized, and the third component will concentrate on the institutional level, to secure capacities to monitor carbon, ensuring at the same time the proper implementation and M&E of the project activities.

**Component 1. Strengthening of local capacities to monitor carbon capture** (local-community level). This component will contribute to increase and improve capacities of local actors (*ejidos*, communities and farmers) for: (i) use of carbon capture monitoring methods and tools appropriate to this type of producer; (ii) use of global positioning systems (GPS), aerial photography and other electronic visualization techniques; (iii) gathering of information for carbon monitoring; (iv) awareness by poor families regarding climate change and possible mitigation alternatives; (v) better monitoring and surveillance practices, and the drawing up and distribution of reports; (vi) better organization for sharing experiences; and (vii) systematization and dissemination of lessons generated by the project with a view to their replication and scaling up.

This component is complementary to activities under the IFAD-financed project (CFDP), aimed at *consolidating beneficiaries' organization and local management capacity* through the formulation of community development plans and *strengthening producers' organizations* (administration, identification and resolution of internal conflicts, consolidation of internal governance, environmental management, agroforestry techniques, sustainable forest management etc.).

**Component 2. Increase in carbon capture potential** (pilot projects). This component will increase the carbon capture potential in the project zone by financing forestry and agroforestry activities under sustainable forest management (SFM). The objective of the pilot projects is to test new experiences of forest management that can contribute to maximize carbon capture and to improve the use of natural resources in areas with collective ownership of land (*ejidos*), generating lessons that help CONAFOR scale up at regional and national levels. The activities will be carried out by the beneficiaries (farmers) in the project area, assisted by the project staff.

The project will: (i) identify suitable areas for carbon capture through the use of agroforestry species suited to local conditions in the region and with potential benefits in terms of watershed, biodiversity and other goods and services; (ii) invest in pilot sites in selected locations, linked to the monitoring and reporting activities (component 1); and (iii) ensure the protection and survival of forest cover and the long-term maintenance of captured carbon through the development and adoption of improved forest management techniques. Typical activities to be carried out include afforestation/reforestation of marginal lands, sustainable management of existing forests, and promotion of agroforestry. The project will contribute to the reforestation of at least 100,000 hectares in the project area, and will also help to the sustainable management of permanent harvesting areas and degraded areas totalling approximately 400,000 hectares. Some complementary, affordable and appropriate technologies, such as solar wood dryers and dehydrators and wood saving stoves, will be also tested, and results disseminated among beneficiaries throughout CONAFOR.

This component is complementary to the IFAD CFDP (forestry investments and businesses), which has the aim of increasing and diversifying the poorest forest inhabitants' income through the establishment of ecobusinesses and the implementation of projects related to sustainable productive activities (to be covered by IFAD/GoM funds). IFAD will in particular support the formulation and implementation of business plans, supply resources for the necessary investments, provide training in the organizational and management skills needed for such businesses, and facilitate the linkages between these businesses and the markets.

**Component 3. Institution-building and administration** (institutional level). This component will improve the capacity of national and state/regional levels of the National Forestry Commission (CONAFOR) (forestry experts and decision-makers) to promote investments that will increase carbon capture potential, monitoring activities, record-keeping and the submission of reports on carbon stocks. It includes the consolidation of the CONAFOR's capacity regarding information management and administration (using Softwear), and LULUCF mapping techniques (land surveying and analysis using remote sensors).

The **total project cost** will be US\$ 18.525 million, excluding the preparatory activities. The GEF will contribute with US\$ 5 million. The IFAD/GoM cofinancing (US\$ 13.525 million) corresponds to the associated CFDP (baseline), which was approved by the IFAD Executive Board last September 2009. CFDP activities will start in January 2010. Requested GEF contribution and cofinancing are shown in tables B and C.

IFAD's associated baseline activities (under CFDP) for this component will dovetail with the IFAD/GEF project and help to improve the effectiveness of CONAFOR expenditure by training key staff and creating methods facilitating poor families' access to its programmes and resources. The project will set up adequate monitoring and evaluation systems to measure impact, including baseline studies of the eligible area, and mid-term and final evaluation of the project.

#### **A.4. Anticipated global environmental benefits**

The project offers the following global environmental benefits and other significant secondary benefits:

1. *Climate change mitigation.* The project activities will increase carbon capture and that pilot projects will maintain and/or increase carbon stocks. Direct benefits are also anticipated in the form of mitigation of the effects of climate change by reducing changes in land use and preventing and avoiding emissions, for example by generating livelihood alternatives, and improving the management (applying SFM principles) and production techniques. It is estimated that a total of 100,000,000 ton CO<sub>2</sub> will be reduced/sequestered at the end of the project. Expected CO<sub>2</sub> emissions to be avoided and/or carbon to be sequestered are detailed in section F.2 below.
2. *Biodiversity conservation and sustainable forest management.* The project will contribute directly to biodiversity conservation through sustainable forest management since: (i) its focus area lies within the Mesoamerican biodiversity hotspot; (ii) Oaxaca and Chiapas contain 60 per cent of this area, and these two states occupy the first and second places nationally on the biodiversity index;<sup>4</sup> and (iii) these two states contain almost every type of ecosystem, notably temperate conifer forests, broad-leaved forests and mesophile montane forests.
3. *Adaptation to climate change.* The recovery capacity of deforested and degraded ecosystems will be increased through improved management actions, which will increase forest ecosystems' resilience to the impacts of flood, drought, fire and pests.
4. *Rehabilitation of degraded land and soil.* The project will promote (i) rehabilitation and a reduction in degradation of the ecosystems in which it intervenes, and (ii) regulated management of marginal forest land.

#### **B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL/REGIONAL PRIORITIES/PLANS**

Mexico is a party to various multilateral environmental agreements, for example the UNFCCC, the Convention on Biological Diversity and the United Nations Convention to Combat Desertification. The country has played an active role in formulating policies on climate change mitigation and adaptation to such change. In the first years of the twenty-first century, Mexico declared to the UNFCCC that actions in the forest sector to mitigate climate change are priorities for its Government, inasmuch as this sector was the second largest generator of CO<sub>2</sub> in the country in 2002 (14 per cent), coming second only to the energy sector.

The project will support the country's **National Climate Change Strategy and Special Programme on Climate Change**, both of which designate climate change mitigation actions in the forest sector as priorities. In particular, the Special Programme on Climate Change states that improved management and reforestation initiatives will make forest ecosystems more resilient to such environmental action. The project was also designed to make a direct contribution to achieving national objectives 8 (environmental sustainability) and 10 (reduction in greenhouse gas emissions) and also a key part of the National Development Plan 2007-2012, 4, component 4, particularly 4.1 on climate change.

The project is also closely aligned with the priorities of environmental institutions in Mexico and will support pursuit of these priorities. The Secretariat for the Environment and Natural Resources (SEMARNAT) has set priorities on the ongoing promotion of sustainable forest and woodland management and strengthening of the **Environmental Services Payment Programme**, incorporating payment for carbon capture. Lastly, the project is in line with the priorities of the **Institutional Programme 2007-2012** of CONAFOR for conservation and sustainable use of forest resources.

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<sup>4</sup> Mexico is considered one of the most megadiverse countries in the world.  
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### C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH [GEF STRATEGIES](#) AND STRATEGIC PROGRAMS

The primary objective of the project is that of implementing activities to prevent climate change and support mitigation of its effects, while halting the advance of the agricultural and livestock frontier, actions that will have a direct consequence in the form of a reduction in greenhouse gas emissions from LULUCF. The project will help to identify and apply policies and practices promoting carbon capture and reducing the sector's emissions in specific regions of Mexico. In particular, it will help to boost local technical capacities for climate change mitigation and will boost the CONAFOR's national- and state-/regional-level capacities in this regard. Lastly, it will work at the local level to increase beneficiaries' awareness of the importance of forest activities in carbon capture and their additional benefits in terms of the goods and services of these ecosystems (for example, sustainable land and water use, and biodiversity).

In this regard, the project is closely aligned with GEF strategies, objectives and eligible activities regarding climate change. The project supports directly Strategic Objective 7b of the GEF Focal Area Strategy for Climate Change (reduction in emissions through land use, land-use change and forestry) and **CC Strategic Program 6** (management of LULUCF as a means to protect carbon stocks and reduce greenhouse gas emissions). The project will help to identify and apply policies and practices promoting carbon capture and the reduction in greenhouse gas emissions coming from LULUCF, by boosting local capacities and making sustainable investments in forest localities in the states of Campeche, Chiapas and Oaxaca.

The proposed project is aligned with GEF-4's **Sustainable Forest Management Framework Strategy** through support to the sustainable management of forested ecosystems in the three Mexico's Southern States, and the contribution to emissions' reduction from LULUCF activities. The GEF funds will be use catalytically, mobilizing extra resources from IFAD, the Government of Mexico and the beneficiaries to help reduce global emissions in a very cost-effective way. As was recognized by the Collaborative Partnership on Forestry (CPF)<sup>5</sup>, "SFM provides a flexible, robust, credible and well-tested framework for simultaneously reducing carbon emissions, sequestering carbon, and enhancing adaptation to climate change. At the same time it can help supply environmentally friendly forest products, protect biodiversity, secure freshwater supplies and provide other essential ecosystem services"<sup>6</sup>.

### D. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF RESOURCES

n/a.

### E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES

The project will share information and lessons learned, and will, when appropriate, formalize its collaboration with the Government of Mexico national or regional programmes, avoiding a duplication of efforts and activities. It will complement the actions of the above-mentioned projects and will benefit people who are not at present receiving support from CONAFOR programmes. In particular, this IFAD/GEF intervention will be closely coordinated with CONAFOR programmes that also incorporate carbon capture actions. It will collaborate especially closely with the Forest Environmental Services Project, and will also be coordinated with the Project for Biodiversity Conservation in Indigenous Communities and the Sustainable Development Project for Rural and Indigenous Communities in the Semiarid Northwest. Lastly, the project will be executed in permanent coordination with SEMARNAT and the National Institute of Ecology.

### F. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH [INCREMENTAL REASONING](#)

**F.1. Baseline situation.** Current government initiatives in the states of Campeche, Chiapas and Oaxaca are insufficient either to guarantee fulfilment of the forests' carbon capture potential or to generate additional benefits for rural development and biodiversity. Current CONAFOR programmes have little or no likelihood of achieving broad enough effects to mitigate climate change and bring about rural development in the above-mentioned states. It is thus estimated that the implementation of the actions and recommendations from the National Climate Change Strategy and the Special Climate Change Programme will lag behind in the regions where this project is to be implemented, so that loss of the biological and ecological functions of ecosystems will continue, with a negative effect on local inhabitants who depend on forests.

<sup>5</sup> The CPF is an innovative partnership of 14 major forest-related international organizations, institutions and secretariats (CBD, CIFOR, FAO, GEF, ICRAF, ITTO, IUCN, IUFRO, UNCCD, UNDP, UNEP, UNFF, UNFCCC, WB)

<sup>6</sup> Strategic Framework for Forests and Climate Change (2009). CPF

IFAD will cofinance the “Community-based Forestry Development Project in the Southern States (Campeche, Chiapas and Oaxaca)” (CFDP), which seeks to reduce poverty and improve the management of forest resources, and that will provide a basis for the IFAD/GEF intervention. The CFDP project focuses on supporting local initiatives to promote sustainable forest management, with the main objective of helping to increase the income of poor inhabitants who depend on forests and woodland, by building up local capacities and establishing and boosting local businesses. Since the focus of the CFDP is on sustainable local forest enterprises, the project will not promote directly reforestation or management of forests, although it will contribute to improve their use. For the same reasons, the CFDP project will contribute only indirectly to conservation of carbon stocks or to reducing emissions caused by forest degradation and changes in land use, and hence, no significant changes are expected from this project (baseline) alone, or other related governmental initiatives.

**F.2. Incremental support: the IFAD/GEF intervention.** Efforts to capture carbon and reduce greenhouse gas emissions from LULUCF activities are of vital relevance for the country, since this sector contributes to nearly 15 % of total emissions. The IFAD/GEF project will complement the CFDP in the selected municipalities of Campeche, Chiapas and Oaxaca, increasing carbon capture and promoting actions to mitigate the effects of climate change in the beneficiary areas, by building up local awareness and enhancing capacities concerning climate change mitigation, especially with regard to the monitoring of carbon sequestration. In this regard, it is expected that the project will avoid the emissions of 50 tons CO<sub>2</sub>/ha/yr in pine forests; 33 tons CO<sub>2</sub>/ha/yr in pine-holm oak forests; 113 tons CO<sub>2</sub>/ha/yr in tall forests; and 57 tons CO<sub>2</sub>/ha/yr in low forests. These avoided emissions will be translated in equivalent captures of 13.62 ton C/ha/yr in pine forests; 8.99 ton C/ha/yr in pine-holm oak forests; 30.79 ton C/ha/yr in tall forests; and 15.53 ton C/ha/yr in low forest ecosystems. The project will also help to promote the sustainability of activities supporting and ensuring long-term conservation of carbon stocks. The project will provide significant benefits for the global environment, as mentioned in section A.4 above. Lastly, it will help to boost existing capacities, methodologies and institutional tools, which have to date paid scant attention to adaptation to and mitigation of climate change in marginalized rural communities.

As also explained in section B above, the project will be aligned to, and support, the priorities of national institutions related to environmental conservation and management, in particular the Secretariat of Environment and Natural Resources (SEMARNAT). SEMARNAT promotes, as priority under the climate change area, the sustainable management of forests through incentive-based mechanisms (PES type), including payment for carbon sequestering, to which the project will contribute. Similarly, the project will also support the priorities set in the Institutional Programme 2007-2012 of CONAFOR, which considers important the implementation of pilot experiences under the Reduced Emissions from Deforestation and Forest Degradation (REDD) framework in *ejidos* and communities, to generate lessons that will help build the new national strategy for implementation after 2012. Any collaboration under REDD will be financed from the IFAD associated project (CFDP), not from GEF funds

**G. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVES FROM BEING ACHIEVED, AND IF POSSIBLE INCLUDING RISK MITIGATION MEASURES THAT WILL BE TAKEN**

The Project Executing Agency, CONAFOR, and the Unit directly involved, Community Forestry, has wide experience in the management of programs funded by international institutions (WB, IFAD, GEF, USAID, Ford Foundation, WWF, CIFOR, etc). Among those programs implemented during the last ten years by CONAFOR/Community Forestry, it is worth mentioning two: “Programa de Desarrollo Forestal Comunitario” (PROCYMAF) and “Programa de Conservación Comunitario de la Biodiversidad”(COINBIO), which are providing useful insights and invaluable knowledge on project management, all of which will contribute to mitigate the risks mentioned in the table below. The associated IFAD-GoM CFDP will support those areas needing institutional or social strengthening, while environmental issues will be addressed by the GEF grant.

**Table 1. Possible risks and mitigation strategies**

<b>Risk</b>	<b>Level</b>	<b>Mitigation strategy</b>
<i>Delay in execution of the IFAD-funded project:</i> Implementation of the project is held up for some reason.	Low	During preparation of the project, work was carried out on a coordination strategy between IFAD and the implementing agencies, in an effort to anticipate any aspect that could jeopardize implementation of the project as planned. The Operations Manual of the project cofinanced by IFAD (CFDP) will include mechanisms to run both projects.
<i>Strategy to include the poorest and most vulnerable beneficiaries fails:</i> The project's targeting strategy does not include the most distant beneficiaries, who have less access and are currently excluded from the benefits of the CONAFOR and suffer from greater environmental degradation.	Low	The project to be supported by IFAD anticipates the recruitment of field agents who will not only promote activities, but will also help to facilitate the participation of all potential beneficiaries in the implementation area. A specific profile will be drawn up for recruitment of these field agents to ensure that they can cover both projects efficiently. The project also incorporates training activities for field agents. Lastly, specific work programmes will be created by the associated CFDP to run the projects.
<i>The community structure and form of government is not taken into account:</i> The project seeks to complement the support that the CONAFOR provides to <i>ejidos</i> and farming communities, laying stress on families and individuals; this approach requires a clear, effective strategy in order to avoid flouting local practices and customs.	Low	The project, through the associated CFDP, includes a strategy that will allow work to be carried out at family and group level, while also encompassing elements to strengthen farming nuclei and bring about participatory development. For example, the closer liaison of field agents with localities will always start with farming or municipal authorities.
<i>Gender inequality in project-promoted activities:</i> Gender equality issues are not promoted as anticipated in access to natural resources and in support from the project.	Low	The project will adopt a strategy incorporating awareness-raising activities on this issue for men and women. It also anticipates the incorporation of women into decision-making processes and their increased access to both natural and project resources.
<i>Lack of adequate markets for project-promoted products:</i> The products promoted, especially non-wood or agroforestry items, do not find a place on the market.	Medium	The identification of economic opportunities in local plans will be based on value chain and market analysis, as well as analysis of the local production potential for the item in question, supported by the associated CFDP.
<i>Insufficient local-level organizational and administrative capacity:</i> Local capacities are inadequate to reduce and mitigate environmental impacts caused by the harvesting of forest and farming resources, especially by the process of converting forest land into farmland.	Low	The IFAD project will train the beneficiaries on issues connected with organization, better management practices and agroforestry techniques, thus enabling them to optimize the environmental goods and services of ecosystems in a sustainable manner. It will also boost internal organization (families, groups and communities) in order to achieve its objectives. The associated IFAD project (CFDP) will prioritize these aspects.
<i>Environmental degradation:</i> Project-supported forestry and agroforestry activities degrade the ecosystems in which they are carried out.	Low	The IFAD project will carry out activities to improve local organizational, technical and decision-making capacities and make production systems more sustainable. It will also set up a monitoring system to identify negative environmental impacts so that corrective measures can be taken without delay.
<i>Climate change affects project results:</i> Anticipated changes in temperatures and the water cycle will lead to an increase in fires.	Medium	Activities under the proposed project are intended to restore the functioning of forest ecosystems and improve their protection. The project also includes measures to detect local-level climatic risks, and will improve change monitoring of changes by authorities and communities.

## **H. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT**

**H.1. Project focus.** Carbon capture in the forest sector has been identified as one of the most cost-effective ways of mitigating climate change. Mexico is in the forefront in the world in terms of models of community forest management, with a number of examples in the states of Quintana Roo, Michoacán and Oaxaca providing significant experience in carbon capture and the development of rural zones. An economic analysis has shown that most community forestry projects for carbon capture have a cost of less than US\$10 per metric ton of carbon. In comparison, the Intergovernmental Panel on Climate Change estimates that the cost of carbon capture and storage is between US\$20 and US\$270 per metric ton. The approach adopted by the project maximizes benefits in terms of biodiversity conservation and adaptation to climate change, thus reducing the vulnerability of rural inhabitants to natural disasters, for example floods, pests and fires, and therefore having a greater cost-benefit ratio.

**H.2. Baseline activities and project management.** The GEF activities encompassed in the IFAD project will help both to reduce the costs of monitoring, evaluation and institution-building, and also to optimize results. This is reflected in appropriate management costs, which represents only 5.7 % of total GEF grant. Inasmuch as the GEF support actions will be integrated with the IFAD project, operational structures and resources will be shared. Both projects will be executed by the same CONAFOR directorate (the Community Forestry Directorate). Joint monitoring activities will be carried out, thus increasing cost-effectiveness.

## **I. JUSTIFY THE COMPARATIVE ADVANTAGE OF GEF AGENCY**

**I.1. Comparative advantage.** IFAD considers that the rural poor must be helped to adapt to climate change, while they can also make a major contribution to mitigating such change, in line with the objectives of sustainable development. Its main objective is that of promoting community-led adaptation to and mitigation of climate change and achieving rural development in the long term. Most IFAD-supported projects are carried out in ecologically fragile and marginal zones, and target the poorest groups of inhabitants in rural zones.

IFAD's support for mitigation focuses on priorities connected with the rural sector (agricultural, forest and livestock production). The Fund has broad experience in four particular areas: (i) improvement in agricultural technology and techniques; (ii) durable administration of natural resources by grassroots organizations and local communities; (iii) diversification in means of livelihood; and (iv) coping with disasters brought about by natural factors. Considering that agriculture has been identified as a priority sector in most national communications to the UNFCCC, IFAD can play a key role in adaptation in this sector and contribute to climate change mitigation through better land use and a reduction in changes in such use. IFAD's focus is intended mainly to promote a greater participation of local inhabitants.

IFAD is a GEF agency since 2005, with demonstrated expertise in sustainable land management, use of biodiversity, sustainable forest management, climate change activities (focus on adaptation in rural areas, and LULUCF activities), and water management and use.

**I.2. IFAD's experience in Mexico.** During the past 25 years, IFAD has worked with the rural poor in Mexico, producing significant impacts and experience, and identifying major challenges that require a closer relationship between the Government and the Fund. In this period IFAD has granted Mexico seven loans for a total of US\$152,400,000, while the country has also benefited from grants for a total of more than US\$13 million. Operations have included productive initiatives that have provided substantial support to communities, with special stress on indigenous communities and women's participation in social and productive activities, and emphasis in the environmental sustainability of the actions. IFAD is currently pursuing three thrusts to achieve a greater impact in terms of poverty reduction. These thrusts are the result of the work of the Country Strategic Opportunities Programme (COSOP), prepared in 2007, and they seek to:

1. Improve income and employment levels in rural communities, especially among the indigenous population and landless farmers, taking into account sustainable management of natural resources and the possible adverse impacts of climate change
2. Boost the capacity of communities and their grassroots organizations, and promote local development;
3. Promote the active participation of rural and indigenous women in their communities' decision-making, social and economic activities.

**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 [country endorsement letter\(s\)](#) or [regional endorsement letter\(s\)](#) with this template).

NAME	POSITION	MINISTRY	DATE (Month, day, year)
Claudia Grayeb Bayata	Deputy Director General for North America, Asia-Pacific and the Caribbean	Secretariat for Finance and Public Credit	23.09.2009

**B. GEF AGENCY CERTIFICATION**

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Mr. Elwyn Grainger-Jones, Director, Global Environment and Climate Change Unit (GECC), Programme Management Department (PMD), IFAD		7 December 2009	Mr. Jesús Quintana, Program Manager, Global Environment and Climate Change Unit (GECC), Programme Management Department (PMD), IFAD	+39.06.5459. 2210	j.quintana@ifad.org