United Nations Development Programme
Country: MEXICO
PROJECT DOCUMENT

Project Title: Fifth Operational Phase of the GEF Small Grants Programme in Mexico

UNDAF Outcome(s):

1. Poverty and inequality reduction through the promotion of competitive and sustainable economic development conducive to more equality, opportunities for decent jobs for all, without compromising the environment (SGP outputs 1.1, 1.3, 1.4, 1.5, and 1.6);
2. Ensuring a safe and productive environment, conserving the natural heritage for present and future generations, contributing to national development through sustainable and equitable use of natural resources (SGP outputs 1.2, 1.7, 2.1, 2.2, 2.3, and 2.5); and
3. Institutional and individual capacity development to arrest or revert environmental degradation and conserve the natural resource base of the country, and enhance participatory natural resources management and improved governance (SGP outputs 2.4, 3.1, 3.2, 3.3 and 3.4)

UNDP Strategic Plan Environment and Sustainable Development Primary Outcome: Expanding access to environmental and energy services for the poor.

UNDP Strategic Plan Secondary Outcome: Mainstreaming environment and energy

Expected CP Outcome(s): Outcome 3: Sustainable production processes and chains replicated and expanded.

Expected CPAP Output (s): Output 3.1.2: Development and approval of sustainable production projects

Implementing Partner: United Nations Office for Project Services (UNOPS)

Brief Description

The project objective is to support community-based initiatives and actions for sustainable livelihoods to conserve Mexico's Southeastern large ecosystems and help mitigate climate change. This will be achieved through three inter-related outcomes: 1) Improved conservation of forest, wetland and coastal-marine biological resources in community-owned lands in the production landscapes of Mexico's South-eastern region; 2) Carbon stocks in community-owned forest lands maintained or increased; and 3) Increased project management capacity among communities, and knowledge acquired through project implementation systematized and disseminated. Building on the achievements and experience from previous phases of the SGP in Mexico, the project will support at least 135 community-based initiatives over a three-year period to overcome the capacity barriers for the adoption of sustainable practices at scale for biodiversity conservation and for maintaining carbon stocks.

The project will be executed by UNOPS as Implementing Partner using the existing mechanism of the GEF Small Grants Programme (SGP) in Mexico, including grant approval by the National Steering Committee and day-to-day management by the Country Programme Team under the leadership of the Country Programme Manager (National Coordinator). The project will collaborate with a large number of partners including national and State Government institutions, national and local NGOs, scientific institutions, and the private sector.

Programme Period:	2.5 years
Atlas Award ID:	00065167
Project ID:	00081790
PIMS #	4519
Start date:	1st July 2011
End date:	31 December 2013
Management Arrangements	UNOPS Execution
PAC Meeting Date	_____

Total resources required	$10,562,755
Total allocated resources:	$4,662,755
○ Regular	$0
○ Other:	
○ GEF	$4,662,755
Parallel financing	
○ Government	$1,739,889
○ UNDP	$ 1,546,549
○ Other grant	$1,438,242
○ Other In-kind	$1,175,320

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Tables and Figures

Annexes

Acronyms/Abbreviations

APR	Annual Project Review
AWP	Annual Work Plan
BC	Biological Corridor
BD	Biodiversity
BTOR	Back-to-office Report
CBO	Community-based Organization
CC	Climate Change
CCA	Common Country Assessment
CCM	Climate Change Mitigation
CD	Capacity Development
CEO	Chief Executive Officer
CPAP	Country Programme Action Plan
CPMT	Central Programme Management Team
CO	Country Office
CONABIO	National Commission for Knowledge and Use of Biodiversity (*Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*)
CONAFOR	National Forestry Commission (*Comisión Nacional Forestal)*
CONANP	National Commission of Protected Areas (*Comisión Nacional de Areas Naturales Protegidas*)
CSO	Civil Society Organization
CTC	Technical Consultative Committee (*Comité Técnico Consultivo*)
ERC	Evaluation Resource Centre
FCPF	Forest Carbon Partnership Fund
FSC	Forest Stewardship Council
GATOB	Technical Assistance Group for Community-Based Organizations (*Grupo de Apoyo Técnico a Comunidades de Base*)
GEF	Global Environment Facility
GHG	Green-house Gases
IAIG	Internal Audit and Investigation Group
IAS	Invasive Alien Species
ILO	International Labour Organization
IW	International Waters
LULUCF	Land Use, Land Use Change, and Forestry
MBC	Mesoamerican Biological Corridor
M&E	Monitoring and Evaluation
MOA	Memorandum of Agreement
MRV	Measurement, Review and Verification
NCCS	National Climate Change Strategy
NGO	Non-governmental Organization
NSC	National Steering Committee

PIF	Project Identification Form
PIR	Project Implementation Review
PLMR	Programme on Local Risk Management (*Programa local de manejo de riesgo*)
POPs	Persistent Organic Pollutants
PPR	Project Progress Report
PSAH	Payments for Hydrological Environmental Services Programme
QPR	Quarterly Progress Report
REDD	Reduced Emissions from Deforestation and Forest Degradation
RR	Resident Representative
RTA	Regional Technical Advisor
SBAA	Standard Basic Assistance Agreement
SEMARNAT	Ministry of Environment and Natural Resources (*Secretaría de medio ambiente y recursos naturales*)
SFM	Sustainable Forest Management
SGP	GEF Small Grants Programme
STA	Senior Technical Advisor
STAP	Scientific and Technical Advisory Panel
STAR	System for the Transparent Allocation of Resources
tCO2 e	Tons of CO2 equivalent
UMAC	Micro-regional Units for Risk Preparedness and Management (*Unidades micro regionales de atención a contingencias*)
UMAS	Units for Wildlife Management and Conservation (*Unidades para la conservación, manejo y aprovechamiento sustentable de la vida silvestre*)
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNOPS	United Nations Office for Project Services

SECTION A: ELABORATION OF THE NARRATIVE

PART A.1 SITUATION ANALYSIS

1.1 GLOBAL SIGNIFICANCE

1. Mexico contains approximately 12% of the world's biodiversity on approximately 1.5% of the planet's land surface. It has high levels of endemism: out of the country's registered 58,769 species of invertebrates, 13,256 are endemic, and out of the 5,167 species of vertebrates recorded, 1,121 are also endemic. Of major importance is the occurrence of biotic elements of different Nearctic and Neotropical origin in the same place, leading to unique species assemblages. Many plant families have diversified in Mexico, among them the Leguminosae, Cactaceae, Orchideaceae, and also some genera such as Bursera, Pinus, Quercus, and Tillandsia. Mexico is home to 50% of all pine species (72) and 70% of the oaks (150). The mesophile forests in the middle elevations and most humid part of the mountains have the greatest diversity of species by coverage, with 3,000 species of flowering plants in a potential area of 1% of the country, as well as a level of endemism of 13% in terms of genus.

2. South Eastern Mexico, which includes the states of Campeche, Chiapas, Quintana Roo, Tabasco, and Yucatan where this project will be implemented, possesses a great diversity of ecosystems and species as well as significant endemism. Biodiversity is enhanced due to the nature of the terrain in areas like the Yucatan peninsula, where slight elevations of a predominantly calcareous soil produce unique island-like biota in a matrix of karstic sinkholes or *cenotes*. Among other large tracts of forests, South Eastern México harbors the Lacandon rainforest constituting the largest remaining expanse of evergreen rainforests and harboring 22% of the country's biodiversity, including 50% of butterflies, 46% of birds, and 26.8% of mammals. This region´s wetlands comprise swamps with shrub/grass vegetation, wooded wetlands, and temporarily or permanently flooded forests and jungles. In particular, Tabasco and Campeche include zingiberales on high herbaceous floodplains (Calathea, Thalia, Heliconia and some graminoids). There are also flood-prone low rainforests in Tabasco, Campeche and Quintana Roo, and seasonally-flooded riverside forests, palms (Attalea, Roystonea) and palmettos (Acoelorrhaphe). Most of these vegetation types have a significant role in transition between terrestrial and aquatic ecosystems, and influence both ecological dynamics. Important among coastal or estuarine wetlands are tidal marshes, deltas, coastal lagoons, inlets, estuaries and bays, rocky zones, dunes, and mangrove swamps, as well as beaches, where a significant portion of Mexico's tourism industry has developed.

3. South Eastern Mexico possesses some of the largest remaining tracts of mangroves in the world. Mangroves carry out critical functions related to the regulation of fresh water, nutrients, and sediment inputs into marine areas. They are important carbon sinks and provide protection against erosion and buffer the effects of severe storms and floods.

1.2 THREATS AND BARRIERS

4. The unique biodiversity of South Eastern Mexico is threatened by a combination of habitat destruction, fragmentation and degradation, and invasion of alien species in coastal, freshwater and forest ecosystems.

5. Forest ecosystems in Southeast Mexico suffer from a high deforestation rate. About 260,000 hectares of forest land changes use yearly as a result of conversion to commercial agricultural land, pasture for cattle or subsistence farming through slash-and-burn agriculture. At least 64% of the region´s original vegetative cover has been significantly modified. This signifies both an immense and increasing pressure on wild habitat and large volumes of greenhouse gas emissions released into the atmosphere from biomass burning for land clearing and runaway forest fires. It is estimated that if deforestation continues at the current rate much of the remaining 20% of the region's original forests will be destroyed during the first decades of the 21st century, leaving only remnants in parks and reserves.

6. A second dimension of deforestation is habitat fragmentation across the forested landscape, primarily due to patch clearing for agricultural development. In the region, the remaining forest has a 52% incidence of fragmentation, with only the forested area between the biosphere reserves of Sian Ka'an and Calakmul having a significant degree of continuity. A third dimension of deforestation is the effect of land use change on "downstream" ecosystems. Conversion to agriculture leaves land exposed to intense tropical rains that erode the soil and sweep sediments, fertilizers and pesticides into coastal-marine ecosystems where biodiversity is threatened and potentially lost.

7. Another serious threat is ecological impoverishment caused by poaching and unsustainable harvest of non-timber forest products. This process of ecological degradation gradually weakens the resilience of forest ecosystems to other external stressors such as invasive species, pests and diseases, hurricanes, and forest fires.

8. Wetlands are threatened by overexploitation of aquatic resources such as fish and waterbirds, and conversion of wetland habitat to filled/drained terrain suitable for construction of urban and rural infrastructure is common. Coastal development, particularly tourism, is expanding so rapidly along much of Mexico's Caribbean coastline that, with the possible exception of the Sian Ka'an Biosphere Reserve, the continued integrity of these coastal resources is seriously threatened. Near shore water quality is particularly poor near some major tourist resorts. Black coral, queen conch, other invertebrates, fish, and sea turtles are collected illegally in the Yucatan. Algal grazing fishes have been over-harvested on some reefs; algae capable of overgrowing reef coral may be increasing in cover.

9. In South Eastern Mexico, mangroves, as well as coral reefs, are under threat from oceanic pollution as well as uncontrolled tourism and fishing. The main threats are considered to be hurricanes along with global warming and the resulting increase in sea levels and ocean temperatures, which cause coral bleaching. As mentioned above, inland activities, such as land clearing and intensive commercial farming can lead to pollution and sediment loading, resulting in damage to down-stream coastal and marine ecosystems.

10. Another example of habitat degradation is the effect on ecosystem function of the invasion of alien species. Fish species have been introduced to freshwater and marine ecosystems either deliberately as part of government rural development programmes (e.g. tilapia) or from the aquarium trade (e.g., armored catfish, lion fish). These species can outcompete or prey on autochthonous species, destroy fishermen´s nets and otherwise damage marine and freshwater habitat by disrupting food chains and predator-prey relationships. At the same time, species introduced for timber plantations and agroforestry (e.g. *Gmelina arborea*; *Leucaena leucocephala*) have escaped control and invaded forest ecosystems, through a variety of seed dispersal mechanisms (e.g. wind, animals).

11. Poverty of local communities is a major cause of habitat degradation. Despite the wealth in natural resources and the proximity to major markets, 21.9% of the region´s approximately 9.04 million inhabitants live in extreme poverty, contributing to ecosystem degradation and loss of biodiversity through the unsustainable pursuit of livelihood necessities. Poor people are dependent on ecosystem services to survive. Rural people cut trees to use or sell as firewood; migrants live as squatters on protected land; slash-and-burn agriculture expands as a result of population growth and low soil productivity; and animals and plants are poached and sold. The highest degree of poverty in the project region is among the Maya communities. Only 10.5% of the indigenous population is above the poverty line, compared to 25.8% of the non-indigenous population.

12. *Ejidalization* of the region has resulted in 4,259 *ejidos* covering a total surface of 10.6 million hectares (100,594 km2). There are currently 624,771 *ejido* members, signifying little more than 16 hectares per *ejido* member on average; *ejidatarios* are compelled to deforest at least some land for subsistence agriculture, a process which, inevitably, results in fragmentation of the regional tropical and montane forests (primarily in Chiapas, Quintana Roo and Campeche). Nevertheless, many *ejidos*, primarily those with forests, still have common lands that are not directly subject to this process of individual exploitation and fragmentation but are managed as intact units held in common.

13. In Southeast Mexico, human activities are not the only cause of biodiversity loss. The other primary threat to both human and wild habitats is climatic, i.e. hurricanes and their consequences, which are loss of life, forest destruction or fragmentation, floods, erosion, loss of valuable soils, and heightened vulnerability to wildfires. Damage to forest ecosystems by hurricanes or forest fires often leads directly to permanent or long lasting changes in land use. Forests degraded by unsustainable exploitation for timber, non-timber forest products or partial clearing and fragmentation are much less resilient to such climate extremes as drought and hurricanes.

14. *Ejidos* and communities play a crucial role in biodiversity conservation and sustainable use as well as in avoiding land use change in forestlands. They own 80% of all Mexico's forests with indigenous people owning 60% of the tropical lowland forest and 70% of montane forest. These lands are vital for the long-term conservation of biodiversity because of their role in supporting buffer zone sustainability and the connectivity between protected areas. They also represent the primary source of food security and income for these communities through agriculture and the harvest of timber and non-timber forest products. Equally important, *ejido* and community forestlands play a significant role in mitigating climate change and in enhancing ecosystem resilience to climate change by mitigating effects on temperature and precipitation, and ensuring an optimal flow of ecosystem goods and services.

15. *Ejido* and community lands' contribution to ensuring the integrity of protected areas and their connectivity as well as to enhancing ecosystem resilience will be realized only if communities can derive income and food security from them while sustaining biodiversity and ecosystem services. Economic activities practiced by communities currently range widely in their potential compatibility with biodiversity conservation and climate change mitigation goals and their long-term sustainability. There is a growing body of experience in South Eastern Mexico with successful conservation- compatible activities such as community-based sustainable forest management for timber and non-timber forest products (e.g. organic honey, medicinal plants), management of coastal-marine and wetland resources for eco-tourism and sustainable harvest of coastal-marine and wetland products (e.g. lobsters, fish), and more sustainable agro-ecosystem management through agro-forestry and the adoption of more productive, low input practices aimed at reducing slash-and-burn and agricultural extensification, in general.

16. For successful conservation of the wealth of biodiversity in South Eastern Mexico, experiences such as these must be replicated by ever-larger numbers of communities across the range of ecosystem types, including wetlands and coastal-marine ecosystems. Economic benefits derived from successful marketing and sale of sustainably harvested products at scale are a key driver of adoption of sustainable practices by communities. Communities must have the capacities to produce sufficient volumes of high quality conservation-compatible products, add value, and get them to market. This implies capacities to plan and manage land use that is coherent with the conservation objectives of protected areas and biological corridors, as well as business management skills and abilities. At the same time, communities must have the capacities to engage with new and emerging opportunities such as payments for ecosystem services (carbon sequestration, etc.), and to build resilience to climate change of their conservation-compatible production systems. Finally for communities to benefit economically as an incentive to conserve forests and other ecosystems, they must coordinate their production systems and sales strategies to avoid duplication and unconstructive competition, tap markets and to achieve economies of scale across sustainable forestry operations, tourism enterprises and other sustainable livelihood activities.

17. The project will therefore address the following key barriers to adoption by communities of practices at scale that enhance conservation of biodiversity in production landscapes and seascapes, build climate resilience and increase productivity:

Barrier 1a: Insufficient capacities for the identification and adoption of sustainable use practices and systems at scale in forested areas of high BD value and control of invasive plants.

18. SGP´s history of support to sustainable resource use projects has resulted in a suite of potential interventions that have been proven to produce a double dividend of reduced habitat conversion, fragmentation or degradation and increases in the stability and sustainability of rural livelihoods. These

interventions have been aimed at removing the barriers to sustainable livelihoods and include organic apiculture, sustainable forest management and the sustainable harvest of non-timber forest products, alternative tourism, aquaculture, agro-forestry systems that replace or minimize slash-and-burn agriculture and others that protect ecosystem integrity while producing income. Nevertheless, these practices must be implemented by sufficient number of communities to achieve adequate market penetration with enough production to leverage economies of scale among producing communities.

19. The vast majority of *ejidos* and communities have been practicing slash-and-burn agriculture for generations, together with exploitation of forest resources such as hunting, and harvest of non-timber forest products. They tend to be unfamiliar with the array of potential alternative income generating activities that are compatible with biodiversity conservation and which have been tested in other venues. Business planning and management skills are rudimentary, and there is little awareness of business opportunities for biodiversity friendly products. Knowledge of marketing for conservation or other niche markets is basic, and mechanisms for adding value and transfer to market are unknown.

20. Although there is a growing body of experience in community forestry, communities in South Eastern Mexico have relatively little experience in managing their forestlands for sustainable production of certified timber and often lack the required organizational capacities. While in the State of Quintana Roo there were 7 certified community forests by 2006, only one forest *ejido* in Campeche and one in Chiapas were under review for obtaining certification. Silvicultural skills are underdeveloped or absent, planning in general is weak, and effective business plans are non-existent. Abilities to manage relatively complex forestry operations are undeveloped as are capacities to comply with certification standards. Marketing of certified timber is incipient. These weaknesses exclude communities from taking advantage of emerging markets for certified timber to generate income from sustainable land use practices. The GEF is financing a sustainable forestry project titled "Transforming management of biodiversity rich community production forests through building national capacities for forest certification" that will be active in the South Eastern region of the country. While the SFM project will finance the technical assistance required for certified forest activities, SGP grants to communities will cover activities needed to develop and implement sustainable forest management plans, which serve as a prerequisite for certification. It should be noted that the executing entity for the SFM project is one of SGP's pivot organizations - Trópica R. L. The SFM project built its strategy and procedures on the SGP experience.

21. Invasive plant species degrade ecosystem functions by competing with native species, disrupting food chains and otherwise. The introduction of invasive species in South Eastern Mexico is the result of intentional and unintentional processes including rural development programmes (e.g. *Leucaena sp*., *Gmelina arborea*) whose aim was to increase production of forage, food or plantation timber. Communities are unfamiliar with the need to control these species or with practices and systems to control them, thus they are transported to the wild where they establish themselves and spread. Communities do not currently have the knowledge to formulate control or eradication programmes for these species, nor are they entirely aware of the economic damages generated by these species over the long term.

22. Finally, communities often compete with each other for markets. While competition is a necessary condition for markets to function, for small, underdeveloped producers it can impede development/adoption of more sustainable systems of production, if not mitigated by greater coordination and communication among producers.

Barrier 1b: Insufficient capacities for the identification and adoption of sustainable use practices and systems at scale in marine and freshwater ecosystems and control of invasive fish species in aquaculture practices and fragile marine ecosystems

23. SGP has worked with communities to develop an array of successful practices and systems for sustainable fisheries and aquaculture, as well as for the control of aquatic invasive species that have produced benefits for the global environment as well as for rural and coastal livelihoods. These interventions have been oriented towards removing barriers to sustainable production practices and

include fisheries management, lobster culture, freshwater aquaculture with native fish species, and control of invasive fish species with emphasis on tilapia, armored catfish, and lion fish. Nevertheless, these practices must be implemented by sufficient numbers of communities over time to achieve sustainable impacts both in terms of market penetration (for aquaculture, lobster culture and sustainable fisheries) and reduction in pressures from invasive species.

24. Most communities tend to be unfamiliar with aquaculture systems and practices, and capacities are low for their development and implementation, in particular because these systems require in-depth knowledge of species biology and management. Sustainable management of near shore fisheries requires not just technical skills but also governance mechanisms for a community commons. Control of invasive species requires in depth knowledge of species biology and control measures. Community capacities for successful application of these activities is rudimentary at best, and those more commercially oriented initiatives such as lobster culture or aquaculture also require business planning and management skills. At the same time, given the dynamics of these aquatic ecosystems, new practices must be identified and developed on a fairly continuous basis, requiring testing of new knowledge and techniques in an iterative learning process. The main certification system for marine species is the Marine Stewardship Council certification (MSC). There is little experience among communities with respect to managing fisheries sustainably and almost none with respect to obtaining certification.

Barrier 2: Incipient understanding and skills for maintaining carbon stocks at landscape level.

25. The forests of South Eastern Mexico hold enormous stocks of carbon sequestered in soil and biomass. At the same time, as functioning ecosystems, they provide a significant buffer to such effects of climate change as increased risk of fire and damage from floods. Strategies to reduce vulnerability and strengthen resilience of local communities to floods, droughts and extreme weather events include rehabilitation of degraded landscapes, protection and restoration of ecosystems and sustainable management of natural resources. To motivate communities to maintain standing forest, they must perceive real benefits to doing so from either direct payments for carbon or other ecosystem services or avoided economic damages from climate and weather extremes.

26. Currently, slash-and-burn agriculture, as practiced by *ejidos* and communities, results in deforestation and forest fragmentation, both of which expose the remaining forest to increased temperatures, dryness, and wind speeds. The use of fire to clear biomass before planting often results in runaway forest fires and the resulting release of vast amounts of carbon into the atmosphere. Once soil fertility is exhausted, these cleared lands typically follow a process of progressive reforestation over several decades until fertility is restored, and they are cleared again for agriculture, though with increasing populations this cycle becomes shorter and shorter. At the same time, deforestation for other uses e.g. pasture may result in permanent loss of forest cover. In both scenarios, carbon in soil and biomass is lost, and the resilience of the surrounding forest to the effects of climate change is weakened.

27. Proactive forest planning and management to enhance climate change resiliency can reduce the risk of fires that can devastate local ecosystems and economies while augmenting the pace of carbon sequestration through reforestation and forest enrichment. However, there are significant obstacles to such course of action:

- Awareness of climate risk and the relationship between functioning forest ecosystems and climate resilience, although increasing day-by-day, is still relatively weak;
- Communities currently lack the capacities to plan and manage land use with a long-term perspective that enhances productivity, climate resilience and climate mitigation, as well as supports connectivity and protected area integrity;
- Communities and local and state authorities are unable to manage climate risk in a coordinated manner to ensure synergies across community and municipal boundaries and focus resources on the most vulnerable areas;
- The technical skills of communities for reforestation and ecosystem rehabilitation are underdeveloped, and fire management capacities are weak.

Barrier 3: Weak support/systemic frameworks to upscale community efforts by sharing lessons and other information and experience.

28. For the biodiversity of South Eastern Mexico to be effectively conserved over the long-term, thousands of communities and *ejidos* across the region will have to plan and manage land use to achieve productivity, biodiversity conservation and climate resiliency objectives as well as to adopt and implement conservation-compatible production practices and systems.

29. For this change to occur across the region, a critical mass of communities must be motivated to adopt these practices and systems before a tipping point can be reached and conservation-compatible systems and practices are adopted as the norm. Formation of this critical mass of communities cannot advance solely or quickly enough through the day-by-day addition of communities and their small grant initiatives, but needs to be accelerated through a systematic programme of knowledge dissemination and capacity building to reach both participating communities and communities that may be interested in participating in the future.

- Community capacities to systematically design, implement, monitor and evaluate projects are fundamentally low.
- Community coordination for concerted action, whether for cross-boundary planning and management for conservation or resiliency objectives or for marketing of sustainable products, is essentially non-existent, and community organizational abilities vary dramatically.
- Useful information on ecosystems, types of interventions, or lessons learned from past projects is not readily accessible to the region´s communities, NGOs, or government institutions.
- Communities are unable to address specific technical issues, e.g. control of invasive species.
- Sustainable forest management practices and ecotourism alternatives are undeveloped and training does not benefit from a programmatic, pedagogical approach.

1.3 LONG-TERM SOLUTION / PROJECT APPROACH

30. The long-term solution proposed by this project is to build on the baseline and previous SGP experience and demonstrate the viability of achieving ecological connectivity for biodiversity conservation and climate change mitigation through the sustainable management of production landscapes and seascapes and of natural resources by local communities.

31. The project objective is to conserve the biodiversity and ecosystem services of South-eastern Mexico´s Large Ecosystems and to help mitigate climate change through community based initiatives and actions. The project will address biodiversity conservation and sustainable use at the landscape level, and land use, land use change and forestry, by continuing to apply an ecosystem focus when programming community interventions for sustainable resource use leading to global environmental benefits. SGP´s history of support to sustainable resource use projects has resulted in a suite of potential interventions that have been proven to produce a double dividend of reduced habitat conversion, fragmentation or degradation and increases in the stability and sustainability of rural livelihoods. These interventions are aimed at removing the barriers to developing and implementing sustainable livelihoods and include organic apiculture, sustainable forest management and the sustainable harvest of non-timber forest products, alternative tourism, aquaculture, agro-forestry systems that replace or minimize slash-and-burn agriculture and others that protect ecosystem integrity while producing income.

32. The creation or strengthening of adequate business management skills in CBOs, the networking of productive community-based organizations to achieve inter-project synergies and economies of scale, the establishment of a market-oriented perspective and capacities based on a well organized information system and appropriate training, and the use of appropriate environmental and social impact indicators for project monitoring and evaluation, will result in the production of a sufficient volume of products with certified quality for sale in national and international markets. Such mechanisms have already been successfully developed and proven viable as a result of SGP's previous support to, for example, community organic honey production and marketing.

33. Individual initiatives receiving grants from this project will contribute concrete outputs to the achievement of three inter-related outcomes:

- Area increased of sustainably managed biodiversity in community-managed landscapes.
- Carbon stocks increased or maintained and climate resilience enhanced through sustainable use of land, avoided land use change, and forestry.
- Stakeholders informed and empowered for effective conservation and sustainable use of resources and climate risk management at scale.

34. Because the region is large (233,416 km2, 9.04 million inhabitants) and resources are relatively scarce, a micro-regional approach will be used to focus the Country Programme geographically and strategically. A micro-region encompasses representative natural habitats (deltaic-estuarine, lagoon, forest, reef) in relation to a neighbouring protected area or biological corridor. There are 20 micro-regions targeted within this project. In each micro-region there is a variant of traditional nature–society relationship as a result of differences in ecosystemic production of goods and services and their social use developed by human communities.

35. The following are the priority ecosystems with associated sustainable livelihood activities that have been successfully developed, tested and implemented over the previous 15 years with SGP funding:

36. *Tropical Forest and Continental Wetland in its different variants: Deciduous, Sub-deciduous and Sub-evergreen*. The largest and most forested area is located between Sian Ka'an and Calakmul Biosphere Reserves. For viable community development based on sustainable use of this biologically diverse habitat, financing schemes have been designed for organic apiculture, sustainable forestry, non-timber forest products, agro-forestry, and alternative tourism.

37. *Deltaic – Estuarine system in the Coastal Plain of Tabasco, the Biosphere Reserve of the Central Wetlands and the Wild Fauna and Flora Protected Area of the Términos Lagoon*. SGP's strategy here is based on reducing pressures on mangroves, coastal woodlands and habitat through consolidation of the productive activities already initiated by supporting community-based initiatives in aquaculture with native species and control of invasive species, and sustainable fisheries.

38. *Coastal Lagoons and Coastal Wetlands that runs from Ria Celestun to the Lagoon of Yalahau, containing six natural protected areas: the Petenes Biosphere Reserve, the Special Biosphere Reserves of Celestun and Rio Lagartos, the State Reserves of El Palmar and Bocas de Dzilam and the Wild Flora and Fauna Protected Area of Yumbalam*. The conservation and development strategy is based on reducing pressures on mangroves, coastal woodlands and habitat by supporting community activities in aquaculture with native species, control of invasive species, sustainable fisheries, and alternative tourism.

39. *Caribbean Coral Reef System*. The strategy is to reduce pressures on mangroves, and coastal habitat by consolidating and strengthening the opportunities for sustainable livelihoods initiated by the SGP Compact Programme, by means of alternative tourism, and sustainable fisheries, around the Sian Ka'an World Heritage Site.

40. *Montane Forest Ecosystems belonging to the "El Triunfo" Biosphere Reserve*, considered a bio-geographical region of national and global significance, because it represents different climate, ecosystems, and soil taxa, along with a great diversity of flora and fauna in a small area. It has high levels of endemism and is a natural wildlife refuge area. For the conservation and sustainable use of its biodiversity and associated natural resources, and for the development of sustainable livelihoods for its communities, support will be provided to community-based activities on organic apiculture, sustainable forestry, non-timber forest products (including management of wild flora and fauna), and agro-forestry.

1.4 STAKEHOLDER AND BASELINE ANALYSIS

1.4.1 Stakeholder Analysis

41. Key stakeholders are the communities who will design, implement, monitor and evaluate small grant projects. SGP beneficiaries also contribute significant in-kind co-financing to the projects (land,

infrastructure, tools, labor, and other inputs). In some cases NGOs may also receive SGP grants if local communities are not able to directly manage SGP funding. Through the funding of this project, more than 135 NGOs and CBOs will be additionally incorporated and linked to SGP's existing regional and national networks. As presented in section 2.7, an important feature of SGP in Mexico is the network of so-called "pivot" organizations which comprises 103 locally based NGOs that provide technical support to community-based organizations and that are key to the sustainability of SGP interventions and programmes. Pivot organizations are independent NGOs that have their own sources of funding and have professional staff. Their main objective is to provide technical support to community-based organizations. Because of their location near the SGP beneficiaries and their understanding of local culture, pivot organizations are well placed to assist the communities throughout the SGP grant implementation cycle. Some pivot organizations also assist SGP to monitor CBO project implementation at the local level by helping communities apply participatory M&E and collecting information and data to track indicators. NGOs contribute significant amounts of in-kind co-financing and in some cases they also contribute cash co-financing. Other important stakeholders are the National Steering Committee (NSC) members comprising representatives of civil society, government and academia who provide essential governance for the Country Programme, including strategic guidance and networking with broader constituencies in country. NSC members work without remuneration. Last but not least, State Government entities and some local branches of Federal Government entities contribute cash and in-kind co-financing (see Section C, Table 9) and technical assistance to the project.

1.4.2 Baseline Analysis

42. The baseline project in Southeast Mexico is primarily made of government environmental conservation initiatives. Federal and state governments have confronted the problem of habitat destruction and unsustainable use of biodiversity by primarily instituting a broad system of large protected areas. Government conservation action has been focused on protecting areas of high conservation value in landscapes or seascapes under serious threat of habitat conversion or alteration and species extinction. However, these protected areas run the risk of becoming isolated islands of intact wild habitat in a larger landscape or seascape devoid of biodiversity i.e., in the case of forests, areas that have been cleared of primary vegetation in order to accommodate agriculture, livestock, and other economic uses. In recognition of the ecological importance of connectivity between terrestrial protected areas in South Eastern Mexico the government adopted the Mesoamerican Biological Corridor, running approximately from central Mexico to South America, as its key policy/planning framework for maintenance in perpetuity of biodiversity and ecosystem services in the region. Seventeen large terrestrial, and coastal-marine protected areas cover the most important habitat in terms of biodiversity conservation value in South Eastern Mexico, whose connectivity and integrity are essential to the survival and sustainability of biodiversity over the long-term. The government has also passed laws and regulations enabling sustainable use of forests and other resources in buffer zones and corridors between protected areas.

43. Mexico developed in 2010 a National Strategy for the Prevention, Control and Eradication of Invasive Species. The goal of the Strategy is to establish an efficient prevention, detection, early warning and response system as well as a coherent and comprehensive national legal framework. The Strategy identified 5 cross-cutting strategic actions of which SGP will support: (a) individual and institutional capacity development to deal with invasive species at [national], sub-national and local levels; and (b) awareness raising and public information to secure the cooperation of all citizens in the prevention, control and eradication of invasive species. The government will establish intergovernmental and inter-sectoral coordination and cooperation protocols to ensure timely and adequate collaboration at the international and national levels. With SGP support, local communities will help monitor invasive species' pathways, alert national authorities about invasive species dispersion, and contribute to national efforts for early eradication or control.

44. Federal and State government entities provide assistance to communities to manage forests and other natural resources sustainably but coverage of such support in terms of technical and financial assistance is

very limited in the Southeast of the country. While the government has over time developed environmental and natural resources management policies and norms, obtaining the necessary permits for natural resources management activities take very long and few communities in the project region have benefitted from the opportunities brought about by these policies (for example, of all approved UMAS in the country less than 9% were in states in the center and south of the country). The Government also provides technical assistance and training in forest management, aquaculture, and other sustainable economic activities but coverage remains low.

45. Community forestry in Mexico has been supported by the Government Forest Pilot Plan, which aims at empowering communities for forest management. The Pilot Plan was successful in demonstrating that community organizations are able to establish sustainable forest management systems and maintain the forest estate by deterring deforestation. The Forest Stewardship Council (FSC) has certified 40 community-based forestry projects in Mexico, the largest number in the world. To certify a project, FSC requires the community to establish conservation lands, develop biological inventories, identify threatened or endangered species, and develop a conservation strategy. In addition, *ejidos* and communities have established different types of voluntary conservation areas. As of September 2008, CONANP had registered 177 areas nationally, covering an area of 207,887 ha on the lands of communities and *ejidos* that had voluntarily requested CONANP's certification.

46. Successful experiences across the country indicate that forests can become engines of growth for rural communities. Reduced poverty stems from the fact that community-based SFM initiatives create jobs, diversify the economic activities of *ejidos* and communities, invest in infrastructure (roads, schools, clinics, etc.), organize to use a range of forest resources and market them as a single company and not as several small producers, invest to give added value to forest products and generate vertical integration in the chains of production, share profits among members of the community, keeping the entire economic value of the company's activities in the locality as social and monetary investment, and generate human capital by employing the people of the region, training and involving them in technical, administrative and managerial activities.

47. Concerning Reduced Emissions from Degradation and Deforestation (REDD+), in March 2010 the Forest Carbon Partnership Fund (FCPF) reviewed Mexico's R-PP request and a grant of $3.6 million was approved for "readiness" activities. A REDD+ Working Group formed under the Inter-institutional Commission for Climate Change has met regularly to develop the National REDD+ Strategy. A multi-stakeholder technical advisory committee (*Comite Técnico Consultivo* or CTC-REDD+), including civil society, has been created and appointed as advisory body for the GT REDD. Mexico has ratified ILO 169 and thus recognizes the importance of promoting and ensuring the participation of Indigenous People in the implementation of the National REDD+ Strategy. Concerning Monitoring, Reporting and Verification, Mexico is a demonstration country for GEO Forest Carbon Tracking. Complementary activities will include developing an early detection system for land use change. A multi-scale measuring scheme is in process of development, connecting information at project and sub-national and national levels for a single accountability data set.

48. Last but not least, in 2002, UNDP under SGP auspices established a programme for Local Risk management based in Merida. This programme trains local experts on risk prevention and disaster response management. The programme designs and applies organizational and capacity development methods for communities, civil society organizations, the private sector, and local governments to identify risks and reduce vulnerability of communities. The programme has had significant social and economic impact and was very successful in minimizing the damage of hurricanes Emily and Wilma (2005) and Dean (2007) and operates in 7 States of Mexico's South Eastern Region. Currently it has activities in 185 municipalities (1,045 local communities) and has cooperation agreements with 40 NGOs, foundations and socially responsible businesses. This new phase of SGP will continue building on the Local Risk programme.

1.4.3 SGP Experience

49. The Mexican SGP has been in operation since 1994. From inception the programme has been regionally focused in the Yucatan Peninsula (States of Campeche, Quintana Roo and Yucatan) within an area of some 200,000 square kilometers and with some 3.5 million inhabitants of which 35% are Maya. The programme strategy is periodically reviewed and revised in consultation with all stakeholders. This has enabled the programme to adapt its approach to the changing socio-economic and biotic and abiotic conditions in the biodiversity rich but fragile ecosystems of the Peninsula. The first strategy revision in 1997 called for supporting projects related to one another and in micro-regions with similar socio-environmental conditions in order to improve the likelihood of synergies between individual projects and the possibilities of transforming the relationship between local communities and their environment. The second strategy revision took place in 1999 and was based on the monitoring and evaluation information and data generated by the programme and a review of other UNDP national activities. This revision established the relationship between SGP's micro-regions and national protected areas, as well as with the Mesoamerican Biological Corridor. The review also helped SGP to better define the type of community-based initiatives that could contribute effectively to achieving global environmental benefits. A decision to expand the programme to the Centla Wetlands and the coastal plains of the State of Tabasco ensured the coverage of the entire deltaic – estuarine ecosystem that includes the Términos Lagoon, the Centla Wetlands, and the coastal plains of Tabasco. The programme also expanded its action to 4 micro-regions in the State of Chiapas to support communities in the upper watershed of the Grijalva and Usumacinta rivers. During the third strategy revision (2004-2005) it was decided that SGP would focus on addressing priority problems identified by local communities from the perspective of their relationship with the large ecosystems (i.e., tropical forest, coastal lagoon, coral reef, and deltaic-estuarine) that contain the natural resources they use. Previous good practices were aligned as "funding lines" along the following categories: organic apiculture, sustainable forestry, alternative tourism, aquiculture and sustainable fisheries, agro-ecology and agro-forestry, and research and environmental education for conservation. This "funding lines" are still relevant and will be used during this programme phase.

50. Of a total of 466 projects funded in previous phases, 333 correspond to the biodiversity focal area, 65 to climate change, and the remainder to international waters, POPs or are multifocal. Some 227 projects have supported sustainable livelihood initiatives with a production component, while the rest involve technical assistance for capacity development, environmental planning, conservation and applied participatory research. Projects financed are contributing to conserve 150,010 hectares of marine habitat; 113,157 hectares of tropical forest; 10,500 hectares of montane forest; 30,000 hectares of coastal lagoons; 90 hectares of inland lakes and 9.3 hectares of wetlands. With SGP support communities have established 2,834 hectares of agro-ecological or agro-forestry systems and 24 hectares of tree nurseries with 207 plant species. Communities are obtaining 329 tons of products from aquaculture and some 1,100 tons of good quality honey.

51. SGP-Mexico has directly benefitted some 5,126 people and indirectly some 31,089. SGP projects have contributed to create 4,780 permanent jobs and more than 10,000 people have participated in training events organized by the country programme staff or by supported projects. There is a large body of evaluation evidence that indicates that SGP grantees have been able to increase their capacities and acquire a wide variety of skills: from project development, to business management, and environmental knowledge. SGP grantees are able to apply new knowledge in their day-to-day production activities, which increases the likelihood of sustainability of such capacities both at the individual and institutional (CBO) levels. A very important element has been the continuity of the programme over the years and the associated networks of practitioners that are based within the micro-regions and backstop communities' initiatives. It should be noted that while the number of CBOs in the region is quite large, the capacities of these organizations are generally low and many issues hinder their effective governance. The fact that community initiatives supported by SGP in previous phases are still going on is an indicator of the programme's success in enhancing CBOs organizational and technical capacities. However, the findings of a recent participatory evaluation pointed out that as a result of the increased size and complexity of

projects funded by SGP it was necessary to improve CBO access to specialized technical assistance and to increase the frequency of technical visits to project sites. This requirement has been taken into consideration in the development of this phase of the programme. SGP will strengthen its ability to ensure timely access by grantees to certified technical assistance and ongoing backstopping. Consultations with communities identified capacity development and technical assistant needs in the following areas:

- Issues related with SGP project development and implementation such as the use of project templates, preparation of project proposals, budgeting, accounting and financial reporting;
- Institutional strengthening of CBOs such as strategic planning, negotiations, conflict resolution;
- Issues related to production and business development and management such as business planning, marketing and credit;
- Technical issues specific to the projects.

52. SGP will therefore strengthen or improve community access to the following mechanisms for capacity development and technical assistance:

- SGP-certified technical assistance organizations or individual experts;
- An established group of local experts (GATOB for its Spanish acronym) that provides support to CBOs in project development, implementation, monitoring and evaluation;
- Grassroots leaders (*Promotores Comunitarios*) trained and certified by SGP who support their own CBO as well as other community organizations within the micro-region in relevant project aspects;
- Manuals and guidelines specifically developed to meet training needs in GEF Focal Area issues or related to the sustainable production activities of local communities.

53. Over the years SGP has learned from positive and negative experiences. For example, the Isidoro Hurricane in 2002 showed the vulnerability of many project activities to recurrent and strong severe weather events. Among others, beehives were destroyed, valuable germplasm was lost, and project infrastructure damaged. This lead to a decision to work with communities and State risk reduction and disaster management entities to mainstream vulnerability assessments and disaster preparedness strategies in all SGP-funded areas. SGP has supported the development of 124 community risk management plans. On the other hand, hurricane events have also demonstrated that healthy ecosystems and agro-forestry and agro-ecology practices that promote species diversity are far more resilient, with communities and ecosystems recovering faster from these events.

I. PART A.2 PROJECT STRATEGY

2.1 Conformity of the project with GEF Policies

54. The present project is consistent with the GEF Strategic Goal 1 (Conserve, sustainably use, and manage biodiversity, ecosystems and natural resources globally, taking into account the anticipated impacts of climate change). Project Component 1 will help address BD SO2 "Mainstream biodiversity conservation and sustainable use into production landscapes/seascapes and sectors". A central part of the project strategy is to engage and empower community-based actions to improve long-term sustainability of the Mesoamerican Biological Corridor by adopting land uses that reduce pressures on biodiversity, thereby maintaining ecosystem connectivity between 17 protected areas vital for the conservation of globally significant biodiversity. The project will support activities to improve the productivity and sustainability of conservation-compatible livelihoods, including sustainable forest management for timber and non-timber forest products, aquaculture, fisheries management, and ecotourism among others. The project will build the business planning and management capacities of communities to ensure quality of goods and services produced sustainably and facilitate ready access to existing and emerging markets for these products. At the same time, the project will address ecosystem degradation by invasive alien species

through identification of invasive species pathways and support to the implementation of Mexico's invasive species management framework and action plan.

55. This project also responds to the GEF Strategic Goal 2 (Reduce global climate change risks by stabilizing atmospheric GHG concentrations through emission reduction actions). Component 2 aims at maintaining the carbon stocks contained in community-owned forestlands, and avoiding GHG emissions from forest fires and slash-and-burn agriculture consistent with CCM-5. In maintaining forestlands as sustainable carbon sinks, the project will use proven appropriate risk management measures to reduce vulnerability of natural and social systems.

56. The project addresses GEF-5 capacity development objectives, specifically CD-2 and CD-5 through knowledge management and capacity development for biodiversity conservation and sustainable use, and will develop or strengthen capacities of local NGOs and CBOs to develop community projects capable of contributing to Climate Change mitigation. The project will also work with stakeholders to develop and apply monitoring and evaluation systems that strengthen accountability and adaptive management.

57. In accordance with the decisions of the GEF-SGP Steering Committee meeting that took place in Washington DC on 3 March 2010, a maximum of 20% of the STAR allocations may be used to support demand-driven community-based International Waters and Chemicals project proposals where synergies with the STAR focal areas can be found and within the geographic scope of the project. SGP-funded IW and Chemicals proposals will be aligned with the following objectives:

- IW Objective: Support transboundary water body management with community-based initiatives.
- Chemicals Objective: Promote and support phase out of POPs and chemicals of global concern at community level.

58. It is not possible to select a priori the outcomes and outputs for the IW and Chemicals focal areas; these will, however, be identified as and when grant proposals in these focal areas are approved by SGP' National Steering Committee.

2.2 COUNTRY OWNERSHIP: COUNTRY ELIGIBILITY AND COUNTRY DRIVENNESS

2.2.1 Country eligibility

59. Mexico ratified both the Convention on Biological Diversity and the UN Framework Convention on Climate Change on 11 March 1993 and is therefore eligible for GEF financing in both Focal Areas.

2.2.2 Link to national strategies

60. The proposed project is consistent with both the National Development Plan 2007-2012 and the State Sustainable Development Plans prepared by the five state governments. The project will increase and disseminate biodiversity knowledge and increase the area under conservation/sustainable use management. It will integrate conservation of the nation´s natural capital with social and economic development, and promote ecotourism as a tool for conservation of natural heritage and economic development in rural areas. The project will promote sustainable management of natural resources through rural production projects.

61. The project includes elements that contribute to all four strategic components of the Mexican National Biodiversity Strategy (2000): (i) protection and conservation of BD; (ii) valuation of BD; (iii) BD knowledge and information management; and (iv) diversifying the use of BD. Furthermore, the project is consistent with and supports the implementation of the 2010 National Strategy for the Prevention, Control and Eradication of Invasive Alien Species, in particular its capacity development, awareness and information components.

62. The project is consistent with national and regional plans that are aimed at reducing greenhouse gas emissions by avoiding biomass burning and enhancing sustainable forest management. The project will promote measures that reduce climatic change-related ecological impacts and the vulnerability of

different socio-economic sectors and systems. To control forest degradation, the project is consistent with national and regional plans that promote sustainable use of forest resources, and the design and applications of tools for the payment of ecosystem services to those communities that conserve and protect their forests.

63. In accordance with the National Climate Change Strategy (NCCS), Component 2 is designed to maintain or enhance carbon stocks in community-owned forestlands and to avoid the use of fire in agricultural practices. SGP will also contribute to avoid land use change in forest areas, a priority in the NCCS.

64. The Third National Communication of Mexico recognizes the importance of LULUCF to achieve climate change mitigation objectives. Through components 2 and 3 SGP will develop community and civil society capacities to monitor Carbon stocks and develop projects and actions to avoid land use change in forestlands and maintain or enhance carbon stocks in production areas. The project is also consistent with Mexico's REDD+ work and approaches.

2.2.3 Links with UNDAF and with ongoing UNDP and GEF programmes and projects

65. In 2006 the United Nations System jointly with the Government of Mexico identified the main national development challenges and prepared the Common Country Assessment (CCA). On this basis, the UNCT identified the priorities for UN support to national development, which are contained in the UNDAF 2008-2012. The following are the UNDAF areas that SGP will be directly supporting: (i) Poverty and inequality reduction through the promotion of competitive and sustainable economic development conducive to more equality, opportunities for decent jobs for all, without compromising the environment (SGP outputs 1.1.1, 1.1.3, 1.1.4, 1.1.5, and 1.1.6); (ii) Ensuring a safe and productive environment, conserving the natural heritage for present and future generations, contributing to national development through sustainable and equitable use of natural resources (SGP outputs 1.1.2, 1.1.7, 2.1.1, 2.1.2, 2.1.3, and 2.3.1); and (iii) Institutional and individual capacity development to arrest or revert environmental degradation and conserve the natural resource base of the country, and enhance participatory natural resources management and improved governance (SGP outputs 2.2.1, 3.1.1, 3.1.2, 3.1.3 and 3.1.4). SGP contributes to the above objectives by supporting highly participatory community projects and programmes that provide opportunities for rural and coastal communities in the South Eastern region – a priority geographic area of the UNDAF – to participate in natural resources management and governance, and to improve their livelihoods in a sustainable manner. SGP actions also support the national protected areas system, the natural resources and environmental management units (UMAS), and enhance the capacities for risk prevention and management among local communities applying a multicultural and gender sensitive approach.

2.3 Project Goal, Objective, Outcomes, Outputs and Activities

66. The project Goal is to conserve globally significant ecosystems of Mexico and mitigate climate change by supporting the implementation of relevant national policies and strategies on biodiversity and land-use, land-use change and forestry, while also contributing to communities' sustainable livelihoods.

67. The long-term Project Objective is to support community-based initiatives and actions for sustainable livelihoods to conserve Mexico's South Eastern large ecosystems and help mitigate climate change.

68. The project will achieve global environmental benefits by supporting at least 135 community-based initiatives that will collectively contribute to overcoming organizational and individual capacity barriers to the conservation and sustainable use of biodiversity, and to mitigate climate change in the production landscapes and seascapes of South Eastern Mexico. Individual small grants and other project activities will deliver concrete outputs to achieve three interrelated Outcomes: (i) Improved conservation of forest, wetland and coastal-marine biological resources in community-owned lands in the production landscapes of Mexico's South-eastern region; (ii) Carbon stocks in community-owned forest lands maintained or

increased; and (iii) Increased project management capacity among communities and knowledge acquired through project implementation systematized and disseminated.

69. To the extent possible the project will take an integrated approach whereby individual activities contribute to deliver more than one outcome, and individual organizations and initiatives link up to achieve economies of scale, learning and replication.

70. Outputs and activities designed to achieve the project objective and outcomes are described below:

Outcome 1: Improved conservation of forest, wetland and coastal-marine biological resources in community-owned lands in the production landscapes of Mexico's South-Eastern region

Total Cost: $ 5,756,974	**GEF Request: $ 2,429,974**	**Co-financing: $ 3,327,000**

71. Outcome 1 seeks to conserve globally significant biodiversity by enabling and empowering local communities and their partners to sustainably manage biological assets while also improving their livelihoods. This outcome will help maintain existing ecological connectivity between protected areas in the Palmar - Dzilan and Sian Ka'an – Calakmul biological corridors given that a large proportion of forestlands in these corridors are owned and managed by local communities. A key element of the strategy for outcome 1 is to create the conditions for enhanced uptake of sustainable use practices by communities in forest and coastal ecosystems through increased sustainable forest management capacities and improved access to technical assistance, certification schemes, financial resources and markets for biodiversity-friendly goods and services. Outcome 1 also addresses the threat to biodiversity in southeastern Mexico posed by terrestrial and aquatic invasive alien species by enabling communities in the region to play their role in the implementation of the National Strategy on Invasive Alien Species.

Output 1.1.1: Sustainable forest management plans designed, approved and under implementation to enable access to and retention of forest certification and improved income from sustainable timber products

72. This output is designed to address the complex community capacity barriers to manage forest production landscapes in a manner that enhances ecological connectivity, maintains ecosystems' goods and services in the long term, and improves community livelihoods. The main SGP strategy to help conserve the sub-evergreen tropical forests that are essential to secure ecological connectivity between the Biosphere Reserves of Sian Ka'an and Calakmul and their biodiversity is to develop the community forest economy, harmonizing rural development with environmental conservation. In this region *ejidos* and local communities own most forestlands. This output will support the development of sustainable forest management capacity of four ejidos: X-hazil with 25,000 hectares of production forest, Noh Bec with 18,000 hectares, Veinte de Noviembre with 14,000 hectares, and Buena Vista with 4,500 hectares. In these communities SGP will support the preparation of land use plans, the revision of existing forest management plans, the application of low impact forestry operation techniques, as well as silvicultural practices that ensure natural regeneration and forest growth. SGP will also support the establishment of forest management offices staffed by trained community members supported by pivot forestry organizations. In this manner it is expected that communities will be able to obtain and retain forest management certificates accredited by the FSC system. The ability of communities to pay for professional forestry services essential to meet the legal requirements for timber operations and to obtain and retain FSC certification is very limited. Furthermore, individuals and companies that provide professional forestry technical assistance in the region are dependent on scarce public funds for the preparation and implementation of projects. The consequence is that communities are often left on their own once resources to prepare forest management plans are obtained and the plans are filed for approval because communities are unable to pay for continued technical services for forest management, timber harvesting

and marketing. To address this problem SGP promotes a new model consisting of long-term technical assistance cooperation agreements between the *ejidos* (who own forestlands) and pivot NGOs accredited to the National Forestry Registry for provision of technical forestry services. To improve the likelihood of sustainability of the system SGP will support capacity development in the fields of strategic planning, forestry enterprise formation, and business plans development of regional technical NGOs that provide forestry services to CBOs.

73. To generate community benefits it is not only essential to strengthen the community forest enterprises that manage timber extraction and processing in the *ejidos* and that regulate the community macro-economy, but also to help establish micro-industries to complement household incomes. Such micro-industries will be established through cooperation agreements with public and private institutions. Priority will be given to women initiatives because they are the least benefited from forestry activities, which are mostly carried out by men.

74. In addition to developing skills for project development, business plans development, negotiation of credits, acquisition of equipment for timber extraction and processing, management and administration and marketing skills (see also output 1.1.3) for this enterprises, SGP will help create capacities for the operation of forest geographic information systems to better manage silvicultural operations and monitor forest sustainability. This will be complemented with additional training on environmental impact assessment, forestry management planning for tropical forests, plant propagation, agro-forestry plantations and forest protection, among others.

Output 1.1.2: Community business skills and production capacity programme delivered for sustainable non-timber forest products management and marketing

75. This output is designed to help communities address capacity barriers to benefit legally and sustainably from non-timber forest products in their lands and to scale up their production. The production and sales of honey has been identified by SGP-Mexico as one of the most effective and sustainable ways of conserving forest ecosystems and improve communities' income. SGP has supported apiculture for many years with significant success and is now ready to go one step further and assist communities in producing organic honey and obtain and retain organic honey and fair trade certification.

76. There are many other non-timber forest products used by communities traditionally for medicinal, ornamental, aromatic, food and other purposes and with significant potential for improved livelihoods and income generation. SGP will support local communities to develop production skills to secure sustainable production of a variety of non-timber forest products for which the technical expertise is already available. Among others to be determined during project implementation, SGP will support the sustainable propagation and production of some 48 orchid species, 14 palm species and 10 *Beaucamea* species. Concerning medicinal plants, SGP will assist communities in managing a large number of species (see Annex 1).

Output 1.1.3: Commercial networks formed for certified sustainable timber and non-timber forest products.

77. This output will complement activities described in outputs 1.1.1 and 1.1.2 by helping establish networks of certified producers of timber and non-timber forest products to help address the barriers related to lack of capacities to establish sustainable forest management systems at scale, in particular, the lack of *ejido* organizations' capacities to individually tap into existing opportunities and niche markets for their sustainably produced goods and services. Sustainable timber extraction is not sufficient to ensure the viability and sustainability of forest management in the region. To not exceed the carrying capacity of tropical forests it is necessary to diversify forest resource use and add value to timber and non-timber forest products. Among others, this output will help establish a network of micro-forestry enterprises with low impact extraction technologies and producing a diversified range of products. Other networks (e.g. for organic honey producers) will also be encouraged and supported. SGP and pivot organizations will

support the communities at all stages, from the development of by-laws to establish their production and marketing associations through obtaining a loan for the acquisition of equipment and the development of their administrative and management capabilities, accounting systems and marketing strategies.

Output 1.1.4: Sustainable lobster (*Palinurus argus*) and sea cucumber (*Holothuria spp*) fisheries programme for fisher community organizations on the Caribbean and Yucatan Channel coasts and Output 1.1.5: Sustainable native species aquaculture programme for lagoon, deltaic and estuarine ecosystems implemented.

78. Outputs 1.1.4 and 1.1.5 will help address community capacity barriers for sustainable fisheries and aquaculture as livelihood strategies that also help conserve freshwater and marine and coastal biodiversity. These outputs will also help prevent the introduction of aquatic invasive alien species and contribute to their control. SGP will support initiatives that meet the following requirements:

- Be consistent with sustainable micro-regional development programmes developed in a participatory manner and based on integrated planning for the conservation and sustainable use of marine and freshwater resources;
- Develop and consolidate social enterprises adopting low or no environmental impact production systems, that operate with strict controls in the use of natural resources as well as for potential waste discharges in the environment;
- Take advantage of natural conditions to apply extensive aquaculture techniques with negligible or no impact;
- Cultivate only native species with no genetic modification;
- Gather larvae or fish breeders without affecting biodiversity;
- Create jobs for fishing communities affected by a decreased in fisheries productivity while reducing pressure on commercial species;
- Avoid negative effects of aquaculture activities on fishermen and coastal communities and their resources;
- Continually assess the social and environmental impact of activities;
- Protect fragile mangroves, wetlands and coastal areas;
- Avoid using toxic and bio-accumulating compounds;
- Do not discharge organic waste into the environment.

79. The following marine, brackish and freshwater native species have been selected:

Table 1: Marine, brackish and freshwater species

Species		**Ecosystem**	**Micro-region**
Crassostrea virginica	Bivalve Mollusk	Deltaic - Estuarine	Coastal Plains of Tabasco
Petenia splendida	Fish (Tilapia substitution)	Deltaic - Estuarine	Coastal Plains of Tabasco Centla Wetlands
Lipesosteus tropicus	Fish (Tilapia substitution)	Deltaic - Estuarine	Coastal Plains of Tabasco Centla Wetlands Términos Lagoon
Cichlasoma urophthalmus	Fish (Tilapia substitution)	Deltaic - Estuarine	Coastal Plains of Tabasco Centla Wetlands
Poecilia mexicana	Fish (Tilapia substitution)	Deltaic - Estuarine	Centla Wetlands Términos Lagoon
Centropomus undecimalis	Fish	Deltaic - Estuarine	Términos Lagoon
Callinectes rathbunae	Crustacean	Deltaic - Estuarine	Términos Lagoon

Holothuria spp	Echinoderm	Marine	North of Yucatán
Palinurus argus	Crustacean	Mangrove and Reef	Central Quintana Roo

80. Sustainable fisheries of sea cucumber and spiny lobster will be undertaken by fisher organizations in northern Yucatan and central Quintana Roo. Aquaculture activities will take place with community organizations in Isla del Carmen, the Centla Wetlands and the Coastal Plains of Tabasco where the largest mangrove area of North America is found and where two protected areas – the Terminos Lagoon and the Centla Wetlands – have been established to protect the deltaic-estuarine large ecosystem formed by the Grijalva –Usumacinta pluvial system. The expected total annual production is 525 tons of biomass.

81. Aquatic invasive alien species that will be particularly targeted for control and/or substitution are tilapias and lionfish.

Output 1.1.6: Two alternative sustainable tourism circuits in operation to enable conservation of coastal dunes, coastal lagoons, mangroves, wetlands and forests

82. Mexico's environmental authorities consider alternative tourism as a tool for biodiversity conservation and rural zone development. Alternative tourism is an important income generation option for communities in areas where traditional livelihoods are in decline. Early tourism ventures were started by community organizations such as fishermen cooperatives, *ejidos* and rural production organizations in areas where there is significant demand for tourism services such as in the coast of Quintana Roo. Eco-tourism ventures have increased significantly is recent years, however, the majority is owned by private enterprises that sometimes subcontract community groups for services or to use their land. As such, the potential of sustainable tourism as a conservation tool in community lands and coastal areas is yet to be realized. The current offer of alternative tourism services in South Eastern Mexico is small and not diversified. Concerning quality, many community tourism services do not meet basic environmental, cultural, social and economic sustainability standards. SGP has been promoting alternative tourism initiatives since 1996 and, to date, it has provided financial support to some 53 tourism projects. The results are mixed but significant experience has been gained. SGP has learnt that community tourism activities often fail because they are undertaken in isolation. For success and sustainability it is necessary to link up various groups and initiatives to offer tourism circuits that provide a more satisfying experience to tourists, to achieve and maintain competitive quality standards, and to avoid competition. During this phase SGP will support activities related to community-managed alternative tourism in the following habitats: coral reefs, coastal sand dunes, coastal and inland wetlands, tropical forests, and the underground hydrological system including caves and *cenotes*. The following activities will be eligible for SGP grants:

- Capacity building, training and infrastructure development for alternative tourism activities with new community groups;
- Integrated proposals for the establishment of tourism circuits presented by three or more groups that already operate tourism activities in a effective and environmentally sustainable manner;
- Proposals to develop new tourism products and markets;
- Proposals that contribute to public policies (municipal, state and federal levels) that enable community tourism activities;
- Initiatives that help develop norms, standards and regulations emerging from concrete experiences and knowledge on alternative tourism demand and ecosystem carrying capacity;
- Proposals to assess environmental and social impact of existing alternative tourism projects, including the identification of suitable baselines and indicators for monitoring these activities.

83. The main beneficiaries will be some 200 members of 12 community organizations and their families. The following are some targets for the habitats where communities will undertake sustainable tourism activities: 15% reduction in the fishing effort in coral reef areas; 50% reduction of mangrove loss; 25% reduction in sand dunes vegetation loss; a 20% increase in the number of organizations affiliated to

alternative tourism networks; 2 new networks established in the Centla Wetlands and Terminos Lagoon (also see Output 1.1.3).

Output 1.2.1 System for detection, control and reporting by communities on invasive alien species such as *Hevea brasiliensis*, *Gmelina arborea*, *Leucaena leucocephala*, *Elaeis guineensis*, *Pterois volitans*, *Oreochromis sp*, and *Plecostomus sp* established and implemented in 2 micro-regions.

84. This output will create awareness among local communities on IAS and will establish a system by which communities can cooperate with federal and state entities responsible for the detection, control and eradication of IAS. Areas with globally significant biodiversity around protected areas within the geographic focus of this project will be targeted.

Outcome 2: Carbon stocks in community-owned forestlands maintained or increased

Total Cost: $ 3,406,997	**GEF Request: $ 1,541,997**	**Co-financing: $ 1,865,000**

85. Outcome 2 seeks to achieve global environmental benefits by enabling communities to maintain or enhance carbon stocks in *ejidos* and other community-managed forests and agricultural land. The conversion of forestland to agricultural uses is one of the main causes of deforestation in Latin America. The area under cultivation in Mexico in 2000 was 20.2 million hectares, however, official records indicate that 32.8 million hectares were under "agricultural" use, which means that 12.6 million hectares deforested for agricultural purposes were not planted/used and did not have any secondary vegetation on them. An undetermined number of hectares in Southeast Mexico are devoid of vegetation due to periodic slash-and-burn due to this same phenomenon. There are multiple causes, such as farmers' perception that a "clean" plot has a greater value than one that has vegetation on it, or the need to demonstrate the "use" of the land to maintain possession over it. Traditional agricultural systems based on slash-and-burn practices as well as forest fires in forestland impacted by hurricanes also contribute significant amounts of GHG emissions. Moreover, because hurricanes destroy forests and they constitute fire hazards, communities tend to change the use of these lands to agriculture or cattle ranching. Changes in agricultural practices, in particular the substitution of coffee varieties that require shade by other varieties is also causing the loss of carbon stocks in agricultural lands.

86. Given that in the area targeted by this project one and a half million people are traditional farmers that also own or manage large forest areas the strategy for Outcome 2 is to address the capacity barriers to communities adoption of agro-ecological, agro-forestry and silvicultural practices that help maintain carbon stocks, avoid land use change, reduce carbon emissions, and improve their livelihoods.

87. The table below shows the data used to estimate the CO2 emissions reduction/sequestration targets for each type of SGP intervention:

Table 2: Carbon emissions reduced/sequestered

Activity	**SGP 30 month target**	**Measure-ment unit**	**tCO2e/ha/ year**	**Annual emissions reduction tCO2e**	**30 months emissions reduction tCO2e**
SFM sub-evergreen tropical forest	70,000	Hectares	1.01	70,700	176,750
SFM montane forest	1,000	Hectares	1.01	1,010	2,525
Slash and burn reduction	1,500	Hectares	658.25	987,375	2,468,438

Forest fire avoidance	20	Hectares/ fire	21,941.67	438,833	1,097,084
A - EMISSIONS REDUCTION TOTAL				1,497,918	3,744,796
Reforestation (monoculture)	15,000	Hectares	0.23	3,450	8,625
Reforestation with conservation techniques	20,000	Hectares	0.14	2,800	7,000
B - CARBON SEQUESTRATION TOTAL				6,250	15,625
TOTAL A + B CO2 REDUCED/SEQUESTERED				1,504,168	3,760,421

Output 2.1.1 Reforestation (15,000 ha) and fire prevention programme (20 ha of fire avoided) in community owned lands implemented

88. This output aims at addressing community awareness, and technical and organizational barriers concerning the need to enhance carbon stocks in agricultural lands with different degrees of degradation and vegetation loss. SGP will support local communities to reforest their lands using native species that bring both environmental and livelihood benefits. It will also support initiatives to equip and train local community brigades for wildfire prevention and control to reduce the risk of forest fires after hurricanes in cooperation with the National Commission on Forests and the National Protected Areas Commission. SGP-funded initiatives will help remove deadwood that is prone to combustion and a major cause of fire after hurricanes, without affecting nutrient cycles. SGP will also support awareness-raising activities that will inform communities in protected areas buffer zones about fire hazards in cooperation with local authorities, *Ejido* Commissioners, and the States' entities responsible for education.

Output 2.1.2 Forest re-growth enhanced and maintained in 20,000 hectares of community-owned land impacted by hurricanes and that communities do not currently value as an important forest asset

89. This output aims at creating the conditions for avoiding land use change in forestlands impacted by hurricanes. It will do so by facilitating natural regeneration and implementing vegetation enrichment planting with selected native species. Communities will establish tree nurseries and carry out the work in their lands with scientific and technical assistance from specialized partners such as the Autonomous University of Yucatan, the University of Quintana Roo, the Colegio de la Frontera Sur, and the Centre for Scientific Research of Yucatan. SGP will contribute to remove organizational and capacity barriers to ensure these activities can take place in the large geographic area targeted. It will also support community projects that will enable sustainable production of non-timber forest products such as organic honey (see Outcome 1) so that communities perceive the importance of restoring and conserving the forests.

Output 2.1.3 Sedentary agricultural practices established in 1,500 hectares, without slash-and-burn

90. This output seeks to address capacity barriers to sustainable agricultural production, in particular, to the adoption of agro-forestry and agro-ecological practices that avoid slash-and-burn. SGP will support community initiatives that meet the following criteria:

- Avoid the use of fire as a method for preparing the land for cultivation;
- Improve soil productivity to increase crop yields leading to sedentary agricultural systems that do not exacerbate forest land conversion to agricultural uses;
- Promote the use of traditional sustainable agricultural practices that are being lost, conserving germplasm of native species for forestry and agriculture;
- Produce food primarily for local communities' consumption, prioritizing local markets and selling the surplus only.

91. SGP expects to benefit some 1000 families who will derive income and/or food from approximately 450 tons of agricultural products yearly.

Output 2.2.1 Community risk management plans developed to guide practices for reducing carbon loss and increasing climate resilience at landscape level (>140 plans in Yucatan, Quintana Roo and Campeche), including damage prevention from hurricanes, floods and forest fires

92. Since 2002, after the destruction caused by hurricane Isidoro in the Yucatan Peninsula, SGP designed a programme dedicated to developing local capacities to reduce project vulnerability to severe weather events (hurricanes, river flooding, tsunamis, wildfires, etc.), epidemics and other disasters. SGP formed local trainers and developed emergency plans in geographic areas where SGP was funding community projects. Risk management plans prepare communities for possible contingencies and damage mitigation using as a basis a Risk Atlas of the Yucatan Peninsula and by modifying the design and implementation of development activities to reduce their environmental and economic vulnerability. As a result of the success of SGP's disaster risk-reduction activities the programme was taken up and expanded by UNDP to other regions of the country.

93. With this new project, SGP Mexico will consolidate its risk preparedness work with the aim of reducing the vulnerability of both SGP-financed projects and the social systems in which the projects are implemented. It should be noted that capacity development activities will be primarily funded by the UNDP Country Office Programme on Local Risk Management (PLMR). Risk management activities will protect GEF investments in the area and will reduce the human, economic and material losses resulting from natural disasters. To raise communities' risk assessment and management capacities, and to respond to future risks in an organized manner SGP will implement the following strategy:

- Form new micro-regional units for risk preparedness and management (UMAC for their Spanish acronym) and strengthen existing ones to enable them to extend their coverage;
- Increase the number of local promoters and community emergency committees trained;
- Ensure that emergency plans exist in all localities where SGP-funded projects will be implemented and up-date existing plans;
- Ensure that all GEF-funded small grants projects have an emergency plan and that communities are fully aware of the main risks from the project development stage (see Annex 2) for the manual and template used by communities to develop their plans);
- Ensure that brigades able to conduct damage assessments (EDAN for their Spanish Acronym) in emergency situations exist in the micro-regions where SGP operates;
- Establish and information node or center to coordinate all UMACs and eventually the EDAN and compile relevant information.

94. All SGP-funded small grants will include specific risk indicators. For example, how organic apiculture initiatives will reduce the vulnerability of beehives to strong winds or floods in case of hurricanes.

95. Risk analysis will use the method developed by Novib (*Nederlandse Organisatie voor Internationale Ontwikkelingssamenwerking*) and will build on and use the resources available to national and regional institutions, which are the baseline project for this component.

Output 2.3.1 Baseline information for LULUCF activities collected, and periodic monitoring of carbon stocks performed

96. This output will help monitor and measure carbon benefits of community-based initiatives using IPCC best practice guidance and other relevant methods and tools. SGP country programme team and National Steering Committee members will receive training on carbon measurement methods and tools. The project will link up with other ongoing carbon monitoring processes such as those related to the Mexican REDD+ initiative. SGP Mexico staff will participate in the first training workshop on Carbon

measurement organized by the Colorado State University on behalf of the GEF-funded "Carbon Benefits Project". The project will also contract an expert to assist the country programme team to adjust the tools and apply them as relevant in the context of SGP's work. The expert will also help consolidate the information from each grant and validate the information to help monitor the Carbon benefits of the entire portfolio of projects. This expert may also help determine the cost effectiveness of Carbon monitoring at this scale.

Outcome 3: Increased project management capacity among communities and knowledge acquired through project implementation systematized and disseminated

Total Cost: $ 227,908	**GEF Request: $ 120,784**	**Co-financing: $ 107,124**

97. Outcome 3 aims at creating the conditions for replication and scaling up successful SGP practices. Activities related to Output 3.1.1 will be designed to enhance the organizational and individual capacities and skills of CBOs and their members to adopt production practices that are compatible with biodiversity conservation objectives and that help maintain and enhance carbon stocks. Output 3.1.2 will be designed to address CBO and individual capacity barriers related to project development and implementation. Outputs 3.1.3 and 3.1.4 will support overall country programme knowledge management. Previous SGP experience with respect of CBO/NGO capacities in the Southeastern region of Mexico has been discussed earlier in this document. This component will be implemented to address shortcomings identified during the evaluation of the previous phase of the programme. Among other targets, SGP expects to fully meet the technical assistance needs of community groups with respect of SGP areas of interest.

Output 3.1.1 Training delivered in each micro-region in accordance with community needs and sustainable development initiatives

98. Training subjects will be specific to the production activities undertaken by each type of small grant project. Training under this output will also cover legal aspects and business development and management that complement other capacity development activities of Output 1.1.2. Training will be delivered through government and non-government SGP partners. Specific training materials will be developed as needed and existing materials will be updated as required. SGP partners will contribute significant co-financing towards technical assistance and training activities including training materials, facilities, travel costs of trainers, and documentation of training events and results. SGP partners will also cover a significant amount of travel costs related to attendance to workshops and training events.

Output 3.1.2 Training programmes for community participatory project development, governance, monitoring and evaluation for adaptive management and learning

99. This project output will address the significant organizational and project implementation weaknesses of grassroots organizations that have not benefited so far from SGP grants. The SGP country team will deliver this component with support from the group of partner organizations known as GatoB. The new SGP project templates and the complexity of the projects require a high degree of project design and implementation skills. SGP will also place strong emphasis on capacity building for project monitoring and evaluation as an important ingredient for adaptive management of projects and learning by grantees and the country programme. Grantees will be requested to document their M&E activities, to develop project specific performance indicators, and to collect data on relevant SGP country and global level indicators.

Output 3.1.3 Establishment of databases by ecosystem, micro-region, and type of intervention, and with

an effective access system to support decision-making, project results documentation, and dissemination of lessons.

100. SGP will upgrade its databases to meet the requirements of the project. In addition to expanding the information system to include Carbon monitoring elements, SGP will gather and maintain information by micro-region, ecosystem, and type of intervention. This activity will require the services of a database analyst. The information system will be accessible to NSC members, the general public and will be compatible with the SGP global database.

Output 3.1.4 Publications on lessons learnt produced and widely disseminated

101. SGP Mexico will document project successes and experiences with a view to make them widely available to other sustainable development practitioners, other GEF projects and to communities beyond the project geographic areas. Partner organizations will contribute in-kind and financial resources to produce a significant number of visual and text materials that can be used in different media and for SGP's diversified audiences. These materials will be used in experience exchange events supported under this output.

2.4 Project Indicators, Risks and Assumptions

2.4.1 Indicators

102. The project indicators are provided in the Project Results Framework in Section B. The Framework includes indicators for the Project Objective and for the Outcomes along with their baseline and target values and means of verification. Progress indicators for specific Outputs and activities will be developed and measured as part of the annual operational plan and reporting exercises.

103. At the Objective level, 9 overall indicators and targets have been identified to enable monitoring progress towards the project objective as well as towards key GEF Strategic Objectives. These are: (i) increased area of sustainably managed production landscapes and seascapes that integrate biodiversity conservation; (ii) reduced habitat fragmentation in community lands between protected areas in the Palmar – Dzilam and Sian Ka'an – Calakmul biological corridors; (iii) reduced risk of introduction of invasive alien species in terrestrial and aquatic ecosystems and improved control of selected IAS by local communities; (iv) Carbon stocks maintained or increased in community-owned land, measured in tCO2 equivalent/year; (v) increased number of communities with enhanced SFM capacities obtaining and retaining certification and marketing their timber and non-timber forest products; (vi) increased area of forest and non-forest lands under good management practices; (vii) enhanced communities livelihoods and reduced climate change risk; (viii) stakeholders empowered and informed for effective conservation and sustainable use of resources and avoiding land use change; (ix) and individual grant performance enhanced by increased community know-how on project design, M&E and adaptive management.

104. In addition, the project has selected a set of 18 indicators to be applied to clusters of community activities to measure progress towards the three project Outcomes. It should be noted that individual community projects (grants) will have specific objectives and outcomes and therefore, will include specific indicators, baseline and target values against which they will be individually monitored and evaluated. Only a few relevant indicators, as indicated above, will be applied across several grants to aggregate results within and across project target ecosystems or types of interventions.

105. Outcome 1 on improved conservation of forest, wetland and coastal-marine biological resources in community-owned lands in the production landscapes will be measured by the number of: (i) land/resource use management plans developed and approved; (ii) fishing boats fishing at a given time and number of fishermen as a proxy of pressure over marine resources in the project area; (iii) low intensity eco-friendly aquaculture initiatives in deltaic, estuarine and coastal lagoon ecosystems providing sustainable livelihoods and helping control aquatic invasive species; (iv) hectares of coastal and marine

habitats conserved through sustainable alternative tourism; (v) commercial networks for sustainable/ certified timber and non-timber products and number of communities participating in them; (vi) communities with enhanced production capacity for non-timber forest products and business skills (for those with commercial use) measured by the number of products and volume of production; and (vii) grantee communities actively monitoring and controlling invasive alien species in terrestrial and aquatic ecosystems.

106. Outcome 2 on Carbon stocks maintained or increased in community-owned forestlands will be measured by the number of hectares of forestlands with avoided land use change or increased vegetation cover, and the number of hectares of agricultural lands without slash-and-burn. Other indicators to measure progress against this outcome will be the establishment and application of a LULUCF monitoring system and the percentage of communities implementing risk preparedness plans in case of hurricanes and other severe weather events that affect forest areas and community livelihoods.

107. Outcome 3 on increased project management capacity among communities and knowledge acquired through project implementation systematized and disseminated will be measured by: (i) the percentage of successful community-based projects; (ii) the number of community projects applying adaptive management; (iii) the establishment of a Project Information System with up-to-date and user friendly data; (iv) the number of community leaders and members with enhanced capacities for sustainable livelihoods and ecosystem management and conservation; (v) the number of communities that receive adequate technical assistance for their activities; and (vi) the number of additional communities made aware of results of SGP supported activities.

108. SGP Mexico will also use the indicators defined for the Global SGP (as relevant), the list of which is included in Annex 3.

2.4.2 Risks and Assumptions

109. There are few new risks to be faced by SGP in Mexico since the programme has already been operating for 17 years. However, SGP takes risks seriously and will be monitoring for them on an on-going basis and updating the UNDP risk log module in ATLAS on a quarterly basis (see M&E section and Annex 4). Below are some perceived risks, their rating, and mitigation measures.

Climate Threats (high)

110. South Eastern Mexico is affected every year by extreme weather events that threaten ecosystems and human communities. The project includes activities to reduce risks, managing risks at local level, building upon the experience of the Local Risk Management Programme initially developed by the Mexico SGP. This programme has proved to be effective in reducing the social and economic impacts of hurricanes and extreme weather events, and has already been replicated throughout Mexico (some 1,000 villages, 200 municipalities, 7 federal States and national government agencies).

Unfair competition (medium)

111. Sustainable production is generally more expensive than conventional methods. Producers engaged in unsustainable production systems may be able to undercut prices for similar products and services produced by sustainable systems, resulting in unfair competition. This risk can be mitigated by optimizing and scaling-up production, and by certifying products as biodiversity friendly to capture a premium over and above the unsustainable production price.

Running a grants programme with civil society organizations that have a low level of technical and management capacity (low)

112. SGP has a past performance rating of 85% achievement. Risk mitigation systems in place (e.g., grantee capacity development support, appropriate rates of grant disbursement, working in a flexible manner that responds to the strengths and weaknesses of grantees, periodic monitoring visits) will be strengthened to maintain or improve this rate of achievement. SGP also reduces risks by supporting

replication of good practices that have proven to deliver on GEF strategic priorities at the community level.

Resistance to change agricultural practices (high)

113. Maya communities in the project geographic area have practiced slash and burn agriculture for thousands of years and these practices are deeply rooted in the Maya culture. The project will work with the younger generation who is more educated, has a better understanding of the new demographic, environmental and economic conditions under which they have to produce and earn a living, and may be more open to new technologies and practices.

The Project Results Framework includes the most important assumptions to achieve the project outcomes and eventually its objective. A major assumption is that the Country Team will continue receiving effective support from its traditional partners – the NSC, pivot organizations and local government organizations, which is essential for a two-staff team to deliver on a large, complex and demanding project like this one.

2.5 Expected Global and Local Benefits

2.5.1 Global Environmental Benefits

114. The following global environmental benefits will be delivered:

- *Increased area of sustainably managed production landscapes and seascapes that integrate biodiversity conservation*: 70,000 hectares of sub-evergreen tropical forest; 6,000 hectares of deltaic estuarine ecosystem; 9,000 hectares of coastal lagoon and wetlands; and 1,000 hectares of montane forest.
- *Carbon stocks enhanced and emissions reduced in community-owned forestland and agricultural areas*: 1,504,168 tCO2 e/year mitigated through avoided land use change, reduced slash-and-burn and forest fires, reforestation and forest conservation initiatives.

2.5.2 Main Local Benefits

115. The premise of the project is that community-driven action is required that enables sustainable livelihoods which lead to decreased deforestation and habitat fragmentation and the long-term sustainability of community lands as conservation-compatible, climate resilient, productive landscapes. In the majority of the small grants projects, communities will carry out activities that generate income or sustainable livelihoods while producing global environmental benefits; these include certified sustainable forest management, aquaculture, alternative tourism, fisheries management, and others mentioned above. Individual and organizational capacities will be strengthened producing social capital that will benefit community initiatives in other spheres (e.g. health, education). Women will be particularly favored by this project because women groups will be explicitly targeted for support given their role in agriculture as well as in the harvest of non-timber forest products.

116. SGP expects to co-finance a minimum of 135 grants that will benefit an equal number of community organizations. The programme will prioritize vulnerable communities. SGP interventions will also lead to enhanced individual and institutional capacities among indigenous peoples, farmers and fishermen in a wide range of issues such as agricultural and forestry practices, invasive alien species, sustainable natural resources management, risk prevention, governance of community organizations, project development, resources mobilization, and monitoring and evaluation. Each project component includes specific targets with respect to number of communities, and concrete benefits expected (tons of food produced, increased income, etc) which are reflected in the project results framework.

117. SGP applies a multicultural and gender equity approach to project design and implementation as well as to capacity development. SGP will monitor its interventions using disaggregated indicators to

assess project results and effects on men and women. Women´s groups will be explicitly targeted for support, given their role in agriculture as well as the harvest of non-timber forest products.

2.6 Cost-effectiveness

118. An important criterion for SGP grant approval by the NSC is cost-effectiveness. The budgets of project proposals are compared with those of prior similar interventions and assessed against expected environmental and social benefits. In all cases, communities are expected to contribute substantial in-kind co-financing (i.e. labour, infrastructure, equipment, tools, land) and help mobilize other in-kind or cash resources from development partners and local government. The NSC also assesses whether there may be more cost effective alternatives to achieve the same global environmental benefits before approving SGP grants. This ensures that GEF funds are applied in the most cost-effective manner.

2.7 Sustainability of Individual and Institutional Capacities.

119. The SGP-Mexico Strategy offers an alternative conceptualization of community-based sustainable development that counters the large-scale rural development model that prevails in Mexico. Community-based sustainable development promotes self-governance through a grassroots democratic process, both essential ingredients to achieve project outcome sustainability. Under such a process, decision-making is consensual and participatory, communities identify their own conservation and development priorities and goals, and establish how activities will be carried out, by whom, and in what order.

120. The SGP-Mexico works in 20 micro-regions in the Yucatan Peninsula and the States of Chiapas and Tabasco that cover the breadth of socio-cultural and ecological zones in the Southeast of the country. In each of these micro-regions SGP has the collaborative participation of NGOs to facilitate community grant activities and improve the flow of information, funds, appropriate technology, and other resources to marginalized rural communities. At the same time those NGOs have benefited from support to strengthen their own capacities, which is essential to enable them to provide quality technical assistance services to community-based groups. Out of the 103 NGOs in the network, 94 are based in specific micro-regions while the other 9 have broader geographic coverage but a specific thematic orientation. The table below shows the micro-regional or thematic NGO distribution.

Table 3: Number of partner NGOs in the SGP Mexico Network by micro-region and field of expertise

Micro-region	**#**	**Micro-region**	**#**	**Theme**	**#**
1. Tabasco Coastal Plain	2	9. Coastal Yucatan	12	Organic Apiculture	3
2. Centla Marshes	1	10. South Yucatan	4	Handcrafts	2
3. Carmen Lagoon	4	11. East Yucatan	5	Communication	2
4. Central Campeche	2	12. North Quintana Roo	9	Applied Research	1
5. South Campeche	9	13. Central Quintana Roo	27	Community Organization	1
6. North Campeche	6	14. South Quintana Roo	2		
7. South West Yucatan	2	19. Chiapas Highlands	4		
8. North West Yucatan	4	20. North Chiapas	1		

121. SGP-Mexico features two central and complementary components: Technical assistance that helps maintain a regional cohesiveness among the individual activities, and the NGO network that allows

continuous communication and interaction among the groups and projects. Both elements are really important to help sustain individual and institutional capacities acquired through SGP-funded activities.

122. Additionally, SGP-Mexico and its NGO network members have diversified the programme's financial base by creating a separate credit fund "Fondo Peninsular" managed by EDUCE *Sociedad Cooperativa* to support the SGP Strategy Financing Lines. The Fund was established with resources from the Federal Government (FONAES), the Switzerland Embassy, the UNDP Country Office, and from the participating organizations. These resources enable community organizations to take small loans to apply acquired knowledge and provide continuation to SGP-funded initiatives. Given that the Mexican SGP requires a cash contribution as co-financing to its grants, organizations can get the required amount from the Peninsular Fund. SGP beneficiary organizations can also ask for credit to finance activities not considered eligible for SGP funding. The Peninsular Fund has a yearly turn over of some $500,000 USD. Only 7% of the total amount of the loans has required judicial collection. The expected co-financing amount from the Fondo Peninsular is reflected in Table 9 (see EDUCE *Sociedad Cooperativa*).

2.8 Replication and up-scaling

123. The project will emphasize replication and up-scaling within the selected geographical areas. SGP financed field interventions will be carefully selected by the NSC based on their replication potential. Project Component 3 is devoted to knowledge management and capacity development of community organizations and their members, which are essential for replication. SGP will help identify and codify best practices and make this information available to other communities and development practitioners to promote uptake by other communities within the project target areas and beyond. During this phase SGP will place particular attention to further develop its knowledge management system. This system will be used to analyse what works, what doesn't and why and make these lessons available through various means. SGP will establish a system by which CO2 can be measured and monitored for each relevant project intervention. Annual SGP reports will condense this data to nurture the Country´s efforts for Carbon stock maintenance and to draw relevant lessons to communicate how small actions taken locally have larger impacts on Climate Change mitigation.

124. The project will actively pursue upgrading and up-scaling of prior successful practices. For example, SGP success with introducing effective apiculture practices among local communities and linking these with biodiversity conservation will be upgraded by supporting communities achieve organic certification and will be up-scaled by establishing commercial networks to help a large number of communities take control of honey marketing at the international level. Similarly, additional communities will receive SGP support to establish alternative tourism ventures and to develop or strengthen their tourism network association and include new members, which in turn will help promote tourism ventures and improve the quality of services.

2.9 Collaborative Arrangements with Related Projects

125. The project will coordinate and establish linkages with the following baseline projects and initiatives (including other GEF projects):

Table 4: Related projects and initiatives

Initiative and Organization(s)	Relevance to SGP	Brief description of coordination, synergy or complementarity with SGP
El Triunfo Biosphere Reserve: Habitat Enhancement in Productive Landscapes	Although the project was completed in September 2002, there are several experiences about biodiversity conservation in the production landscape of the Biosphere Reserve,	The majority of community organizations in the buffer and influence zones of the El Triunfo Biosphere Reserve require

	buffer and influence zones (through cultivation of coffee under tree shade, productive reconversion of coffee production regimes, and promotion of sustainable production opportunities) that will be useful to SGP grantees.	continued support to maintain and expand their biodiversity-friendly activities. In coordination with the Reserve authorities, SGP will address these unmet needs.
Mesoamerican Biological Corridor (MBC)	SGP- Mexico has a long standing collaboration with the MBC to promote conservation and sustainable use of biodiversity through co-financing agreements in biological corridors in the states of Campeche, Quintana Roo, and Yucatan. In its new stage named "Fostering sustainable and competitive production systems consistent with the conservation of biodiversity" SGP will have the opportunity to strengthen its relationship with the MBC.	In the next few years, SGP will coordinate with the MBC to support the expansion of environmental friendly productive activities. Technical assistance services will be provided in a coordinated and systematic manner.
Integrated Assessment and Management of the Gulf of Mexico Large Marine Ecosystem (IAMGMLME)	This trans-boundary project is oriented to build capacities and institutional planning to conserve this critical ecosystem. Some specific demonstrations activities in the Laguna del Carmen micro-region are relevant to SGP.	SGP will coordinate with IAMGMLME pilot projects to conserve the deltaic estuarine large ecosystem
Mitigating Climate Change through Sustainable Forest Management and Capacity Building in the Southern States of Mexico (States of Campeche, Chiapas and Oaxaca)	SGP–Mexico will develop strategies and tools, and strengthen the capacities of local communities to carry out activities that help reduce greenhouse gas emissions and maintain or increase carbon capture in the forest ecosystems by financing LULUCF activities. Activities of this SFM initiative are highly relevant to SGP's work.	The Mexican SGP, will cooperate with the National Forestry Commission (CONAFOR) to co-fund poor and vulnerable rural community-based organizations.
FCPF funded R-PP and REDD+ Strategy preparation	A multi-stakeholder technical advisory committee has been created and appointed as advisory body for the GT REDD. Concerning Monitoring Reporting and Verification, Mexico is a demonstration country for GEO Forest Carbon Tracking.	SGP will collaborate with the Technical Advisory Committee (CTC-REDD+), and will follow up the development of the REDD+ strategy for Mexico to ensure coordination and complementarity. It will also cooperate with the REDD+ pilots in Quintana Roo and Chiapas, as appropriate

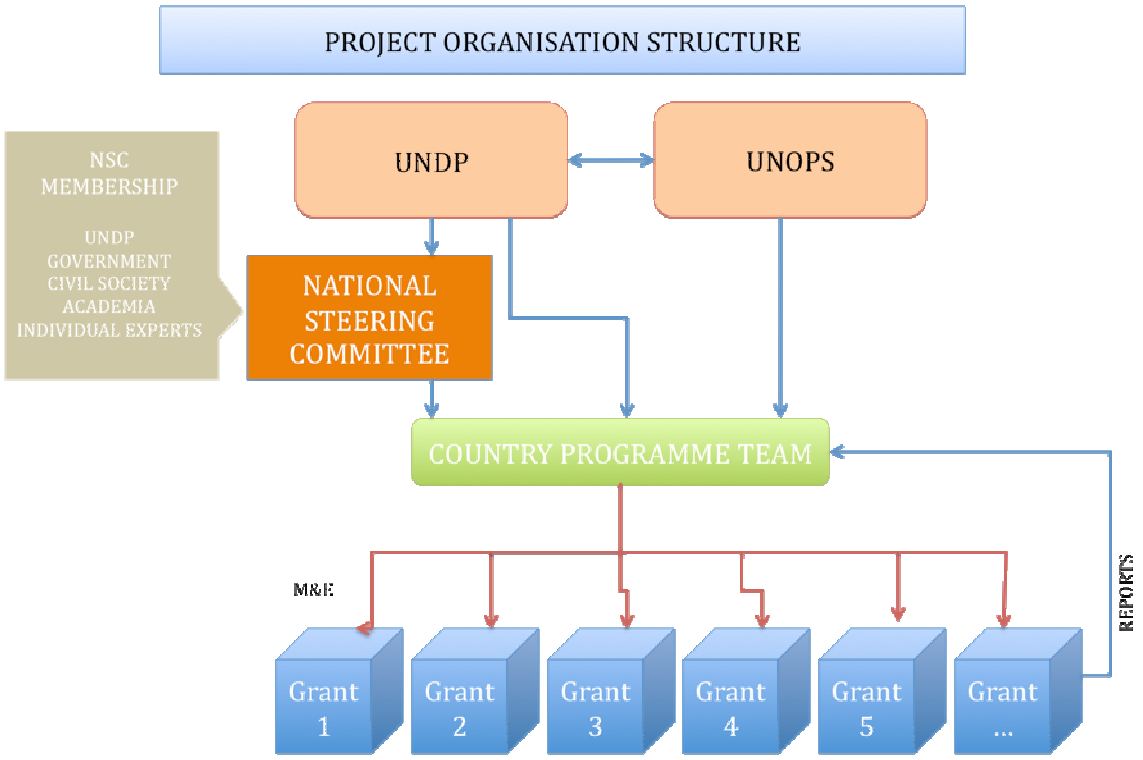
II. PART A.3 IMPLEMENTATION ARRANGEMENTS

Organizational structure and arrangements

126. SGP has, since 1992, continuously refined and modified its implementation approach to ensure the most efficient use of resources possible in generating global environmental benefits through community action. The cost-effectiveness of the SGP and the Mexico program have been extensively and independently reviewed and analyzed. A 2007 GEF Council technical paper reviewed and analyzed the

GEF-SGP cost-effectiveness compared to other programs, and found that with the current structure, "overall the SGP is comparable to other programs in terms of cost efficiency of management". A later GEF council paper following up on the 2008 joint evaluation of the SGP and the 2007 technical paper reviewed the cost-effectiveness of alternative execution arrangements. Based on the previous reviews and analysis, a November 2009 GEF Council paper recommended maintaining and continuing to improve the current arrangements for GEF-5, which was supported by the GEF Council. As part of the preparation of the PIF, Mexico reviewed the options for implementation and execution arrangements and concluded that the present approach will continue to be the most cost-effective. The project will therefore be implemented by UNDP and executed by UNOPS, through a small Country Programme team.

127. The diagram below shows the project organizational structure. The roles and responsibilities of the various parties to the project are described in the SGP Operational Guidelines (see Annex 8.2).



128. UNDP will provide overall program oversight and take responsibility for standard GEF project cycle management services beyond assistance and oversight of project design and negotiation, including project monitoring, periodic evaluations, troubleshooting, and reporting to the GEF. UNDP will also provide high level technical and managerial support through the recently established Communities Cluster within EEG, and from a UNDP Regional Technical Advisor (RTA) and other members of the regional teams, who will be responsible for project oversight for upgraded Country Programme projects. SGP CPMT will monitor for compliance of upgraded Country Programmes with SGP core policies and procedures.

129. In accordance with the global SGP Operational Guidelines that will guide overall project implementation in Mexico, and in keeping with past best practice, the UNDP Resident Representative will appoint the National Steering Committee (NSC) members. The NSC, composed of government and

non-government organizations with a non-government majority, a UNDP representative, and individuals with expertise in the GEF Focal Areas, is responsible for grant selection and approval and for determining the overall strategy of the SGP in the country. NSC members serve without remuneration and rotate periodically in accordance with its rules of procedure. The Government is usually represented by the GEF Operational Focal Point or by another high level representative of relevant ministries or institutions. The NC will report to the NSC on Country Program progress, to the UNDP RR as primary supervisor, and to CPMT regarding the SGP Operational Guidelines. The NSC also contributes to bridging community-level experiences with national policy-making. The SGP Local Consultative Body (LCB) based in Nanyuki and covering the Mt. Mexico Districts, which is unique to Mexico and whose members also work pro bono, will continue advising the Country Team concerning its activities in the Mt. Mexico region and will expand its membership to include stakeholders in Laikipia.

130. The Country Office is the business unit in UNDP for the SGP project and is responsible to ensure the project meets its objective and delivers on its targets. The Resident Representative signs the grant agreements with beneficiary organizations. The Country Office will make available its expertise in various environment and development fields as shown below. It will also provide other types of support at the local level such as infrastructure and financial management services, as required. UNDP will be represented in the NSC, and will actively participate in grant monitoring activities.

131. The country team - recruited competitively and composed of a National Coordinator, a Local Coordinator based in Nanyuki and funded through co-financing, and a Program/Financial Assistant - is responsible for the day-to-day operations of the program. This includes supporting NSC strategic work and grant selection by developing technical papers, undertaking ex-ante technical reviews of project proposals; taking responsibility for monitoring the grant portfolio and for providing technical assistance to grantees during project design and implementation; mobilizing cash and in-kind resources; preparing reports for UNDP, GEF and other donors; implementing a capacity development program for communities, CBOs and NGOs, as well as a communications and knowledge management strategy to ensure adequate visibility of GEF investments, and disseminating good practices and lessons learnt. As indicated in the PIF, the vast majority of project site visits for monitoring and technical support to some 80 grantees are done by road, and therefore, it is far more cost-effective to own and maintain a 4WD vehicle than to rent a car or use other means of transport for the NC, PA, NSC members or other volunteer personnel who need to go to the field. A staff member that could also perform other M&E tasks would be responsible for such vehicle.

132. Grants will be selected by the NSC from proposals submitted by CBOs and NGOs through calls for proposals in specific thematic and geographic areas relevant to the SGP strategy. Although government organizations cannot receive SGP grants, every effort will be made to coordinate grant implementation with relevant line ministries, decentralized institutions, universities and local government authorities to ensure their support, create opportunities for co-financing, and provide feedback on policy implementation on the ground. Contributions from and cooperation with the private sector will also be sought.

133. SGP utilizes consultants for specialized services only, mostly for baseline data collection, capacity development activities, business development support, and to assist grantees when specialized expertise is required, or for tasks that require an external independent view such as the mid-term and terminal evaluations.

134. UNOPS will provide Country Programme execution services, including human resources management, budgeting, accounting, grant disbursement, auditing, and procurement. UNOPS is responsible for SGP financial management and provides periodic financial reports to UNDP. The UNOPS SGP Standard Operating Procedures (see Annex 8.3) guide the financial and administrative management of the project. This document along with the UNOPS SGP Operational Guidelines will be revised during the project inception workshop to adjust existing procedures to the new up-graded situation of the Mexico SGP.

135. UNOPS will not make any financial commitments or incur any expenses that would exceed the budget for implementing the project as set forth in this Project Document. UNOPS shall regularly consult with UNDP concerning the status and use of funds and shall promptly advise UNDP any time when UNOPS is aware that the budget to carry out these services is insufficient to fully implement the project in the manner set out in the Project Document. UNDP shall have no obligation to provide UNOPS with any funds or to make any reimbursement for expenses incurred by UNOPS in excess of the total budget as set forth in the Project Document.

136. UNOPS will submit a cumulative financial report each quarter (31 March, 30 June, 30 September and 31 December). The report will be submitted to UNDP through the ATLAS Project Delivery Report (PDR) system and follow the established ATLAS formats and PDR timelines. The level of detail in relation to the reporting requirement is indicated in the Project Document budget, which will be translated into the ATLAS budgets. UNDP will include the expenditure reported by UNOPS in its reconciliation of the project financial report.

137. Upon completion or termination of activities, UNOPS shall furnish a financial closure report, including a list of non-expendable equipment purchased by UNOPS, and all relevant audited or certified financial statements and records related to such activities, as appropriate, pursuant to its Financial Regulations and Rules.

138. Title to any equipment and supplies that may be furnished by UNDP or procured through UNDP funds shall rest with UNDP until such time as ownership thereof is transferred. Equipment and supplies that may be furnished by UNDP or procured through UNDP funds will be disposed as agreed, in writing, between UNDP and UNOPS. UNDP shall provide UNOPS with instructions on the disposal of such equipment and supplies within 90 days of the end of the Project.

139. The arrangements described in this Project Document will remain in effect until the end of the project, or until terminated in writing (with 30 days notice) by either party. The schedule of activities specified in the Project Document remains in effect based on continued performance by UNOPS unless it receives written indication to the contrary from UNDP. The arrangements described in this Agreement, including the structure of implementation and responsibility for results, shall be revisited on an annual basis and may result in the amendment of this Project Document.

140. If this Agreement is terminated or suspended in accordance with the above paragraph, UNDP shall reimburse UNOPS for all costs directly incurred by UNOPS in the amounts specified in the project budget or as otherwise agreed in writing by UNDP and UNOPS.

141. All further correspondence regarding this Agreement, other than signed letters of agreement or amendments thereto should be addressed to the UNDP-GEF Executive Coordinator and the UNDP Resident Coordinator.

142. UNOPS shall keep UNDP fully informed of all actions undertaken by them in carrying out this Agreement.

143. Any changes to the Project Document that would affect the work being performed by UNOPS shall be recommended only after consultation between the parties. Any amendment to this Project Document shall be effected by mutual agreement, in writing.

144. If UNOPS is prevented by force majeure from fulfilling its obligations under this Agreement, it shall not be deemed in breach of such obligations. UNOPS shall use all reasonable efforts to mitigate the consequences of force majeure. Force majeure is defined as natural catastrophes such as but not limited to earthquakes, floods, cyclonic or volcanic activity; war (whether declared or not), invasion, rebellion, terrorism, revolution, insurrection, civil war, riot, radiation or contaminations by radio-activity; other acts of a similar nature or force.

145. Notwithstanding anything to the contrary, UNOPS shall in no event be liable as a result or consequence of any act or omission on the part of UNDP, the government and/or any provincial and/or municipal authorities, including its agents, servants and employees.

146. UNDP and UNOPS shall use their best efforts to promptly settle through direct negotiations any dispute, controversy or claim which is not settled within sixty (60) days from the date either party has notified the other party of the dispute, controversy or claim and of measures which should be taken to rectify it, shall be referred to the UNDP Administrator and the UNOPS Executive Director for resolution.

147. This project will be implemented by UNOPS in accordance with UNOPS' Financial Rules and Regulations provided these do not contravene the principles established in UNDP's Financial Regulations and Rules.

148. UNOPS as the Implementing Partner shall comply with the policies, procedures and practices of the United Nations security management system.

3.2 Communications and visibility requirements

149. Full compliance is required with UNDP's Branding Guidelines. These can be accessed at http://intra.undp.org/coa/branding.shtml, and specific guidelines on UNDP logo use can be accessed at: http://intra.undp.org/branding/useOfLogo.html. Amongst other things, these guidelines describe when and how the UNDP logo needs to be used, as well as how the logos of donors to UNDP projects need to be used. For the avoidance of any doubt, when logo use is required, the UNDP logo will be used alongside the GEF logo. The GEF logo can be accessed at: http://www.thegef.org/gef/ GEF_logo. The UNDP logo can be accessed at http://intra.undp.org/coa/branding.shtml.

150. Full compliance is also required with the GEF's Communication and Visibility Guidelines (the "GEF Guidelines"). The GEF Guidelines can be accessed at: http://www.thegef.org/ gef/sites/thegef.org/files/documents/C.40.08_Branding_the_GEF%20final_0.pdf. Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in project publications,

vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

151. Where other agencies and project partners have provided support through co-financing, their branding policies and requirements should be similarly applied.

III. PART A.4 MONITORING AND EVALUATION

152. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures. Project M&E will take place at three levels: For the portfolio of up-graded SGP country programmes; for the Mexico SGP Country Programme; and for individual community grants. It will also pay attention to the development of skills at local level to enable grantees to monitor and assess their own activities and achievements.

153. LULUCF is a new concept that SGP will pilot in selected areas during GEF 5 through community-based initiatives. In order to meet expected standards, SGP will work with communities and other national and local partners during the first months of project implementation to collect the necessary data to establish a baseline against which progress can be monitored periodically and reported on to GEF. Because the REDD+ MRV system will not be in place at the inception of the project, SGP will explore the possibility of using the tools and methods for carbon stock assessment and monitoring being developed by the GEF Carbon Benefits Project. It should be noted that the SGP in Mexico already has some data that is available for this purpose, and is acquainted with methods recently applied in other parts of the country, such as the one applied for measuring the REDD effect of the Payment for Hydrological Environmental Services Program in Mexico (PSAH).

154. SGP-Mexico will apply the relevant Global SGP indicators to monitor individual projects and the national portfolio, and to report to UNDP and GEF. The Logical Framework Matrix in Section B provides performance and results indicators. In addition, Annex 3 provides global SGP indicators relevant to this project.

155. The project will be monitored through the following M&E activities.

4.1 Portfolio of upgraded Country Programmes

156. The UNDP Communities Cluster at HQ will monitor the implementation of the portfolio of upgraded SGP Country Programmes and will promote and support cross-fertilization and learning among Country Programmes and with the global SGP. The SGP CPMT will monitor SGP Country Programmes for compliance with the global SGP Operational Guidelines.

4.2 Country Programme Level

4.2.1 Project start

157. A Project Inception Workshop will be held within two months of project start with those with assigned roles in the project organization structure: the UNDP Regional Technical Advisor, the UNDP Country Office SGP Focal Point, National Steering Committee members, the SGP Country Programme Manager (formerly SGP National Coordinator) and, where feasible, a UNOPS headquarters representative. The Inception Workshop is crucial to brief all participants on the new SGP requirements as a GEF Full-Size Project and to build ownership for project results. The Inception Workshop should carry out a number of key activities including:

- Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of the UNDP Communities Senior Technical Advisor (STA), Regional Technical Advisor (RTA), and Country Office (CO), and of UNOPS

vis-à-vis the project team and the National Steering Committee (NSC). Discuss the roles, functions and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms.
- Based on the project results framework, finalize the first annual work plan and agree on a schedule for grant approvals for the entire project life.
- Review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks.
- Provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements and roles. The Monitoring and Evaluation work plan and budget should be agreed and scheduled.
- Discuss financial reporting procedures and obligations, and audit arrangements.

158. An Inception Workshop report is a key reference document and must be prepared by the SGP Country Programme Manager with RTA review and shared with participants to formalize various agreements and plans decided during the meeting.

4.2.2 Quarterly

- Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform.
- Based on information recorded in ATLAS by UNOPS, UNDP will have access to updated financial information in an ongoing manner.
- Information on the grant portfolio shall be updated in the SGP Global Database using the indicators provided in Annex 3.
- Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS (see Annex 4). Risks become critical when the impact and probability are high.
- Based on the information recorded in Atlas by the CO and the SGP Country Programme Manager, Project Progress Reports (PPR) can be generated in the Executive Snapshot.
- Other ATLAS logs can be used to monitor issues, lessons learned etc. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

4.2.3 Annually

159. Annual Project Review/Project Implementation Reports (APR/PIR): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (1 July to 30 June). The APR/PIR combines both UNDP and GEF reporting requirements. The SGP Country Programme Manager will prepare the PIR with inputs and supervision from the UNDP CO SGP Focal Point and the RTA. The APR/PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes - with indicators, baseline data and end-of-project targets (cumulative).
- Project outputs delivered per project outcome (annual).
- Lesson learned/good practice.
- AWP and other expenditure reports.
- Risk and adaptive management.
- ATLAS QPR.
- Portfolio level indicators, in this case the global SGP Indicators as outlined in Annex 3 will be used on an annual basis.

160. The RTA may conduct joint visits with the Country Programme Manager to selected project sites as an input to PIR preparation. A Field Visit Report/BTOR will be circulated to the project team and other relevant project stakeholders, as appropriate, no less than one month after the visit.

4.2.4 End of project

161. An independent Evaluation will take place three months prior to the expected phase end date (approximately on April 2014). The evaluation will focus on the delivery of the project's results as initially planned or as corrected as a result of monitoring activities. The evaluation will look at impact

and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The UNDP STA, in consultation with SGP CPMT, will prepare the Terms of Reference for this evaluation. The UNDP Evaluation Office shall validate the TOR. Given the pilot nature of the first group of upgrading SGP Country Programmes, the evaluation should also undertake an assessment of costs and benefits of the upgrading process, summarize lessons learned, and provide recommendations to the GEF Secretariat and the Global SGP concerning the upgrading of other Country Programmes. The evaluation requires a management response, which should be uploaded to PIMS and to the UNDP Evaluation Office Evaluation Resource Center (ERC).

162. During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also layout recommendations for any further steps that may need to be taken to ensure sustainability and help replication of project results.

4.2.5 Learning and knowledge sharing

163. Particular attention will be paid to the GEF Focal Area "learning objectives" to ensure that experiences emerging from local level implementation of technologies, approaches and policies are fed back to the wider portfolio. Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation through lessons learned. The project will identify, analyze, and share lessons that might be beneficial in the design and implementation of similar future projects, in particular to other SGP upgrading countries.

164. The project team will participate in at least one workshop with other SGP upgraded countries to share experiences. Ideally, this workshop should take place as part of the evaluation. The detailed objective(s), venue, agenda, and timing of the workshop will be determined by the STA in consultation with the SGP country teams, the respective RTAs and the evaluation team.

165. Finally, there will be a two-way flow of information between this project, other SGP upgraded countries and the global GEF SGP programme. Such flow of information should cover substantive and operational information, experiences and lessons.

4.3 Individual Grant Monitoring and Evaluation

166. The following minimum standards shall be applied for individual grant M&E:

4.3.1 Ex-ante Visits

167. The project team should undertake ex-ante visits on a risk basis to grant-requesting organizations upon grant-approval by the NSC and prior to the signature of the MOA between UNDP and the grantee.

4.3.2 Field monitoring visits

168. Every project should be visited at least twice in its lifetime, upon receipt of the first progress report from beneficiary organizations and during the following year. NSC members with relevant expertise in project-related technical areas may join the Country Programme Manager during these visits as appropriate.

4.3.3 Progress reports

169. Beneficiary organizations should submit half-yearly progress reports to the Country Programme Manager along with a financial report. A forecast of resources needed in the following period should be submitted by the grantee to the Country Programme Manager as a requirement for disbursement of next instalment.

4.3.4 Final report

170. Beneficiary organizations should submit a final report summarizing global benefits and other results achieved, outputs produced, and lessons learned. The final report should also include a final financial statement.

4.3.5 Final Evaluation

171. A final evaluation will be done for each project. The Country Programme Manager should validate the terms of reference for these evaluations and vet the evaluation consultant. The cost of this evaluation will be part of the grant budget.

4.3.6 Grant Projects Audit

172. The SGP Country Programme Manager will organize audits to selected grantee organizations on a risk basis. The cost of these audits will be charged to the grant project budget.

4.4 M&E Workplan and Budget

173. The Workplan and Budget for monitoring and evaluation activities at the programme and individual grant level are summarized in Table 5 below.

Table 5: M&E costed workplan

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team staff time*	Time frame
Country Programme Level			
National Inception Workshop and Report	▪ SGP Country Programme Manager ▪ NSC ▪ UNDP RTA and CO ▪ UNOPS	Indicative cost to project: National Inception Workshop: $ 7,000 Travel cost of RTA from IA fee	Within first two months of project start up
Measurement of Means of Verification of project results.	▪ SGP Country Programme Manager ▪ Consultants (adaptation of M&E systems to GEF-5 requirements and data collectioin)	To be finalized during Inception Phase and Workshop	Start, mid and end of project and annually when required.
Measurement of Means of Verification for Project Progress on output delivery and implementation	▪ SGP Country Programme Manager	To be determined as part of the Annual Work Plan preparation	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	▪ SGP Country Programme Manager ▪ UNDP RTA	No cost to project budget Annual visit by RTA – Travel cost from IA fee	Annually
Periodic status/ progress reports	▪ SGP Country Programme Manager and team	No cost to project budget	Quarterly
SGP Global and National Database update	▪ SGP Country Programme Manager ▪ Database analyst for data input and data quality assurance	Indicative cost to project: $ 10,750	Quarterly
Upgraded countries Experience exchange workshop	▪ SGP Country Programme Manager and team ▪ UNDP STA ▪ GEF SGP CPMT	Indicative cost of country team participation in upgraded countries exchange workshop:	At the mid-point of project implementation.

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team staff time*	Time frame
Country Programme Level			
		$9,000	
Independent Evaluation	▪ SGP Country Programme Manager and team ▪ UNDP CO ▪ UNDP RTA ▪ Evaluation team	Indicative cost: $ 35,950	At least three months before the end of project implementation
Project Terminal Report	▪ SGP Country Programme Manager and team ▪ UNDP CO ▪ Local consultant (proofreading, editing, layout, printing)	Cost of layout and printing of the report included in the knowledge management budget component	At least three months before the end of the project
SUB-TOTAL *Excluding project team staff time and UNDP staff and travel expenses*		**US $ 62,700**	

Individual grant level			
Type of M&E activity	**Responsible Parties**	**Budget US$**	**Time frame**
Ex-ante visit	▪ SGP Country Programme Manager and team ▪ NSC members	Indicative cost: $ 2,800	Risk based (20% of total No. of grants)
Field monitoring visit	▪ SGP Country Programme Manager and team ▪ NSC members	Indicative cost: $ 54,000	At least twice in the lifetime of project Additional visits on a risk basis
Monitoring of and technical support to community application of M&E methods and tools	▪ SGP Country Programme Manager ▪ National consultant (preparation of training materials and training delivery in biological corridors) ▪ NSC members	Indicative cost: $ 25,500	Half-yearly
Progress reports	▪ Beneficiary organization ▪ SGP Country Programme Manager	No cost	Half-yearly
Final report	▪ Beneficiary organization ▪ SGP Country Programme Manager	No cost	End of project
Final evaluation	▪ National consultant ▪ SGP Country Programme Manager ▪ Beneficiary organization	Included in project grant budget	End of project
Audit	▪ UNOPS ▪ SGP Country Programme Manager	Included in project grant budget	Risk based

	▪ Beneficiary organization		
SUB-TOTAL COST		US$ **82,300**	
TOTAL indicative COST of Project M&E *M&E of approximately 135 projects. Excluding project team staff time and costs included in project grant budget*		**US$ 145,000**	

IV. PART A.5 LEGAL CONTEXT

174. This document together with the CPAP signed by the Government of Kenya and UNDP, which is incorporated by reference, constitute together a Project Document as referred to in the Standard Basic Assistance Agreement (SBAA) and all CPAP provisions apply to this document.

175. Consistent with the Article III of the SBAA, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.

176. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

SECTION B: STRATEGIC RESULTS FRAMEWORK (SRF) AND GEF INCREMENT

PART B.1: PROJECT LOGICAL FRAMEWORK

This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: **Outcome 3**: Sustainable production processes and chains replicated and expanded.					
Country Programme Outcome Indicators: **3.1.2.1.** Development and approval of sustainable production projects in the Yucatan Peninsula. **3.1.2.2.** Capacities for sustainable production projects strengthened.					
Primary applicable Key Environment and Sustainable Development Key Result Area: 4. Expanding access to environmental and energy services for the poor.					
Applicable GEF Strategic Objective and Programme: BD-2, CCM-5, CD-2 and CD-5					
Applicable GEF Expected Outcomes: BD-2 Outcomes: 2.1 Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation; and 2.3 Improved management frameworks to prevent, control and manage invasive alien species; **CCM-5 Outcome** 5.2 Restoration and enhancement of carbon stocks in forests and non-forest lands, including peatland; **CD-2 Outcomes**: 2.2 Increased capacity of stakeholders to diagnose, understand and transform complex dynamic nature of global environmental problems and develop local solutions; and 2.3 Public awareness raised and information management improved; and **CD-5 Outcome** 5.2 Evaluation of programmes and projects strengthened and improved against project results.					
Applicable GEF Outcome Indicators: BD Indicators: National and sub-national land-use plans (number of plans) that incorporate biodiversity and ecosystem services valuation; Certified production landscapes and seascapes (number of hectares); Policy and regulatory management frameworks for IAS and relevant sectors; **CCM Indicators**: Carbon stocks monitoring system established; Forest and non-forest lands under good management practices; **CD-2 Indicators:** Stakeholders are better informed via workshops and trainings about global challenges and local actions required; and Public awareness raised through workshops and other activities (Number); **CD-5 Indicator**: Capacity for monitoring of projects and programmes developed (Number)					
Project goal: To conserve globally significant ecosystems of Mexico and mitigate climate change by supporting the implementation of relevant national policies and strategies on biodiversity and land-use, land-use change and forestry, while also contributing to communities' sustainable livelihoods.					
	Indicator	**Baseline**	**Targets** **End of Project**	**Source of verification**	**Risks and Assumptions**
Project Objective Community-based initiatives and actions for sustainable livelihoods conserve Mexico's South-eastern large ecosystems and help mitigate climate change	1. Increased area (hectares) of sustainably managed production landscapes and seascapes that integrate biodiversity conservation in the following ecosystems: • Sub-evergreen tropical forest • Coastal-marine areas • Montane forest	Area under sustainable management by local communities in selected South-eastern ecosystems: • 113,157 hectares of sub-evergreen tropical forest • 99.3 hectares of deltaic estuarine ecosystem • 30,000 hectares of coastal lagoon and wetlands • 10,500 hectares of montane forest	At the end of a three year period communities conserve biodiversity and sustainably manage the following additional areas in selected ecosystems: • 70,000 hectares of sub-evergreen tropical forest • 6,000 hectares of deltaic estuarine ecosystem • 9,000 hectares of coastal lagoon and wetlands • 1,000 hectares of montane forest	SGP database and project information system Project evaluation reports	No major hurricanes or floods will occur during the project implementation period State governments fulfil their commitments towards supporting community-based initiatives
	2. Reduced habitat fragmentation in community lands between protected areas in the Palmar – Dzilam and Sian	Sian Ka'an-Calakmul BC: The annual rate of forest conversion to grasslands in the last 20 years is estimated at 7% while the annual rate of	Forest areas remain the same or increase in at least 50% of the land of grantee communities in the Sian Ka'an- Calakmul BC	Aerial photographs Satellite images Ground surveys Project monitoring reports	The concept of ecological connectivity is understood by communities and other stakeholders at local and regional levels and there is a favorable attitude towards community stewardship of natural

	Ka'an - Calakmul biological corridors Measured in percentage of habitat loss reduction	forest conversion to agricultural land is 6%. Dzilam – Palmar BC: The original sand dune vegetation has been reduced by 48%. The current annual rate of sand dune vegetation loss is 3%. The rate of mangrove loss in the period 2000-03 was about 40%. The current annual deforestation rate is 1.84%	In the Dzilam – Palmar BC sand dune vegetation loss will be arrested (0% loss) in community areas supported by SGP The rate of mangrove forest loss will not increase in the area of SGP-influence, i.e. ≤ 1.84% per year Mangroves remain healthy as an indicator of adequate water flow from hummock (Peten) areas		resources Proposed production activities and changes in land and resource use practices enable communities to reduce habitat degradation and improve their livelihoods
	3. Reduced risk of IAS introduction in terrestrial and aquatic ecosystems and improved control of selected IAS Measured in number of hectares monitored and managed by local communities for detection and control of IAS or in percentage of reduction of specific IAS	Mexico has a National Strategy for the Prevention, Control and Eradication of Invasive Alien Species. However, an implementation plan has yet to be developed. There is no system by which communities can systematically provide early warning on IAS introductions and receive technical assistance for the eradication or control of IAS in both terrestrial and aquatic ecosystems IAS baseline information will be collected for each area and species at the time of grant approval	Communities' participation in IAS detection, eradication and control achieve the following: • 10,000 hectares of water bodies (lagoons, wetlands and river deltas) with community systems to control Loricariidae (in particular *Plecostomus sp)*; • 8 reef areas with a community system to detect *Pterois volitans*; • 10% reduction of *Tilapia spp* and *Oreochromis spp* in the protected areas of Pantanos de Centla and the Términos Lagoon. • 10% reduction of plant IAS in community lands with SGP interventions (including species such as *Gmelina arborea, Elaeis guineensis, Leucaena leucocephala, and Hevea Brasiliensis*)	Grantee project reports Community IAS control records Sampling in lagoons, rivers and estuaries Project evaluation reports	Action plan for the implementation of the National Strategy on IAS is developed and funded with sufficient attention to communities' role and capacity needs. Supply of exotic species for aquaculture declines
	4. Carbon stocks maintained or increased in community-owned lands trough avoidance of land use	Carbon stocks loss and GHG emissions related to land use and land use change in community lands in project area to be determined at inception of project,	• 442,283 tons of CO2e/year mitigated through restoration and enhancement of vegetation cover in community-owned forest lands and avoidance of	Aerial photos and satellite images Field survey reports Project progress reports	No major hurricanes or floods will occur during the project implementation period

	conversion from forest land to other uses; avoidance of wildfires and slash-and-burn practices; and through sustainable forest management, reforestation and natural regeneration Measured in tCO2 e/year	including: • Current rate of forest land conversion in areas affected by hurricanes • Current rate of forest land conversion to agriculture and livestock uses in project area • Current area under slash and burn practices in project area • Current frequency and number of hectares affected by wildfires in community lands • Reforestation practices in last 2 years in community lands • Current rate of conversion of area under shade coffee to other coffee varieties	wildfires • 2,800 tons of CO2 e/year maintained or increased through avoided land use change in community forest and non-forest areas • Reduced GHG emissions of 987,375 tons of CO2 e/year through avoided slash and burn practices	Reports from technical assistance providers Data records resulting from application of Carbon measurement tools	
	5. Increased number of communities with enhanced SFM capacities obtaining and retaining certification and marketing their timber and non-timber forest products Measured by the number of certificates obtained/retained and by tons of timber and non-timber forest products sold	• 7 forest *ejidos* in Quintana Roo have FSC certification • FSC certification applications from 2 *ejidos* are under review of which 1 in Campeche and 1 in Chiapas • There are 714 UMAs with approved permits nationally but 90.8% are in 4 States (Sonora, Coahuila, Nuevo Leon and Tamaulipas) while the rest (9.2) are in other parts of Mexico. SGP has supported 8 UMAs in South-eastern Mexico of which 2 have obtained permits (for crocodile) while the other 6 are still	• At least 50% of the additional 4 forest *ejidos* supported by SGP obtain and retain FSC certification for sustainable timber • 18 communities successfully producing a variety of non-timber forest products, with sustainable management plans of which at least 10 community wildlife conservation management units (UMAs) established and with their operation legalized and certified by SEMARNAT. • 4 communities retain their organic apiculture certification and	FSC certificates Management plans developed SEMARNAT certificates of UMAS Community timber and non-timber production and sales records Project progress reports	SGP strategy for increased access to continuous high quality technical assistance is successful Markets for sustainably produced goods and services continue to expand locally and nationally Community umbrella organizations achieve high levels of cooperation and good governance and administration

		awaiting SEMARNAT approval. • 4 communities with certified organic apiculture • A baseline per product (tons of product sold) will be established at the inception of the project to monitor markets for community products	• On average the volume of sustainable community products sold in local, national and international markets increases by 15% over the project period		
	6. Increased area of forest and non-forest lands under good management practices Measured in number of hectares with community sustainable production practices per ecosystem	30,000 hectares of coastal lagoons; 90 hectares of inland lakes and 9.3 hectares of wetlands. 17,000 hectares of forests being conserved through non-organic apiculture 10,500 hectares of montane forest 2,834 hectares of agro-ecological or agro-forestry systems and 24 hectares of tree nurseries with 207 plant species.	• 2,000 hectares of freshwater ecosystems and 3,450 hectares of coastal lagoons conserved through low intensity, native species community aquaculture programmes • 20,000 hectares of forest ecosystems used for certified organic apiculture, producing 1,000 tons of honey • 7,000 hectares of forest ecosystems conserved through sustainable non-timber forest products • 5,550 hectares of coastal and forest ecosystems used for sustainable tourism • 1,500 hectares with avoided land-use change and sedentary agriculture using agro-ecological and agro-forestry systems	Project progress reports Reports from technical assistance providers Community production and sales records	Timely and high quality technical support will be made available to communities engaged in sustainable production and conservation activities
	7. Enhanced communities livelihoods and climate change risk reduction Measured in tons of food/crop production, income or savings, and risk management	Approximately 1,000 families targeted by the project produce some 200 tons of food/year Baseline to be provided at the time of grant approval for specific communities 124 local communities with	• 100% increase in food production (i.e., 1,000 families producing 450 tons/year) • 25% increase in profits for beekeepers obtaining organic certification • 140 local risk prevention and	Community crop production registries Household surveys Project progress reports Risk management plans	

y for d edness	risk management plans	management plans		
s d ffective nd e of use ugh one events esses	Over 400 SGP grantees from previous programme phases with increased capacities and skills to effective biodiversity conservation SGP had not targeted land use change avoidance in previous phases, therefore the baseline is 0	• At least 80 new grantees empowered and with increased capacities for effective conservation and sustainable use of natural resources • At least 50 new grantees empowered and with increased capacities to undertake activities with the aim of avoiding land use change in forest and non-forest lands	Evaluation of CBOs capacities Evaluations during training activities Reports of technical assistance providers Independent evaluation reports	
rant munity project and gement ne rate ojects	The rated of individual grant success in previous SGP phases is 85% Baseline concerning community know-how will be determined for each grantee at the time of grant selection	• The 85% rate of success of individual grants will be maintained or increased.	Monitoring reports Individual grant evaluations	The country programme team will be able to work effectively with partner organizations to deliver technical assistance and monitor the projects effectively. Training can be delivered at project inception to enable communities meet the increased project quality requirements
ber of use lans	Existing management plans: • 2 *ejido* forest management plans • 8 draft UMAS management plans • 2 lobster fisheries management plans • 5 freshwater fish species management plans	The following new management plans will be delivered: • 4 *ejido* forest management plans • 18 sustainable non-timber products management plans including 10 UMAS management plans (see species below) • 4 lobster/sea cucumber fisheries management plans • 9 freshwater fish species	Management plans Technical assistance reports	The advocacy work by SGP at Federal and State level and by communities with the State Judiciary to remove barriers to the approval of UMAS management plans succeeds

	fisheries in the Caribbean coast and Yucatan Channel Measured by number of fishing boats fishing at a given time and by number of fishermen as a proxy of pressure over marine resources in the project area Increased number of low intensity eco-friendly aquaculture initiatives in deltaic, estuarine and coastal lagoon ecosystems providing sustainable livelihoods and helping control aquatic invasive species	declined from 19.8 tons in 1996 to 14.2 tons in 2006. In the project area it is more severe: In Campeche it declined from 21 tons in 1994 to 7.7 in 2000; in Quintana Roo from 8.7 to 3.7; and in Yucatan from 20.3 tons to 6.5 in the same period. Intensive large-scale aquaculture production is based on the exploitation of a limited number of species such as shrimp and causes negative impacts on coastal ecosystems. Fresh and brackish water aquaculture is based on exotic species such as Tilapias, which also have a negative effect on aquatic biodiversity. There is no baseline data concerning number of low intensity aquaculture initiatives with native species in the south eastern region but SGP financed 65 initiatives in previous phases	marine resources. • 9 aquatic native species[1] sustainably managed • At least 525 tons of biomass produced annually by end of project • Sustainable fisheries for *Holothuria spp* (Sea cucumber) and *Palinurus argus* (Spiny lobster) • 2,000 hectares of deltaic-estuarine habitat sustainably managed. • Substitution of IAS by native species in SGP supported communities (at least 70% of existing community aquaculture activities that use exotic species substitute these by native species) and 100% of new aquaculture activities use native species	registries Surveys in lagoons, rivers and estuaries Production and sales inventories Project reports Field visits for controls of use of certified fishing gear	hurricanes Availability of fingerlings and adequate water quality maintained Current fishing quota system and fishing closed season for the species are maintained and enforced by authorities Management plans for the NP of Pantanos de Centla and Terminos Lagoon will be implemented
	Increased number of hectares of coastal and marine habitats conserved through sustainable alternative tourism (community tourism ventures	53 initiatives on alternative tourism	Two new tourism circuits in 5,550 hectares of coastal dunes, coastal lagoons, mangroves, wetlands and/or forests Existing tourism networks increase by 20% the number of affiliated CBOs	Project progress reports Visitors registries Tourist services offer through Internet Inscription of the tourism networks in	Tourism in the region is not affected by severe weather events or by increase in crime rates which are currently very low in the region Competition between groups is avoided and cooperation and adoption of best practices continues

[1] *Crassostrea virginica, Petenia splendida, Lipesosteus tropicus, Cichlasoma urophthalmus, Poecilia Mexicana, Centropomus undecimalis, Callinectes rathbunae, Holothuria spp, and Palinurus argus*

	reduce pressure from fisheries)		300 people of various organizations receive training on alternative tourism Strengthened alternative tourism network "Puerta Verde" in Northern Quintana Roo	the Public Registry Fishing vessels registry	Mexican Petroleum (Petroleos Mexicanos) contributes to the development of a public policy on sustainable tourism for the municipalities of Carmen in the State of Campeche and Centla in the State of Tabasco
	Number of commercial networks for sustainable/ certified timber and non-timber products and number of communities participating	No commercial network for timber and non-timber forest products has been established in the 5 micro-regions	At least 2 commercial networks formed with 20 communities affiliated and participating: • A new network composed of aquaculture production communities for the Centla Wetlands and the Terminos Lagoon • A new network bringing together communities engaged in timber and non-timber forest products	Records and reports of commercial networks Meeting minutes Project monitoring records	Community commercial networks are able to compete with large intermediaries, in particular for organic honey marketing
	Number of communities with enhanced production capacity for non-timber forest products and business skills (for those with commercial use) measured by the number of products and the volume of production	Specific baseline data will be gathered for each species 100% of non-organic honey is bought by local intermediaries who control access to local, regional and international markets Technical study for community production *Pimenta dioica officinalis* (Allspice)	18 communities sustainably managing 48 ornamental plant species (e.g., orchids, palms, and *Beaucamea*), 40 species of medicinal plants, 8 wild animal species for commercial production under UMAS (*Agriocharis ocellata, Amazona farinosa, Crax rubra, Crocodylus moreletii, Mazama americana, Odocoileus virginianus, Penelope purpurascens y Tayassu tajacu).* For a more complete list of species see Annex F) Technical study for the commercial production of gum from Chicle (*Manilkara zapota)* and production of *Pimenta dioica officinalis* (Allspice) 600 families will obtain income or food from non-timber forest products 14 communities with enhanced capacities and infrastructure (285 apiaries) producing organic honey	UMAS permits and records Community production and sales records Organic honey certificates Project progress reports	A regional market for non-timber forest products (different from honey) can be established Entities responsible for issuing production permits respect legal timeframes Prices in international markets for organic apiculture remain stable Communities are able to successfully control de effects of africanized bees and to apply apiculture methods to combat parasites that are accepted by organic certifiers Cost of inputs remain stable and co-financing for achieving certification is obtained

			and obtaining certification Each beehive produces 70 kg of honey 100% of honey produced is accepted by organic markets		
	Percentage of grantee communities actively monitoring and controlling invasive alien species in terrestrial and aquatic ecosystems	There is no community programme for monitoring and control of IAS in the project area, however, prior SGP work has help start substituting IAS species in rural development programmes by native species.	50% of SGP grantees actively contribute to monitor and control at least 5 plant species (*Gmelina arborea, Elaeis Guineensis, and Leucaena leucocephala*), and aquatic IAS (*Pterois Volitans, Oreochromis sp, Plecostomus, sp*)	Field survey reports Project evaluation reports	Communities are aware of the negative economic and environmental effects of IAS and receive adequate training and technical support from the relevant authorities to maintain their interest in collaborating in IAS control
Outcome 2 Carbon stocks in community-owned forest lands maintained or increased	Number of hectares of forestlands with avoided land use change Number of hectares of agricultural land without slash and burn Number of hectares of forestlands with increased vegetation cover	20,000 of forests impacted by hurricanes are at risk (fires and land use change) Slash and burn practices are widespread in the project area. Specific baseline data will be gathered at grant approval Specific baseline data will be gathered at the time of grant approval for specific areas	• 20,000 hectares of community-owned forests impacted by hurricanes and that they no longer value as an asset conserved and mitigating 2,800 tCO_2e/year • 71,000 hectares of avoided land-use change mitigate 71,710 tCO_2 e/year • 1,500 hectares under sedentary agriculture without slash-and-burn mitigate 987,375 tCO_2 e/year • Reduced wildfires by 20 hectares annually mitigate 438,833 tCO_2e/year • 15,000 hectares reforested mitigate 3,450 tCO_2 e/year	Aerial photos and satellite images Maps of forest areas conserved Community census and records from agricultural and forestry entities Project progress reports Field survey reports Records from application of Carbon monitoring tools	Forestry, agricultural and agroforestry systems selected enable communities to maintain or enhance vegetation cover and reduce use of fire in agricultural practices Interest of state and federal authorities in charge of agricultural and rural development to mainstream environmental concerns into rural poverty reduction activities and food production Germplasm of native species for reforestation and agriculture is available and pressure on farmers from local authorities to use improved seed varieties will decrease Cofinancing for irrigation systems is obtained Prices in local/state markets are attractive to farmers
	LULUCF monitoring system at the project and country programme level established and applied	There is no prior experience in the region concerning measuring and monitoring carbon stocks related to community activities	At least 50% of SGP grantees implementing project activities on land use, land use change and forest ecosystem conservation will contribute to monitoring Carbon stocks	Document describing the approach to monitoring carbon stocks related to project activities	SGP staff will be trained on Carbon measurement methods and tools Technical assistance on Carbon monitoring will be available in the project area on an on-going basis Communities understand the relevance of Carbon monitoring and

			SGP country programme team and selected National Steering Committee members trained in carbon measurement and applying the knowledge to assess Carbon benefits at the country programme level	List of trained people Carbon monitoring records at the individual grant and portfolio levels	are willing to devote time to it Other national Carbon-related activities, including REDD+ will be supportive of the work of SGP
	Percentage of communities implementing their CC risk preparedness plans in case of hurricanes or other severe weather events	100% of 124 communities with CC risk preparedness plans have put it in effect	100% of communities with a risk management plan actively implemented	Community risk management committees activity reports Country programme monitoring activities	Local authorities are supportive of communities risk preparedness efforts and will promote periodic drills to ensure the plan is implemented
<u>Outcome 3</u> Increased project management capacity among communities and knowledge acquired through project implementation systematized and disseminated	Percentage of successful community projects	85% of SGP-funded projects rated as successful by evaluations (outcomes, outputs and targets met and likelihood of sustainability)	The current 85% rate of successful projects will be maintained or increased during this SGP phase.	Individual grant evaluations	Communities successfully apply training and take ownership of the project for continuity Support networks and NGOs deliver efficiently and effectively manner their responsibilities towards the grantees
	Number of community projects that apply adaptive management	80% of CBOs and NGOs implementing SGP funded projects implement their monitoring and evaluation activities and apply adaptive management	At least 80% of projects show evidence of timely course change or improvements in project delivery based on M&E inputs and training	Project progress reports Project evaluation reports	
	Project information system includes up-to-date and user friendly data	SGP Mexico has a project database and an information system, however, it requires updating and upgrading to meet the requirements of the global SGP and the Mexico programme.	Data organized by ecosystem, micro-region and type of intervention available for 100% of projects approved under GEF -5	Database and project reports	
	Number of community leaders and members with enhanced capacities for sustainable livelihoods and ecosystem management and conservation	700 community leaders trained	At least 4 individuals per project with enhanced knowledge and leadership capacities to work with communities in sustainable ecosystem and resources management as well as in business plan development and marketing of community produced goods and services. Of these at least 1 female leader per project.	Project monitoring records Reports from technical assistance providers	

	Increased number of communities that receive adequate technical assistance for their activities Measured by percentage of communities reporting satisfaction with quality and timeliness of support	45% of communities satisfied with support received	100% of communities report satisfaction with technical assistance and other support received	SGP monitoring reports Participatory evaluations involving communities and partner organizations	Forest enterprises will have enough income to pay for technical services beyond minimum requirements for processing their forest permits
	Number of additional communities made aware of results of SGP supported activities	N/A	20% of beekeepers in the Yucatan Peninsula made aware of the results of SGP-supported organic apiculture activities Knowledge from experiences in sustainable agriculture and agroforestry systematized through participatory evaluations with 17 communities and shared with a similar number of organizations through exchange visits, presentations, manuals and visual materials Results of sustainable forest management activities shared with all Forest ejidos in the South of the States of Quintana Roo and Campeche Experiences of alternative tourism and sustainable fisheries systematized and shared with at least 10 fisher communities in 4 States (Tabasco, Yucatan, Campeche and Quintana Roo)	Project evaluation reports	

Outcome 1 would be achieved through the following outputs:

1.1.1 Sustainable forest management plans designed, approved and under implementation to enable access to forest certification and improved income from sustainable timber products (four *ejido* initiatives)

1.1.2 Community business skills and production capacity programme delivered for sustainable non-timber forest products management and marketing (>18 communities)

1.1.3 Commercial networks formed for certified sustainable timber and non-timber forest products (>20 communities participating)

1.1.4 Sustainable lobster and sea cucumber fisheries programme implemented for fisher community organizations on the Caribbean coast (>4 community initiatives)

1.1.5 Sustainable native species aquaculture programme for lagoon, deltaic and estuarine ecosystems implemented (>10 community initiatives)

1.1.6 Two alternative sustainable tourism circuits in operation to enable conservation of coastal dunes, coastal lagoons, mangroves, wetlands and forests (>20 communities)
1.2.1 System for detection, control and reporting by communities on invasive species such as *Hevea brasiliensis*, *Elaeis guineensis*, *Leucaena sp, Pterois volitans* and *Plecostomus sp* established and implemented in two micro-regions
Outcome 2 would be achieved through the following outputs:
2.1.1 Reforestation (15,000 hectares) and fire prevention (20 hectares of fire avoided) in community-owned lands implemented
2.1.2 Forest re-growth enhanced and maintained in 20,000 hectares of community-owned land impacted by hurricanes and that communities do not currently value as important forest asset
2.1.3 1,500 hectares under sedentary agricultural practices established, without slash-and-burn
2.2.1 Baseline information for LULUCF activities collected, and periodic monitoring of carbon stocks performed
2.3.1 Community risk management plans developed to guide practices for reducing carbon loss and increasing climate resilience at landscape level (>140 plans in Yucatan, Quintana Roo and Campeche), including damage prevention from hurricanes, floods and forest fires
Outcome 3 would be achieved through the following outputs:
3.1.1 Training delivered in each micro-region in accordance with community needs and sustainable development initiatives
3.1.2 Training for community participatory project development, governance, monitoring and evaluation for adaptive management and learning delivered
3.1.3 Establishment of databases by ecosystem, micro-region and type of intervention, and with an effective access system to support decision-making, documentation of project results and dissemination of lessons
3.1.4 Publications on lessons learnt produced and widely disseminated through the SGP website and other media (>2)

PART B.2: INCREMENTAL COST ASSESSMENT

B.2.1 Baseline scenario and alternative strategy

Outcome 1: Community based actions to conserve and sustainably manage forest, wetland and coastal-marine ecosystems and resources in the production landscapes and seascapes of Mexico's South Eastern region

Table 6: Baseline scenario and alternative of output 1

Baseline scenario	**Alternative/incremental strategy**
The focus ecosystems have various degrees of habitat fragmentation and degradation due to unsustainable urban and rural development, infrastructure development and resource use practices. While the country has enacted a number of laws and regulations that create an enabling environment for sustainable land and natural resources use, there are also sectoral policies and laws that result in investments and practices with negative environmental impacts. For example, policies that promote and regulate aquaculture encourage large-scale intensive aquaculture systems that cause environmental damage and have caused the introduction of aquatic invasive alien species with negative effects on biodiversity. While baseline government initiatives have established a large number of protected areas in Mexico's southeast and significant resources have been deployed to cover recurrent costs of PA management, government and donor-supported initiatives to ensure connectivity between these areas fall short of what is required.	Contribute to enhancing community capacity for sustainable resource use planning and management at scale while improving communities' livelihoods. SGP has and will continue to be for the foreseeable future a major contributor to support conservation and sustainable resource use in community forest and non-forest lands in this part of the country. Successful practices will be replicated and up-scaled through improved technical assistance and backstopping. SGP expects to both increase the number of participating communities and upscale successful practices. Where feasible, sustainable livelihood activities will attempt to reach new niche markets such as those for organic products. SGP supported activities will substitute alien invasive species in agro-forestry and aquaculture practices by native species and will help control IAS within their lands.
CONABIO collects and analyses information on invasive alien species in Mexico to detect their introduction, understand their impact and propose actions to eradicate or control such species. In 2005, CONABIO registry included 780 invasive species in the country: 647 plants, 75 fish, 16 mammals, 2 amphibian, 8 reptiles, 30 birds, and 2 invertebrates. Among fish invasive species affecting areas where SGP operates are Tilapia (*Oreochromis sp*.), Plecos (*Hypostomus sp*.) and Lionfish (*Pterois volitans*). Invasive plant species in the project area such as *Gmelina arborea* and *Leucaena leucocephala* are often related to introductions for forestry and agroforestry activities. In 2010 Mexico completed the preparation of a National Strategy for the Prevention, Control and Eradication of Invasive Alien Species. A National Advisory Committee on invasive alien species under the joint coordination of CONABIO, SEMARNAT and CONANP developed the strategy. While this is an important step, the country has yet to develop an implementation plan to achieve the ambitious goals set by the strategy for 2020. In particular, there is no effective mechanism in Southeast Mexico to inform and engage local communities in the implementation of the IAS strategy. There are no	SGP will demonstrate the viability of involving local communities in the effective implementation of the national strategy on IAS in their territories. While over the years some government entities and CSO have promoted poverty alleviation activities utilizing alien species (e.g., aquaculture with Tilapia) SGP's policy from the start has been to implement sustainable livelihood activities with native species only. An important SGP strategy for the control of IAS is to substitute exotic species used in production activities with native species. Other project outputs under Components 1 and 2 will also be supportive of this goal.

investments to support community control IAS.	

Outcome 2: Maintenance of carbon stocks in community-owned lands in Mexico's South Eastern forest ecosystems

Table 7: Baseline scenario and alternative of output 2

Baseline scenario	**Alternative/incremental strategy**
The original area covered by evergreen tropical forest in Mexico was about 17.82 million hectares, some 9% of the national territory. This area has been reduced to 3.16 million hectares of primary forest and 6.31 million hectares of secondary forest. In SGP focus geographic areas, the majority of remaining forests belongs to local communities on whom their conservation and restoration depends. In addition to land use change due to the expansion of the agricultural frontier, frequent hurricanes have contributed to the degradation and loss of forests. Wildfires are frequent in forestlands hit by hurricanes due to the dry matter that remains on the ground and becomes a fire hazard. While government institutions monitor and combat wildfires available staff is insufficient to prevent and control these fires. Forestlands devastated by hurricanes or subsequent wildfires often change their use to pastures because communities do not value the land once timber has been lost. Non-forest lands are also losing carbon stocks as a result of changes in agricultural practices. For example, traditional coffee varieties that require shade are being replaced by "improved" varieties. There are few government sponsored forest restoration programs outside protected areas in this part of the country. More importantly, afforestation and reforestation programs often use invasive alien species such as *Leucaena sp* and *Gmelina arborea*, with negative impacts on ecosystems and biodiversity.	To enhance carbon stocks with due consideration for biodiversity taking the following approaches: (i) Where feasible, restore the system structure to bring it back to its former natural condition. This is a viable approach when part of the existing forest is standing without much alteration. (ii) Within production landscapes, restore the main ecosystem functions by planting native species that may also be of economic interest to local communities, albeit some biodiversity is lost. Often there are invasive alien species in these ecosystems that need to be controlled. During tree planting activities communities will monitor and control as much as possible IAS. The level of degradation of the original vegetation and its regeneration capacity as well as soil conditions will determine the species to be used (a list of species that may be used are in included in Annex xx). SGP will also help develop the capacity of local communities to prevent and control forest fires, in particular in areas hit by hurricanes and around protected areas.
Maya communities have practiced lash-and-burn for millennia. Local farmers are not aware of the negative impacts these activities have on the global environment, nor are they familiar with alternative crop production methods that do not deplete soil nutrients, maintain the vegetation cover and avoid unintended forest fires.	SGP will promote diversified agricultural production systems and agro-ecological and agro-forestry methods that do not use fire or agro-chemicals, and that yield healthy food and help conserve or enhance biomass in agricultural landscapes.

Outcome 3: Knowledge systematized and disseminated, and communities trained in project design, monitoring and evaluation for adaptive management and learning

Table 8: Baseline scenario and alternative of output 3

Baseline scenario	**Alternative/incremental strategy**
There are 103 NGOs partnering with SGP to provide technical assistance to community based organizations in 20 micro-regions. There are also State and Federal Government institutions that provide assistance to communities through their extension system in rural development issues.	SGP will build on the existing programmes of NGOs helping these organizations develop their own capacities in areas where they do not have sufficient capacity or experience. It will also implement a capacity development plan that responds to specific capacity needs identified during prior programme evaluations.

In spite of the above, local NGOs are unable to cover all subjects and areas without GEF assistance. Government entities are mostly focused on traditional rural development fields with little or no consideration for biodiversity and environmental sustainability. There is no expertise available in the region on LULUCF and carbon stocks monitoring, although through REDD+ initiatives such expertise may develop. Research centres based in the project area and State universities are contributing to knowledge management with respect to sustainable development.	SGP will collaborate with REDD+ initiatives in South Eastern Mexico. Building on prior SGP SFM work and sustainable agriculture, SGP will pilot Carbon stock maintenance in community owned lands. SGP's unique focus on community-based conservation and environmental management will build on work done locally by scientific organizations and will use their information and knowledge management platforms to disseminate project experiences in addition to KM work directly aimed at SGP partners and beneficiaries.