Green and Inclusive Recovery in Mexico (GreenMex): Making high-value ecosystems and rural livelihoods more resilient and sustainable in a post COVID-19 scenario.

Part I: Project Information

GEF ID
10717

Project Type
FSP

Type of Trust Fund
GET

CBIT/NGI
CBIT **No**
NGI **No**

Project Title
Green and Inclusive Recovery in Mexico (GreenMex): Making high-value ecosystems and rural livelihoods more resilient and sustainable in a post COVID-19 scenario.

Countries
Mexico

Agency(ies)
FAO

Other Executing Partner(s)
National Forestry Commission of Mexico (CONAFOR)

Executing Partner Type
Government

GEF Focal Area
Biodiversity

Taxonomy

Forest and Landscape Restoration, Forest, Focal Areas, Payment for Ecosystem Services, Financial and Accounting, Biodiversity, Temperate Forests, Biomes, Tropical Dry Forests, Rivers, Tropical Rain Forests, Grasslands, Forestry - Including HCVF and REDD+, Mainstreaming, Certification -National Standards, Agriculture and agrobiodiversity, Productive Landscapes, Protected Areas and Landscapes, Community Based Natural Resource Mngt, Sustainable Livelihoods, Sustainable Land Management, Land Degradation, Income Generating Activities, Sustainable Agriculture, Improved Soil and Water Management Techniques, Ecosystem Approach, Integrated and Cross-sectoral approach, Restoration and Rehabilitation of Degraded Lands, Sustainable Pasture Management, Sustainable Forest, Community-Based Natural Resource Management, Agriculture, Forestry, and Other Land Use, Climate Change Mitigation, Climate Change, Climate resilience, Climate Change Adaptation, Ecosystem-based Adaptation, Influencing models, Indigenous Peoples, Stakeholders, Local Communities, Beneficiaries, Financial intermediaries and market facilitators, Private Sector, Capital providers, SMEs, Public Campaigns, Communications, Behavior change, Awareness Raising, Non-Governmental Organization, Civil Society, Academia, Community Based Organization, Type of Engagement, Learning, Capacity, Knowledge and Research, Knowledge Generation, Capacity Development

Sector
Mixed & Others

Rio Markers
Climate Change Mitigation
Climate Change Mitigation 1

Climate Change Adaptation
Climate Change Adaptation 1

Submission Date
9/28/2020

Expected Implementation Start
8/1/2022

Expected Completion Date
8/1/2027

Duration
60In Months

Agency Fee($)
952,170.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
BD-1-1	Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors	GET	8,829,944.00	42,742,484.00
BD-2-7	Address direct drivers to protect habitats and species and improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate	GET	1,749,723.00	7,621,048.00
		Total Project Cost($)	**10,579,667.00**	**50,363,532.00**

B. Project description summary

Project Objective

To mainstream biodiversity conservation, integrated landscape management and ecosystem connectivity into social policies and programmes in Mexico.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 1 Green Recovery: Setting up the Enabling Environment	Technical Assistance	**Outcome 1.1:** Regulatory framework of CONAFOR?s *Support Programme for Sustainable Forest Development*[1] and institutional strategies strengthened and harmonized for the generation of multiple environmental and socioeconomic benefits.	**1.1.1**: Key biodiversity (BD) and integrated landscape management criteria are incorporated into the CONAFOR?s *Support Programme for Sustainable Forest Development.* **1.1.2**: (Three) Territorial institutional strategies strengthened and harmonized to promote inclusive economic recovery with a BD-friendly approach. **1.1.3:** Impact assessment of the innovative practices applied by the Project - to be upscaled by the entire CONAFOR?s *Support Programme for Sustainable Forest Development*[1].	GET	1,944,199.00	531,500.00
		Project indicator 1: *Percentage of CONAFOR planning instruments that include environmentally friendly territorial arrangements**[2]**.* *Target: 100 % of CONAFOR planning instruments.*	1.2.1 Bioforestry Corridors (BFC) that incorporate the strengthened strategy of CONAFOR?s territorial management[1]. *Target: 18 BFCs*			
		Project indicator 2: Percentage of project bioforestry corridors (BFCs) that implement the biodiversity and connectivity strategies	**1.2.2:** ?Green Recovery? Training Programme, addressing Nature-Based Solutions[2], governance and social economy. *Target audience: government officials, beneficiaries of CONAFOR programmes and relevant stakeholders*[3]			

[1] The assessment will apply a Nature-Based Solution (NBS) approach to measure the societal and ecosystem impacts of the project field interventions. The aim is to inform policy design and support the upscaling of NBS at programme level. Therefore, the project will integrate the missing pieces of the NBS approach and will support biodiversity mainstreaming in the Government?s signature programme.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 2. Green Recovery: Integrated landscape management, inclusive conservation and ecosystem connectivity	Technical Assistance	**Outcome 2.1.** Nature-based solutions (NBS)[1] applied in prioritized forest and agroforestry landscapes, contributing to ecosystem connectivity, generating multiple environmental and socioeconomic benefits. *GEF Core Indicator 4: Area of landscapes under improved practices (excluding protected areas)* *Target: 4,867,049 ha:* *- 1,568,620 ha in Durango;* *- 389,702 ha in* *Lacandon Jungle;* *- 2,908,727 ha in Balsas and South Pacific* *GEF Core Indicator 1.1: Newly created terrestrial protected areas.*	**2.1.1** NBS and ecosystem connectivity strategy, developed and implemented in 3 priority landscapes. **2.1.2** Investments in Nature-Based Solutions and productive diversification are promoted and implemented in selected landscapes, incorporating native species of sociocultural importance and with economic potential[1]. **2.1.3** New Voluntary Conservation Areas (VCAs) and Other effective area-based conservation measures (OECMs) have been formally accredited or certified by CONANP and/or CONAFOR in the prioritized landscapes. **2.1.4** Community-based monitoring system for NBS strengthened [2]. [1] FAO will ensure close coordination with the following GEF project: *Securing the Future of Global Agriculture in the Face of Climate Change by Conserving the Genetic Diversity of the Traditional Agro-ecosystems of Mexico* (GEF ID 9330), to avoid duplication of efforts. [2] The ?BioComuni? protocol will be strengthened through the project. ?BioComuni? is a biodiversity monitoring protocol run by the country's *ejidos* and communities and supported by the National Forestry Commission (CONAFOR), the Mexican Fund for Nature Conservation and the United States Forest Service. Its ultimate aim is to strengthen the capacity of *ejidatarios* and *comuneros* to take action to improve the management of their natural resources.	GET	4,066,202.00	33,039,454.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 3. Green Recovery: Market instruments and sustainable ventures	Investment	**Outcome 3.1** Inclusive and sustainable markets for high-value BD products, identified and strengthened. *Project indicator 3: At least 7 inclusive business models implemented/landscape.* *Project indicator 4: At least 10 social economy organizations participating in inclusive biodiversity-positive[1] value chains (at least two women?s organizations).* *Project indicator 5: 50 % of women beneficiaries and 30 % of youth beneficiaries participate in green and inclusive chains.* [1] Linked to NBS.	**3.1.1** Social economy business models[1] for Biodiversity and NBS products implemented. **3.1.2** (Number of) Social Economy Organizations[2] with improved access to green and inclusive value chains. **3.1.3** Institutional innovations to support sustainable market linkages implemented - including certification of BD products and alternative verification and participatory guarantee systems [1] ?Social economy? is a term that refers to collective initiatives that have as main objective the generation of collective well-being through economic profitability. It is made up of social organizations endowed with legal personality with an internal organization. The social economy approach seeks to support the economic autonomy of social organizations, while giving them control on decision-making and the capacity to organize their activities through democratic governing bodies. According to the Law of Social and Solidarity Economy of Mexico, six types of social organization are accredited while the catalogue of organizations of the social sector accredits 16 associative figures (https://www.gob.mx/cms/uploads/attachment/file/473301/Cat_logo_de_OSSE_2019.pdf) [2] This output will seek to increase the participation of women-, young people- and indigenous people-led social economy organizations.	GET	3,386,308.00	13,532,244.00
		Outcome 3.2 Improved and sustained	**3.2.1** Financing strategy that promotes landscape restoration and the creation of			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 4 Communication, knowledge management and M&E	Technical Assistance	**Outcome 4.1** Monitoring and evaluation under a results-based approach, good practices and lessons learned, systematized and disseminated.	**4.1.1** Project M&E System. **4.2.2**. Mid-term review and terminal evaluation. **4.1.3** Geospatial platform and digital learning community report multiple benefits and support decision-making. **4.1.4** Knowledge management, cooperation and horizontal management networks created[1] for NBS implementation and landscape restoration **4.1.5**: Communication strategy for the positioning and dissemination of the environmental benefits derived from the project and CONAFOR?s *Support Programme for Sustainable Forest Development.* **4.1.6** Best practices and lessons learned systematized and disseminated.	GET	679,164.00	100,000.00

[1] It will involve State Forestry Councils (CEF), Macro regional Councils, *ejidos*, local research and academic institutions.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
				Sub Total ($)	**10,075,873.00**	**47,203,198.00**
Project Management Cost (PMC)						
	GET		503,794.00	3,160,334.00		
	Sub Total($)		**503,794.00**	**3,160,334.00**		
	Total Project Cost($)		**10,579,667.00**	**50,363,532.00**		

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	National Forestry Commission (CONAFOR)	In-kind	Recurrent expenditures	3,000,000.00
Recipient Country Government	National Forestry Commission (CONAFOR)	Public Investment	Investment mobilized	44,993,198.00
Recipient Country Government	National Commission of Protected Natural Areas (CONANP)	In-kind	Recurrent expenditures	1,500,000.00
Recipient Country Government	Ministry of Environment and Natural Resources (SEMARNAT)	In-kind	Recurrent expenditures	250,000.00
GEF Agency	FAO	In-kind	Recurrent expenditures	620,334.00
			Total Co-Financing($)	**50,363,532.00**

Describe how any "Investment Mobilized" was identified

CONAFOR will provide co-financing through public investment, as follows: Component 1: Community Forest Management and Value Chains; Component 2: Commercial Forest Plantations and Agroforestry Systems; Component 3: Forest Restoration of Micro-basins and Strategic Regions; and Component 4: Environmental Services. This co-financing estimate is subject to fiscal budget availability.

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
FAO	GET	Mexico	Biodiversity	BD STAR Allocation	10,579,667	952,170	11,531,837.00
				Total Grant Resources($)	**10,579,667.00**	**952,170.00**	**11,531,837.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)

300,000

PPG Agency Fee ($)

27,000

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
FAO	GET	Mexico	Biodiversity	BD STAR Allocation	300,000	27,000	**327,000.00**
				Total Project Costs($)	**300,000.00**	**27,000.00**	**327,000.00**

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management for conservation and sustainable use

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
100,000.00	100,000.00	0.00	0.00

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
100,000.00	100,000.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Akula National Park Areas Voluntarily Destined for Conservation (ADVC)	**125689**	**Select**Protected Landscape/Seascape	100,000.00	100,000.00		

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)

Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
133325.00	151000.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
58,115.00	73,000.00		

Indicator 3.2 Area of Forest and Forest Land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
75,210.00	78,000.00		

Indicator 3.3 Area of natural grass and shrublands restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
3813160.00	4867049.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
3,813,160.00	4,867,049.00		

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	508546	3372129	0	0
Expected metric tons of CO?e (indirect)	1429077	9597597	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	508,546	3,372,129		

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (indirect)	1,429,077	9,597,597		
Anticipated start year of accounting		2022		
Duration of accounting	20	20		

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)				
Expected metric tons of CO?e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	186,161	47,234		
Male	184,717	67,766		
Total	370878	115000	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

All GEF core indicators have been adjusted (in relation to the PIF) based on the "Study on ecological connectivity in the territories of the GreenMex project", conducted by the Institute for Sustainable Development in Mesoamerica (IDESMAC). - GEF Core indicator 1: Terrestrial protected areas created. The IICA study (2012) study was used as a basis for calculating the potential and feasibility of providing Environmental Services, with data from the MADMex platform (CONABIO, 2018). This contains a layer of information on land cover at 10 m detail. The Land Use and Vegetation Series VII (INEGI, 2018,) was also used to measure forest cover at the level of each of the Agricultural Units mapped in the National Agricultural Registry (RAN) (2017). Multi-criteria analysis was used to integrate a synthesis map of Areas with potential for establishing new terrestrial protected areas at Agricultural Unit level. This served as the basis for defining the Bioforest Corridors (BFCs) from the viewpoint of structural connectivity. These analyses were complemented by functional connectivity analyses based on the estimated habitat suitability of two key mammal and two bird species in each macroregion. The BFCs contain clusters of Ejidos and Communities with Very High and High potential for establishing Type 1 Nature-Based Solutions (NBSs), including Voluntary Conservation Areas (VCAs) and (OECMs). In order to obtain a certificate from the National Commission of Natural Protected Areas (CONANP) and other governmental instruments and programmes, it is necessary to obtain, at the very least, updated agricultural documentation. Territorial planning was therefore based only on information from the RAN. The target set allows the project to contribute a quarter of the area needed to achieve Aichi Target 11 in the total area of the three macroregions and also covers about 10 percent of the Areas with Very High Potential for the creation of new terrestrial protected areas and other Active Conservation mechanisms. - GEF Core indicator 3: Area of land restored Mixed quantitative-qualitative methodology with an experimental approach was applied due to marked territorial and scale differences between the macroregions. The quantitative indicators used for identification were: degree of soil erosion (based on data from INEGI, 2014), pollination function (based on data from CONABIO, 2018), forest integrity (based on data from GFW, 2020) and forest carbon sequestration (based on data from GFW, 2021). Two summary maps were compiled using the analytical maps: agricultural degradation and forest degradation. The Bioforestry Corridors proposed for the project are territories with landscape mosaic arrangements that are intended to fulfil the project?s three socioenvironmental strategies. Conservation in Community Areas under different schemes (including VCAs), restoration of degraded forests and forest landscapes, and restoration of degraded agricultural areas. Characterization workshops were held in each of the project's macroregions to define the proposed Type 2 NBSs, considering qualitative aspects under the mixed methodology used. The venues were as follows. Tuxtla Guti?rrez, Chiapas; Chilpancingo, Guerrero and; Durango, Durango. This participatory research tool considered the collective opinions of local experts from CONAFOR, CONANP,

State Governments, academia and technicians from social organizations with extensive and recognized knowledge and experience of the territory. During the workshops, Type 2 NBSs with feasibility and potential to be implemented in each macroregion were analysed. Social mapping exercises were then used to capture these NBSs based on agricultural and forest degradation maps. The surface target of the degraded agricultural land restored was calculated by multiplying the number of beneficiaries of the Sembrando Vida program by the 2.5 ha allocated by them for its restoration through agroforestry. In terms of forest restoration, during the period from 2001 to 2020 it is estimated that a total of -151.6 thousand hectares of forests and woodlands have been lost in the Bioforest Corridors established for the project (GFW, 2021). To mitigate this deficit, a forest restoration target of 78 000 hectares is proposed, i.e. 51.6 percent of the transformed area. The surface target of the forest restored lands is the area of forest plantations and reforestation for the restauration of hydrological basins included in the programs managed by CONAFOR. The project will therefore step-up actions to make up for the land use change gap in the macroregions. - GEF Core indicator 4: Area of landscapes under improved practices including sustainable management of forest landscapes. BFCs are landscapes for socioenvironmental planning purposes and have strong territorial, ecological and biocultural roots: firstly, they are diverse areas with their own integrity determined by functional networks of socioenvironmental processes; secondly, they come with the system of PNAs present in each macroregion, which sometimes operate more as conservation islands than socioenvironmental cooperation areas; thirdly, the BFCs are a way to recognize local knowledge in areas that are often in the hands of the original peoples and communities, who are responsible for the fact that these landscapes still retain many of their environmental functions and provide ecosystem services. The total area of the three project implementation macroregions is just over 12.4 million hectares in seven Mexican states. The total area of the 18 bioforestry corridors identified, which connect 81 PNAs (25 are federal, 21 state and 4 municipal) and 31 VCAs, is 4.86 million hectares. These corridors help ensure the current functionality of forest landscapes in the three macroregions, as they represent, together with the area of the PNAs (1.48 million hectares), 50.8 percent of the total area of the three macroregions. - GEF Core Indicator 6: Greenhouse gas emissions mitigated (metric tons of CO_2e). This was prepared in accordance with the Intergovernmental Panel on Climate Change (IPCC) 2006 Guidelines, Volume 4, Agriculture, Forestry and Other Land Use (AFOLU), using the EX-ACT (Ex-Ante Carbon Balance) tool developed by FAO and the World Bank to estimate Greenhouse Gases Mitigated in their projects, expressed in carbon dioxide (CO_2) equivalents, that were emitted or sequestered due to project implementation as compared to a business-as-usual scenario. It is based on the stock change method, assuming default Emission Factors (TIER 1). The assessment was carried out per landscape according to its climatic and soil conditions, the IPCC land use categories for the baseline scenario (2020) and the land use change scenarios with and without the project, considering an implementation period of five years (2020 ?2025) and a capitalization period of 15 years (2025?2040). The calculation of carbon mitigation in the three macro-regions

considers three main factors: i) the forests and woodlands of the humid tropical regions of the South: Balsas-South Pacific and Lacandon Jungle. have a higher forest carbon sequestration capacity; ii) the surface of the total project implementation area increased by 49 percent; iii) the project's protection and restoration targets increased by 56.5 percent and 13.25 percent respectively. The estimation of the GHG emissions mitigated by the project will be carried out through a comparative analysis of the emissions/removals occurring in scenarios with and without the project (business-as-usual). Such estimates will be made following the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines, Volume 4, Agriculture, Forestry and Other Land Use (AFOLU). The estimates will be based on the activity data method multiplied by the emission factor, using the most appropriate and specific information available for the country (TIER 2), which has been generated through the National Monitoring, Reporting, and Verification System (SNMRV) of CONAFOR; the EX-ACT Tool will be used to estimate GHG emissions mitigated as a result of the implementation of sustainable management, protection, and forest restoration activities within the regions defined for the implementation of the project. The estimation of GHG emissions mitigated by the project will be made at the level of the project regions, considering their respective ecological, climatic, and soil conditions. Note: The ex-ante estimate of this indicator will be updated, under the approach described above, within 6 (six) months following the start of project implementation. - GEF Core indicator 11: Number of direct beneficiaries disaggregated by gender. The people who would be directly involved in the implementation of type 1 and 2 NBSs were considered. For the application of type 1 NBSs and the fulfilment of the Terrestrial protected areas target, a direct beneficiary population of 70 200 people (35 451 women and 34 749 men) are considered. An average of 450 inhabitants per Agricultural Unit was estimated for this calculation. The gender distribution is based on the average of the three regions, where 50.5 percent of the population is made up of women and 49.5 percent of men. For Type 2 NBSs targeted at forest restoration, a population of 15 600 (4 103 women and 11 497 men) was directly benefited by the project. These numbers were estimated based on the assumption that each producer will contribute at least five hectares of forest restoration to the project. The distribution by gender was calculated considering that the national average of women who have agricultural tenure and therefore their own plot of land is 26.3 percent. For the application of Type 2 NBSs targeted at agricultural restoration, a population of 29 200 (7 680 women and 21 520 men) is directly benefited by the project; this number was calculated based on the assumption that each producer will contribute at least 2.5 hectares of agricultural restoration to the project. The gender distribution was calculated considering the national average of women with a land title and therefore their own plot of land, which amounts to 26.3 percent. The project will contribute to the following Aichi Biodiversity Targets: 1, 7, 15 and 19. It is also fully aligned with the Sustainable Development Goals, in particular SDG 2, SDG 8, SDG 13 and SDG 15.

Part II. Project Justification

1a. Project Description

1.a Project Description

1) Global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

1) Mexico is a ?mega-biodiverse? country, the fourth most biodiverse in the world, and is home to an estimated 12% of the world?s species and a range of climates, topographies, ecosystems and vegetation types[1][1]. However, the country is facing severe environmental degradation, which is resulting in the fragmentation of globally important ecosystems and habitats, as well as a decline in productivity[2][2]. The main drivers of pressure on biodiversity are ecosystem degradation and loss, overexploitation of species and resources, introduction of invasive alien species, potential adverse effects of using genetically modified organisms, pollution, climate change, and land use and urban development[3][3].

2) Highly biodiverse and soil rich areas often adjacent to poor areas where population depend on natural resources for their livelihoods and who often compete over resources with industries and large-scale agricultural production. The areas that are richest in biodiversity converge with the greatest regions of poverty and marginalization, many of which are areas with significant indigenous presence. Biodiversity loss not only impacts the physical environment, but social welfare and economic development, particularly in the most vulnerable communities. The role of biodiversity as a cornerstone of livelihoods is very important, especially in marginalized populations[4][4].

3) **Drivers of environmental degradation:** The factor with the greatest impact on the loss of ecosystems and biodiversity has been the deforestation of natural ecosystems for food production, with the consequent fragmentation and degradation of ecosystems[5][5]. Land use change is mainly due to the

establishment of agricultural activities; livestock farming generates pressure on ecosystems, as it is practised in about 56 percent of the total area of Mexico, resulting in land use change for the establishment of pastures or forest degradation due to free grazing. The extensive agriculture is one of the main drivers of deforestation and ecosystem fragmentation and degradation. Indeed, it is a sector that demands important resources such as: water (76% of the water concession), nutrients (5 million tons of fertilizers per year), soil (54.9% of the territory - exchange rate of 0.15% per year) and energy (180.26 PJ, as of 2016), as well as contributing 12% of GHG emissions at the national level, which is added to another 4.9% from land use, land-use change, and forestry (LULUCF) activities. Ecosystems are also subject to other natural factors that can impair them, such as fires, forest pests, droughts, invasive species, and extreme weather events.[6][6]

4) Other natural resources such as water and soil are also affected. The general indicators of water quality in the country show that more than 32 percent of sites subject to monitoring are affected by some degree of pollution[7][7]. Mexico is among the top three countries in the world with the highest intensity of pesticide use, which is linked to a consequent loss of water quality due to pesticide pollution[8][8],[9][9]. In terms of soil degradation, 44.9 percent of the country?s soils are reported to be affected by some degradation process: chemical degradation occupies the first place (17.8 percent of national territory), followed by water erosion (11.9 percent), wind erosion (9.5 percent) and, finally, physical degradation (5.7 percent)[10][10].

5) **Impact of Covid-19 in Mexico:** The Covid-19 pandemic has had a devastating impact on the Mexican economy, with GDP initially estimated to have contracted by 17.3 percent since the start of the pandemic. The IMF estimates that by September 2021 GDP had contracted by 8.6 percent compared to 2020 levels as a result of the pandemic but expects growth of 6.2 percent by 2022. Worsening poverty, also affecting people who are already vulnerable, is likely as a result of the economic impact of Covid-19. The pandemic has had a disproportionate impact on poor and marginalized groups who tend to have less access to health services and whose economic income depends on daily work or trade.[11][11]

Threats and root causes

6) Certain social, economic and political factors that are considered root factors, in turn lead to other knock-on or direct factors such as changes in vegetation cover for food production (habitat loss), overexploitation of biodiversity components and the introduction of invasive alien species. Therefore,

biodiversity loss in Mexico is attributed to two main causes: i) habitat loss and fragmentation; and ii) unsustainable use of natural resources or overexploitation. The root factors include population growth, which causes a greater demand for resources, the expansion of the agricultural frontier and the growth of cities or urbanization. The latter effect occurs because concentrating the population exerts strong pressure on the goods and services provided by the ecosystems on which they depend.

7) Biodiversity loss in Mexico is attributed to two major threats and root causes: i) habitat loss and fragmentation, particularly in marginalized rural areas adjacent to globally significant natural areas; and ii) unsustainable natural resources use /overexploitation due to substitution of monocultures and commercial agricultural plantations and unsustainable practices in productive landscapes; overexploitation of wildlife is due to unsustainable use for consumption and trade, as well as illegal trafficking of products and specimens at local, national and international levels[12][12]. In addition, adequate incentives are missing.

Historically speaking, natural resources have undergone a deterioration in Mexico. Deforestation rates have been assessed as very severe in the 1970s to 2000s and vegetation was highly fragmented; today the trend of deterioration continues despite a decrease in the rate of deforestation. During the period 2001-2018, average annual gross deforestation was 212 070 ha, of which 87 884 ha were in warm-humid forests, 57 733 ha in warm-dry forests and 32 840 ha per year on average in temperate sierras[13][13].

i) Habitat loss and fragmentation

8) Regarding habitat destruction and fragmentation as the main cause of biodiversity loss in Mexico, the original area covered by the country?s natural ecosystems had been cut by 50 percent by 2011. Moreover, the country?s forest and jungle cover are now just 32 percent of its original extent, with the greatest losses located in the tropics[14][14]. Habitat loss in Mexico, although not as fast as in previous decades, is still high, with an annual deforestation rate of 0.19 percent according to the latest FAO Global Forest Resources Assessment Report. This represents a loss of 125 000 hectares per year for the period 2010?2020.[15][15]

9) The causes of habitat loss with the greatest impact in terms of area are highly profitable agricultural activities, such as monocultures (avocado, oil palm, soybean), as well as livestock farming[16][16]. Ecosystems transformed for cattle production are the most widespread form of land use throughout the territory and are the main factor associated with land use change in the country[17][17].

10) More accessible and productive ecosystems with better soils and more gradual slopes (e.g., forests, grasslands and, to a lesser extent, shrublands and temperate forests) are transformed into mainly agricultural production areas. While ecosystem transformation is not complete, from a functional point of view, fragmentation leads to a deterioration of ecosystem composition, structure or function (fragmented landscape), affecting diversity of species and the ecosystem services they provide [18][18].

11) In terms of forest ecosystems, around 70.9% of Mexico is covered by some type of forest vegetation and is inhabited by 10,870,927 people in 23,000 *ejidos*[19][19], 15,584 farming communities and indigenous communities (comprising a population of 3,427,373), most of them in highly marginalized conditions[20][20]. At the same time, Mexican forest ecosystems present different dynamics of deforestation and degradation processes. The main causes of deforestation in Mexico are attributed to the conversion of natural areas into agricultural land, the expansion of urban and industrial development, illegal logging and wildland fires.

12) Ecosystem fragmentation reaches severe levels, especially in the case of vegetation in the humid tropics, where only 58 percent of rainforests extend for more than 80 km[21][21] . Several studies have shown that areas below this threshold experience irreversible losses of biological diversity.

13) Mexican forest ecosystems display different deforestation and degradation process dynamics. The main causes of deforestation in Mexico are attributed to the conversion of natural areas into agricultural land, the expansion of urban and industrial development, illegal logging and forest fires[22][22].

14) Pollinators, seed dispersers and the various organisms that inhabit ecosystems and agro-ecosystems are also affected by habitat fragmentation, especially by land use changes for intensive agriculture (loss of pollinator habitat) and logging. Tropical forests are the main beneficiaries of pollination, with insects pollinating up to 95 percent of canopy trees, bats pollinating 20-25 percent of subcanopy and understory plants, and insects pollinating a further 50 percent. In agricultural ecosystems, pollinators such as bees, birds and bats influence agricultural production in Mexico.

Approximately 171 species cultivated in Mexico bear fruit or seeds that are eaten by humans, and more than 80 percent of these crops depend to some degree on pollinators for efficient production[23][23].

ii) Unsustainable use of natural resources/overexploitation

15) Natural ecosystems and agro-ecosystems are affected by intensive agriculture as well as extensive livestock farming leading to deforestation and forest fires. Land degradation in Mexico affects more than 80 million hectares (45 percent of the national territory) while for the period 2015-2020, 127 800 hectares have been deforested[24][24]. Unsustainable land management practices can be identified in many production systems applied in the country (forestry, agriculture and livestock), and these are responsible for critical degradation. Forest degradation is caused by overgrazing in forest areas, forest fires, illegal or excessive logging, inefficient forest management, and increased slash-and-burn agriculture[25][25].

16) Traditionally, Mexican agriculture has been centred around the *milpa*, a system for intercropping vegetables such as maize, beans, squash and chillies. The *milpa* is a system where different species coexist, sharing resources such as water, light, soil and even ecological interactions, such as nitrogen fixation. In recent years, however, the crops that have grown most in terms of production area in Mexico are export-oriented products (blackberries, strawberries, vegetables, avocados and agaves) and pastureland crops (grasses and oats), as well as soybeans and oats, often in monocultures and with unregulated use of chemical fertilizers and pesticides.[26][26]

17) Natural resources have been used unsustainably, as in the case of water resources, the national wastewater treatment capacity is inadequate, covering only 63 percent of the wastewater generated, exacerbated by the time that treatment equipment is inoperative. Water pollution is a proven risk to ecosystems, human health and productive activities.

18) A lack of historical biomass data and the country?s limited monitoring capacity makes it difficult to estimate forest degradation in Mexico, especially on a national scale. However, severely degraded areas can be identified on a local scale[27][27]. Degradation is caused by a series of practices that can lead to overexploitation, such as selective logging, firewood collection or grazing[28][28].

iii) Missing environmental criteria in policies and programs

19) Social programs address poverty-alleviation without considering the environmental axis as a solution for poverty**.** Currently, the Government of Mexico (GoM) policy has proposed a two-way strategy for poverty reduction: unconditional cash transfers and incentives for agroforestry systems. Social protection programmes may have resulted in agricultural production increases, but typically do not include any specific BD standards to ensure environmental sustainability and ecosystem connectivity, beyond legal prohibitions forbidding government agricultural subsidies in certain forest areas. In addition, the implementation of these standards can generate enhance linkages to niche, and more profitable, markets.

Selection criteria

20) The project will be implemented in three high-biodiversity landscapes or macroregions where CONAFOR and CONANP support programme governmental actions converge. The project intervention landscapes were determined through a geospatial analysis in two phases: 1) Definition of potential regions of interest, also called *GreenMex macroregions* (14 polygons), and 2) Definition of intervention landscapes (macroregions) from that set, within which bioforestry corridors will be implemented.

i. Definition of potential macroregions of high biodiversity (14 areas)

21) The definition of the potential macroregions of interest for the project involved a multi-criteria analysis with six variables: (i) the presence of hydrological basins with potential water reserves basins (WWF-CONAGUA-CONANP, 2011); (ii) Biodiversity conservation priority sites (CONABIO, 2007); (iii) the existence of Protected Natural Areas (federal, state and municipal); (iv) the presence of areas with payment for environmental services (CONAFOR, 2018); (v) the proportion of Priority Restoration Sites (CONABIO, 2016); and (vi) the degree of forest fragmentation in Mexico (INIFAP, 2008). 14 high-biodiversity value areas that integrate the five variables and three selection criteria were identified. Their importance is also related to ecosystem connectivity and habitat protection. (See Annex E).

ii. Definition of macroregions of intervention (three macroregions)

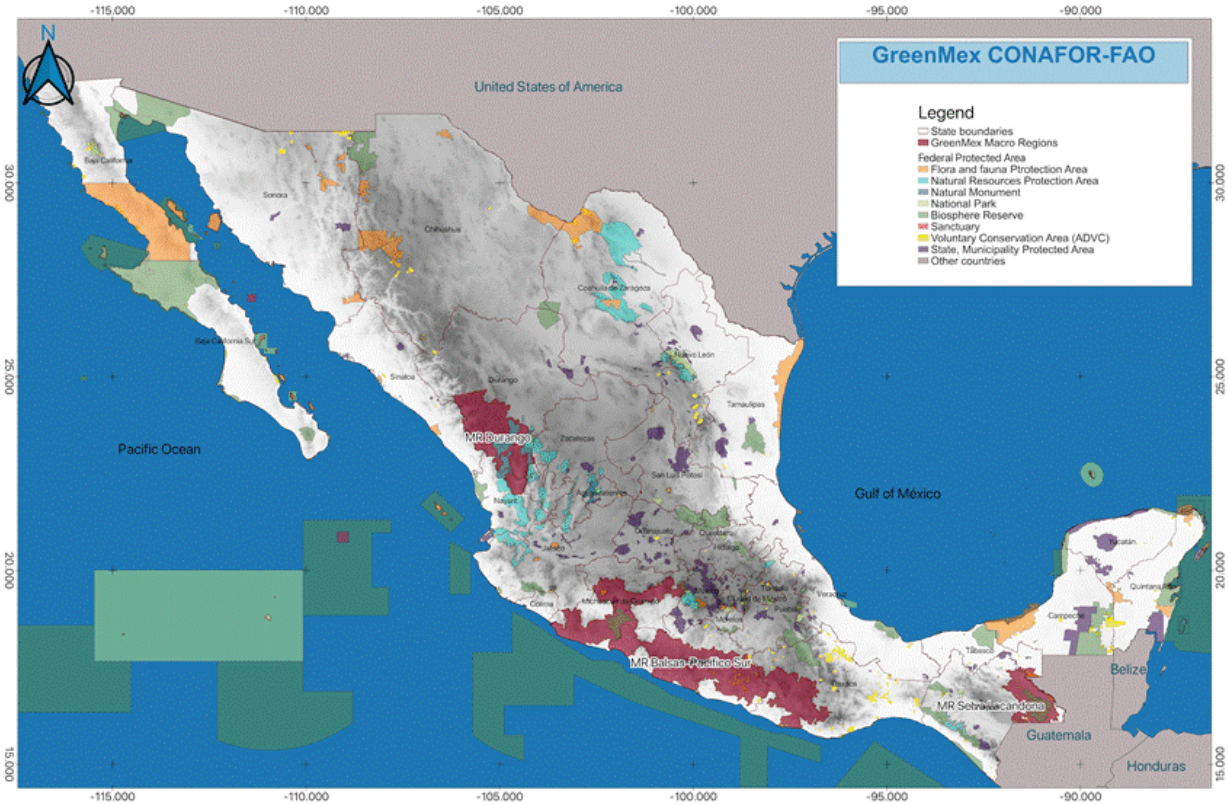
22) Three out of the 14 macroregions identified were selected for the implementation of the GreenMex project (Map 1): Durango macroregion, Balsas-South Pacific macroregion and the Lacandon Jungle macroregion.

23) The definition of these three high-biodiversity macroregions for project intervention considered five criteria: (i) the location of the macroregions in relation to the Climate Corridors for Biodiversity Conservation (CONANP-CONABIO-GEF Resilience, 2019); (ii) the presence of protected natural areas (PNAs), Voluntary Conservation Areas (VCAs; CONANP, 2019) and/or Areas Eligible for Conservation in Mexico (CONANP-CONABIO, 2014); iii) the location of the macroregions in relation to the hydrological basins of Mexico determined by a hydrological basin water flow simulator (SIATL; CONAGUA-INEGI 2019); iv) overlap between the macroregions and CONFOR?s medium, high and very high priority areas (CONAFOR-NFP, 2021); v) location of the macroregions in relation to the priority areas for the conservation of the Mesophyll Forest priority conservation areas in Mexico (CONABIO, 2016).

24) It was also decided that the macroregions should preferably not overlap with areas covered by other GEF projects[29][29]. If there were any overlaps, synergies should be sought. This proposal is compatible with the administrative management units at local level (location of CONAFOR?s Forestry Development Promotion offices). A significant proportion of the areas earmarked for the project lies in municipalities with high and very high levels of marginalization and municipalities with indigenous populations (24.09 percent of the total population of the three macroregions).

25) The three selected macroregions include 25 federal Protected Natural Areas (total: 1 412 647 hectares) and incorporate 3 747 659 hectares of Key Biodiversity Areas (KBAs).

26) Map 1 illustrates the three high-biodiversity macroregions selected for potential intervention by the GreenMex project, where bioforestry corridors will be established by direct intervention. Tables 1 and 2 show the potential intervention areas and their land use.



Map 1. High biodiversity macroregions (landscapes) selected for project implementation: Durango, Lacandon Jungle and Balsas Basin.
Source: FAO

Table 1: Areas of the project's macroregions, including PNAs, VCAs and KBAs

Landscape or Macroregion	Landscape area (ha)	Federal Protected Natural Areas (PNAs)	Protected area in Federal PNA (ha)	Municipal, State and private Protected Areas	Protected area in Municipal, State or Private Areas (ha)	Voluntary Conservation Areas (VCAs)	Protected area in VCAs (ha)	Key Biodiversity Areas (KBAs) overlapping with the Landscapes	Landscape area in KBAs (ha)
Durango	3 080 742.84	2	618 275	3	962	0	0	11	640 589

Balsas-South Pacific	8 079 606.21	14	333 312	16	36 675	23	51 062	21	2 014 206
Lacandon Jungle	1 295 668.60	9	461 060	0	0	4	3 689	8	1 092 864
Total	**12 456 017.66**	25	1 412 647	22	37 637	27	54 751	40	3 747 659

Sources: FAO, keybiodiversityareas.org and SEMARNAT

Table 2: Land Use and Vegetation in the three macroregions selected for the Greenmex Project

Land Use and Vegetation	Durango Ha (%)	Lacandon Jungle Ha	Balsas-South Pacific Ha
Primary vegetation (natural cover)	1 825 745 (59.26 %)	558 758.69 (43.12 %)	2 133 178.87 (26.4 %)
Secondary vegetation	1 062 572 (34.49 %)	322 080.72 (24.85 %)	3 764 591.27 (46.59 %)
Agricultural use	188 398.22 (6.11 %)	396 504.71 (30.6 %)	2 080 616 (25.75 %)
Water bodies	1 129.56 (0.03 %)	12 081.65 (0.93 %)	43 794.49 (0.54 %)
Urban areas	1 586.15 (0.05 %)	4 737.44 (0.36 %)	47 755.65 (0.59 %)
Areas with no apparent vegetation	1 311.6 (0.04 %)	25.23 (0.00 %)	5,527.76 (0.06 %)
Other coverages	0	1480.51 (0.00 %)	4141.77 (0.05 %)

Sources: FAO, INEGI (Land use coverage)

iii. Proposed Bioforestry Forridors

27) Once the three potential intervention macroregions had been defined, a territorial analysis was carried out within each one in order to define functional biological corridors, known as Bioforestry corridors. These areas are landscapes that support socio-environmental planning and were structured around territorial, ecological and biocultural elements. In terms of territory, these take the form of areas containing intact networks of socio-environmental processes; in terms of ecology, these corridors are linked to the network of PNAs in each region ? and in terms of biocultural aspects, the aim is to accredit local knowledge, mainly in the hands of indigenous peoples and communities. The project includes 22 Bioforestry corridors: five in the Durango Region, eight in the Lacandon Jungle and nine in Balsas-South Pacific. The total area included in these 22 Corridors is 4.9 million hectares, and this is where the project?s actions and activities will be concentrated. Maps showing the proposed corridors for each macroregion are shown in Annex E.

Description of project sites: environmental problems, root causes and baseline scenario

Durango Landscape or macroregion

28) The boundary of the Durango macroregion (Maps 2) is defined by the coordinates of 21.94237016 and 24.67743034 degrees latitude, and -106.205899 and -104.0800716 degrees longitude (decimal degrees, EPSG 4326), in the southern portion of the western Sierra Madre Occidental mountain range; it covers an area of 3 080 742.84 hectares distributed within eight municipalities of the States of Durango (5: Durango, Mezquital, Nombre de Dios, Pueblo Nuevo and Suchil) and Nayarit (3? Acaponeta, Huajicori and Del Nayar).

29) The total population within the Durango Macroregion is 162 671 inhabitants living in 1 534 settlements[30][30]. The male population amounts to 80 614 people (49.55 percent) and the female population 82 056 people (50.45 percent). The indigenous population includes 63 630 people, 39.11 percent of the total population, with Tepehuano, Wix?rika (Huichol), Mexicanero and Coras ethnic groups represented. The population of African descent amounts to 1 120 people (0.06 percent of the population). 28.35 percent of the population of this region live in settlements classified as very highly marginalized and 15.74 percent of the population lives in settlements classified as highly marginalized[31][31].

30) 71.48 percent of the area of the Durango macroregion (2 202 338.69 hectares) is under a system of social or collective ownership (218 farming settlements in total, 185 *Ejidos* and 33 Communities); of this total 1 142 906.19 ha (51.89 percent) belong to *Ejidos*, and 1 059 432.51 ha (48.10 percent) belong to Communities. Data from the Mexican Civil Council for Sustainable Forestry (CCMSS) indicate that, of this social property universe, 211 farming settlements are managed by 24

158 people, including *ejido* members, land co-owners, owners and settlers, have a Forest Management Plan, with the following reported surface areas: 1 296 444.01 ha of these farming settlements have forest cover, and of these 806 313.05 ha are harvested in terms of forest production.

31) The Durango landscape consists of terrestrial ecoregions of temperate mountain ranges that contain native ecosystems in good condition, representative of cool climate, wet semi-cold, sub-humid temperate, dry to semi-dry temperate, warm sub-humid and semi-dry semi-warm, with pine-oak forest, mesophilic forest of mountain, sub-deciduous forest and deciduous forest, gallery vegetation, xerophilous scrub, natural palm grove and grassland. Its land use (Table 3) is forest predominantly (93.51%), with primary forest in 49.57% and secondary forest in 43.94%. 869,437 hectares (67%) are under social property regime, in *ejidos* and communities.

Table 3 Land use and vegetation in the Durango macroregion

Land Use and vegetation	Total land area (ha)	% of landscape area
Primary vegetation (forest)	1,825,745.278	59.26
Secondary vegetation	1,062,571.998	34.49
Agriculture	188,398.2194	6.11
Urban	1,586.146164	0051
No vegetation	1,311.641755	0042
Water bodies	1,129.559901	0.036

32) The Durango macroregion is delimited by the Mezquital, San Pedro and Jes?s Mar?a hydrological basins, which are part of the Presidio-San Pedro hydrological region. The landscape is characterized by its by its broad forest vocation, however, illegal logging, inadequate forest management and the incipient increase in the agricultural frontier have caused the degradation of forest cover. The integrity of the Durango macroregion forests is good. According to data from an analysis carried out during the project preparation grant (PPG) stage by the organization IDESMAC, with data from Global Forest Watch, 43.9 percent of the Durango Region is in a condition of Very High Forest Integrity, accounting for some 1 338 345 hectares, while only 10.82 percent falls into the High Integrity category. The Medium category accounts for only 2.4 percent of the area, while 42.7 percent of the total Durango Region is characterized as being in a condition of Low Forest Integrity.

33) According to CONABIO data, 1 380 742.62 ha are Extreme Priority sites for implementing conservation measures, while 874 057.03 ha are High Priority sites. The landscape is also very

important in terms of water-related ecosystem services, 2 418 832.1 ha (78.51 percent of the total landscape area) in areas considered to be priority territories according to CONABIO (2018).

34) In the Durango macroregion, 618 275 hectares fall into two federal PNAs, the La Michil?a Biosphere Reserve and the Natural Resources Protection Area national irrigation district feed basin (CADNR) 043 State of Nayarit, also includes two state PNAs; they also include 11 KBAs: Guacamayita, Santiaguillo, Pi?lago, R?o Presidio-Pueblo Nuevo and Quebradas de Sinaloa, Nayarit and Durango (Table 1). Hydrological basin protection and germplasm (mainly forest germplasm) maintenance services are also relevant in this site. This landscape supports biotic interactions along the western Sierra Madre and between the temperate and tropical zones of the Pacific Rim.

35) This macroregion is located in one of the geographical regions in the south of the continent where healthy populations of black bear *(Ursus americanus)* have been detected, the distribution of these animals is increasingly restricted due to the pressures mentioned above and climate change. The fauna also includes other important species such as the cougar *(Puma concolor)*, coyote *(Canis latrans)*, Mexican wolf *(Canis lupus baileyi)*, white-tailed deer *(Odocoileus virginianus)*, jaguarundi *(Felis yagouaroundi)*, jaguar *(Panthera onca)*, ocelot *(Leopardus pardalis)*, wild turkey *(Meleagris gallopavo)*, collared peccary *(Dicotyles tajacu)*, neotropical otter *(Lontra longicaudis)*, black myotis bat *(Myotis nigricans)* and cottontail rabbit *(Sylvilagus florindanus)*.

36) The **main threats and pressures facing biodiversity and ecosystems** in Durango are related to illegal logging, incipient and poor forest management practices, and the advance of the agricultural frontier for overgrazing and the development of hunting ranches. The reported loss of tree cover for this landscape (Global Forest Watch) was 8 450 ha from 2002 to 2020. The highest tree cover loss was recorded in 2013. Illegally and legally logged timber is used for furniture, poles, construction beams and tomato cultivation structures. Logging of the pine forests in the sierra leads to later erosion and conversion of the natural vegetation, mainly to oak forests. The soil erosion (Table 4) process in this landscape is concentrated in the middle and low mountainous portions of the southern region of Durango and a portion of the State of Nayarit, as well as in the arid plane area that falls in the central region of Durango.

Table 4 Degree of erosion of the Durango macroregion

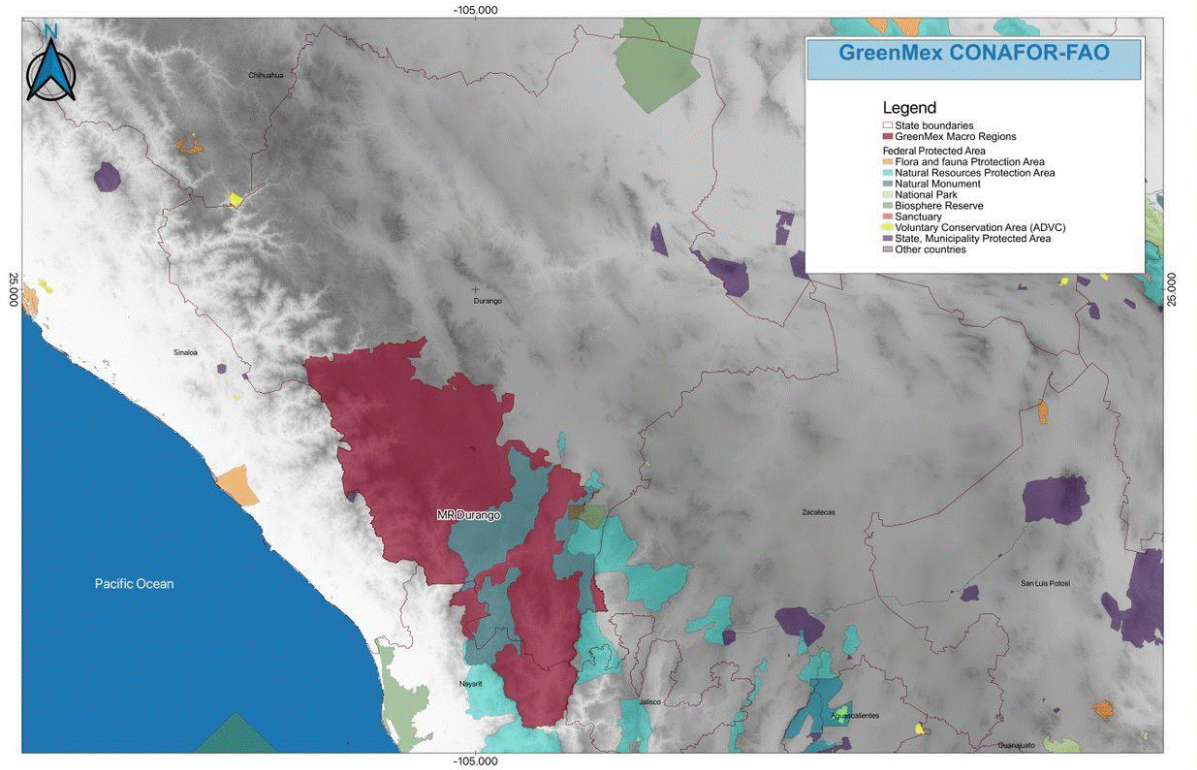
Degree of erosion	**Affected area (ha)**	**Percentage**
Source	9 901.86	0.76
Slight	839 434.91	65.02
Moderate	439 622.24	34.04

N/A	2 413.49	0.18
Total	1 291 372.51	100

Prepared by: IDESMAC, with data from INEGI 2014

37) The reduction in pollinator populations, and consequently the decline in pollination function, can have significant negative impacts on biodiversity and food security. During the PPG stage, IDESMAC conducted an analysis of the pollination ecosystem service degradation index (pollination function) developed by CONABIO, finding that the pollination function of 60 percent of the area of this macroregion is medium and the pollination function of 30 percent is low.

38) Lastly, this macroregion contains 122 927.3 hectares identified as Extreme Priority and 120 063.18 as High Priority for ecological restoration actions, according to data from CONABIO (2016).



Map 2. Durango macroregion, where the bioforestry corridors will be implemented.

Source: FAO

Lacandon Jungle macroregion

39) The boundaries of the Lacandon Jungle macroregion (Map 3) are delimited by the coordinates 16.07403615- and 17.50861855-degrees latitude, and -92.02403729- and -90.55671879-degrees longitude (decimal degrees, EPSG4326). It is located to the east of the States of Chiapas and Tabasco and covers a vast area of tropical rainforest that connects with the Guatemalan forests and forms, together with this and the other rainforests of south-eastern Mexico, the Selva Maya, the second largest tropical forest massif after the Amazon Rainforest. The total area of this landscape is 1 295 668.60 hectares, distributed throughout nine municipalities in the state of Chiapas and 11 in the state of Tabasco. The landscape forms part of the Mesoamerican Biological Corridor.

40) The population in this landscape amounts to 244 593 people living in 835 settlements, of whom 121 910 (49.8 percent) are men and 122 683 (50.2 percent) are women. The indigenous population amounts to 144 523 people (59.08 percent of the total population), the best represented ethnic group is the Lacand?n, with other smaller groups such as the Tzeltales. The population of African descent amounts to 2 184 people (0.89 percent of the total population). In the Lacandon Jungle Region, 37 003 inhabitants (15.12 percent) live in settlements classified as very highly marginalized, while 70 372 inhabitants (28.77 percent) live in settlements classified as highly marginalized[32][32].

41) A total of 857 808 hectares of the Lacandon Jungle Region are under a system of social or collective ownership (267 farming settlements in total, 264 ejidos and three Communities); of this total 369 583.26 ha (43.08 percent) belong to Ejidos, and 488 224.74 ha (56.92 percent) belong to Communities. Data from the Mexican Civil Council for Sustainable Forestry (CCMSS) indicate that, of this social property universe, only seven ejidos (managed by 32 people) have a Forest Management Plan, with the following reported surface areas: 9 170.38 ha of these farming settlements have forest cover, and of these 3 628.41 ha are harvested in terms of forest production.

42) In this macroregion there are nine federal PNAs (461 060 hectares): two Biosphere Reserves, Montes Azules and Lacan-Tun; two Natural Monuments, Bonampak and Yaxchil?n; the Lagunas de Montebello National Park; and four Flora and Fauna Protection Areas, Chan-Kin, Nah?, Metzabok and Ca??n del Usumacinta. It also contains eight KBAs and four VCAs. The Montes Azules or Lacandon Jungle KBA is one of the last areas of tropical rainforest in Mexico, being home to 12 vegetation types and at least 45 fauna species of conservation importance, including: Jaguar *(Panthera onca)*, Mantled howler monkey *(Alouatta palliata)*, Yucatan black howler *(Alouatta pigra)*, Black-handed spider Monkey *(Ateles geoffroyi)* and Ocelot *(Leopardus pardalis)*.

43) In the Lacandon rainforest there are 3 400 species of vascular plants, of which about 573 are tree species. According to UNAM studies, up to 267 different species of plants can be found per hectare, of which 160 are trees: the best known include the chicle or chicozapote, ceiba, mahogany, platanillo, cedar, plumillo, jobo, cansh?n, guapeque, magnolia, amate, ram?n, maculis or white oak.

44) In terms of animals, 24 percent of Mexico?s mammals, 44 percent of all birds, 10 percent of amphibians and reptiles, 40 percent of diurnal butterflies and 13 percent of fish are present in the Lacandon area, which accounts for less than 1 percent of Mexican territory. The Lacandon jungle is the only place in Mexico with wild populations of the scarlet macaw. This region is also sole home to species of four-eyed tlacuache, fox-tailed armadillo, some salamanders, the monkey eagle and unique butterfly species.

45) The Lacandon jungle also houses significant populations of protected, threatened or endangered species such as the jaguar, the tapir, the white-lipped peccary, the scarlet macaw, the harpy eagle, the white turtle and the brown or morelet?s crocodile, as well as large troops of howler and spider monkeys[33][33].

46) The Lacandon Jungle has a high degree of endemism. In particular, the only population of *Lacandonia shismatica* known in the world can be found in small area of tropical forest. The area is also important because it contains significant areas of mesophilic mountain forest, the conservation of which is of paramount importance. Table 5 details the mainland and vegetation use in the Lacandon Jungle macroregion.

Table 5 : Land use and vegetation in the Lacandon Jungle macroregion

Land Use and Vegetation	Total land area (ha)	% of total landscape area
Primary vegetation	558,758.6852	43.12
Secondary vegetation	322,080.7234	24.85
Agriculture	396,504.7149	30.6
Water body	12,081.65439	0.93
Urban	4,737.438609	0.36
No vegetation	25.23462616	0.00

47) In terms of forest integrity, reported data (IDESMAC-GFW) indicate that more than 885 000 hectares (two thirds of the total area of the Lacandon Jungle macroregion) are of medium integrity. The High and Very High Integrity categories are close to each other, the former with around 158 000 hectares corresponding to 11.87 percent of the total area and the latter with 224 000 hectares, i.e., 16.83 percent of the total area. The Low Integrity category includes 64 000 hectares, which represents only 4.84 percent of the area. The Lacandon Jungle Region is also extremely important for cloud forest preservation. CONABIO reports that 320 848.29 ha (24.76 percent of the total landscape area) is Critical priority, while 156 306.95 ha (12.6 percent of the total landscape area) is considered High priority for the conservation of this threatened ecosystem.

48) At a general level, and allowing for additional variables, CONABIO considers 619 257.23 ha of this landscape to be Extreme Priority for the implementation of conservation measures, while 224 850.01 ha are High Priority.

49) The landscape is in one of the rainiest regions of the country, which sustains its ecosystems and water cycle. CONABIO reports, regarding this landscape, that an area of 898 769.29 ha (percent of the total landscape area) is in areas considered a priority in hydrological terms.

50) The **main threats to biodiversity and ecosystems** in the Lacandon Jungle Region are deforestation and forest and soil degradation. Other social issues are present, such as the migration of people from Central America, and the irregular occupation and subsequent transformation of land by displaced people from other parts of the state.

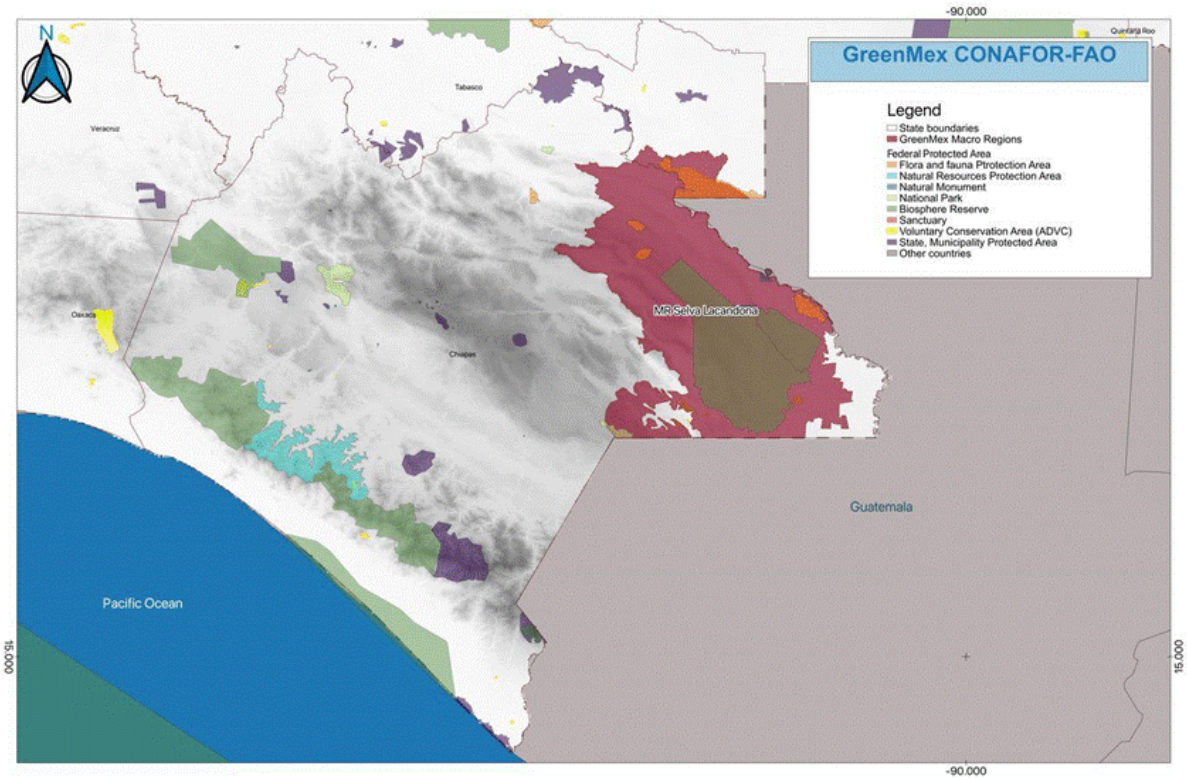
51) Figures on tree cover loss reported by Forest Watch for this landscape indicate that tree cover in the region fell by 220 000 ha from 2001 to 2020. These changes were mostly caused by the creation of new settlements, unsustainable agriculture and cattle ranching, forest fires, land tenure conflicts, overexploitation of soils, hunting or trapping for the illegal trade in native fauna and the logging of timber species such as cedar, mahogany, palm and granadillo. According to GFW, 2016 and 2019 were the years when tree cover loss was greatest. According to a data analysis (INEGI, 2014) conducted during the PPG stage, more than 1 200 000 hectares show some degree of erosion in the Lacandon Jungle region, of which at least 300 000 falls into the severe erosion category (24.84 percent of the total), while 48.37 percent of the macroregion is affected by mild erosion (Table 6).

Table 6 :Degree of soil erosion in the Lacandon Jungle macroregion

Degree of erosion	Affected area (ha)	Percentage

Severe	301 486.99	24.84
Slight	587 273.57	48.37
Moderate	325 230.67	26.79
Total	1 213 991.22	100

52) During the PPG stage, we calculated the degradation of the pollination function in the Lacandon Jungle macroregion, finding that 51.99 percent of the area considered for the pollination function is categorized as medium, followed by the very high category with 22.57 percent, and the low and high categories, with percentages of 13.15 percent and 12.29 percent respectively. CONABIO reports, for this landscape, 254 044.61 hectares to be Extreme Priority and 281 518.58 to be High Priority for ecological restoration actions.



Map 3. Lacandon Jungle macroregion, where the bioforestry corridors will be implemented.

Source. FAO

Balsas-South Pacific macroregion

53) The boundaries of the Balsas-South Pacific macroregion (Map 4) are delimited by the coordinates 15.92286692- and 19.86245317-degrees latitude, and -103.7118938- and -100.0708705-degrees longitude (decimal degrees, EPSG4326). It is a vast territory that covers a good portion of the south Sierra Madre, encompassing a heterogeneous mosaic of ecosystems and land uses. The total area of this landscape is 8 079 606.21 hectares, which is distributed throughout 173 municipalities in the states of Michoac?n (30 municipalities), Guerrero (42 municipalities) and Oaxaca (101 municipalities).

54) The population in this landscape is 3 580 484 people living in 7 387 settlements, of which 1 723 224 (48.12 percent) are men and 1 857 261 (51.88 percent) are women. The indigenous population amounts to 752 765 people (21.02 percent of the total population), the best represented ethnic groups are Mazahua, Nahua, Otomi, Pur?pecha, Mixtec, Tlapaneco. The population of African descent amounts to 172 643 people (4.82 percent of the population).

55) Data from CONAPO-INEGI, 2020, indicate that this landscape covers important portions of the regions with the most marginalized populations in the country, concentrated in Monta?a de Guerrero, Tierra Caliente de Michoac?n and a significant region of Oaxaca. The findings show that 288 369 inhabitants (8.05 percent) live in settlements classified as very highly marginalized while 516 862 inhabitants (14.43 percent) live in settlements classified as highly marginalized.

56) A total of 4 336 988.42 hectares of the Balsas-Southern Pacific Region are under a system of social ownership (1 479 farming settlements in total, 1 204 *Ejidos* and 275 Communities); of this total 2 638 023.82 ha (60.82 percent) belong to *Ejidos*, and 1 698 964.6 ha (39.18 percent) belong to Communities. Data from the Mexican Civil Council for Sustainable Forestry (CCMSS) indicate that, of this social property universe, 169 farming settlements have a Forest Management Plan, with the following reported surface areas: 657 963.87 ha of these farming settlements have forest cover, and of these 287 030.38 ha are harvested in terms of forest production.

57) The Balsas-South Pacific macroregion connects several coastal and mountain ecosystems (at least 24 different vegetation types), including priority areas for cloud forest, arid deciduous forests and evergreen forests, which are the most threatened forest ecosystems in Mexico. Several endangered and protected species coexist in this vast landscape: the monarch butterfly *(Dannaus plexippus)*, the jaguar *(Panthera onca)*, the Gila monster *(Heloderma sp.)* and species of the genus Dalbergia, among many others.

58) The Balsas-South Pacific macroregion comprises 14 federal PNAs (333 311 hectares): Zicuir?n-Infiernillo Biosphere Reserve, Monarch Butterfly Biosphere Reserve, Pico de Tanc?taro Flora and Fauna Protection Area, seven National Parks (Barranca del Cupatitzio, Cerro de Garnica, General

Juan ?lvarez, Insurgente Jos? Mar?a Morelos, Lagunas de Chacahua, Bosencheve and El Veladero), and four beaches categorized as Protected Nature Sanctuaries. It also has 16 state PNAs and 23 VCAs. This landscape overlaps with 21 Key Biodiversity Areas (KBAs), among which the most important are: Cuenca Baja del Balsas, Sierra de Atoyac and Bosques de Niebla de la Costa Grande, Cuenca Baja del R?o Papagayo and Acahuizotla.

Table 7 Land use and vegetation in the Balsas-South Pacific macroregion

Land Use and Vegetation	Total land area (ha)	% of total landscape area
Primary vegetation	2 133 178.86	26.40
Secondary vegetation	3 764 591.26	46.59
Agriculture	2 080 616.35	25.75
Urban	47 755.65	0.59
Water body	43 794.49	0.54
No vegetation	5 527.76	0068

59) Forest integrity in the Balsas-South Pacific macroregion is the greatest cause for concern in all three project landscapes: More than 2 700 000 hectares, corresponding to 34.49 percent of the total area of this territory, are considered to have Low Integrity; this is followed by the High Integrity Index, with 28.25 percent, or a little more than 2 200 000 hectares; the medium category accounts for 22.86 percent, around 1 800 000 hectares. Lastly, 14.4 percent fall into areas with Very High Forest Integrity, amounting to around 1 100 000 hectares.

60) This landscape also coincides with vast areas that CONABIO believes should be allocated some degree of priority due to the need to conserve patches of mesophilic mountain forest: 3 215 537.67 ha (39.79 percent of the total landscape area) is considered a Critical priority, while 719 993.71 ha (8.91 percent of the total landscape area) is considered a high priority for the conservation of this threatened ecosystem. In another multi-criteria analysis with environmental, biodiversity and climatic variables, CONABIO considers 1 185 436.19 ha in the Balsas-Southern Pacific Region to be an Extreme Priority for implementing conservation measures, while 880 260.36 ha are High Priority. In terms of hydrological importance, CONABIO reports that an area of 3 321 372.29 ha (41.10 percent of the total landscape area) is in territories considered to be hydrological priorities.

61) The **main threats to biodiversity and ecosystems** in the Balsas-South Pacific macroregion are land use change and habitat loss (transformation of natural vegetation into extensive agricultural

areas with a significant advance in the agricultural frontier); discharges of toxic fluids into aquifers by sugar mills and pollution of water bodies; introduction of alien species such as eucalyptus; forest fires, oil fields; unsustainable tourism development; clandestine waste dumping by mining companies and illegal mining operations.

62) Global Forest Watch estimated the loss of tree cover in this landscape from 2001 to 2020 to be 155 000 ha. The years when a growing trend in tree cover loss was observed were 2018 and 2016. Soil erosion in the Balsas-South Pacific macroregion is mainly slight (53.69 percent), see Table 8.

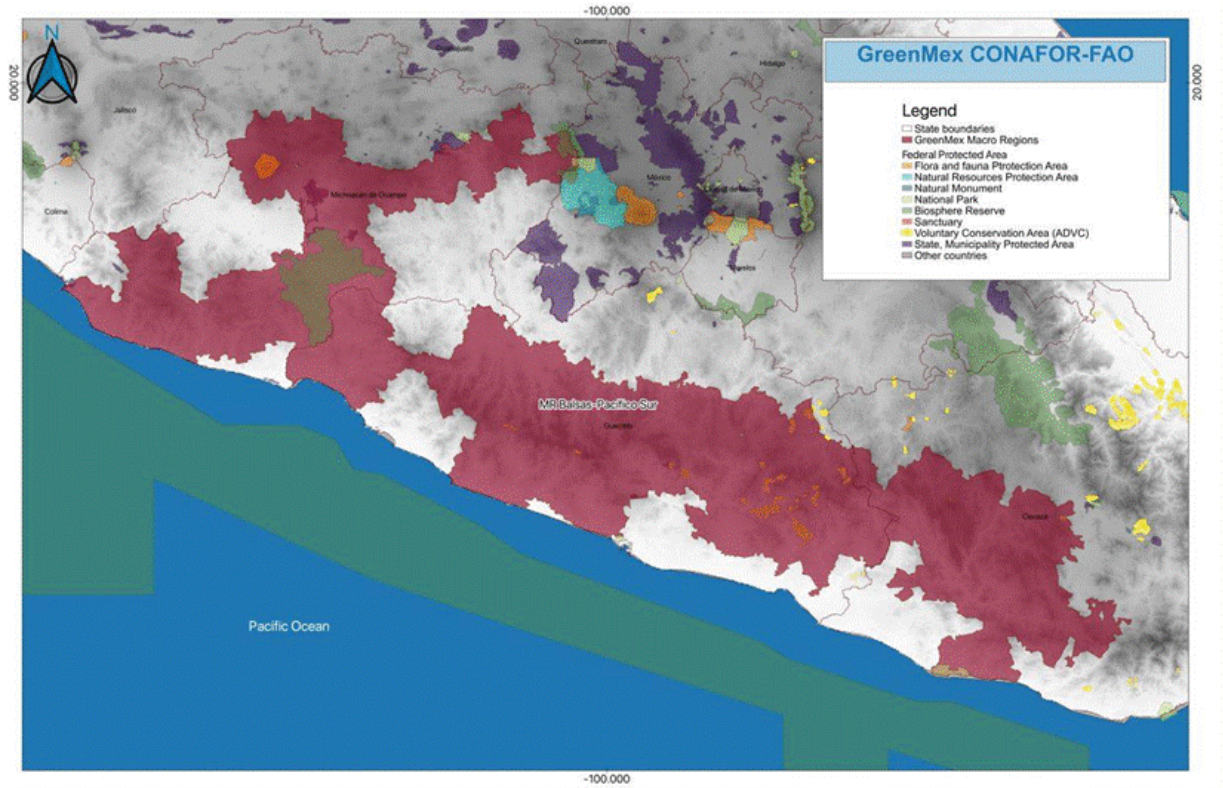
Table 8 : Soil erosion in the Balsas-South Pacific macroregion

Degree of erosion	Affected area (ha)	Percentage
Extreme	5 571.49	0.15
Source	199 690.78	5.54
Slight	1 935 178.49	53.69
Moderate	1 439 199.42	39.93
N/A	24 612.45	0.68
Total	3 604 252.64	100

Prepared by: IDESMAC, with data from INEGI 2014

63) In the Balsas-South Pacific Region, data on the degradation of the ecosystem service of pollination indicate that some 3 million hectares are affected, equivalent to 42 percent of the total area of the region. Eighty-nine percent of the total is reported as medium degradation; a Low Pollination level affects 2 800 000 hectares, i.e., 38.91 percent of the area; the High category accounts for 1 100 000 hectares or 15.94 percent; and lastly, the 163 000 hectares reported in the Very High category are equivalent to 2.27 percent of the total area considered for the pollination function.

64) CONABIO reported 533 653.16 hectares to be Extreme Priority and 517 742.94 hectares to be High Priority for ecological restoration actions in the Balsas-South Pacific macroregion.



Map 4. Balsas-South Pacific macroregion where bioforestry corridors will be implemented.

Source: FAO.

Barriers

1) Institutional barriers

Barrier #1.- Limited coordination between institutions at different governmental levels (national, state and municipal) and between sectoral programmes (social, agricultural and forestry) to safeguard biodiversity and implement integrated landscape management actions.

65) The planning and implementation of social, agricultural and forestry policies and programs is poorly coordinated, with little to no consideration of the diverse ecosystems that coexist in each territory. Institutions or dependencies (national, state, municipal) define their policies based on their specific objectives and mandates, focusing on the scope of the short- and medium-term objectives of

their own sector. The National Forest Programme (2020-2024)[34][34] states that barriers arise as a result of institutional reasons and apparently contradictory sectoral policies, while local support programmes have an adverse effect on forestry management. The planning and implementation of local environmental, social and agricultural policies and programmes is poorly coordinated, although it is regulated by the General Law for Sustainable Rural Development and sectoral legal frameworks. Institutions or agencies (national, state, municipal) define their policies based on their specific objectives and mandates, focusing on achieving the short and medium-term objectives of their own sectors. As such, policies and objectives for the sustainable use and conservation of natural resources are generally the domain of the Ministry of Environment (SEMARNAT). The various institutions of the environmental sector also issue specific internal mandates, which are not always rolled out at local level.

66) There is a need to improve inter-institutional, intersectoral and intergovernmental coordination, so that the landscape is viewed holistically as a construct that is both social and environmental, where stakeholders involved in decision-making acknowledge that environmental, social and economic functionality can be achieved[35][35]. Policies affecting forestry, conservation, good biodiversity management and agriculture need to be brought into line with social policy and national economic development priorities.

Barrier #2.- Weakness in monitoring the results of government programmes and their contribution to national and international biodiversity targets.

67) Institutional programs have monitoring systems disjointed between sectors and include management indicators while omitting impact/outcome indicator. Institutional programmes? monitoring systems are not coordinated between sectors. It is difficult to generate and access appropriate and relevant information on the forestry sector. This hampers strategic decision-making by communities, *ejidos*, owners, rightful holders, producers, industrialists, researchers, civil society organizations and interested citizens, as well as by federal, state and municipal authorities. Although the ?BioComuni? protocol has been institutionalized in CONAFOR, the project needs to strengthen our monitoring of biodiversity conservation action outcomes that contribute to national and international commitments.

Barrier #3: The technical and implementation capacity of the territorial management model promoted by CONAFOR is insufficient.

68) Due to the nature of its purpose and powers, CONAFOR is primarily an operational agency. The efficiency and effectiveness with which it fulfils its functions and, therefore, the contribution of the forestry sector to the well-being of the inhabitants of rural areas and to the development of the country, is directly linked to fieldwork and permanent interaction with the different members of the forestry sector. In 2020, CONAFOR therefore promoted the implementation of a new territorial management model closer to the communities (Forestry Development Promoters offices at state level and Local Forestry Development Promoters offices). However, since the model is still relatively new, we need to build the technical capacities of the promoters' office?s staff, mainly in terms of Nature-based Solutions (NBS), Integrated Landscape Management and access to market and financing[36][36].

2) Governance barriers

Barrier #4: Limited participation of women, young people and indigenous people.

69) Only 19 % of the *ejido* property in Mexico is in the hands of women, and these are subject to a number of barriers regarding: a) access to programmes because they do not have the legal means to prove land ownership; b) access to credit and supplies; and c) participation in decision-making and representation. Although women are important contributors to the forestry sector[37][37], activities related to the productive sectors, such as forestry, exclude women. Regulatory barriers and institutional deficiencies in the design of programmes and affirmative actions that level up and facilitate opportunities for the participation of these target groups affect the participation of women, young people and indigenous communities[38][38].

Barrier #5: Weak community governance over natural resources and BD.

70) Stakeholders (government institutions, technicians and producers) have limited vision of the territory. The lack of a landscape approach hinders effective participation in planning and zoning. Likewise, ejidos and communities have limited capacities about local governance, technical, organizational, planning and commercial activities, resulting in a lack of accountability mechanisms and inadequate representation in local assemblies. There is a marked weakness in applying a gender approach and social integration (women, youth, indigenous peoples and the elderly); participation and access to resources is characterized by gender and ethnic inequality gaps.

3) Technical barriers

Barrier #6: Local actors (outreach workers, communities) are not properly trained or present in sufficient numbers to incorporate ecosystem biodiversity, restoration and connectivity.

71) Inputs for sustainable production are difficult to find and have high costs. Many new agroecological, agroforestry, and silvopastoral approaches promoted by formal programs and projects have never gotten beyond the pilot stage and have not been widely disseminated. For example, while programmes have many technicians who are knowledgeable about conventional agricultural and agroforestry practices, they are not trained in integrated landscape management approaches.

72) The unsustainable use of natural resources is due, in part, to a lack of knowledge of the local potential and limits/carrying capacity. Technical and advocacy capacities are insufficient. Technical and innovation capacity in the forestry sector, including among communities and organizations owning most of Mexico?s forests, is limited. Technical and organizational capacity building is rarely present, which leads to deficient technical and administrative management of the forest resource[39][39] [40][40].

73)

74) Productive diversification in the Mexican forestry sector, including high-value biodiversity-related products, faces a lack of capacities. This limitation is reflected in low competitiveness, low valuation, land-use change and/or forest degradation, making it difficult to move towards sustainable income-generating alternatives. The prevailing conditions favour forest degradation with unproductive agricultural options, dependent on external inputs, with a consequent loss of biodiversity and fragmentation of habitats. Production options are restricted to those that have been practised in the past, featuring a low level of innovation and inertia over dealing with environmental degradation processes.

4) Market and Financing Barriers

Barrier #7: Lack of market opportunities and profitable opportunities for high-value biodiversity products and those derived from NBSs, including timber forest products (TFP) and non-timber forest products (NTFP).

75) Rural populations use NTFPs but lack diversified plans and strategies to promote their sustainable use. Information on NTFPs is scattered, contradictory and unclear. Likewise, there is an incomplete overview of the effects on ecosystems due to the scarcity of systematized and reliable information on the diversity of uses, extraction rates, collection, production and commercialization processes.

76) Small producers or community forest enterprises find it difficult to access local, national and international markets due to their lack of pricing know-how, poor negotiation skills, exclusion along the value chain and weak organizational capacities. The market is in any case limited, mainly because little consumer information is available on sustainable products. Producers and technical actors also have little capacity to add value to production and regarding value chain development in general. While the demand for edible and medicinal NTFPs has increased, they have highly variable seasonal markets with marketing chains that are generally only most profitable at later stages of the chain (i.e., processing centres). There is a lack of programmes to encourage the implementation of ?green seal? ecolabeling in small-scale production, build capacities and promote short value chains.

Barrier #8: Forest and agricultural producers have little access to finance and few incentives to finance sustainable production.

77) Crops and products that support the flow of ecosystem services are not traditionally incentivized. Although funding schemes (formal and non-formal) exist in the Mexican forestry sector, they have not penetrated sufficiently into communities and community-based social enterprises. The Mexican forestry sector is one of the sectors served through development banking, but the volume of credit for forestry projects is marginal[41][41]: only 1.8 percent of all the total funding disbursed by the Trust Funds for Rural Development (FIRA) in 2018 went to forestry projects. The actual sum disbursed, i.e., 3,538 million Mexican Pesos, was mainly focused on large companies in the sector, with the participation of community forestry enterprises being marginal. From 2013 to 2018, the placement of development bank credit in the forestry sector rose from 1,155 million to 3,538 million Mexican Pesos.

78) In the forestry sector, smaller forestry companies face greater restrictions than larger and more established ones, the main causes being: i) producers do not have information on formal financing instruments available on the market; ii) insufficient credit culture; iii) the long timeframes for projects to generate a return on investment; iv) lack of legal accreditation of land; v) lengthy loan decision timescales typical of financial institutions, which lead to producers giving up; vi) competition between credit and subsidies.

79) Lastly, while initiatives exist to support green enterprises, gender equality businesses or other sustainable development-oriented ventures, Mexican financial institutions do not encourage access to affordable finance for SMEs, small and medium-sized producers and cooperatives, particularly in poverty-stricken areas. This is due to a high level of perceived risks, lack of registered guarantees or collateral, high costs of financial services and limited financial literacy.

2) The baseline scenario and any associated baseline projects

2.a Reference scenario

Legal, regulatory and planning framework

80) The national regulatory framework in environmental matters is laid down in the political constitution of the United Mexican States, which establishes that everyone has the right to a healthy environment for their development and well-being, and that the State is responsible for guaranteeing respect for this right; it is also enshrined in various conventions and international cooperation agreements, such as those derived from the United Nations Framework Convention on Climate Change/Paris Agreement, the Convention on Biological Diversity, the United Nations Convention to Combat Desertification and the 2030 Agenda and the Sustainable Development Goals.

81) The legislative framework governing environmental management and biodiversity in Mexico consists mainly of the following laws: General Law on Sustainable Forest Development (LGDFS), General Law on Ecological Balance and Environmental Protection (LGEEPA), General Law on Wildlife (LGVS), General Law on Climate Change (LGCC)[42][42], Agrarian Law (LA), Law on National Waters (LAN), Law on Sustainable Rural Development (LDRS), and Federal Law on Environmental Responsibility (LFRA)[43][43]. Other important instruments include the Mexican Official Standards on environmental matters, which are mandatory and which, in the forestry sector, seek to regulate forestry production and harvesting activities.

82) In the specific field of forestry, the LGDFS regulates and promotes the integrated and sustainable management of forest areas, conservation, protection, restoration, production, management, cultivation, management and use of the country?s forest ecosystems and their resources. The LGDFS Regulation governs instruments regulating policy, management and sustainable use of the forestry sector. The three project macroregions are regulated under this legislative framework.

83) The LGEEPA establishes the general framework for environmental protection, defining environmental policy principles and the instruments for their application. Its many objectives also include the preservation and protection of biodiversity, as well as the establishment and administration

of Protected Natural Areas, which are an instrument that will be promoted through this project, in the form of Voluntary Conservation Areas (VCAs).

84) The LGVS was laid down with the aim of conserving wildlife through its protection and sustainable use. It also establishes Wildlife Management Units (WMUs) as mechanisms for the sustainable use of wild species, in order to conserve biodiversity and boost production and socioeconomic development in the country.

85) The LAN regulates the exploitation, use or appropriation of water and its distribution and control, as well as the preservation of its quantity and quality in order to achieve integrated sustainable development. It is relevant in the field of environmental services related to hydrological basins and their link to forest resources

86) The LDRS, among its other powers, promotes the establishment of actions for the ?useful and sustainable use of land, seeking to promote the integration and diversification of production chains, generate employment, add value to raw materials, reverse the deterioration of natural resources, produce environmental goods and services, protect biodiversity and the landscape, respect the culture, uses and customs of the population, as well as prevent natural disasters? (Article 53).

87) The Agrarian Law (LA) is relevant to forest governance because it accredits social ownership and gives legal personality to farming settlements, divided into communities and *ejidos*. It also establishes the conditions for the use of its natural resources, as well as its social and economic organization.

88) Regarding the laws to support the mandate of each environmental sector institution and the instruments that are available to conserve biodiversity, one of *CONANP?*s flagship strategies is the establishment of Protected Natural Areas (PNAs). This strategy is recognized nationally and globally, for example in its contribution to fulfilling Aichi Target 11; *CONAFOR* has implemented a similar mechanism, through its Payments for Ecosystem Services (PES) scheme. Although this is not recognized as a decree, but as a programmatic authorization, it has still played a very important role for some key territories. Lastly, *SEMARNAT* introduced the Environmental Management Units (UMA) instrument, which also is a locally oriented authorization rather than a decree.

89) A review of the legal framework reveals a need to identify possible regulatory overlaps and over-regulation at different territorial levels. There is also a need to promote greater integration between laws, especially concerning biological connectivity and biodiversity protection, both at federal and subnational levels, which would allow for joint efforts to actively protect and conserve biodiversity.

Planning framework

90) Other instruments such as the National Biodiversity Strategy of Mexico (ENBioMex) implemented by the National Commission for the Knowledge and Use of Biodiversity (CONABIO) and the Integration Strategy for the Conservation and Sustainable Use of Biodiversity in the Forestry Sector (ENBIOFOR) are also reference frameworks to help guide and design national public policy on biodiversity.

91) The 2016 United Nations Biodiversity Conference provided for ENBIOFOR 2016?2022, with the aim of designing, implementing and promoting policies, programmes and actions in the Mexican forestry sector to achieve sustainable forest development to mainstream cross-cutting conservation and biodiversity use. The strategy includes nine pillars and 52 lines of action.

92) At subnational level, the Strategies for the Conservation and Sustainable Use of Biodiversity (ECUSBE) are public policy instruments drawn up in each state and are part of the CBD implementation arrangements in Mexico. Out of the seven entities covering the areas where the Project will be implemented, Chiapas, Michoac?n and Oaxaca have already published their ECUSBE, while Durango, Guerrero, Nayarit and Tabasco do not have a state strategy developed yet.

93) The National Forest Programme (PNF) 2020?2024 is a Special Programme derived from the National Development Plan 2019?2024, drawn up and led by CONAFOR, with the participation of forest sector stakeholders and the approval of the National Forest Council. PNF?s purpose is to contribute to the fulfilment of international commitments relating to forestry that Mexico has undertaken by entering into a series of multilateral agreements. These agreements include: the United Nations Convention to Combat Desertification; the International Tropical Timber Agreement; the United Nations Framework Convention on Climate Change (UNFCCC); the Paris Agreement; the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); the Convention on Biological Diversity (CBD) and the Aichi Biodiversity Targets; and the 2030 Agenda and its Sustainable Development Goals (SDGs). The Government of Mexico has also signed up to international initiatives, such as the Bonn Challenge, the United Nations Strategic Plan for Forests, and the New York Declaration on Forests.

94) The PNF covers a total of 26 strategies and 188 specific actions, including the national strategy for community forest management, the national strategy to reduce emissions from deforestation and forest degradation, the fire management programme to prevent and fight forest fires, the programme to curb illegal logging and illegal trade in raw materials and forest products, the strategy to promote active conservation through payment for environmental services, the strategy for productive restoration with an integrated land management approach, the strategy for a regulatory and

administrative framework to facilitate sustainable forest development, and the strategy for neighbourhood territorial management, among others[44][44].

95) PFN includes five priority objectives: 1. ? Promote community forest management for the sustainable and diversified use of forest resources, as well as the integration and development of local networks of competitive value that trigger local economies to improve the quality of life of the population living in forest areas. 2.? Protect Forest ecosystems from factors that lead to deterioration in the vegetation cover in order to maintain the natural heritage and contribute to climate change mitigation, for the well-being of the population living in forest areas and of society in general, through territorial management. 3. ? Conserve and restore the capacity to provide ecosystem services in strategic forest areas, through an inclusive and participatory approach that contributes to guaranteeing a healthy environment for the development and well-being of the population. 4.? Promote a new model of governance, plurality and effective and inclusive social and public participation in the forestry sector. 5.? Promote effective institutional coordination and improve institutional capacity-building for the forestry sector.

96) After reviewing the plans and programmes, we concluded that we need to promote medium and long-term planning, in order to give continuity to the established goals and objectives. This is particularly relevant in periods of executive power change when the new federal public administration proposes new planning instruments that do not necessarily follow through previous approaches and objectives. The institutional strengthening of SEMARNAT and CONAFOR, as institutions guiding forest policy, helps to guarantee the construction of a far-sighted vision for promoting conservation, protection and sustainable management of forest ecosystems.

Government programmes in the three macroregions

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97) ***CONAFOR?s Support Programme for Sustainable Forest Development*** supports is the key initiative for this GEF project. This program supports people who are owners, legitimate possessors and inhabitants of forest areas to implement actions that contribute to the protection, conservation, restoration and incorporation into sustainable forest management schemes of forestry land, preferably forest and temporary forest land. The programme also strengthens value chains, which in turn contribute to adaptation to and mitigation of the effects of climate change, by implementing support components, concepts and procedures. This programme has national coverage and focuses on priority areas identified by technical, environmental, forestry, social and economic diagnoses. It is made up of five components: Component I. Community Forest Management and Value Chains; Component II. Commercial Forest Plantations and Agroforestry Systems; Component III. Forest Restoration of

Micro-basins and Strategic Regions; Component IV. Environmental Services; Component V. Forest Protection. Its approved budget for 2021 was 825.5 million pesos.

98) **The *Sembrando Vida Programme (PSV)*** is one of the main national strategies for social development, run by the Ministry for Welfare. By 2021, the Programme covered 20 states of the country with a presence in the following project areas: Chiapas, Durango, Guerrero, Michoac?n, Nayarit and Oaxaca. The PSV aims to encourage farmers to establish agroforestry production systems that combine the production of traditional crops with fruit and timber trees (system of intercropping *milpa* with fruit trees (MIAF)) in order to help generate employment, improve food self-sufficiency and increase the income of inhabitants. It also seeks to have an impact on recovering the forest cover of 1 075 000 hectares in the country. The Programme grants financial support to adult farmers, who live in rural settlements and have an income below the rural welfare line and who are owners or possessors of 2.5 hectares available for agroforestry projects. SV beneficiaries are legal age farmers, landholders of 2.5 hectares usable for agroforestry projects. Out of these 2.5 hectares, one hectare should be cultivated with *milpa*[45][45] or preferably as *Milpa* Intercropped with Fruit Trees (*MIAF*). The other 1.5 hectares should be dedicated to Agroforestry Systems (SAF). SV provides support for agroforestry production and technical support for the implementation of agroforestry systems. Participants who have complied with their monthly work plan receive $ MX 5,000 allocated as savings; of this amount, $ MX 250 must be used as saving investment in a financial institution, and $ MX 250 pesos must be kept at the Welfare Fund. Ultimately, SV aims to strengthen the economic and social development of the communities of 410,000 farmers in 1,025,000 hectares.

99) The various institutional instruments for biodiversity conservation promoted by the Mexican environmental sector (PNAs, VCAs, PESs, UMAs) tend to specialize in the regions where the project will be implemented: PNAs are typical of the Lacandon Jungle macroregion; PESs and VCAs are mainly located in the Balsas-South Pacific macroregion; and UMAs are predominant in the Durango macroregion. The project will promote the accreditation of other local active conservation strategies and recognize individual specializations at the level of each macroregion.

100) ***The Banca Social*** **(Ministry of Welfare, through the National Institute of Social Economy (INAES):** Social Bank (*Banca Social*) has a support program focused on the Savings and Credit Organizations of the Social Economy Sector. Currently, 803 Cooperative Societies of Savings and Loans (SOCAP) are recognized with more than 8 million members and manage an economic asset of USD 8,196,661,390[46][46]. Under the social economy approach, it has been possible to consolidate cooperative enterprises based on the sustainable use of biodiversity.

101) **National Commission on Natural Protected Areas (CONANP)** has created and currently manages 182 Natural Protected Areas (PAs) in Mexico, to safeguard the remnants of moderately conserved terrestrial and marine ecosystems and biodiversity. However, CONANP?s management policies only focus on the interior of the polygon areas, resulting in relatively secure islands of conservation that are completely separated from each other and result in a series of delicate crystal bubbles for species survival.

3) The proposed alternative scenario with a brief description of expected outcomes and components of the project and the project?s Theory of Change

Project objective

102) The GreenMex project will mainstream biodiversity conservation, integrated landscape management and ecosystem connectivity into social policies and programs in Mexico[47][47]. The project will be implemented in forest and agroforestry landscapes within three target areas of high biodiversity value in Mexico.

Project strategy

103) To achieve this objective, the project will be underpinned by CONAFOR?s *National Forestry Programme* (PNF) 2020?2024 and one of its implementation instruments, the CONAFOR?s *Support Programme for Sustainable Forest Development*. PNF is aligned with the Social Policy pillar established in Mexico?s National Development Plan (PND)[48][48], contributing to social policy by promoting sustainable development. Among other objectives, to promote community forest management for the sustainable and diversified use of forest resources, as well as the integration and development of local networks of competitive value that trigger local economies to improve the quality of life of the population living in forest areas[49][49].

104) The proposed GEF project will be implemented in forest/agroforest landscapes within three target areas. The selection criterion is a confluence of government actions such as the CONAFOR PNF, the CONANP and SV programs.

105) Four components are planned to achieve the project objective. Through **Component 1** , public policy aimed at socio-environmental development in rural Mexico will encourage cooperative inter-institutional efforts to foster biodiversity, integrated landscape management, the ecosystem approach, ecological connectivity through bioforestry corridors where Nature-Based Solutions (NBS) are promoted in the different key instruments for rural development, particularly in relation to forests (legal, regulatory, institutional, programmatic, budgetary, financial and market instruments). It is hoped that improved cooperation between the public policies of the different institutions (environmental, social and agricultural) will be directly reflected by an effective reduction in the fragmentation of ecosystems and, consequently, an improvement in the state of biodiversity in key regions.

106) Through **Components 1 and 2**, the project seeks to strengthen institutional technical capacity through the territorial management model promoted by CONAFOR, based on the Forestry Promoters offices and Local Forestry Development Promoters offices, and the governance of institutional and local actors involved in the management and conservation of biodiversity and ecological connectivity.

107) Through **Component 2**, the project will implement an ecological and socioeconomic connectivity strategy based on the implementation of **Bioforestry Corridors** (BFC) and type 1 and 2 NBSs, identified during the project design phase, which will be validated during the first year of project implementation. Lastly, **Component 3** will strengthen the social economy and develop inclusive business models to address the new scenarios imposed by the Covid-19 pandemic, as well as establish new commercial relationships, functional local and national markets, and effective financing schemes for products related to the good management of biodiversity, for the benefit of the local inhabitants. We hope that the evidence generated from the project?s activities and experiences will contribute to green and inclusive recovery in rural areas of high biodiversity importance in Mexico.

108) The project will contribute to establishing an institutional and organizational environment conducive to green and inclusive recovery; building technical and organizational capacities for the adoption of sustainable practices and land restoration; and developing market instruments and sustainable partnerships. Communication and management of the knowledge generated in these processes ? as well as a robust monitoring, evaluation and reporting system ? will be crucial for the scaling up of learning and innovations to the public policy levels mentioned in the previous section.

109) As a result of the project?s scope, its longer-term objective is to restore key landscapes, create new protected areas and new conservation schemes, with an active conservation and NBS approach. All of this will contribute to strengthening and improving the status of biodiversity and ecosystem connectivity, and to rebuilding better economic systems in key regions and landscapes, and in vulnerable populations, in a resilient and sustainable manner.

110) In summary, the GEF project will implement actions focused on: i) strengthening stakeholders? capacities for the recognition, valuation and sustainable management of biodiversity and ecosystem services; ii) strengthening CONAFOR?s strategies, programmes and planning instruments with a view to mainstreaming biodiversity, integrated landscape management and ecosystem connectivity; iii) strengthening territorial governance to improve social representation in decision-making processes; iv) promoting ecosystem connectivity through Nature-Based Solutions (NBS) ? types 1 (conservation) and 2 (agricultural and forest landscape restoration and community forest management); and v) develop market-based tools to promote the inclusive participation of beneficiaries of CONAFOR?s programmes in the value chain of timber and non-timber forest products (NTFPs) and underutilized native species (with emphasis on women, young people and indigenous peoples).

Project Technical Approach

The project rationale is based on four approaches:

111) The **United Nations Building Back Better** after COVID-19 approach, which in Latin America and the Caribbean ?implies building back with equality, redefining the development model towards one anchored in human rights and factoring in the environmental dimension, aligned with the 2030 Agenda and the Sustainable Development Goals (SDGs)?[50][50].

112) The Advisory Committee on Sustainable Forest-based Industries (ACSFI[51][51]) recognises that the COVID-19 pandemic is impacting all aspects of our lives across the world, including the food trade, food supply chains and markets, as well as people?s lives, livelihoods, and nutrition. The ACSFI highlights that during the pandemic, forest products have played a crucial role in keeping people safe and healthy by providing personal protective equipment, and other supplies and services, including hygiene and sanitary products, biomass for heating, ethanol for sanitizer, respirator paper, and packaging for food and other parcels. In order to continue the uninterrupted supply of these products, the forest sector has been appropriately recognized in many parts of the world as an essential service. A sustainable forest sector lies at the heart of COVID-19 recovery plans that seek to build back better. There is now a unique chance to substitute high fossil fuel-based products with those from a renewable resource. As policy makers work to create enabling conditions that support sustainable approaches, and industries that can ensure their societies can build back better[52][52].

113) The sustainable forest-based industries provide:

? long-term sustainable management of precious forest resources. We are long-term stewards of the forest and aim to balance various demands to maximize societal benefit. In the long term, active sustainable forest management increases the forest resources available and thus forms the foundation of every other benefit e.g., social co-benefits.

? livelihoods and green jobs, in rural areas.

? promote the use of sustainably sourced wood in construction and wood products to improve life quality and health. Wood used in homes, workplace and in public buildings improves indoor air quality, and wood?s natural warmth and comfort produce calming, stress reducing effects.

? crucial support for sustainable food systems through the production of wood energy and wild foods, often collected in forests by forest-based communities.

? an opportunity to use what would otherwise be wood waste and turn it into a critical component of a functioning sustainable circular bioeconomy.

? the sustainable provision of wood and other ecosystem services related for example to carbon sequestration and climate change mitigation, biodiversity and clean water.

? tangible contributions to the United Nations Sustainable Development Goals and Global Forest Goals and Targets of the United Nations Strategic Plan for Forests 2030.

? industries at all scales that safeguards biodiversity; and

? a valuable amenity for recreation and recuperation and support for mental health and well-being.

114) The **Nature-Based Solutions (NBS)** definition, as agreed by UNEA on 2 March 2022: (NBS are) ?actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits?.

115) This project will be based on a type of NBS:

? *Type 1.* Minimal ecosystem intervention: with the aims of maintaining or enhancing the delivery of a range of ESs, within and outside these conserved ecosystems. This type of NBS is connected, for example, with the concept of Biosphere Reserves.

? *Type 2.* Interventions in ecosystems and landscapes corresponds to the sustainable and multifunctional management approaches; it improves ES delivery to a level over and above that which would be obtained with a more conventional intervention. This type of NBS is related to natural systems agriculture and agricultural and forest restoration.

116) **Bioforestry corridors (BFCs)** are seen as landscapes for socio-environmental planning purposes and therefore have strong local, ecological and biocultural roots. Firstly, they take the form of diverse areas containing intact networks of socio-environmental processes. Secondly, which is very important for the project, these corridors are linked to the network of PNAs present in each macroregion, which in many cases operate more as conservation islands than socio-environmental cooperation areas. Thirdly, they represent a way of recognizing local knowledge, which is often in the hands of indigenous and tribal peoples and communities. Such knowledge explains why these territories and landscapes still retain many their environmental functions and can provide ecosystem services by employing community-based solutions that are in turn type 1 and 2 NBS and are essentially biocultural in nature. The bioforestry corridors are the territorial units in which the various processes for achieving the project will take place.

117) The **Social Economy** approach applied by the Mexican Government through the National Forest Programme. The social economy focuses on cooperative initiatives and seeks to generate social welfare through cost-effectiveness. Activities promoted by the social sector are expected to deliver goods and services while generating positive environmental impacts and mainstreaming sustainable practices through a life cycle approach. The unit of work is the territory, defined as a socioecological system.

118) The Social Economy (SE) fosters a direct connection between social and community entrepreneurs and buyers of environmentally friendly products, to generate at least three benefits: i) minimizing risks through formal agreements, ii) creating products that meet the quality requirements of specific markets, and iii) establishing effective and efficient market channels for BD and forest products. This SE strategy aims to support inclusive value chains and market placement. The SE has learnt from Mexico?s considerable experience in community-based commercial forestry, through the implementation of models such as fair trade, organic coffee, sustainable production of basic grains and organic natural gum, among others.

Component 1: Green Recovery: Setting up the Enabling Environment

119) The component will strengthen the national and territorial institutional environment to mainstream a biodiversity restoration, management and conservation approach through the forestry, environmental, agricultural and social sectors by promoting NBSs, while building capacities and the BFC connectivity approach at the different levels of government and among local actors. The aim is to effectively coordinate actions taken by the above sectors under an integrated landscape management

approach. In brief, under C1, the project will seek to create an enabling environment among institutions and local stakeholder conditions in order to implement Component 2 and Component 3.

120) Through Component 1, the project will address three barriers:

- Limited coordination between institutions at different governmental levels (national, state and municipal) and between sectoral programmes (social, agricultural and forestry) to safeguard biodiversity and implement integrated landscape management actions, conceptualizing the territory as an integrated landscape and social construction in which society and actors involved in decision-making recognize that environmental, social and economic functionality can be achieved.

- The technical and implementation capacity of the territorial management model promoted by CONAFOR is insufficient.

- Local actors (outreach workers, communities) are not properly trained or present in sufficient numbers to incorporate ecosystem biodiversity, restoration and connectivity.

- Limited participation of women, young people and indigenous people

121) The actions of this component will strengthen the implementation and results sought by the National Forestry Programme 2020?2024, particularly objective 5 ?Promote effective institutional coordination and improve the development of institutional capacities to address the forestry sector?. The activities to be carried out will increase the coordination and commitment of partners and Government actors to define territorial institutional strategies that incorporate an ecosystem outlook under a biodiversity management and ecological connectivity approach. Component 1 aims to achieve two outcomes and generate five outputs, as detailed below:

<u>Outcome 1.1:</u> Regulatory framework of CONAFOR?s *Support Programme for Sustainable Forest Development*[53][53] **and institutional strategies strengthened and harmonized for the generation of multiple environmental and socioeconomic benefits**.

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? *<u>Project indicator 1</u>: Percentage of CONAFOR planning instruments that include environmentally friendly territorial arrangements*

- o <u>Baseline:</u> 0%
- o <u>Target:</u> 100% of CONAFOR[54][54] *planning instruments*.

? Project indicator 2: Percentage of project bioforestry corridors (BFCs) that implement the biodiversity and connectivity strategies developed by the Forestry Development Promoters offices[55][55] and approved by the respective governance bodies.

- Baseline: 0 BFC
- Target: 100 of BFC

122) Outcome 1.1 will support the generation of inter-institutional agreements at national level and local agreements between the different strategic actors, to promote a vision of integrated landscape management, connectivity, biodiversity and restoration and other NBSs. This will be based on CONAFOR?s Support Programme for Sustainable Forestry Development and other environmental, social and agricultural programmes that have an impact on the target macroregions.

Output 1.1.1: Key biodiversity and integrated landscape management criteria are incorporated into the CONAFOR?s Support Programme for Sustainable Forest Development.

123) Output 1.1.1 is based on an analysis of the rules of procedure of the programmes, actions and incentives of the Support Programme for Sustainable Forest Development in order to mainstream biodiversity conservation and connectivity practices into the planning instruments applicable to forest lands under management. The following actions are therefore proposed:

a. In Project Year 1, *an analysis of the regulatory framework (policy and planning instruments) and CONAFOR?s institutional strategy* will be carried out in order to issue recommendations for strengthening and/or mainstreaming BD and connectivity criteria through the integrated management of the landscape and NBSs in instruments such as the Integrated Development Plans[56][56] (IDPs) of areas covered by the project. Although the Support Programme for Sustainable Forest Development includes strategies for conservation and ecosystem restoration, the connectivity approach must be strengthened through bioforestry corridors under a landscape mosaic approach and the NBSs.

   As part of the same activity, other instruments regulating commercial forest harvesting and that contribute significantly to the conservation of ecosystems will be analysed, for active management of forest areas with a landscape approach. Instruments such as Forest Management Programmes (CONAFOR), Land Use Planning (SEMARNAT), PNA management plans and the VCAs (CONANP), as well as the UMAS (SEMARNAT) and projects under the payment for environmental services scheme (PES, CONAFOR), apply criteria for the conservation of biodiversity and ecological connectivity. However, these criteria are still insufficient, and in all

cases, there is not enough technical capacity, support or financial resources to fully implement and monitor the effectiveness of applying the programmes, or to scale up the lessons learned, particularly in land areas under management that are destined for restoration or recovery. Similarly, each region displays a certain amount of specialization in deploying the available instruments: PNAs predominate in the Lacandon Jungle; PESs and VCAs can be found mainly in Balsas-South Pacific; and UMAs are predominant in Durango landscapes. The project will promote ways of accrediting other active conservation strategies in the territories and acknowledge that each macroregion has its own preferences about the specialist instruments applied.

b. *Carrying out consultations with governance and consultative bodies in the forestry sector,* such as i) the National Forestry Council (CONAF); ii) the State Forestry Councils of the states where the project will be implemented and iii) other key actors such as CONAFOR outreach workers, universities and others, for participatory construction of the criteria and/or tools that will strengthen the instruments available to CONAFOR and for the feedback of the results. The first consultations will take place during year 1 of the project.

- CONAF is a consultative and advisory body, regulated by Article 152 of the General Law on Sustainable Forestry Development. CONAF acts as an advisory, supervisory, monitoring, evaluation and follow-up body for the application of the criteria and instruments of forestry policy provided for in this Law and must invariably be consulted on matters of forestry planning, regulations and standards. It is made up of representatives from forest communities, industry, professionals, indigenous peoples, civil society, state forest councils and federal government[57][57]. It is proposed to consult CONAF at least five times (one consultation per year during the five years of the project).

- State Forest Councils[58][58] are consultative, advisory and consensus-building bodies that contribute to the planning, supervision and evaluation of policies for the use, conservation and restoration of forest resources in the States. These councils also promote coordination between different levels of government and sectors of society, as well as with the Councils for Sustainable Rural Development. State Forest Councils are regulated by the LGDFS. The project proposes to consult this committee at least once a year. If necessary, the Councils will be asked to form a specialized working group for specific consultations with other experts.

c. The outcomes of analysing the regulatory framework and the consultations carried out will allow CONAFOR, at the end of year 2, to incorporate the resulting recommendations into institutional public policy instruments to *implement the Integration Strategy for the Conservation and Sustainable Use of Biodiversity in the Forestry Sector, as well as in the Rules of Procedure and other territorial planning instruments* of the Support Programme for Sustainable Forestry Development. By the end of 2024,

there will be a change of national government accompanied by a new plan for the 2025?2030 cycle. We therefore propose that the project should carry out new consultations and provide the Mexican government with input for its legal, regulatory and planning frameworks and instruments.

124) This output will be prepared by the Chief Technical Advisor (CTA), the project Field Technical Units (FTUs) (see section 6.a institutional arrangements for project implementation) and CONAFOR staff; the project team will not require any external consultants. This output will directly address institutional barrier 1a.- Limited coordination between institutions at different governmental levels (national, state and municipal) and between sectoral programmes (social, agricultural and forestry) to safeguard biodiversity and implement integrated landscape management actions.

<u>Output 1.1.2:</u> (Three) Territorial institutional strategies strengthened and harmonized to promote inclusive economic recovery with a BD-friendly approach.

125) This output aims to *ensure the effective coordination of intersectoral interventions* (environmental, agricultural and social), and interventions *within the environmental sector with the project?s three partner environmental institutions* (CONAFOR, CONANP and SEMARNAT) under a landscape approach and will address institutional barrier 1a. Output 1.1.2 addresses the Building Back Better vision of reducing poverty while reversing biodiversity loss and environmental degradation.

- As mentioned in the baseline scenario, the forestry policy promoted by CONAFOR, through the PNF, addresses Priority Strategy 3.3: Implement the Integration Strategy for the Conservation and Sustainable Use of Biodiversity in the Forestry Sector within the framework of Mexico?s National Biodiversity Strategy, which promotes the following priority actions, among others: 3.3.1 Promote sustainable forest production in accordance with criteria of connectivity between ecosystems at landscape level, conservation, management and use of biodiversity; 3.3.2 Strengthen forest restoration with criteria of conservation and sustainable use of biodiversity; 3.3.3 Promote the conservation and protection of biodiversity in forest ecosystems through payment for environmental services schemes; 3.3.6 Promote and support actions for building and developing the knowledge and capacities of public servants, technicians and forest producers in the management, conservation and sustainable use of biodiversity in forest ecosystems; 3.3.8 Promote, formalize and strengthen interinstitutional coordination to enhance actions in the field of knowledge, management, conservation and sustainable use of biodiversity in forest ecosystems...The strategy should be promoted by SEMARNAT, CONAFOR, CONANP, CONABIO and INECC.

126) This strategy includes at least two relevant areas for improvement and strengthening: a) the inclusion of NBS and connectivity within an integrated landscape management approach based on the mosaic concept; and b) implementation of the resulting strategy concept locally, i.e., how to coordinate the major actions and landscape approach locally, building of local institutional capacities (local management model) and the capacities of the various local actors.

127) The following substantive actions can be taken to achieve the above:

a. Establishment of national and regional interinstitutional consultations in each macroregion covered by the project, to identify opportunities for coordination and interinstitutional synergy and discussion of lessons learned that could pave the way for the generation and implementation of strategies offering genuine operational viability and efficient resource use. These consultations will include environmental sector institutions and the project will also seek to include the Ministry of Agriculture and Rural Development, the Ministry of Welfare with its *Sembrando Vida* Programme, as well as their counterparts in the states and the Mexican development banking institutions, such as Financiera Nacional para el Desarrollo (FND) and FIRA. These discussions will take place during year 1 of the project.

b. In addition to consultations between institutions, the project will also encourage discussions with key local actors: educational and research institutions, forestry organizations and social enterprises, the agricultural sector, the private sector, among others. During year 1, the key local actors will be corroborated.

c. As a result of the consultations, by the end of the project year we expect to have signed an Interinstitutional Framework Agreement to establish terms for promoting local strategies and implementing the 18 BFCs proposed by the project. Similarly, at local level, we expect the actors responsible for promoting governance and integrated management of the landscape to agree on the NBSs required in each of the bioforestry corridors. This means that the national and local agreements promoted in C1 can create an enabling environment for implementing C2 and C3.

d. In conjunction with Component 2, which defines the NBSs and the ecosystem connectivity strategy, as part of this output the project team will work with CONAFOR, CONANP and SEMARNAT to carry out specific local interinstitutional strategies for each macroregion to promote the landscape approach. Local strategies will include (in addition to biodiversity conservation and integrated landscape management criteria specific to the territory): a plan for strengthening and developing technical, organizational, governance and market capacities of the various technical assistance and governmental support instruments such as CONAFOR?s forestry promoter offices; instruments or tools to make the support sustainable or economic resources to execute and monitor the effectiveness of applying the programmes? guidelines and to scale up lessons learned, particularly in project areas under management that are destined for restoration or recovery. These strategies will also accredit the various active biodiversity conservation instruments promoted by the three project partners (PNAs and VCAs, CONAFOR; PES, CONAFOR; and UMAs SEMARNAT). As mentioned, each region has certain specialist preferences when implementing these instruments and the local strategies will promote the accreditation of other local active conservation strategies and their specialized application in each macroregion.

e. Once the strategies have been defined and validated by the consultation bodies of CONAFOR, CONANP and SEMARNAT, the project will implement actions to disseminate the strategies and follow up the implementation of actions in the interinstitutional governance bodies.

Our aim is that the local interinstitutional strategies resulting from these actions will put biodiversity, connectivity and the bioforestry corridors strategy on the political agenda and serve to influence evidence-based public policy interventions and adaptive learning processes.

Output 1.1.3: Impact assessment of the innovative practices[59][59] applied by the Project - to be upscaled by the entire CONAFOR?s Support Programme for Sustainable Forest Development[60][60].

128) The assessment will apply a nature-based solution (NBS) approach to measure the social and ecosystem impacts of the project?s field interventions. The aim is to inform policy design and support the upscaling of NBS at the Program level. Therefore, the project will integrate the missing pieces of the NBS approach and will support biodiversity mainstreaming in the Government?s signature Program.

129) This assessment will allow the project to measure and process the effects caused by project activities and/or outputs. The project outcome assessment methodology will provide evidence of the effects of the project on biophysical and socioeconomic aspects in accordance with the project?s theory of change. Output 1.1.3 will analyze the cost effectiveness of social, economic and ecosystem services. The object of study will be the combined investment (CONAFOR?s support programs + GEF project) in 3 target landscapes. The results of the assessment will inform decision-making and are expected to promote greater and sustained investments for the generation of multiple benefits. A valuation of the benefits derived from the mainstreaming of BD within the CONAFOR support programs is expected to show clearly what is the value added to the SV program of the interventions implemented within the framework of the project; what are the best models to implement; whether they provide greater social-economic or governance benefits; and how this GEF catalyzing effort could give a plus to the CONAFOR?s *Support Programme for Sustainable Forest Development.*

130) The evaluation design, data-collection instruments and supervision will be carried out by FAO, through its Agri-food Economics Division (ESA) and the Inclusive Rural Transformation and Gender Equality Division (ESP), as well as the OCB GEF Unit in Rome and the project?s monitoring and evaluation specialist, as part of a joint effort. This assessment will show strong evidence of the transformative effect of the GEF?s interventions portfolio. The project will cover the cost of data-collection (household and community-level survey) and high-resolution spatial data-collection (only if necessary). This output will support the monitoring of the core Greenhouse Gas Emissions Mitigated indicator (metric tons of Co2e) at the project midterm and end.

131) The assessment process will collect information from communities and households to be involved in the project, as well as from a control group for counterfactual analysis purposes. This will allow a comparison of the changes produced by the project over time. The methodology will also make use of geospatial data to compare changes at biophysical level, and to link observed changes to household behaviour through econometric techniques.

132) Lastly, pilot studies will be conducted to assess alternative approaches to household behaviour, along with household incentives to adopt sustainable practices, as well as to break down barriers to project sustainability and its future effects. Some alternative options have been identified within the design of Rural Learning Communities, NBSs and the generation of inclusive value chains.

133) We expect the diagnosis to use practical examples and effective instruments to demonstrate that the project?s proposed arid forest management, conservation and restoration actions will produce tangible and positive results for families, rural communities, small-scale producers and decision makers with a gender, intercultural and intergenerational approach. Annex M presents the proposed methodology for assessing project outcomes.

Outcome 1.2: Increased stakeholder engagement and technical capacities.

? *GEF Core Indicator 11*: Direct beneficiaries as co-benefit of GEF investment

- Baseline:
- Target: 115 000 direct beneficiaries as co-benefit of GEF investment

Table 9 Number of beneficiaries by gender and by type of NBS implemented

Type 1 and 2 NBSs	Women	Men	Total
NBS1 (450 inhabitants per agricultural unit)	35 451	34 749	70 200
NBS2 forest restoration (min 5 ha)	4 103	11 497	15 600
NBS 2 agricultural restoration (min 2.5 ha)	7 680	21 520	29 200
Total	**47 234** (41.07%)	**67 766** (58.93%)	**115 000** (100%)

Prepared by FAO Mexico

<u>Output 1.2.1:</u> Bioforestry Corridors (BFC) that incorporate the strengthened strategy of CONAFOR?s territorial management.

134) This output directly addresses four barriers, two of which are technical barriers: the technical and implementation capacity of the local management model promoted by CONAFOR is insufficient and local actors (outreach workers, communities) are not properly trained or present in sufficient numbers to incorporate ecosystem biodiversity, restoration and connectivity. The other two are governance barriers: limited participation of women, young people and indigenous people and weak community governance over natural resources and BD.

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135) The strategy to strengthen the governance of the territory involves two lines of action: 1) CONAFOR?s territorial management model and 2) strategic local actors, such as forest producers (starting out, developing and established) and beneficiaries of Social Forestry Enterprises, in addition to the accreditation of governance organizations and bodies present in the macroregions (landscapes). Output 1.2.1 will strengthen the participation of women, indigenous peoples and young people in the decision-making spaces of *ejidos* and communities, community social enterprises in three of the project?s target landscapes.

136) As of 2020, the local management model with which CONAFOR operates (Figure 1), offers two levels of support:

a) Forestry Development Promoters offices. These are the state representative offices of CONAFOR, which coordinate and implement CONAFOR?s duties at state level, within a framework of organization, governance and participation by forest resource owners, in order to maximize benefits and improve public well-being. There is one Promoters' office for each state in the country (32). Because the project will be implemented in seven states of the country, it will have a direct impact on seven Forestry Development Promoters? Office: Durango macroregion: 1) Nayarit and 2) Durango; Lacandon Jungle macroregion: 3) Chiapas and 4) Tabasco and Balsas-South Pacific macroregion: 5) Guerrero, 6) Oaxaca and 7) Michoac?n.

b) Local Forestry Development Promoters offices. Representative offices, which coordinate and support CONAFOR?s powers at the local level and are coordinated by the State Forestry Development Promoters office staffed by personnel from the institution, with permanent and close residence in the forest areas, providing direct attention and support to ejidos and communities, within a framework of organization, governance and participation of the owners of forest resources, to maximize the benefits to improve people?s well-being. There are currently 84 local Forestry Development Promoters offices

137) The project will strengthen this model with lessons learned from the year of implementation and lessons from other models implemented by CONAFOR and other institutions. The specific actions required to generate the strategy are:

- diagnosis and analysis of the model in technical (NBS, connectivity, territorial governance, market access and funding), operational and administrative-financial terms.
- preparation of a strategy to strengthen CONAFOR?s territorial management model and consultations for its validation.
- implementation of the strategy for strengthening the local management model.
- follow-up, monitoring and systematization of lessons learned from, and good practices of, the implemented strategy.

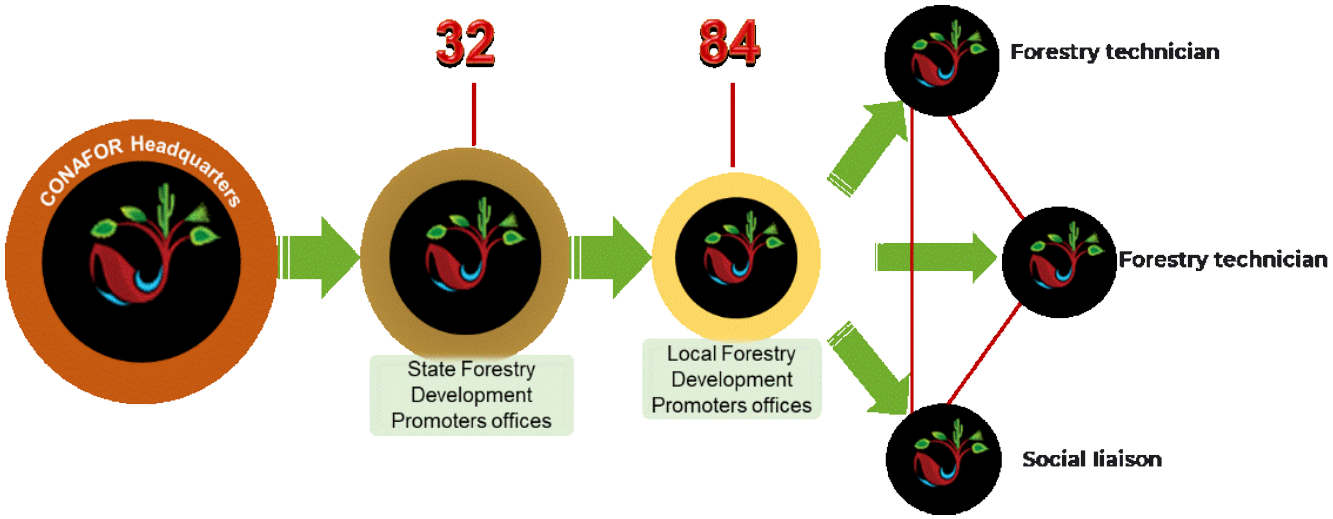


Figure 1. CONAFOR?s local management model.

Source: CONAFOR, 2022.

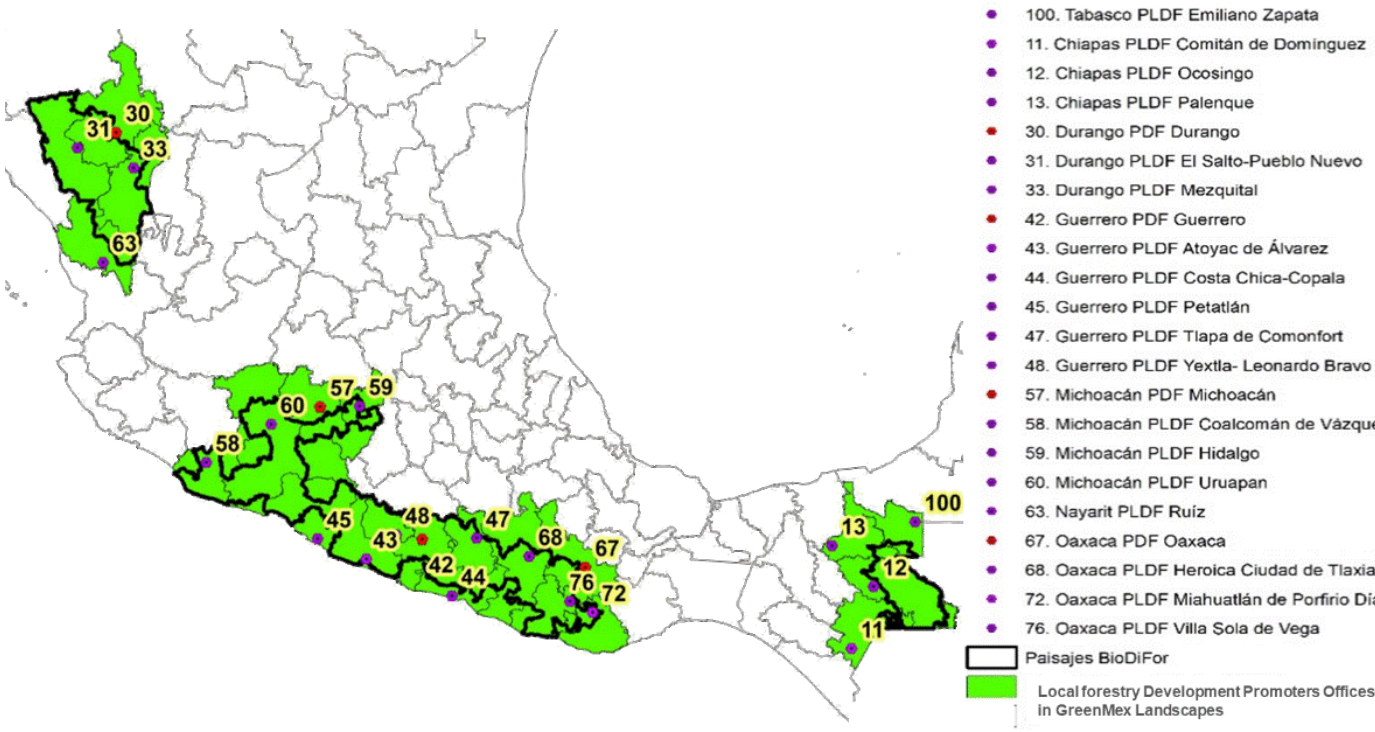
138) The project will seek to strengthen seven Forestry Development Promoters offices and at least 18 Local Forestry Development Promoters offices (Mapa 5). Strengthening these Promoters offices will be the responsibility of the Field Technical Unit (FTU, see section 6.a institutional arrangements for implementation). The project will allocate two extra people to each Local Forestry Promoter Office (Facilitators), so that the members of the Local Forestry Development Promoters offices can be

responsible for dealing directly with project beneficiaries. Local Information and Forestry and Rural Learning Hubs will be set up in the Local Promoters offices (see output 2.4).

139) To supplement the local governance strengthening strategy, during the first year of the project, a diagnosis and analysis of strategic actors present locally will be carried out to promote governance. These actors include forest social enterprises, forest *ejidos* and drivers for setting up Macroregions governance Councils (BFCCs, see component 2), after accreditation of existing structures. The strengthening strategy therefore considers five key activities:

- diagnosis and analysis (year 1 of the project) to: a) identify existing governance bodies in the corridors and macroregions, as well as their level of establishment and areas for improvement; and b) identify the main problems they face in each territory.
- participatory planning for the inclusion of work programmes that strengthen cooperation and communication networks, both cross-cutting (with like-minded actors of equal influence) and vertically (i.e., with actors at asymmetrical hierarchical levels). Planning will take place during year 1 and part of year 2 of the project, while implementation of the work programmes will start from year 2 of the project.
- follow-up, monitoring and systematization of lessons learned from and good practices of the implemented strategy.
- definition and/or strengthening of conflict resolution mechanisms, starting in the first year of the project.

140) This output is also intended to identify the role of women, young people and the indigenous population, and their participation in decision-making in the three macroregions. Methodologies designed by CONAFOR, FAO and other tools generated by different projects will be used.



Map 5. CONAFOR?s Local Forestry Development Promoters Offices in GreenMex Landscapes

Source: CONAFOR, 2022

<u>Output 1.2.2:</u> ?Green Recovery? Training Programme, addressing Nature-Based Solutions[61][61], governance and social economy.

141) This output aims to strengthen the capacities of strategic actors in the following thematic areas: i) Integrated landscape management: NBSs (including restoration) and connectivity; ii) capacities for sustainable production; iii) governance and local management; iv) social economy - business models and access to finance. Producers? capacities will also be strengthened through digitalization, in view of the Covid-19 situation, with a special emphasis on young people. The training programme, which will focus on inclusion, gender, young people and interculturality, will be aimed at:

? government officials (national and local: Forest Development Promoters offices and Local Forestry Development Promoters offices) and other institutional actors from CONANP and SEMARNAT.

? Forest producers (starting out, developing and established), beneficiaries of Forest Social Enterprises.

? Community promoters from forestry and rural training centres.

? Other relevant stakeholders.

142) Beneficiary training will be carried out at three levels: i) Schools for training in NBSs; ii) Forest Learning Communities, FLCs, between communities; and iii) Local Information and Forestry and Rural Learning Hubs, which will be set up in the facilities of the Local Forestry Development Promoters offices. Both the Local Promoters offices and the Forestry Development Promoters offices will serve as multidisciplinary training centres, where training plans will be implemented for the various key actors. This will mainly involve institutional and civil society actors, and in certain cases also forest and agricultural producers. Multidisciplinary training centres for the training of producers will be located in the communities. Some may already be operational for the implementation of the Forestry Programmes, while the project will drive the setting up of others such as the *Sembrando Vida* Programme Rural Learning Communities, Forestry Learning Communities, FLCs and NBS Schools.

143) The green recovery training programme will be designed and implemented in line with the National Forest Programme 2020?2024, priority objective 3, priority strategy 3.3[62][62] and specific action in 3.3.6. Promote and support actions to strengthen and develop the knowledge and capacities of technical public servants and forest producers in the management, conservation and sustainable use of biodiversity in forest ecosystems.

144) This programme will be prepared and implemented in four stages:

? Diagnostic stage: review and identify opportunities to strengthen CONAFOR?s current training programme and diagnosis of capacity-building needs;
? design methodologies and instruments to strengthen the training programme;
? implementation of the Training Programme;
? monitoring, follow-up and lessons learned.

145) A training course will also be developed with an integrated landscape management approach aimed at community forestry promoters, with the aim of training women and young people. These activities will consider the type of producer, company or organization they are designed to reach out to

and the level of development of each one, in accordance with CONAFOR?s current regulatory instruments. Similarly, mentoring programmes are planned to promote local women leaders, starting in the second year of the project. To this end, women involved in successful or innovative biodiversity management initiatives will be identified, trained and supported to act as mentors to facilitate the incorporation of other women in projects related to the conservation and sustainable use of biodiversity.

Component 2 Green Recovery- Integrated landscape management, inclusive conservation and ecosystem connectivity.

146) Component 2 will be developed hand in hand with institutional and multi-stakeholder enabling conditions (promoted by Component 1: interinstitutional framework agreement and local multi-stakeholder agreement; development/strengthening of technical and organizational capacity around biodiversity, connectivity and restoration; in short, strengthening of local governance at macroregional or landscape level) for setting up the bioforestry corridors important for ecological connectivity and biocultural processes, which will also enable the restoration of degraded ecosystems.

147) Component 2 aims to implement an integrated landscape management strategy that promotes inclusive conservation and the ecosystem connectivity of territories with high biodiversity value. In order to achieve the expected results for this component, the project will implement a series of Nature-Based Solutions (NBS), which are management practices of biocultural relevance, based on the institutional and local framework, and with economic potential.

148) The NBSs will implement the best management practices and promote the restoration of degraded forests and land. NBSs, as well as accreditation and certification instruments, will also be promoted to establish and consolidate voluntary conservation areas and other active conservation schemes. The establishment of new areas and other active conservation schemes will contribute significantly to the achievement of the Aichi commitments, to the advancement of the National Biodiversity Strategy, and to other important biodiversity-related goals laid down by the Mexican government. This component will also seek to develop instruments and capacities for local actors to make a crucial contribution to knowledge management and to the monitoring, evaluation, systematization and socialization of issues related to integrated landscape management, governance, Nature-Based Solutions and interinstitutional agreements. Component 2 aims to achieve one outcome and generate four outputs, as detailed below:

<u>Outcome 2.1:</u> Nature-based solutions (NBS)[63][63] applied in prioritized forest and agroforestry landscapes, contributing to ecosystem connectivity, generating multiple environmental and socioeconomic benefits.

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<u>GEF Core Indicator 4:</u> Area of landscape under improved practices (excluding protected areas)

? <u>Baseline</u>: 1,118,356 ha. Durango macro region: 691,636 ha; Lacandon Jungle: 53,790 ha and Balsas-South Pacific macro regi?n: 372,930 ha.

? <u>Target</u>: 4 867.049 of terrestrial area under improved practices through improved management of 1 568 620 ha in the Durango macro region, 389 702 ha in the Lacandon Jungle macro region and 2 908 727 ha in the Balsas-South Pacific macro region providing functional ecological connectivity between NPAs.

<u>GEF Core Indicator 1.1</u>: Hectares of terrestrial protected areas newly created (including OECM).

? Baseline: 56 000 ha (VCAs)

? Target: 100 000 ha.

<u>GEF Core Indicator 3:</u> Area of land restored (agricultural and forestry).

? Target: 151 000 ha.

- 73 000 ha of degraded agricultural land restored
- 78 000 ha of degraded forestry land restored.

149) Nature-Based Solutions (NBS) will include Type 1 and Type 2. Component 2 will support a territorial mosaic.The project will be organized over four levels that correspond to equivalent landscape levels and scales: *target macroregion; ii) bioforestry corridors; iii) agricultural centres; and iv) forest plots or areas*. Figure 2 shows the landscape scales and governance levels of the project in the territory. It is important to note that: a) each landscape unit is taxonomically integrated in a bottom-up scheme; b) each landscape scale corresponds to a level of governance; c) multilevel governance implies the action of a socioenvironmental entity that allows project impacts to be increased; d) each level of governance implies a locally-rooted time and organization function; e) this governance will be covered by the governance structures that are already present in the territories and will be validated or adjusted during year 1 of the project.

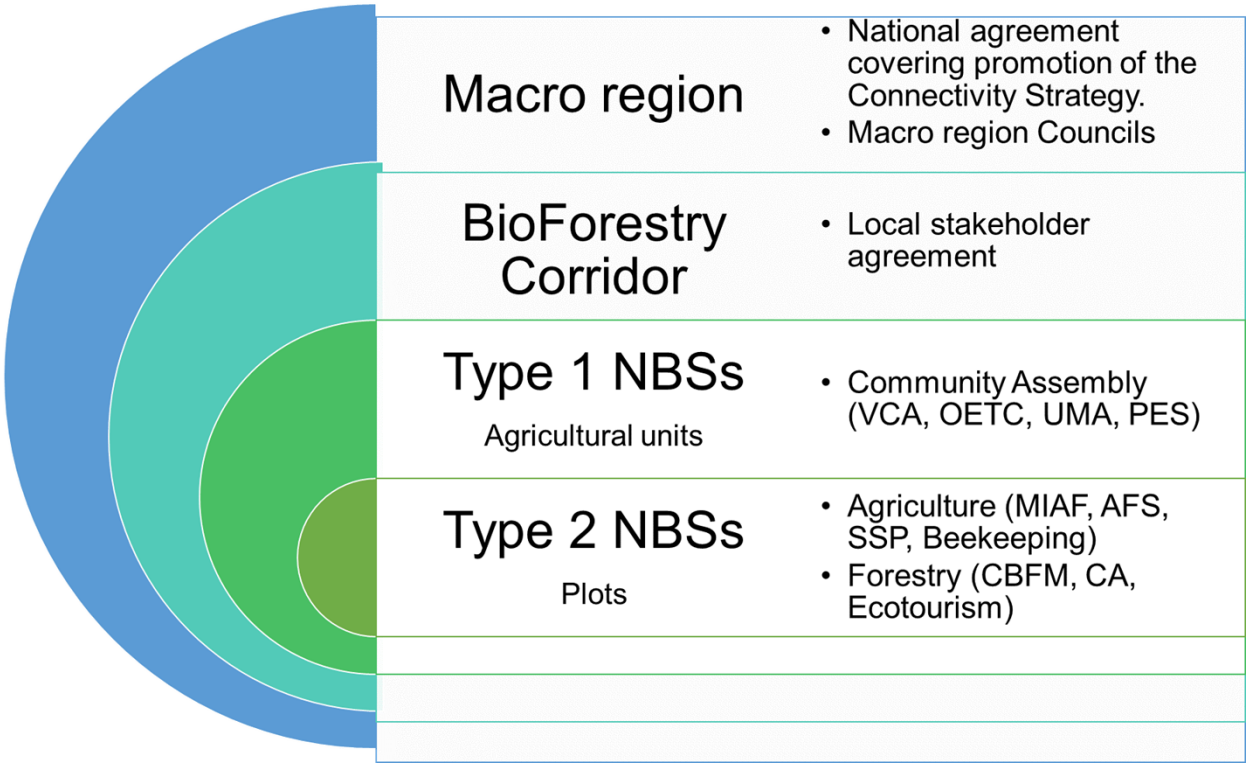


Figure 2. Scale of landscapes for implementing the project and proposed governance.

i) Macroregional space.

150) This incorporates the territories where the geo-environmental processes that the project seeks to ensure are located. Approaching the project at this level considers the biological and geographic viability of species that are highly mobile and range across large ecoregions that are on the same scale as far-reaching processes in landscapes that are geosystems of relevance to the Nearctic and Neotropical zone of the Americas. The macroregions considered relate to:

- The western Sierra Madre, which runs from south to north and is one of the most important mountain ranges in North America, spanning Mexico, the United States and Canada;
- The southern Sierra Madre, which covers an area of great richness and biodiversity as it represents the area of contact between Central Mexican landscapes occupied by the trans-volcanic belt and the semi-arid to humid mountain landscapes of the south of the country where altitude changes establish multiple ecotones and mosaic patterns; and finally,
- The Mexican humid tropics are represented by the Lacandon Jungle macroregion in Chiapas. The complexity of this landscape is sustained by its great environmental and cultural diversity.

151) The institutional scaffolding supporting the macroregions seeks to innovate from a socioenvironmental angle, considering the ecoregion level. We therefore propose to set up representation, democratic decision-making and accountability bodies that include representatives of the leading project institutions CONAFOR, CONANP in close coordination with SADER and SEBIEN, together with representatives of the state governments involved and of the governance councils at the levels macroregion. This fulfils a fundamental goal of Mexico?s environmental policy, i.e., deconcentrating, whereby both central and local levels share the processes in the macroregions. By involving at least two state governments for each region, this model also makes it possible to mitigate the administrative bias that in many cases leads to the sectorization of ecoregional processes that do not distinguish between these types of borders.

152) The project incorporates three macroregions: Landscapes of Durango, Lacandon Jungle and Balsas-South Pacific. The total area is 12.4 million hectares. A governance council will be installed in each macro-region (macro region governance council, MRGC).

153) This planning, decision-making, monitoring and accountability body seeks to offer a space for dialogue between local actors. It is intended to operate as a social and institutional entity that will allow the proper functioning of the project at this level. The MRGCs will be made up of: regional representatives of the project?s leading institutions (CONAFOR?s Forest Promoters offices, CONANP?s PNA Managements, and the project will seek to include representatives of the Ministry of Agriculture and Rural Development and the Ministry of Welfare, representatives of state and municipal governments, representatives of VCAS that are already established and due to be set up under the project, representatives of producers involved in forest and agricultural restoration, and representatives of key sectors for local innovation, women, young people and indigenous peoples).

ii) Bioforestry corridors, BFC.

154) These areas are landscapes for socioenvironmental planning purposes and therefore have strong territorial, ecological and biocultural roots. In terms of territorial roots, they are diverse areas with their own integrity in the form of internal networks of socioenvironmental processes. Regarding their ecological roots, which are of great importance to the project, these corridors are linked to the network of PNAs in each macroregion. In many cases, these PNAs function more as conservation islands than as territories of socioenvironmental cooperation and connectivity. The third aspect, i.e. biocultural roots, covers the accreditation of local knowledge. This mainly lies in the hands of indigenous peoples and communities, which in many cases explains why these territories and landscapes still maintain their environmental functions and provide ecosystem services, employing community-based solutions including fundamentally biocultural type 1 and 2 Nature-Based Solutions.

155) The project includes 18 Bioforestry corridors: five landscapes in Durango, eight in the Lacandon Jungle and nine in Balsas-South Pacific. The total area is 4.8 million hectares.

iii) Agricultural units that will implement the Type 1 NBS

156) Which may be VCAs, Community Ecological Land Use Zoning Plans (OETCs), Forest Management Plans, Wildlife Management Units (WMUs/UMAs), Environmental Compensation-Payments for Ecosystem Services (PES) among others. These landscapes are diverse but have their own agricultural integrity because they cover criteria related to social land ownership and tenure. In Mexico, this condition goes further, as *ejidos* and communally owned assets also make use of a local decision-making structure embodied by the *ejido* assemblies. The project will encourage increased participation by other stakeholders, including young people, to improve the governance of the new terrestrial conservation areas. The project is also intended to interact at this level to implement type 1 NBS activities.

157) The project proposes to achieve a target of *156 500 ha of newly created terrestrial protected areas* (GEF Core Indicator 1.1). The project baseline represented by VCAs certified by CONANP in the three macroregions is: 61 090 hectares. The original target in the PIF was to reach 100 000 ha. The proposed target is to add 156 000 ha to the baseline, according to the methodology and criteria set out below. This area will be distributed across the three macroregions in proportion to their size as a percentage of the overall total. In addition to the 61,090 ha of ADVC, the project will promote other active conservation measures such as Payments for Ecosystem Services (PES) scheme, Environmental Management Units (UMA) instrument and Forest Management Plans (PMF).

158) The relevant actors at this level are two of the leading project institutions: CONANP and CONAFOR, acting through the Forestry Promoters offices and PNA Managements, as well as the state and municipal government representatives. The Field Technical Units (see item 6 of this project, in the section on institutional arrangements) and the forestry facilitators attached to the Local Forestry Development Promoters offices of CONAFOR, who will also play a facilitating and assisting role, the bioforestry corridor Councils will also support the agricultural authorities, the *ejido* and/or community assembly and representatives of key local innovation sectors (women, young people and, where appropriate, native peoples when the composition of the agricultural units warrants it).

iv) plot or forest area scale for the restoration of degraded forests and forest landscapes and plots for the restoration of degraded agricultural areas; type 2 NBSs will be implemented in both these territories.

159) Such units are part of productive landscapes that have for many reasons undergone degradation and deterioration in some of their basic functions such as soil erosion control, pollination capacity, forest integrity and carbon absorption. The plots will make it possible to establish points that will serve as socio-territorial cooperation devices that will allow a life experience multiplier effect in the medium term that the project will systematize and document. On this scale, it will contribute to the GEF Core

Indicator 3: 151 000 ha of land restored (73 000 ha of degraded agricultural land restored/ 78 000 ha of forest land restored).

160) The actors involved at this level will be the project?s forestry facilitators attached to the Forestry Promoters offices and SADER local bodies, the agricultural authorities and the group of related forestry and agricultural producers at the level of each participating community.

161) Type 1 and Type 2 Nature-Based solutions (NBS) will be included. All NBS actions were discussed and further and validated with stakeholders and with a gender-sensitive approach. Component 2 of the Project will support a territorial mosaic that includes: a) conservation areas, with a focus on the declaration of new areas voluntarily set aside for conservation (VCAs) and other active conservation initiatives, biocultural landscapes and restoration areas within forest management programmes; b) agricultural areas, *acahuales* and *huamiles*: mostly old forest areas (currently degraded), which have been used for agricultural and livestock activities. They require a productive approach to restoration using techniques such as agroforestry and allow for a combination of traditional agricultural (such as *milpa*) and livestock farming with forestry systems; c) sustainable forest management areas, including payment for environmental services, which promote the inclusion of communities in forest management, monitoring and use; and d) sustainable economic activities such as nature-based tourism.

162) All the NBS actions were proposed and validated on a preliminary basis in expert workshops held in the project?s macroregions, and will be discussed, validated and refined with stakeholders during the first year of the project at the level of each bioforestry corridor, with a sensitive approach to gender, the incorporation of young people and indigenous people and people of African descent. The workshops were held in Tuxtla Guti?rrez (covering the BFCs of Chiapas and Tabasco), Chilpancingo (covering the BFCs of Guerrero, Michoac?n, Oaxaca) and Durango (covering the BFCs of Durango and Nayarit). The experts invited to the workshops were: representatives of CONAFOR?s Forestry Promoters offices, CONANP?s PNA Managements, State Governments, social organizations, the academic sector and independent experts.

NBSs in the Durango macroregion

163) The Type 1 NBSs proposed following workshops held during the project design stage for Durango incorporate: i) VCA, ii) OETCs, iii) UMAS and iv) Environmental Compensation -Payments for Ecosystem Services (PES) scheme. The proposed Type 2 NBSs, aimed at agricultural and livestock restoration, are: (i) Conservation and/or protected agriculture, (ii) MIAFS, (iii) Water and soil conservation practices, (iv) Silvopastoral systems, (v) Use of native species, (vi) Implementation of beekeeping projects, (vii) Agroecological transition with the use of organic fertilizers, biological pest control and use of native species. These must be validated with SADER. The proposed Type 2 NBSs,

aimed at forest restoration, are: i) Ecotourism, ii) Timber Forest harvesting and iii) non-timber forest harvesting (mescal and oregano).

164) The Type 1 NBSs identified by experts during project design incorporate: i) VCAs, ii) OETCs, iii) UMAs, iv) Environmental Compensation -PESs and v) Community Protected Areas. The Type 2 NBSs, aimed at agricultural restoration, are: i) Establishment of agroforestry systems (AFS) combining crops such as maize, medicinal plants (herbalism), cardamom, annatto, lemon, rambutan, lychee, banana, pineapple, honey, shade coffee, cocoa and fruit trees (in connection with the *Sembrando Vida* Programme); ii) Promotion of community and organic beekeeping; iii) Promotion of medicinal plant crops (herbalism) in vegetable gardens and sustainable family farming; iv) Livestock reconversion strategies, through silvopastoral systems (protein bank with *leucaena*) with timber production (fast-growing native species) and pastures with livestock rotation; v) Strengthening value chains (holistic production projects led by women?s groups); vi) Strategies for water and soil conservation, and control of agrochemical use to encourage an agroecological transition even in intensive crops.

165) The Type 2 NBSs for forest and forest landscape restoration that were proposed and endorsed at the Tuxtla Guti?rrez expert workshop are: i) Ecotourism, ii) Community forest management with commercial forest plantations (pine, oak, rubber and cinnamon), iii) Non-timber agroforestry systems: vanilla, xate palm, iv) AFSs with other non-timber products.

Balsas-South Pacific macroregion

166) The proposed Type 1 NBSs incorporate i) VCAs, ii) Concurrent Fund for PESs (MLPSA_FC), iii) Environmental Compensation- PESs, iv) OETCs, v) UMAs, vi) Biocultural Hubs, vii) Certified Conservation Areas in Sustainable Forest Management Plans (PMFS). Type 2 NBSs, aimed at agricultural restoration, include: i) Sustainable Agricultural Production, ii) Soil and Water Conservation, iii) Silvopastoral Management, iv) Implementation of beekeeping, v) Productive projects for women, vi) Cultural Tourism. The Type 2 NBSs aimed at forest restoration that were proposed and ratified at the Chilpancingo expert workshop include: i) non-timber forest harvesting (Maguey, pataxte and palm), ii) Community Forest management (timber: commercial forest plantations), iii) Promotion of ecotourism, iv) Environmental restoration and v) Compensation for reforestation.

<u>Output 2.1.1:</u> NBS and ecosystem connectivity strategy, developed and implemented in 3 priority landscapes.

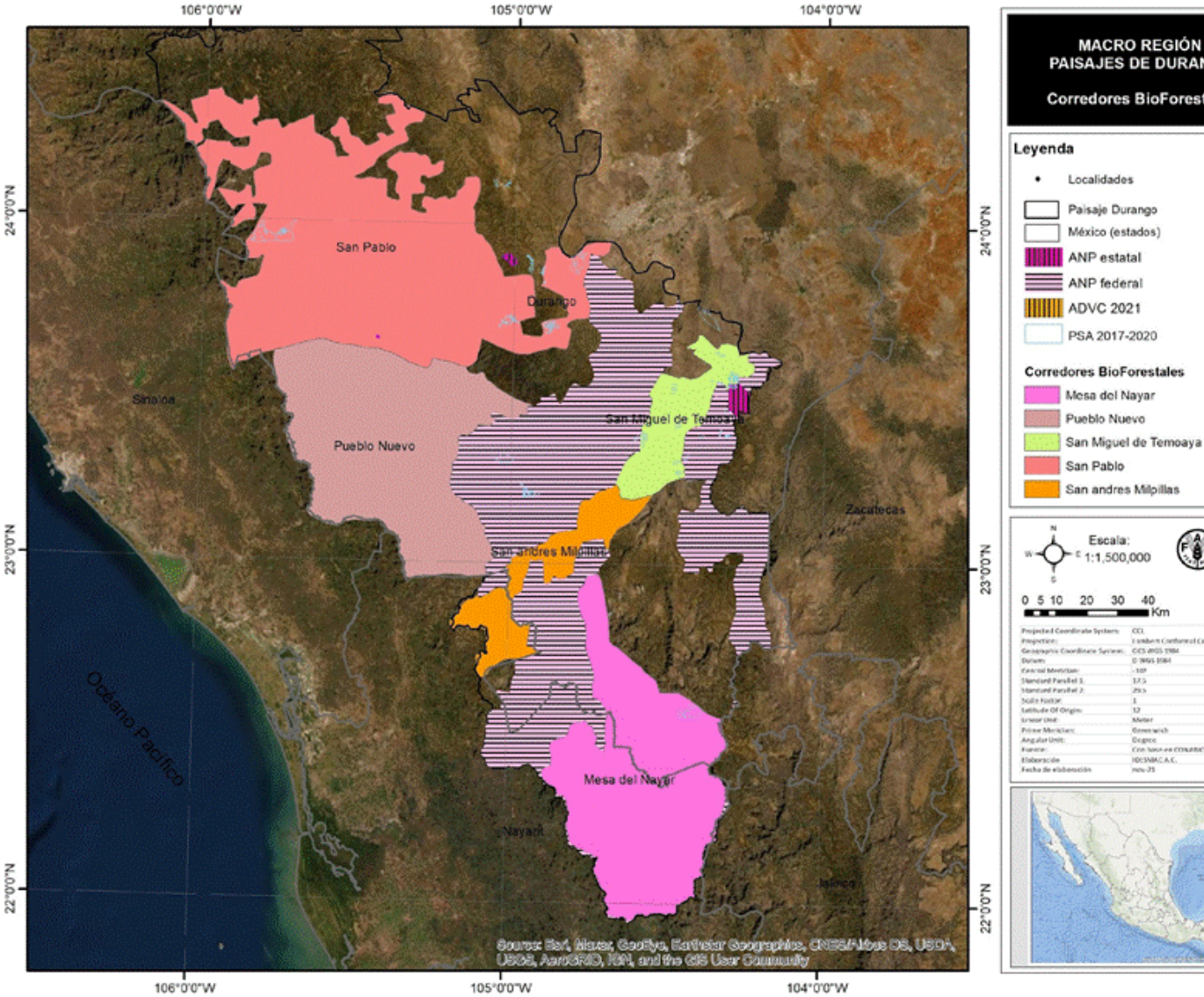
167) Output 2.1.1 will focus on the creation of bioforestry corridors that connect to a PNA and/or clusters of VCAs and *ejidos* with PESs. Bioforestry corridors (connectivity hubs) will support restoration actions on highly degraded and fragmented soils (for agricultural and other uses).

Ecosystem connectivity will be driven by coordinating strategies in the selected landscapes. Restoration actions with a focus on agroforestry will be implemented through the National Forest Programme in coordination with the *Sembrando Vida* programme, SADER and other stakeholders in the field.

168) The total area of the three project implementation macroregions is just over 12.4 million hectares in seven Mexican states. This area was increased due to the incorporation of the Balsas-South Pacific region, which covers just over 8 million hectares. The total area of the 18 identified bioforestry corridors that connect 83 PNAs ? of which 25 are federal, 21 state and 4 municipal ? and 33 VCAs is 4.8 million hectares. These corridors help ensure the current functionality of forest landscapes in the three macroregions, as they represent, together with the area of the PNAs (1.5 million hectares), 50.8 percent of the total territory, i.e. just over 6.3 million hectares. Bioforestry corridors host landscapes that are complex and diverse from a socioenvironmental point of view. The general outcomes of this project can be scaled up in the medium term as an environmental policy instrument with strong territorial roots that is oriented towards sustainable management from a perspective of restoration as well as conservation. This is a joint contribution made by the Government of Mexico, FAO and the GEF to the declaration of the period 2021?2030 as the United Nations Decade on Ecosystem Restoration. Table 10 and maps 6, 7 and 8 present the data on the area and number of bioforestry corridors and the corresponding maps showing their location in each of the three project implementation macroregions.

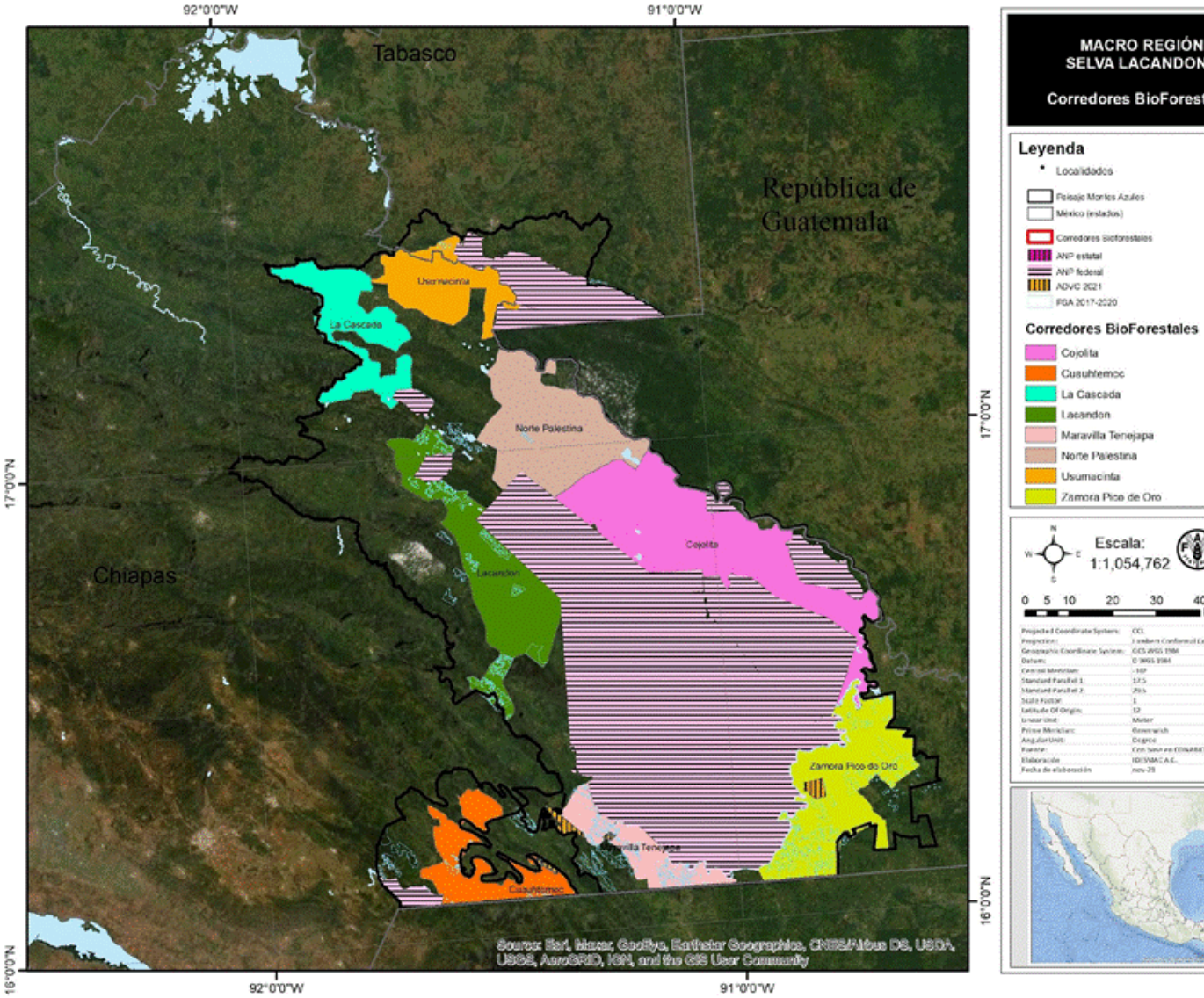
Table 10 Number and area of Bioforestry corridors covered by the project

Corridors	**Number**	**Area**
Durango landscapes	4	1 568 620.26
Lacandon Jungle	6	389 702.05
Balsas-South Pacific	8	2 908 727.61
Total	**18**	4 867 049.92



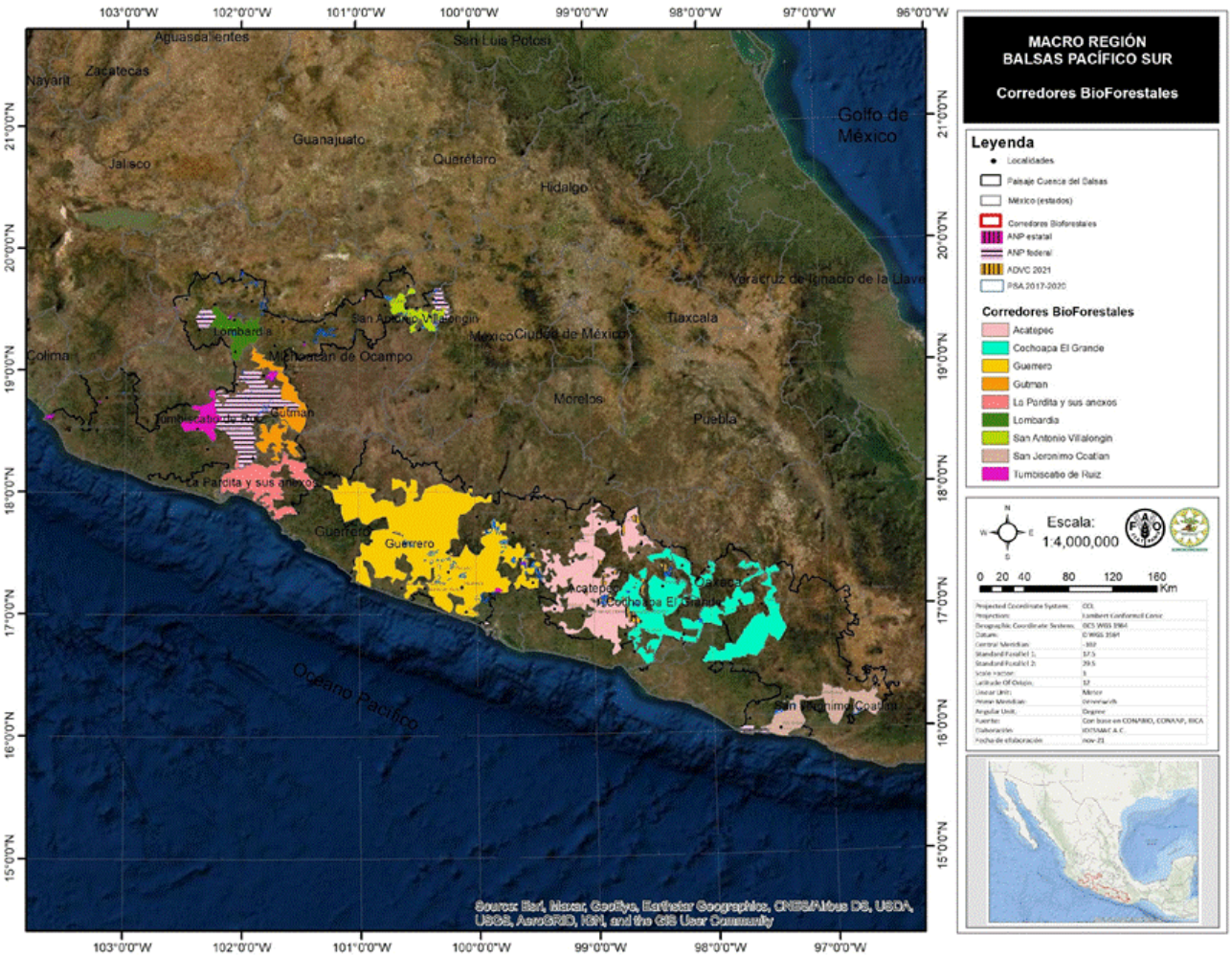
Map 6. Proposed bioforestry corridors for the Durango macroregion.

Source: IDESMAC, 2022



Map 7. Proposed bioforestry corridors for the Lacandon Jungle macroregion.

Source: IDESMAC, 2022



Map 8. Proposed bioforestry corridors for the Balsas-South Pacific macroregion.

Source: IDESMAC, 2022

169) The institutional basis for accreditation of the Bioforestry corridors is laid down in partnership between five Mexican government agencies, CONAFOR, as the project implementing agent and responsible for the country?s forest policy, CONANP, in charge of the Federal Protected Natural Areas, SADER, which is in charge of the rural development sector, the *Sembrando Vida* programme within the Federal Welfare Secretariat, and the Governments of the states of Durango, Nayarit, Michoac?n, Guerrero, Oaxaca, Chiapas and Tabasco. As mentioned in C1, a framework agreement will be drawn up between these bodies so that the project can be implemented. During year 1 of the project, the importance of installing a new governance body to promote the bioforestry corridor will be analysed. It may be decided to strengthen the existing ones. The current governance and organization will be analysed for each BFC. The relevance of developing territorial strategies for mainstreaming biodiversity and connectivity by these councils will also be assessed. The Field Technical Units and forestry facilitators, with the support of the knowledge management specialist and the Education and

Technological Development Unit of CONAFOR, will be responsible for the implementation of the Forestry and Rural Training Centres, as well as the methodological and curricular designs of these centres.

Table 11 Main activities for the implementation of the BFC

Strategies	**Actors involved**	**Target/indicator**
1. Putting together an interinstitutional Framework Agreement for the accreditation of forest integrated pest management (IPM) corridors (Component 1).	CONAFOR, CONANP, SEMARNAT, *Sembrando Vida*, SADER, State Governments, FAO	A national agreement will be signed, and the need for a state-level agreement for the accreditation of Forest IPM Corridors will be reviewed during the first year
2. Promoters? workshops at individual corridor level	CONAFOR, CONANP, SEMARNAT, State Governments, *Sembrando Vida*, SADER, FAO, Municipal Governments, Representatives of Agricultural Units, other important sectors in each region (academia, local experts and private sector)	Eighteen *Promoters'* workshops will be held, one for each forest IPM corridor
3. Analysis of current governance and organization of each BFCs/establishment of Macroregion Governance Councils	CONAFOR, CONANP, SEMARNAT, State Governments, *Sembrando Vida*, SADER, FAO, Municipal Governments, Representatives of Agricultural Units, other important sectors in each region (academia, local experts and private sector)	3 macroregional governance councils established.
4. Establishment of annual regulations and theories of change for the councils	Macro region governance Councils,	
5. Systematization and documentation of the council?s bimonthly meetings	Councils and FTUs, Knowledge Management specialist and forest facilitators from the Promoters offices	Three Annual documents systematizing the council sessions

6. Annual evaluation of the Council?s activities and progress on indicators	Forestry councils and facilitators from the Promoters offices present in the corridors	3 evaluations per council from project Year 3 onwards

Connectivity strategy and definition of the project?s Bioforestry corridors.

170) The 18 Bioforestry corridors that constitute the territorial basis for project implementation were defined based on an analysis of the initial conditions of the landscape, the **stakeholders and planning tools,** including a) the areas to be connected in each region; b) the specific problems of the territory; c) the data to be monitored; and d) the selection of species of interest among all the species present in these areas.

171) During the design phase of the project, in order to define the proposed Bioforestry corridors, a rapid connectivity assessment was carried out for the three project macroregions, based on a mixed quantitative?qualitative methodology and an experimental approach, due to the radical territorial differences and differences of scale between the macroregions. Accordingly, although the same indicators and tools were used to assess the three cases, the results are only relevant at individual case level, so the resulting comparisons are for descriptive rather than analytical purposes only. It is important to maintain this macroregional differentiation throughout project implementation, seeking to recognize regional specificities. The quantitative indicators used for the identification of the Corridors were: Degree of soil erosion (based on data from INEGI, 2014), Pollination function (based on data from CONABIO, 2018), Forest integrity (based on data from GFW, 2020), Forest carbon sequestration (based on data from GFW, 2021), Potential for provision of Environmental Services at the Agricultural Unit level (based on data from the Inter-American Institute for Cooperation on Agriculture (IICA), 2012) and Feasibility of providing Environmental Services at Agricultural Unit level (based on data from IICA, 2012). Three summary maps were put together using the analytical maps obtained: Agricultural degradation, Forest degradation and Potential for the establishment of new terrestrial protected areas. The Bioforestry corridors are territories with landscape mosaic arrangements that are intended to fulfil the three socioenvironmental strategies of the project. Conservation in Community Areas under different schemes (including VCAs), restoration of degraded forests and forest landscapes, and restoration of degraded agricultural areas. Essential data for each Bioforestry Corridor: area, hubs (linked PNAs), land use and vegetation, socioenvironmental issues, monitoring data and species of interest are included in the tables attached as an appendix (BFC Characterization Appendix 2.1.1).

Table 12 Proposed detailed activities

Actions	**Actors involved**	**Target/indicator**
1. Preparing preliminary lists of Agricultural Units and those interested in participating in the project	CONAFOR, CONANP, Council and facilitators from the Promoters offices	Number of participants involved: Type 1 NBSs
2. Diagnosis at Agricultural Unit level for inclusion in the programme.	CONAFOR, CONANP, Council and Forestry Facilitators from the Promoters offices	Number of diagnoses produced
3. Selection of Agricultural Units included in the programme	CONAFOR, CONANP, Council and Bioforestry Agency	Number of agricultural units and areas included in the programme
4. NBS school for training of promoters within the forestry and rural Territorial Information and Learning Hubs	CONAFOR; CONANP, Council and Forestry Facilitators from the Promoters offices	Four Generations of training for promoters in Type 1 NBSs
5. Forest learning communities (FLCs) at the level of each Bioforestry Corridor Note: the FLCs and NBS schools set up forestry and rural Territorial Information and Learning Hubs	CONANP, Agricultural Units, Councils and Bioforestry Agency	Biannual community-to-community experience-sharing sessions at individual Corridor level will take place in the Promoters offices.
6. Preparation and implementation of plans for the application of type 1 NBSs at Agricultural Unit level	CONANP, Agricultural Units, Councils and Facilitators from the Promoters offices	Implementation of protocols for establishing new terrestrial conservation areas (VCAs, OETCs, UMAS) at individual Corridor and Project Region level
7. Accreditation of the Agricultural Unit for type 1 NBSs applied	CONANP, CONAFOR, Agricultural Units, Councils and Facilitators from the Promoters' offices.	Type 1 NBS Certificates established at Agricultural Unit level

<u>Output 2.1.2:</u> Investments in NBS and productive diversification are promoted and implemented in selected landscapes, incorporating native species of sociocultural importance and with economic potential[64][64].

172) The project will support the promotion of productive diversification in the three macroregions and strengthen the production process through different mechanisms such as: farmers who conserve native seeds and other components of biodiversity would have access to specific incentives for conservation, such as participation in accreditation schemes (CONAFOR has such systems), inclusion of programmes connected with this purpose, as well as innovation and training actions for improvement, multiplication, search for new uses and inclusion of protection schemes (Certification, Collective Marks and Denomination of Origin, among others).

173) Characterization workshops were held in each of the project?s macroregions to define the proposed Type 1 and Type 2 NBSs, within the mixed methodology used. The venues were as follows. Tuxtla Guti?rrez, Chiapas; Chilpancingo, Guerrero and Durango, Durango. This participatory research tool, which is primarily qualitative in nature, was supplemented by interviews and field visits. The workshop participants were local experts from CONAFOR, CONANP, State Governments, academia and technicians from social organizations with extensive and accredited knowledge and experience of the territory, and special accreditation was given to representatives of the Forest Promoters? offices. During the workshops, Type 1 and Type 2 NBSs with the feasibility and potential to be implemented in each macroregion were analysed, as well as risks connected with implementation, gender implications and the Covid-19 pandemic. Through social mapping exercises, these solutions were also captured on maps at the individual macroregion scale, based on maps of agricultural and forest degradation and maps showing potential for the establishment of new terrestrial protected areas.

174) The various Forest Learning Communities are another training instrument in addition to the schools to train producers in Type 1 and 2 NBSs. The Communities will serve the purpose of guaranteeing an exchange of farmer-to-farmer experiences; they will also be mechanisms for the systematization and dissemination of local knowledge and their impact is expected to go beyond the scope of the project, at least at individual Bioforestry Corridor level. The Learning Communities will be designed, conducted and systematized by the FTUs, the various project experts, CONAFOR, CONANP. Appendix 2.1.2 provides a description of NBSs in each corridor.

<u>Output 2.1.3:</u> New Voluntary Conservation Areas (VCAs) and Other effective area-based conservation measures (OECMs) have been formally accredited or certified by CONANP and/or CONAFOR in the prioritized landscapes.

175) VCAs are natural protected areas that indigenous peoples, social organizations or individuals voluntarily decide to set aside for environmental conservation. Their legal framework is that of CONANP and they have become a strategic tool for expanding the protected area in Mexico. Other active conservation schemes include: Biocultural Landscapes, the Conservation and Restoration Plans included in the Community Forest Management Plan and ejidos. The project will support the establishment of new VCAs and OECMs, including actions for the protection, conservation and restoration of natural resources, as well as guidelines for the use of natural resources. The project will be based on criteria laid down by CONANP for defining VCAs and CONAFOR for other schemes. These can form large clusters, thus promoting greater connectivity.

176) We used IICA (2012) data to assess the potential and feasibility of providing Environmental Services in the project?s microregions. Both indicators were updated with information from the MADMex (2018) platform which contains a layer of land cover information at 10 m detail, to measure forest cover at the individual Agricultural Unit level found in the National Agricultural Registry (2017) map. Using a multi-criteria analysis, we integrated a summary map of areas with potential for establishing new terrestrial protected areas at the Agricultural Unit level, which served as a basis for defining the Bioforestry corridors from the viewpoint of structural connectivity. Within these, clusters of *ejidos* and Communities were identified with a Very High and High potential for the establishment of type 1 NBSs, including VCAs. Note that, at least for obtaining certification from CONANP and other governmental instruments and programmes, it is currently necessary to have all agricultural documentation updated, which is why planning at this level is only based on information from the national agricultural register (RAN); this does not mean that other territories with social property cannot be considered. For more details on the potential to form VCAs, see Annex on Agricultural Units with potential for VCAs. The attached WP and VCA study that was carried out during the PPG can also be consulted review the analysis of the baseline conditions in terms of distribution, coverage and effectiveness of natural protected areas, including VCAs and their effects on the dynamics of the rural economy and sustainable production.

177) During year 1 of the project, the proposal to create new VCAs generated during the PPG will be validated and, if necessary, adjusted. From year 1 onwards, CONANP and Promoters offices facilitators will implement a promotion drive to establish new VCAs and other conservation schemes (field visits, workshops, site visits and forums). To achieve this, induction and sensitization of project field staff will take place from year 1 onwards.

178) During the promotion stage, preliminary lists of Agricultural Units and potential project stakeholders will be drawn up. A diagnosis will then be conducted at Agricultural Unit level for inclusion in the programme (for more details see Annex Agricultural units with potential for new

ADVC). The process of certification of VCAs, defined by CONANP, will commence from year 2[65][65].

<u>Output 2.1.4:</u> Community-based monitoring system for NBS strengthened

179) The project will support the development of BIOCOMIUNI, a community-based monitoring system promoted by CONAFOR and CONANP. It will provide training and equipment and contribute to the development of digital platforms for its start-up. The ?BioComuni? protocol will be strengthened through the project. ?BioComuni? is a biodiversity monitoring protocol run by the country's *ejidos* and communities and supported by the National Forestry Commission, the Mexican Fund for Nature Conservation, and the United States Forest Service. Its aim is to strengthen the capacity of *ejidatarios* and commoners to take action to improve the management of their natural resources.

180) The Monitoring, Evaluation and Reporting System will be anchored at the level of each Bioforestry Corridor by installing Territorial Information and Learning Hubs (installed in the offices of the Local Forestry Development Promoters), these hubs will be physical locations where internet access will be available through satellite connection, standard Wi-Fi, mobile data connections, LMDS (Local Multipoint Distribution Systems), fibre-optic or any form of access. If no access is available, the project will provide this in the most cost-effective and high-capacity manner possible. Some of the selected community promoters who have studied in the Forest Learning Communities will carry out activities with the forest promoters and facilitators to support the implementation of the hubs.

181) The function of the Hub will be to gather and distribute project information to the various producers and Agricultural Units that make up each bioforestry corridor, as well as to the Corridor Councils and key programme institutions, CONAFOR, CONANP, SADER, FAO. The hub will be established in a community where there is already an existing VCA and successful PES programmes and which also serves as an initial site for Forest Learning Communities. In some cases, the hub will be used to exchange experiences between corridors and macroregions using communication and distance-learning, which may be synchronous or asynchronous. The Territorial Information and Learning Hubs will be integrated into CONAFOR?s BIOCOMUNI system. A data management system is currently (2022) under development to systematize and report on data generated as a result of the implementation of ?BioComuni?. Because this complex strategy is national in scope, it needs to be strengthened in preparation for its implementation, considering aspects such as platform

administration, dissemination, training and technical support for the users who will be owners of the forests and their technicians.

182) During year 1 of the project, the conditions of the offices of the Local Forestry Development Promoters offices will be reviewed to ensure accessibility for producers in the macroregions and to define the model of the hubs in each macroregion or even by BFC promoters with a monitoring background will be selected to be trained in monitoring and follow-up, particularly regarding the progress and achievements of activities proposed by the project in the territories. From year 2 onwards, we envisage that the Forestry Learning Communities will carry out exchanges based in the hubs present in the Local Forestry Development Promoters Offices. From year 3 onwards, exchanges will be promoted between the hubs in each macroregion.

183) The objectives of the hub are:

1. to develop an easy-to-implement, low-cost and locally relevant monitoring protocol that includes indicators that respond to the needs, interests and priorities of natural resource management under the control of the country's agricultural units.
2. to train rural technicians and technical advisors in monitoring, taking advantage of local capacities and knowledge and seeking to ensure that the agricultural units take ownership of the protocol.
3. to provide a local information system to facilitate territorial management and guide biodiversity conservation strategies.
4. to create a permanent biodiversity monitoring network in the farming communities, which will set up a cascade effect whereby the monitoring technicians pass on the knowledge to other members of the community and even to other communities.
5. to encourage public and private institutions, as well as civil society organizations, to support the agricultural units in biodiversity monitoring.
6. to complement and enrich the national biodiversity monitoring sampling effort.

184) The Hubs will in turn be linked to FAO's "1000 Digital Villages" initiative to generate digital hubs to support the transformation of forestry, agri-food and rural systems. CONAFOR and FAO, through the GreenMex project, will promote the digitization of producers by implementing these hubs. It is an acknowledged fact that only 50.4 percent of the rural population in Mexico are internet users[66][66]. In addition, only 37.7 percent of production units (PUs) make use of information and communication technologies in their production activities[67][67]. The mobile phone is the ICT with the highest penetration in the sector (88.1 percent of PUs use it). Conversely, Internet use was reported in only 7.9 percent of PUs. Likewise, only 58.9 percent of PUs using the Internet reported that they had made use of government websites. Access to ICTs throughout the country is unequal, with different local gaps according to state. Veracruz, Chiapas, Puebla, State of Mexico, Oaxaca and Guerrero, where

just over 50 percent of the country's PUs are concentrated, still show a low level of ICT use, particularly use of the Internet (between 4.7 and 10.2 percent of UP users)[68][68].

185) These hubs will promote an ICT-based forestry and agricultural agenda in order to: 1) generate timely sectoral information; 2) improve market access and value chain integration and: 3) make people more computer-literate. The main obstacles to implementing the agenda include: first, the low connectivity coverage in rural areas, associated with the country's poor infrastructure; second, limited government capacity to offer digital services, which is a consequence of the low available budget ? and third, lack of access to computers and other digital equipment by forestry and agri-food producers. The main drivers of digitization in the forestry and agri-food sector are universities and research centres, agricultural producer organizations and the federal government[69][69].

For more details about Territorial information and learning hubs, see the annex: note. Territorial information and learning hubs.

Component 3 Green recovery: market-based instruments and sustainable ventures.

186) This component will address socioeconomic recovery in the post-COVID19 scenario by promoting green and inclusive markets and will promote the creation of commercial strategies that add value to BD products and increase productive diversification for a more integrated use of the landscape in bioforestry corridors, through innovation in current production and marketing processes, including new differentiation and inclusion mechanisms for women and young people. This component will also seek to facilitate access to finance by boosting the current credit schemes available in development banking through the creation of strategic partnerships between multiple, development and social banks. While Component 1 will address the governance architecture, and Component 2 will foster a green recovery in the primary sector (agriculture, forestry, livestock) by co-financing the CONAFOR intervention, Component 3 will address the socio-economic recovery by promoting green markets

187) Specific investment needs in the value chains of each of the bioforestry corridors will be analysed in order to create new credit and savings schemes with social banking through local financial engineering. These new financing schemes will gradually reduce the dependence of communities on the budgets of government support programmes (subsidies) and international aid (grants or non-refundable investments).

188) Component 3 will address the following barriers: 1) lack of markets and profitable opportunities for high-value BD products, 2) limited access to finance, and 3) insufficient incentives for sustainable production, across four outputs and two outcomes as detailed below. In the three targeted landscapes, Component 3 will foster public-private partnerships with producers, governmental agencies, academia and local communities, with the objective of supporting green businesses. Equally relevant will be the strengthening of the social bank, the capacity development of financial intermediaries, the access of social organizations to financial services, and the creation of financial products designed for NBS. The value chains to be worked on (which will be validated and diagnosed in the territories in year 1 of the project) are closely related to the NBSs defined in Component 2.

189) This component will be led by the Market Specialists (MS) of the project (1 per macroregion) and by the Financial Specialist (FS, one at national level).

Outcome 3.1 Inclusive and sustainable markets for high-value BD products, identified and strengthened.

? Project Indicator: At least 7 inclusive business models implemented/landscape;
•Project indicator. At least 10 social economy organizations participating in inclusive biodiversity-positive value chains (at least two women?s organizations).
? Project Indicator: 50% of women beneficiaries and 30% of youth beneficiaries participate in green and inclusive chains.

Output 3.1.1 Social economy business models for Biodiversity and NBS products implemented

190) The post-COVID19 ?new normal? has radically changed the way consumers live, work and shop. This change created opportunities for markets to become more inclusive and sustainable, NBSs are a response to several problems currently experienced by consumers. Consumers are growing more concerned about their health (physical and mental). Therefore, products and services with high biodiversity value that contribute to better health will find a very attractive market. The value chains identified in the project regions can be classified into the following six categories depending on the needs demanded by consumers in a post-COVID-19 scenario: 1) timber, 2) non-timber, 3) honey (including melipona), 4) nature tourism, 5) handicrafts, 6) agriculture (agroforestry systems), 7) forest carbon projects and other products and services.

191) A mapping of products and services that are currently traded in value chains and have a high potential for development within the bioforestry corridors in the three project regions was carried out:

a. In the **Durango macro region,** the NBS will be implemented by involving forest-dependent communities in the value chain processes, promoting productive diversification and the competitiveness of social economy organizations, prioritizing short cycles to reduce the number of intermediaries. The products and services identified for implementing business models in the region?s bioforestry corridors are timber from pine and oak species, nature tourism, oregano, candelilla, medicinal plants, agroforestry systems, environmental services, carbon market and timber furniture. The following products and services will be important in the value chain approach for the Durango region:

Table 14. Product and services under the value chain approach in the Durango macroregion

Pre-production and production phase	**Production and post-production phase**	**Integration of consumer and post-consumer VC clusters**
Agroforestry system-MIAF: use of sour apples grown in the orchards (valued as a local gastronomic delicacy), promoting short chains for self-consumption.	**Other products and services. WMUs. Hunting hunting/breeding of white-tailed deer and wild turkey.** The project can support biodiversity impact monitoring as well as the inclusion of other actors in the chain for more sustainable marketing.	**High Conservation Value Forests.** Several agricultural units are FSC certified. One of the guidelines they must comply with is the determination of forest areas with high conservation value. The project proposes to support the monitoring of these areas and their accreditation by CONANP as VCAs. CONAFOR will also establish priority criteria for *ejidos* and communal land that implement this good practice.

NTFP: oregano. SEMARNAT issues permits. The project aims to consolidate supply in specific areas under management in order to boost marketing beyond local intermediaries	**NTPF: mescal.** Management programmes and the corresponding permits for the use of local agave are available in the macroregion. It is important to contribute to some links in the chain, supporting biodiversity monitoring and certification in order to make the activity more sustainable.	**Environmental Compensation (Payment for Environmental Services). PES by domestic and foreign private companies/Carbon credits.** FSC certification has attracted the attention of several national and foreign companies, which are willing to contribute to PES as part of their social accountability or GHG mitigation programmes. The project could help establish an institutional environment conducive to the implementation of this scheme.
		Timber forest harvesting. Production of pallets for local, national and export niche markets. Demand for this simply processed forest product is growing in the northern part of the country and in the United States. Several companies have approached the project with the intention of entering into agreements with the agricultural units, and the project can support the inclusion of sustainability aspects in order to strengthen this VC.
		Community-based forest management (timber). Furniture production and technical training services in CFM. San Juan Nuevo is a flagship initiative in the macroregion. This community has made great progress in independent management of the landscape through CFM. Because of its track record, the *ejido* can offer training services to other communities, particularly in furniture production. It can provide technical support and training in CFM.

b. In the **Balsas - South Pacific macro region**, NBSs will be implemented in coordination with the projects of the International Fund for Agricultural Development (IFAD) and the

Green Climate Fund (GCF), through social economy organizations and other local community initiatives with the aim of promoting recovery and green businesses, based, among other things, on the value of biodiversity conservation and integrated landscape management. The products and services identified for implementing business models in the region?s bioforestry corridors are timber from pine and oak species, nature tourism, oregano, mescal, copal, pine resin, medicinal plants, honey, handicrafts, carbon market, timber furniture and agroforestry systems. The following table shows products and services identified in the various VC links.

Table 15. Product and services under the value chain approach in the balsas ? south pacific macroregion

Pre-production and production phase	**Production and post-production phase**
Other products and services. Iguana brood stock WMU. Breeding stock can be accessed to establish new community WMUs through an initiative launched by the University of Guerrero. The project can help to maintain and expand consumption towards specialized restaurants in Acapulco-Zihuatanejo by forming a cluster.	**NTFP. Closed-loop marketing of resin from pine forests.** This practice has increased in recent years, mainly in the Michoac?n and Guerrero corridors. However, it is in the hands of intermediaries. The project can support the formation of various clusters at bioforestry corridor level.
Beekeeping. This project is associated with coffee production. Its aim is to increase or introduce the production of honey, which is intended to be certified. The activity has the potential to be extended to several corridors in the macroregion, mainly those located in the areas of Tierra Caliente and Monta?a **de** Guerrero	
Cultural tourism. Accommodation and guided tours, because the macroregion is surrounded by tourist sites (Taxco to Acapulco and Ixtapa-Zihuatanejo)	

c. In the **Lacandon Jungle region**, threats to biodiversity conservation will be addressed in a targeted manner with NBSs, through business models implemented by social economy organizations. All NBS actions will be created, discussed and validated with stakeholders with a gender perspective. The products and services identified for implementing business models in the region?s BFC are: agroforestry systems products (SAF, for its Spanish name: coffee, vanilla, cocoa, among others), medicinal plants, water, medicinal plants, camedor palm, rubber plantations, honey and nature tourism.

Table 16. Product and services under the value chain approach in the Lacandon Jungle macroregion

Pre-production and production phase	Production and post-production phase
Establishment of Agroforestry systems (AFSs): *Rambutan*. As one option for restoring degraded pasture areas, the people in some bioforestry corridors are opting to establish rambutan plantations, which the project can promote under the no-deforestation certification banner. *Shade coffee.* Certified organic coffee production takes place in three corridors. The aim is to add value to the chain by offering training in the production of handicrafts using beans and wood from old coffee trees. Demand-driven sales outlets can be sited along tourist routes. *Cocoa*. Communities dedicated to cocoa and chocolate production are present in the Maravilla Tenejapa corridor. The project can promote organic and fair-trade certification, thus shifting consumer expectations towards a specialized market. This will include the region of San Crist?bal de Las Casas.	**Ecotourism.** *Accommodation and guided tours.* The expansion of nature tourism in the region requires action to ensure activities are sustainably organized. The project can support the drafting of a master plan, especially in the areas where the *Tren Maya* (Mayan Train) operates, or nearby.
Other products and service. *Herbalism.* The project aims to encourage and promote the production of medicines, remedies and treatments locally with a short chain approach. This will initially seek to root these biocultural practices in a limited number of communities and women's groups, which can then join forces.	

192) During year 1 of the project, maps of priority NBS-related value chains will be drawn up or updated. Based on this mapping, a feasibility analysis will be carried out for the marketing of BD products on virtual platforms by organizations; the development of tools and/or methodologies for the implementation of business models (tools for production, administration and marketing and methodologies for market prospecting, promotion and communication); as well as the development of differentiation mechanisms (origin, landscapes, cultural values, etc.) including a communication strategy aimed at end consumers.

193) Due to annual changes in the volumes of BD products and harvesting areas expected in sustainable forest management programmes (timber and non-timber) authorized by SEMARNAT and the lack of up-to-date information systems, value chain maps (including market studies) will be made and/or updated in at least six categories of products and services: 1) timber, 2) non-timber, 3) honey (including melipona), 4) nature tourism, 5) handicrafts and 6) agriculture (agroforestry systems). The value chain maps, and their specific studies will include gender indicators, as well as sex-disaggregated information on men?s and women?s participation in value chains, access to and control of productive resources and distribution of benefits.

194) In the post-COVID19 scenario, the relationship between producers and consumers is undergoing several changes affecting marketing channels. Technology and the digitalization of trade have brought end consumers closer to producers and they are more interested in knowing what they eat, who produces it and where it comes from. Digital retail platforms and social media are windows of information for end consumers, enabling them to satisfy their need to know more specific characteristics of the products and services they buy. Investing in a new platform would be very costly because of the resources and time required to position it and obtain good results. For this reason, an analysis will be carried out to find out arrangements for, and the feasibility of, marketing BD products on virtual platforms by social economy organizations.

195) Each of the seven business models to be implemented by the social economy organizations pose specific challenges for carrying out efficient production and transformation (value added). For example, in the sizing of wood, the *refuerzo* or tolerance (portion of wood ranging from ? to one ?? inch that is lost due to wood sawing errors) and wood drying (a process that involves reducing the moisture in wood so that it can be used as raw material for products with high added value) present great challenges and areas of opportunity due to the losses that they generate for social forestry enterprises. Furthermore, most of the management processes in the production of non-timber forest products, honey and nature tourism services include no audit schemes for monitoring inventories, costs, profits, among other financial indicators necessary for the efficient management of social enterprises. In order to help increase efficiency in production and administrative processes, tools and/or methodologies will be developed for the implementation of business models ranging from software for process improvement to methodologies for increasing production and productivity. These tools will be available on the CONAFOR website for all social economy organizations.

196) EUROMONITOR?s global network of analysts[70][70] have identified the impact on consumer markets regarding sustainability in the post-Covid-19 scenario (EUROMONITOR, 2020) and have observed that the idea of sustainability is evolving towards a more holistic approach that seeks social, environmental and economic value, and is no longer merely an isolated concern about ethical credentials. Consumer preferences regarding sustainability issues are shifting towards purpose over profit. For companies this shift was happening before Covid-19 and the pandemic has accelerated it.

Opportunities in markets and new digital marketing channels will be exploited for each of the BD product and service categories in the new scenario. Closer communication will be sought between the producer and the consumer, or user of products and services who uses BD products as inputs to cut down the number of intermediaries. This will provide more accessible prices for the final consumer and allow sales prices (and income) to be increased for communities. Large companies that market and use BD products will also be required to make the traceability of their supply chains more transparent and to have certified products and services. To take advantage of the opportunities of the post-Covid-19 scenario, differentiation mechanisms (origin, landscapes, cultural values, etc.) will be developed with a communication strategy aimed at the end consumer.

Output 3.1.2 (Number of) **Social Economy Organizations with improved access to green and inclusive value chains**.

197) This output will promote the participation of women-, indigenous peoples - and youth-led social economy organizations in inclusive value chains of high importance for biodiversity, while improving their incomes. At least 200 agricultural units identified in the three regions of the project currently hold valid permits issued by SEMARNAT to carry out the sustainable management of their forest resources. According to SEMARNAT?s Forest Management System, the area authorized for intervention in the coming years is 397 048.16 ha and the volume of production covered by these authorizations is 18 504 147.41 m3r. We also identified 172 processing centres that add value to forest raw materials located in the three regions of the project. However, despite the great productive potential of social economy organizations, only 52 are socially owned, five are part of a mixed ownership scheme (social?private) and the rest (155) belong to private companies.

198) Social organizations dedicated to primary production have faced significant challenges in recent years and some have ceased to operate. Therefore, the register of social organizations dedicated to production and their status in each bioforestry corridor will be updated with the support of CONAFOR?s Local Forestry Development *Promotor?as*. The Forestry Entrepreneurship Index (FEI) developed within the framework of the Programme for Strengthening Enterprises in Productive Forest Landscapes (PROFOEM[71][71]) implemented by CONAFOR will also be used to provide more detailed information on the status of social economy organizations. The IEF indicates the level of entrepreneurial strengthening of entities set up by the agricultural units for the management, harvesting, use and industrialization of timber and non-timber forest resources. It aims to reflect the status of forest enterprises and forest social enterprises (FSEs) in order to target forestry interventions and activities more effectively and assess their development over time. Aspects considered to be crucial in determining the level of entrepreneurial strengthening of community forest enterprises, the components that make up these dimensions, and the variables that are logically related to each of these are based on lessons learned about the successful management of social economy enterprises and the principles, aims and values of social economy sector organizations.

199) In Mexico, social economy sector (SES) organizations, including *ejidos*, communities, social enterprises, cooperatives, *ejido* units, among others, make decisions in a democratic and participatory manner.[72][72] According to the Mexican Law on Social and Solidarity Economy, the values under which *ejidos*, communities, social forest enterprises, and all SES organizations must operate are: 1) mutual aid; 2) democracy: 3) fairness; 4) honesty; 5) equality; 6) justice; 7) plurality; 8) shared responsibility; 9) solidarity; 10) subsidiarity; 11) transparency; 12) trust; 13) self-management; and 14) social inclusion.[73][73] The following table shows the components of each of the five dimensions of the IEF, which are in turn made up of several variables. These variables will be fed with information from surveys delivered to social enterprises:

Table 17. Components and their variables of the five dimensions of the IEF

1. Sustainable management and certainty of supply	2. Organisational capacities and social capital	3. Operational soundness	4. Financial soundness	5. Corporate p
Sustainable sourcing of raw materials	Democratic participation	Administrative Strength	Profitability	Generatio employment an security
Adequate management and certainty of supply	Transparency and accountability	Professionalisation and formalisation of processes	Access to financial services	Social innova
	Cooperation, trust and conflict resolution	Efficiency and competitiveness	Capital investment	Social and com support serv
	Self-management	Marketing strength		
	Continuous training and exchange of experiences	Quality control		
	Networks and alliances	Technological innovation		

200) Based on the information obtained from the value network maps (Output 3.1.1) and the identification of the needs of the social organizations by the local staff, advice will be provided for the development of business plans and integrated development plans (IDP)s considering the FAO?s Gender-Sensitive Value Chain Development and Market Analysis and Development methodologies. The business models to be implemented by social economy organizations will be NBS identified in the bioforestry corridors (see output 3.1.1) and will follow the Building Back Better a better post-COVID-19 [74][74] world with sustainable forest products[75][75] and encourage joint decision-making.

201) Through output 1.2.2, organizational, legal, entrepreneurial, cooperative, technical and financial capacities will be strengthened for women, young people and community forest enterprises, for their inclusion in sustainable value chains. Also, territorial information and learning hubs will serve as spaces where virtual business centres can be implemented.

202) In just two years, the way consumers live, work and shop has changed significantly. As a result of these changes, a ?new normal? has emerged, where forms of consumption are being rethought using technology and constant innovation in business models. For this reason, a training programme on e-commerce, use of platforms and digital marketing will be implemented. This training course will be adapted to and aimed at women, young people and men who make up the social economy organizations, it will be inclusive and will consider the roles of women and young people in the communities so that they are trained in a satisfactory way without this representing a burden on the time they need to earn their livings.

203) Advice and monitoring will be provided for implementing the business models included in the IDPs of social economy organizations. The project will also provide for the necessary investments to ensure quality digital connectivity in social economy organizations in order to take advantage of e-commerce and other virtual tools such as online banking services.

204) Organic and sustainable production is increasingly becoming the worldwide norm. It is important to consider that generation ?Y? or millennials are very interested in knowing the origin of the food they are eating and in ensuring that it was obtained without generating negative impacts on the environment (CIAO, 2020). Global growth in organic and sustainable products is estimated at 30 percent per year, and in the specific case of the USA, it is estimated at 25 percent (IFOAM, 2021) due to health concerns caused by the pandemic and many entrepreneurs deciding to opt for this different system, which adds value to agro-industrial productions. Social economy business will be strengthened through differentiation mechanisms such as certification systems. In the Durango and Balsas-South Pacific regions the certification of forest management and chain of custody under FSC standards, Mexican Standard 143 and the Preventive Technical Audit carried out by CONAFOR will be the main instruments promoted, while in the Lacandon Jungle region, priority will be given to supporting the certification of good environmental practices in tourism enterprises under Mexican standard 133 and the organic, food safety, quality management and environmental management systems seals. BD products and services with their business plans and key differentiators will be further researched and discussed during the first year of the project to agree on firm strategies with value chain actors, including universities, the private sector and CONAFOR?s education and training centres. In order to strengthen the marketing process of social economy organizations and put them in touch with a market that recognizes the value of their products, participation in fairs or exhibitions for the promotion of BD products from the bioforestry corridors will also be encouraged.

205) The project will promote a strategy to support the implementation of model business plans (use of the 2 MDDs for productive projects). To this end, FAO will work with CONAFOR to develop a strategy that will support these business plans.

<u>Output 3.1.3</u> Institutional innovations to support sustainable market linkages implemented, including certification of BD products and alternative verification and participatory guarantee systems.

206) The CONAFOR, CONANP, FIRA and FND programmes offer various types of support for producers to invest in organic, sustainability, chain of custody, food safety, environmental management and quality certifications, among other things, for their products and services. However, they lack a common strategy and market approach. In order to develop a strong participatory strategy, an exchange network of social enterprises with experience in marketing certified products will be created with the aim of aligning the efforts of differentiation mechanisms towards the market.

207) A discussion forum will be held to create clear strategies for linking certified products to sustainable markets with two objectives: 1) the setting up of an interinstitutional panel made up of entities that support and promote certification and differentiation mechanisms, and 2) the creation of an interinstitutional platform that will serve as a coordination centre between the main entities that offer support to cover the costs of certifying BD products under a market approach accompanied by a communication strategy aimed at end consumers that will have as its main goal, the recognition of the benefits of BD conservation by consumers. In the long term, this platform will seek to ensure that the cost of certification is covered by a price differential on BD products that consumers will be willing to pay on a cost-benefit basis to recognize the value of BD and integrated landscape management.

208) The platform will also incorporate entities that promote research, development and innovation of BD products and services and their market connectivity. It will therefore be a platform based on partnerships and support networks (including also academic institutions or private companies).

209) The interinstitutional platform will establish partnerships with retail e-commerce platforms to: 1) take advantage of their sales channels and 2) to send specific messages to the end consumer showing the actions carried out within the integrated management of each bioforestry corridor.

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<u>Outcome 3.2:</u> Improved and sustained socio-economic and environmental benefits through investments of the Social Bank[76][76]**.**

? *Project indicator: 9 productive projects that involve contributions from social economy organizations for their implementation.*

210) This outcome aims to enable the financial environment for forest producer organizations (along the value chain), identified and supported through outcome 3.1, to access finance. This outcome will address the barrier of limited access to finance affecting small-scale producers and community enterprises, as well as the limited incentives to finance sustainable production. Crops and products that support the flow of ecosystem services are not traditionally incentivized. While financing schemes (formal and non-formal) are present in the Mexican forestry sector, they do not have sufficient penetration in marginalized rural communities and community-based social enterprises. Although the forestry sector is served by development banks, e.g., by the Trust Funds for Rural Development (FIRA), the volume of credit for forestry projects is marginal. Only 1.8 percent of total funding is granted by FIRA. Smaller forestry enterprises, SMEs and cooperatives also find it difficult to access this funding due to the high level of perceived risks, lack of registered guarantees or collateral, high costs of financial services and limited financial literacy.

211) This outcome will seek to support funding to support green enterprises or green businesses, businesses with gender-sensitive criteria or other sustainable development-oriented enterprises, which apply biodiversity use and conservation criteria (those identified and whose business plans were developed in output 3.1.2). Some initiatives currently exist in Mexico, but they are limited. The project will develop criteria and tools to strengthen the financial instruments currently offered by Social and Development Banks, mainly with FIRA.

Output 3.2.1 Financing strategy that promotes landscape restoration and the creation of green businesses linked to the NBS, implemented within the framework of the CONAFOR?s *Support Programme for Sustainable Forest Development.*

212) Based on mapping of value networks (Output 3.1.1) and the preparation of a study involving local financial engineering in bioforestry corridors, a comprehensive strategy for financing green and inclusive business models will be set up that will consider the aims of CONAFOR and CONANP support programmes in order to supplement their efforts. The financial strategy will consider savings as a vehicle for investment and will involve at least two savings and loan financial schemes operated by social banking. The strategy will be implemented with the aim of gradually reducing the dependence of social economy organizations on the budgets of government support programmes and international aid. This output will include a mechanism of financial access for sustainable business sub-projects.

213) Nowadays, a very comprehensive package of government support is on offer to strengthen value chains in the project regions. In 2021, in the three project regions, CONAFOR made 15 aid schemes available to producers, CONANP 20, FIRA 7 and FND 4. However, budget cuts of recent years and the excessive number of requirements to be met for accessing the programmes have significantly limited their scope and the total amount allocated in 2021 by the CONAFOR and CONANP aid schemes in the states where the project will be active was only 589.1 million pesos

214) The financial strategy will be mainly aimed at the most vulnerable groups (women and young people) who should overcome the most barriers to access funding. Partnerships will be established with social economy organizations to ensure that they receive seed capital provided by savers and by the programme, considering the liquidity guarantee schemes that CONAFOR operates in the FND and FIRA, the Fund for Financial Inclusion in the Forestry Sector (FOSERFOR) and the National Forestry Fund (FONAFOR) respectively.

215) The strategy includes three lines of action:

i. Reinvestment of profits from business models implemented by social economy organizations (Output 3.1. 2) To this end, a savings and loan scheme will be promoted for social economy enterprises that have been identified and supported through output 3.1.2. The GEF project will support the design of a financing strategy to use savings as seed capital for green social economy business[77][77]. The feasibility of this proposal will be assessed in output 3.2.1 in Project Year. This line of action will strengthen the financial skills of social economy enterprises and beneficiaries of the project, mainly around savings. In Mexico, there have been some initiatives where savings and loan funds have been set up to finance productive projects, for example, through the Strategic Project for Food Security (PESA).

ii. Strengthening the financial schemes and mechanisms currently operated by CONAFOR with government banking institutions to expand access to social forestry enterprises. This line of action will be promoted under framework agreements currently in force with development banks, particularly with the Trust Funds for Rural Development (FIRA) and the National Agricultural, Rural, Forestry and Fisheries Development Fund (FND). During year 1 and 2 of the project, an analysis of the financial framework of CONAFOR will be carried out with both institutions to define the real scope of the possible strengthening of existing schemes. The project will also

consider lessons on the issue of financing from the GEF-funded Sustainable Productive Landscapes project (9555).

iii. *Enable existing social economy enterprises in the three landscapes to finance BDS initiatives.* Forty Savings and Loan Cooperative Societies (SOCAPs) and nine People's Financial Societies (SOFIPOs) have been identified in the three project regions that provide commercial, consumer and housing loans. For details of the SOCAPs and SOFIPOs please see annex "Social economy enterprises financing commercial credits in project regions". During year 1 of the project, a diagnosis and promotion initiative will be carried out to identify social economy enterprises interested in designing financial instruments for inclusive green business in the forestry sector.

216) The financial strategy will be reinforced with the development of tools and methodologies for the application and management of credit when implementing savings and loan financial products provided by social banking, including local ?payments for ecosystem services? mechanisms that operate using private capital. The project will implement two savings and loan schemes with social banking.

Output 3.2.2 Certification mechanisms that promote BD sustainable management, conservation, landscape restoration and the creation of green businesses.

217) This output will promote the development of distinct seals for conservation and sustainable use of BD, as well as participatory certification of organic products derived from family farming and/or organized small-scale producers. This output builds upon the activities and results of output 3.1.3.

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Output 3.2.3 Public?private?community alliances that promote BD sustainable management, conservation, landscape restoration and financing of green businesses implemented within the framework of CONAFOR?s *Support Programme for Sustainable Forest Development*.

218) During the first year of implementation, partnerships with the public and private sector will be sought in order to: 1) promote the financial inclusion of community enterprises with commercial banks and Multiple Purpose Financial Institutions (SOFOMs) that are already operating credit lines with social enterprises in the project regions, 2) establish fair trade strategies, develop supply chain and communication campaigns to inform end consumers about the benefits of buying BD products and services and the negative effects of not adopting a strategy of responsible consumption with large

companies that market or use BD products as inputs, 3) organize the logistics of value networks and networks for the promotion of BD products with companies operating digital retail platforms, 4) consolidate sales strategies aimed at large companies or government entities with social enterprises that have successful green and inclusive business models, 5) solve specific industry and market problems through NBSs with business organizations, and 6) generate new market niches for various ecosystem services (pollinators, watershed and hydrological services and private carbon markets). Also, connectivity will be pursued between sectors that results in ecological connectivity, for example, major agreements with agribusinesses, pharmaceutical companies that carry out biological prospecting in the territories, mining companies, bottling companies and water concessionaires, etc., that operate inside and outside the bioforestry corridors, influencing the transformation of the territory and its uses beyond the dimension of land ownership or tenure. To bring these partnerships into being, three agreements will be signed with private or public sector institutions to strengthen value chains in the bioforestry corridors and to promote the financial inclusion of social economy organizations.

Output 3.2.4 Strengthening of social banking alternatives for the financing of green businesses derived from NBS implemented in BFC.

219) The information from the maps and studies carried out under output 3.1.1 and the tools and financial strategy under output 3.2.1 will be used to identify investment needs for new business models and new productive projects will be financed through the social banks that operate in the three project regions. In order to effectively implement the financial strategy and strengthen social banking alternatives, the project?s technical team will provide support for credit management and the implementation of productive projects until loans are paid off from the fourth quarter of the second year until the end of the project.

220) This output will implement action line 3 of the financial strategy designed in output 3.2.1 and is also expected to ensure that the Social Bank will finance at least three productive projects. Social banking has not yet financed productive projects in the three macroregions, as shown in the following table, and credit goes into commercial, consumer and housing loans. This project is expected to generate financial instruments with clear criteria for financing inclusive green business.

Table 18. Social Bank Outstanding Loan Portfolio

Type of societies	Outstanding Loan Portfolio (Cumulative to June 2021) (Figures in thousands of pesos)			
	Trade credits	Consumer credit	Housing loans	Total
SOCAP	14 410 957.10	48 571 527.10	6 778 959.84	**69 761 444.04**

SOFIPO	5 706 105.95	732 033.93	26 805.34	**6 464 945.22**
Total	**20 117 063.05**	**49 303 561.03**	**6 805 765.18**	**76 226 389.26**

221) Increased sustainability of investment criteria, the expansion of SEO financial service providers and strategies for financial literacy and the gender perspective will expand opportunities for green employment and businesses. From year 2 of the project, criteria and financial tools will be developed to enable the Social Bank to support productive projects. An application mechanism will also be developed for community forest enterprises and approval by Social Banking.

Component 4 Communication, Knowledge Management and M&E

222) The GreenMex project features a strong territorial management component. This involves a results-oriented adaptive management approach to project planning and implementation (from proposal to completion). Project monitoring and evaluation is important to verify the extent to which the desired results and progress have been achieved in terms of outputs and processes over a given timeline. This will allow lessons learned to be taken on board in order to consider, incorporate or adapt actions to meet the GreenMex project objectives and impact targets. Component 4 will support the setting up of an M&E system. This M&E system will be inter-sectoral and will provide an overview of the three landscapes. It will engage with all project institutions (CONAFOR, CONANP, SEMARNAT and others).

223) Activities under Component 4 are designed to monitor and assess the project?s progress, achievement of indicator targets, and risk mitigation measures; identify new actions as needed to address unanticipated risks or change conditions; mainstream gender approaches into the project; draw lessons learned (including successes and failures) resulting from project implementation; and disseminate lesson learned and other project information at the national, regional and global levels. The project will support results-based implementation designed to ensure that project implementation is supported by an M&E strategy based on measurable and verifiable results and principles of adaptive management and knowledge management.

? Indicator: Project outcomes achieved and demonstrating sustainability

- o Baseline: No project outcomes achieved
- o Target: 100% of project outcomes achieved, with sustainability demonstrated

224) Knowledge management, as proposed in the GreenMex project, incorporates the application of communication tools and computer applications that are mainly based on the use of free and open-source software. This lowers the costs of technology development, allowing resources to be channelled into the construction and projection of user profiles in the field (project beneficiaries, women and young people groups, evaluators and scientists, etc.). This means that the tools can be adopted, developed in a self-managed manner, mainstreamed and scaled up in an environment of participatory learning and construction.

225) The project?s knowledge management aspect will involve entering into agreements and strategic partnerships with actors in the academic sector. These will include partners directly related to CONAFOR and SEMARNAT (CECADESU, CEFOFOR, etc.), as well as with research and higher and secondary education institutions. The project will also encourage the participation of young people and women from the communities and regions, who have a relationship with these institutions.

226) The Forestry Promoters offices that will operate strategically around the bioforestry corridors, and the learning hubs and local development agents in the bioforestry corridors will be equipped with the ICT infrastructures (enabling access to information) that they need to run all project activities and will play a central role in the knowledge management process. The positive impact of these on-site capacity-building centres will be supplemented by the development of digital educational platforms, preferably also based on free and open-source software.

227) Knowledge management will be aimed at analysing project activities, methodologies and lessons learned, with the main objective of generating knowledge for the scaling up of good practices at national public policy level. The communication strategy will draw on the knowledge management process to reach key audiences in both the government and private sectors and potential consumers of the value chains implemented by the project.

228) Access to information: the project will have a multidimensional database that links to the Monitoring and Evaluation System. This database will include inputs generated from community monitoring, nature-based solutions, marketing and business development aspects and biodiversity value chains, sustainable forest management, and social enterprises, among other topics. The database will be a tool that can be used to access information in a simple and transparent way and will contribute to a permanent process of sustainable land use, safeguarding the provision of ecosystem services in the long term. It is important to make these databases available to users, whose profiles and skills will be consolidated through the capacity-building process implemented in components 1 and 2 of the project.

229) Participatory monitoring: in order to implement processes in which community actors become part of a collaborative, transparent, inclusive and self-managing project chain, we propose to implement Pilot Participatory Monitoring Systems. This will involve the participatory definition and identification of variables for the design of a consistent system of indicators and methods to carry out the necessary measurements; these systems are intended to be useful for the project?s target population, and at the same time will provide objective information and hard data for the process of evaluating the project?s impact and knowledge management.

230) The Participatory Monitoring Pilot Systems will be aligned with CONAFOR?s BIOCOMUNI and are designed to strengthen and consolidate it. They will cover the design and construction of a pilot, as well as its implementation: capacity-building, data-collection, processing, analysis, systematization and transmission of knowledge. It seeks community ownership of the process, replicability and scaling up of these systems for the benefit of others within and beyond the project landscapes. These participatory monitoring systems can be digitally supported by free and easily accessible platforms for field data-collection, such as KoBo Toolbox (kobotoolbox.org). This is a free platform that incorporates a mobile application for managing data-collection forms, a geospatial platform and a system for analysis, visualization and generation of reports and statistics. The development and promotion of such participatory monitoring processes is crucial and timely, because one of the most immediate challenges facing rural producers of all kinds will be adapting to changing environments that are destabilized by increasing climate variability and other emerging stress factors such as the current economic and health crisis caused by the Covid-19 pandemic. There is a parallel exponential increase in the use of collaborative technology due to global connectivity and the development of all kinds of applications with more user-friendly interfaces on smartphones.

231) Communication strategy: During the first year of the project, a communication strategy will be developed in a participatory manner, identifying objectives, messages, audiences and tools appropriate to the project?s objectives. The communication strategy will cut across all project components and will play a central role in capacity-building, organization of bioforestry corridors, market access, stakeholder engagement and knowledge management, and will be an important instrument for scaling up the lessons and experiences generated by the project.

232) As part of the communication strategy, an inception workshop will be held with key actors to raise awareness of the scope of the project and its links with other programmes. At the end of the first half of the project, a series of activities will be carried out to disseminate the progress achieved so far. The active participation of people from the communities and regions, particularly young people and women, will be sought in these activities.

Outcome 4.1: Monitoring and evaluation under a results-based approach, good practices and lessons learned, systematized and disseminated.

Output 4.1.1: Project M&E System

233) The project monitoring and evaluation system will be a key instrument for project communication and decision-making, as well as for the systematization and dissemination of lessons learned. The entire monitoring and evaluation process of the project will maintain a clear adaptive management focus on the thematic pillars of biodiversity, forest development, connectivity and landscape, as well as governance and inclusion, and will have a strong community component, including collective interest indicators.

234) The first level of the monitoring and evaluation system will incorporate a comprehensive database containing environmental and socioeconomic variables. This will support the establishment of a baseline and will be modified and updated by data obtained by measuring a set of results framework indicators, which will be monitored internally in the project.

235) At its second level, this (institutional) monitoring and evaluation system will be supplemented by participatory monitoring systems. These will track environmental and social variables that are monitored on the ground by direct project beneficiaries, as well as by technicians, outreach workers, government officials and other stakeholders. To this end, it is proposed to implement at least one pilot project in each bioforestry corridor. Community indicators will be developed in a participatory manner during the first year of the project. The monitoring and evaluation system will maintain a clear focus on biodiversity, forest development, connectivity and landscape, as well as governance, inclusion and markets, and will have a strong community component, including collective interest indicators.

Output 4.1.2: Mid-term review and terminal evaluation.

236) The project will undergo at least two external and independent evaluations: i) a Mid Term Review (MTR) and ii) Terminal Evaluation (TE) will be carried out with the purpose of informing and advising on the implementation of the project in a constructive manner. After 30 months of project implementation, the MTR will be carried out. Six months before the end of project implementation, the TE will be carried out. Prior to the TE process, the project will articulate a coherent ?exit strategy?, with a focus on sustainability of the project outcomes.

i) Mid-Term Review (MTR).

237) A mid-term review of the project will be carried out in Year 3 of implementation. This review will determine the progress that has been made on the outputs and identify any adjustments needed for certain activities or for the project itself. The review will be participatory and focus on the impact of results on biodiversity and connectivity, the effectiveness of new models and nature-based solutions, and the market access performance of biodiversity value chains developed in the context of the project.

238) It will focus on the effectiveness, efficiency and relevance of project implementation, highlighting issues requiring action and decisions, and present initial lessons learned from project design, management and implementation. The findings of this review will be incorporated as recommendations to improve implementation during the second half of the project. The terms of reference for this mid-term review will be prepared by FAO Mexico based on guidelines set out by FAO and GEF for this purpose.

ii) Terminal evaluation.

239) A final independent evaluation will take place three months before the tripartite review meeting, focusing on the same issues as the mid-term review. It will look at the impacts and sustainability of the results, including the contribution to capacity-building and the achievement of overall environmental goals. This evaluation will also provide recommendations for the following activities. The terms of reference for this assessment will be prepared by FAO Mexico based on guidelines set out by FAO and GEF.

Output 4.1.3: Geospatial platform and digital learning community report multiple benefits and support decision-making.

240) This output will support the generation of a digital platform, and whose main users will be national, sub-national and local decision-makers. This product will align with and support CONAFOR?s BIOCOMUNI mechanism and contribute to the monitoring of the Sustainable Forestry Development Support Programme (PADFS), while gathering data on target landscape outcomes. It will include information for the PADFS to report on national targets for Nationally Determined Contributions, three types of indicators: i) Monitoring of changes in ecological connectivity; ii) Indirect calculations, based on methodologies used by FAO and CONAFOR, (Ex-Act [78][78]) of carbon dynamics linked to the establishment of agroforestry plots; and iii) Evaluation of the contribution of the PADFS to the conservation, restoration and connectivity of forest landscapes and biodiversity in the Mexican beneficiary states. This output is directly related to 2.1.4. To strengthen the implementation of the BioComuni initiative, support will be provided for aspects such as platform administration, dissemination, training and technical support for forest owners and their technicians.

Output 4.1.4: Knowledge management, cooperation and horizontal management networks created[79][79] for NBS implementation and landscape restoration.

241) The knowledge management network will incorporate regional technical actors and academics from research institutions. It will promote knowledge-sharing among project participants on biodiversity, restoration, NBSs, integrated landscape management, governance, market access and financing, among others. This Knowledge Management network will work at local/regional level, around bioforestry corridors, local development agents, corridor schools and learning communities, social enterprises, community spaces and established corridor councils. A digital platform will also connect people from other territories. Partnerships with the private sector and universities will be explored to digitize landscapes. The Knowledge Management platform will be linked to the geospatial tools installed in CONAFOR and will serve as a repository, including user-friendly data for decision makers, technicians, organizations, institutions and producers. For more details about knowledge management see Component 2 and section 8.

Output 4.1.5: Communication strategy for the positioning and dissemination of the environmental benefits derived from the project and CONAFOR?s *Support Programme for Sustainable Forest Development*.

242) This output will use a *communication for development**[80]***[80] approach. At the local level, communication will be an important tool for the people?s empowerment. The strategy will be based on three goals: i) *Inform*: communicate major strategic issues to raise awareness about biodiversity conservation, integrated landscape management, NBS, and the Building Back Better approach; ii) *Inspire*: cultivate and captivate key audiences or segments, both in policy decision-making, consumption or use of services; iii) *Involve and act*: based on the results obtained, metrics, data and findings, propose a call for action.

243) The strategy will be participatory in design, implementation and evaluation, involving young people from communities and regions.

244) The strategy will target different audiences: a) local initiatives: farmers, communities, Social Forestry Enterprises, *ejidos*, women, young people, local organizations, linked to the digital platform, cooperatives, councils and local development agents. Key actions will include: hubs for community connectivity, schools or learning communities in connectivity landscapes (corridors), use of community radio stations, social networking and communication strategies managed by community young people, including videos, promotion of information capsules, producing culturally sensitive communication materials in local languages as part of a participatory approach , promoting blended learning, peer-to-peer experience sharing, national and international exchanges; b) Technicians with an integrated approach to landscape management. Actions: blended learning, community learning schools or communities, exchange forums, use of the virtual knowledge management platform; c) Municipal, state and federal government officials. Actions: virtual and face-to-face forums with authorities, social

media outreach, short before/after videos, creation of a register of community communication initiatives and collectives, information on target landscapes and field progress; press releases, digital strategies; d) private sector; e) potential consumers of biodiversity value chains (as part of component 3 of the project).

Output 4.1.6: Best practices and lessons learned systematized and disseminated.

245) Lessons learned and good practices from the projects will be systematized and linked to the knowledge management network and communication strategy, making them available to other areas and sectors and supporting scaling up and replication. The project will support a project website, social media, publications, radio and video clips, among others. The project will support the consolidation of lessons learned and dissemination of good practices to strengthen the sustainability of the project outcomes in the project landscapes and to facilitate replication and up-scaling in other landscapes in Mexico and internationally. In Year 1, a gender-sensitive project communications and information strategy (aligned with the Gender Action Plan) will be developed and implemented during the project?s lifetime. Knowledge products will be disseminated through various media; socialization with relevant stakeholders; and creation of a project website. As the project will rely on the participation of multiple territorial and institutional stakeholders, communication tools will be developed to facilitate the process of integration between stakeholders and to foster cooperation. The project will also share best practices between the three targeted landscapes.

Theory of Change Project (ToC)

Key assumptions:

(1) Regulatory frameworks and strategies are adopted and scaled up by the CONAFOR?s *Support Programme for Sustainable Forest Development.* CONAFOR (for Component 1).

(2) Strategies for NBS and nature connectivity adopted and scaled up by CONAFOR, CONANP, SEMARNAT and other federal and regional institutions (for Component 2). These institutions are partners in the CONAFOR?s *Support Programme for Sustainable Forest Development*;

(3) Potential for socio-economic businesses and organizations exist at local level. (4) Global and/or national markets exist or can be created for BD products (for Component 3).

246) The GreenMex Project will seek to achieve biodiversity conservation and the green economic recovery of vulnerable populations in Mexico through a **Building Back Better** approach.

247) The GreenMex project will achieve three overarching long-term goals. The first two - the restoration of key landscapes in Mexico and te creation of new terrestrial protected areas- will build on (and add value to) Mexico?s CONAFOR?s *Support Programme for Sustainable Forest Development* a nation-wide program. Its objective is to promote an intervention model based on integrated land management with a landscape approach, adaptation based on communities and ecosystems. Within this framework, it provides for the delivery of subsidies in order to generate greater and better impacts on the various ecosystems, stakeholders and people who live in the country's forest areas, considering the differences and inequalities between men and women, as well as the differentiated impacts of climate change.

248) In addition to upscaling the CONAFOR?s *Support Programme for Sustainable Forest Development*, GreenMex will also foster the institutional and local capacities for the adoption of biodiversity conservation, landscape management, and ecosystem connectivity within key normative and implementing institutions: CONANP and SEMARNAT (and agriculture sector) and support the implementation of large-scale restoration and biodiversity strategies beyond CONAFOR?s *Support Programme for Sustainable Forest Development* areas of influence.

249) The third long-term goal - rural poverty reduction through green economic recovery ? will seek to strengthen the Social Economy of high biodiversity products through the identification and creation of new markets for BD products and through the development of inclusive models in the BD sector. The main hypothesis here is that BD conservation, integrated landscape management and ecosystem connectivity will be reinforced through the creation of socio-economic incentives at local and national levels.

250) This causal pathway will apply to both the CONAFOR?s *Support Programme for Sustainable Forest Development* Program level (Component 1) and the three targeted landscapes (Component 2 and 3).

251) The main barriers to the recovery of ecosystems and biodiversity conservation in all project territories include limited inter-institutional alignment and coordination within the various governmental levels and sectors, limited technical capacities for the implementation and monitoring of inter-institutional programmes without a joint vision of the territory for the implementation of biodiversity conservation and integrated landscape management actions, as well as limited community participation in governance, with significant gender, age and ethnic group gaps among those involved in the sustainable management of the community?s own resources. The project will address these problems through activities under Component 1 to strengthen the regulatory framework, capacities and institutional and governance processes implemented in a coordinated and participatory manner in the territories.

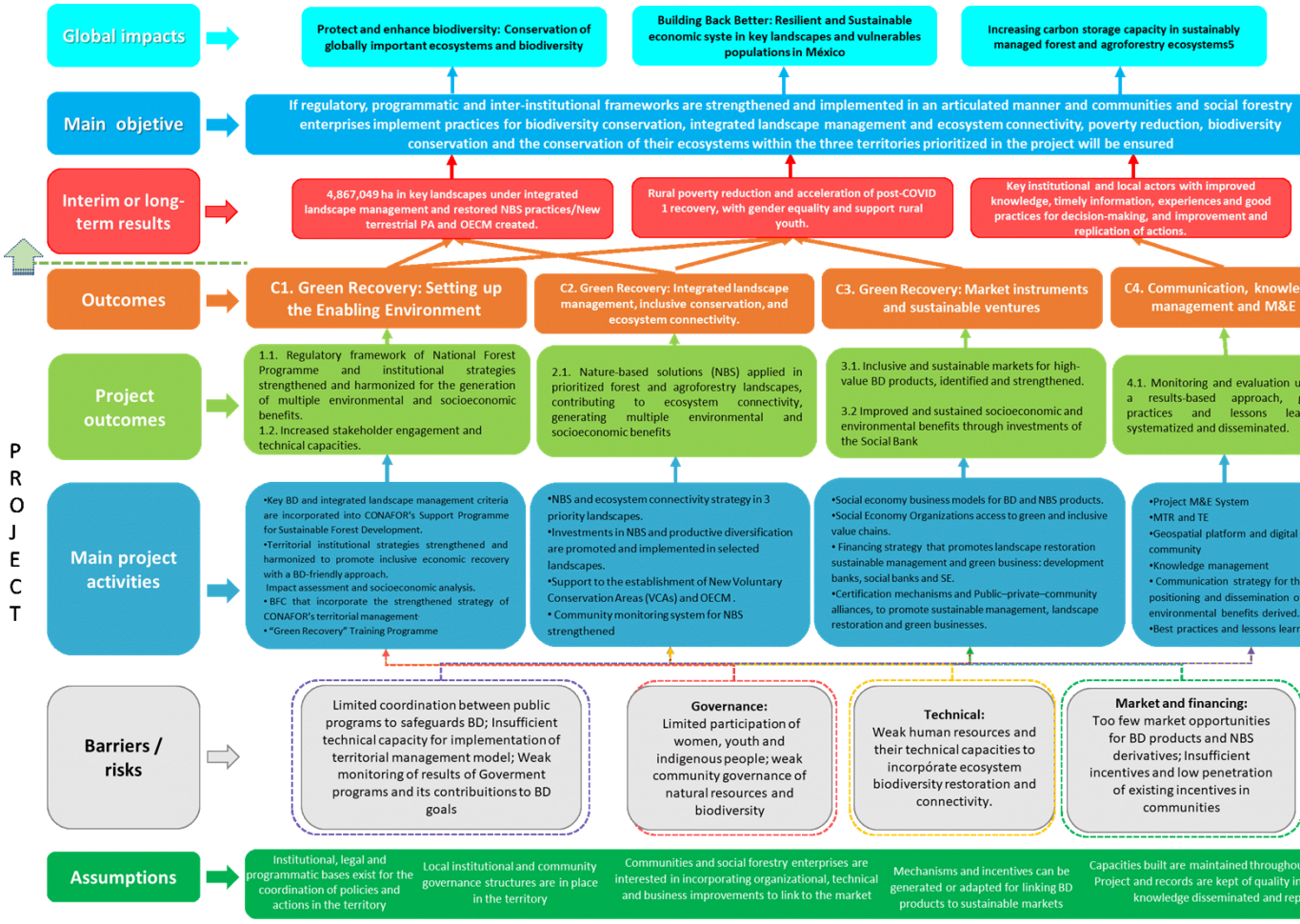
252) The problem of exploitation of forest natural resources and the fragmentation of their ecosystems is also due to the limited knowledge of stakeholders on environmental issues and ecosystem services, coupled with insufficient technical capacity of field promoters and local producers. The project will seek to change the above by addressing the barriers through activities under Component 2, implementing a strategy, tools and practices derived from Nature-Based Solutions in the forest and agroforestry landscapes within the three prioritized territories with support from participatory mechanisms and strengthened technical capacities.

253) Forest communities and social enterprises also have limited income due to the lack of opportunities and capacities to market biodiversity products, and organizational gaps that affect their financing capacity, as well as a limited supply of incentives and adequate instruments for their financing, and their lack of knowledge and information, which prevents them from adding value to their products and placing them on the market. The project will address these barriers through activities under Component 3 to generate ? within community and social forestry enterprises ? business capacities through the identification of sustainable markets for high-value BD products, a strategy and appropriate financing instruments to support landscape restoration activities and the creation of green businesses linked to NBS and certification processes to support these activities.

254) Finally, under Component 4, communication and management of the knowledge generated in these processes, as well as our robust monitoring, evaluation and reporting system, will contribute to generating evidence for the continuous improvement of the project, the decision-making of institutional and local actors and the scaling up of the learning and innovations that are intended to be implemented in public policies cooperating to contribute to the green and inclusive recovery in the rural territories of the country.

255)

Figure 5. ToC diagram of the project



4) Alignment with GEF focal area and/or Impact Program strategies

256) The project is aligned with the Biodiversity Focal Area Strategy of GEF-7, objective BD 1-1, through the mainstreaming of biodiversity in three productive landscapes, the inclusion of environmental criteria in the Mexico National Forest Programme, and the promotion of landscape restoration in degraded forest areas with high-value biodiversity.

257) The GEF project is also aligned with objective BD 1-5 by promoting the mainstreaming of biodiversity in target landscapes inhabited by indigenous peoples and supporting inclusive conservation. The project will support the characterization of the traditional indigenous food system (*milpa*) and its links with biodiversity in the selected landscapes.

258) Finally, it fulfils objective BD 2-7 by supporting the creation of new Voluntary Conservation Areas (VCAs) and other active conservation initiatives thereby increasing the ecosystem coverage of the global protected area estate. At the regional level, the project with work in partnership with PSV and SADER to enhance the *milpa* and community-based food systems by establishing VCAs and other active conservation initiatives that are complementary to the *milpa.*

5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEF-TF, LDCF, SCCF, and co-financing

259) In the baseline scenario without GEF support, the impacts generated by anthropogenic activities, land-use change, agriculture, livestock farming and pressures on forest areas will continue to exert pressure on natural resources, increasing their degradation and loss of biological diversity. Likewise, at the institutional level, insufficient instruments and approaches prevent adequate integrated landscape management and ecosystem connectivity, thereby stunting the integration of conservation and sustainable use among local producers, as well as for the establishment of synergies and agreements between authorities and stakeholders at all levels.

260) Component 1 will address Institutional barriers described in the barriers subsection. Through Component 1, GEF incremental financing will catalyse NBS investments and support the harmonization of concurrent programmes. Component 1 will support the mainstreaming of environmental criteria into social programmes and policies, strengthen land use planning by moving beyond the plot or property level and include the valuation of ecosystem services; and will support the change of productive practices to reduce or reverse degradation and management of high conservation value.

261) Component 2 will address Governance barriers described in the barriers subsection. Through Component 2, GEF co-financing will promote green value chains. Technical assistance and guidance to increase profitability and valuation of ecosystems with high biodiversity will be financed.

262) Component 3 will help overcome technical barriers as well as Marketing and Financial barriers described in the barriers subsection. GEF co-financing in Component 3 will enhance competitiveness of sustainable rural entrepreneurship and productive linkage with the private sector in differentiated green markets. Small- and medium-sized enterprises and second level organizations will be trained. Component 3 will promote commercial agreements with the private sector, as well as strengthen capacities to comply with quality and supply standards without intermediaries.

263) Finally, GEF incremental financing for Component 4 will enhance and improve informed decision-making, as well as management systems and intersectoral monitoring with the active participation of communities.

264) Co-financing of investment projects is expected in rural areas for ecosystem restoration, reforestation with native species, and reforestation to increase connectivity between natural protected areas. Project co-financing includes transfers to producers and technical assistance from technicians. CONAFOR?s co-financing is related to Commercial Forest Plantations, Community Forest Management, Reforestation and Restoration of Watersheds, and PES. CONANP?s co-financing is related to the Conservation Programme for Sustainable Development (PROCODES) and VCA certification, as well as technical assistance in the project intervention sites. The Social and Development Bank?s co-financing will support Social Economy Green Businesses. Other co-financing is related to training programmes that will benefit the project?s target populations.

265) The causal pathways for the proposed project changes are defined in the TOC diagram and description. The actions at the programme level (Component 1) and at the site level in the three target landscapes (Components 2 and 3) are also described above in section 3) the Alternative Scenario.

6) Global environmental benefits (GEF-TF) and/or adaptation benefits (LDCF/SCCF)

The project will generate global environmental benefits (GEB) consistent with national development priorities and sustained over the long term by the local and regional benefits it will generate in terms of environmental sustainability and improved livelihoods. The global environmental benefits that will be produced by the proposed project include: (i) 4 867 049 ha will benefit from the expected regulatory and policy changes to be achieved through the project in key sectors; (ii) 100,000 ha of terrestrial protected areas created or under improved management for conservation and sustainable use; (iii) 151,000 ha of area of land restored (degraded agricultural land restored: 73,000 ha and area of forest and forest land restored: 78,000 ha), as detailed in Table 19 below:

Table 19. Project expected GEBs, disaggregated by landscape

	Terrestrial protected areas created or under improved management	**Area of land restored** (Has) **Core 3**	**Area of landscapes under improved practices** (Hectares)	**Greenhouse Gas Emissions Mitigated** (metric tons of CO2e) **Core 6**	**Number of direct beneficiaries disaggregated by gender**

Landscapes	for conservation and sustainable use (Has) Core 1	Degraded agricultural land restored	Forest and forest land restored	Core 4	Direct	Indirect	Male	Female
Durango	25 000	24 000	15 000	1 568 620	26,006	236,551	10 795	15 755
Balsas-South Pacific	75 000	35 000	53 000	2 908 727	116,972	887,209	28 249	41 801
Lacandon Jungle	56 500	14 000	10 000	389 702	365,568	305,317	7 190	10 210
Total	**100 000**	73 000	78 000	**4 867 049**	508,546	1,429,077	67 766	47 234
		151 000			**1,937,623**		**115,000**	

The project?s scope also contributes to several of the Aichi Targets:

No 7. Sustainable production and consumption: ?By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.? The project covers up to 4 867 049 ha where the local people carry out improved agroforestry management practices, as well as other nature-based solutions for sustainable land management.

266) No 11. (11: Protected Areas (17 percent, 10 percent) effective): ?By 2020, at least 17 percent of terrestrial and inland water, and 10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures and integrated into the wider landscapes and seascapes?. The project intends to protect at least 100 000 ha of landscapes through different types of conservation instruments such as the setting up of government-administered Protected Areas or voluntary conservation schemes.

267) No. 14 Essential ecosystem services restored: ?By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are

restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.?

268) No 15. Increased resilience, restored ecosystems: ?By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 percent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.?

269) The project will restore at least 151 000 hectares of degraded agricultural and forest ecosystems, while ensuring the maintenance of corridors and their biodiversity, and the functions that enable forests to recharge groundwater and hydrological dynamics at the watershed level.

270) The project?s scope contributes to several of the Sustainable Development Goals:

- ? Goal 12. Ensure sustainable consumption and production patterns.
- ? The project covers up to 4 867 049 ha ha where the local people carry out improved agroforestry management practices, as well as other nature-based solutions for sustainable land management.
- ? Goal 13. Take urgent action to combat climate change and its impacts
- ? Goal 15. Sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- ? The project covers up to 4 867 049 ha where the local people carry out improved agroforestry management practices, as well as other nature-based solutions for sustainable land management.

271) Furthermore, as part of the Nationally Determined Contributions to the UNFCCC, Mexico has set specific targets such as ?Achieve 0 percent net deforestation rate by 2030?, ?Increase total biomass stocks in ecosystems under sustainable forest management? and ?Manage and increase carbon sinks in natural protected areas?. The project will contribute to Mexico?s commitments in this area developing, promoting and encouraging productive, protection, conservation and restoration activities, as well as supporting the formulation of plans and programmes and implementation of the sustainable forest development policy and its instruments in project territories.

272) The project will contribute to Mexico?s commitments in this area because it aims to develop, promote and encourage productive, protection, conservation and restoration activities, as well as to

participate in the formulation of plans and programmes and in the implementation of the sustainable forest development policy and its instruments in project territories .

273) Post-COVID-19 recovery: The GEF project will support the implementation of a green recovery strategy in post-COVID-19 scenario in Mexico, in close coordination with CONAFOR?s *Support Programme for Sustainable Forest Development*. GEF intervention will support the transformation of perverse policy incentives into positive ones. These include shifting from deforestation to sustainable forest management and from a short-term production/extraction model to one that better manages biodiversity resources for sustainable use and ensure long-term society-wide benefits.

7) Innovativeness, sustainability, potential for scaling up and capacity development

274) The project will supplement the National Forest Programme and other public interventions in specific landscapes in Mexico to drive a landscape and connectivity approach. Component 1 will support the strengthening of the NFP framework, particularly in the various planning instruments promoted by CONAFOR and at the local intervention level, which will give this project great potential for scaling up. At the same time, a successful post-Covid-19 GEF project may open the door to further South?South cooperation in LAC and other developing areas.

275) The project is innovative as it acknowledges the impacts caused by the COVID-19 pandemic in Mexico and the LAC region and proposes a green recovery strategy to build forward better, based on Type 1 and Type 2 nature-based solutions (NBSs) to address pre-existing social, economic and environmental challenges that have been exacerbated by the health crisis and economic recession. The project provides an opportunity to reiterate the GEF catalytic role in co-financing the incremental cost of mainstreaming a landscape and connectivity approach in public policies and programs. The project includes the following innovative actions, which are designed to ensure scaling-up and sustainability:

i) *Mainstream an integrated landscape management and connectivity approach into the tools used for the socioenvironmental programmes operated by CONAFOR to facilitate sustainable livelihoods*. The assumption is that the conservation and sustainable use of biodiversity could facilitate more resilient and sustainable livelihoods, economic development and healthier diets. The NFP and other government programmes (e.g., those established by the Ministry of Agriculture and the Ministry of Welfare) do not promote clear criteria for landscape vision and connectivity even though they have included some environmental criteria in their planning and regulatory instruments.

The project proposes the implementation of bioforestry corridors (clusters), under a mosaic arrangement, in which networks will be established (communities, service providers, government agents, international agencies, universities and civil society organizations) to connect biodiversity. The project draws on lessons learned from Mexico?s experience in several biological corridor initiatives, including the Mesoamerican Biological Corridor (MBC). In particular, BiodiFor emphasizes that biodiversity conservation and environmental protection must be harmonized with the economic and

social needs of the Mesoamerican region and the need to promote interinstitutional and intersectoral coordination. As such, the BiodiFor project promotes an integrated landscape management approach and positions the territory not only as an environmental geographic space, but also as the outcome of a social construct, where people are key actors in conserving natural resources, hence the Biodiversity and community-based solutions approach. The governance bodies of each corridor ? the Bioforestry Corridor Council ? will be the body for planning, decision-making, monitoring and accountability, which seeks to be a space for dialogue between local actors.

ii) *Promoting sustainability of the investment/economic model*: the importance of achieving linkages with sustainable value chains. Partnerships with the private sector to develop sustainable, deforestation-free value chains will contribute to market access for biodiversity products and by-products, improved incomes and livelihoods for communities.

iii) *Improve sources of information to enable evidence-based decision-making by both institutional actors and communities*. This will improve the monitoring of the project and the National Forest Programme. It will also generate the evidence needed to improve similar practices in other landscapes (in Mexico and other countries). Regarding community decision-making, the project proposes to support the development of BIOCOMIUNI, a community-based monitoring system promoted by CONAFOR and CONANP. It will provide training and equipment and contribute to the development of digital platforms for its start-up. The Monitoring, Assessment and Reporting System for Integrated Landscape Management, Biodiversity Conservation and Ecosystem Connectivity will be anchored at the level of each Bioforestry Corridor through the installation of Territorial Information and Learning Hubs, these hubs will be physical locations where internet access will be available through satellite connection, standard Wi-Fi, mobile data connections, LMDS (Local Multipoint Distribution Systems).

Using the information and outcomes generated by output 1.1.3, ?impact assessment? of the innovative practices implemented by BiodiFor, the project will contribute to: i) protecting and enhancing biodiversity in the project intervention landscapes (through components 1 and 2) and ii) improving the resilience and management of vulnerable households and communities living in project intervention landscapes (component 3), with the aim of providing information for policy design and supporting the scaling up of the connectivity and NBS approach at the NFP level, not only in project intervention territories. Impact assessment (impact evaluation) is divided into two complementary strategies. The first, which will be referred to as the ?biophysical valuation?, uses satellite imagery to respond to the first objective, and proposes to measure forest cover, various vegetation indices such as the Normalized Difference Vegetation Index (NDVI), and if possible, indices reflecting ecosystem connectivity and resilience. The second, i.e. ?socioeconomic assessment?, uses household- and community-level surveys to find out whether the intervention does indeed achieve the second objective, using indices that reflect the impact on food security and other variables that reflect adaptive behaviours such as diversification of income sources, adoption of programme-promoted practices and migration patterns.

276) The project sustainability is likely to be high as it is designed to complement ongoing public policies and programs while creating new markets and setting bridges with the private sector. An important feature is the lesson learned from previous GEF projects about the need of establishing an M&E system than is embedded in the national monitoring system.

277) Environmental sustainability will be ensured by supporting the incorporation of principles of sustainability into norms and plans that govern practices of productive landscapes, particularly in the agriculture and forestry sectors. Social sustainability will be ensured by promoting the active participation of local stakeholders in the definition of productive models and in decision-making. Financial sustainability will be assured through the establishment of sectorial financial and compensatory mechanisms for sustainable agriculture and forestry practices.

7) Summary of changes in alignment with the project design with the original PIF

CHANGES IN PROJECT DESIGN		
EXPECTED OUTCOMES AND OUTPUTS	**CHANGE PROPOSAL (PPG)**	SUPPORTING ARGUMENTS
Component 1		

Outcome 1.1 Regulatory framework of *Sembrando Vida* (SV) Program and institutional strategies, strengthened and harmonized for the generation of multiple environmental and socio-economic benefits.	**Outcome 1.1:** Regulatory framework of CONAFOR?s *Support Programme for Sustainable Forest Development* and institutional strategies strengthened and harmonized for the generation of multiple environmental and socioeconomic benefits.	Mexico?s national program ?S*embrando Vida (SV)*? has been replaced by the *Support Program for Sustainable Forest Development*, led by CONAFOR. This change is due to the acceleration of the results of the SV program, expected to end by 2024. This time adjustment makes it impossible to carry out the proposed structural changes in only 2 years during the implementation stage. The *Support Program for Sustainable Forest Development* is also a nationwide program. Its objective is to promote an intervention model based on integrated land management with a landscape approach, adaptation based on communities and ecosystems. Within this framework, it provides for the delivery of subsidies in order to generate greater and better impacts on the various ecosystems, stakeholders and people who live in the country's forest areas, with consideration to the differences and inequalities between men and women, as well as the differentiated impacts of climate change.[81][81] This program links national and global environmental benefits with socioeconomic ones, capable of generating high contributions to a post-COVID 19 recovery with equity, favoring local socioeconomic benefits for the rural population located in the project?s targeted zones. The improvements proposed for this new program focus on the incorporation of operational planning instruments in each bioforestry corridor, with linkages to territorial governance mechanisms, so as to facilitate this integrated vision of landscape and connectivity.
Output 1.1.1 Key biodiversity (BD) and integrated landscape management criteria are incorporated into	**Output 1.1.1**: Key biodiversity (BD) and integrated landscape management criteria are incorporated into the CONAFOR?s *Support Programme for Sustainable*	In accordance with the above-described program change, and the improvements needs within the new framework, this adjustment considers the incorporation of KBAs and minimum criteria to guarantee integrated management of the landscape

the SV program.	*Forest Development.*	with a vision of connectivity. Within the framework of output 1.1.1. the *Support Program for Sustainable Forest Development* will be strengthened with the inclusion and mainstreaming of BD, NbS and gender criteria.
Output 1.1.3 Impact assessment[82][82] of the innovative practices applied by the Project - to be upscaled by the entire SV Program.	**Output 1.1.3:** Impact assessment of the innovative practices applied by the Project - to be upscaled by the entire CONAFOR?s *Support Programme for Sustainable Forest Development*.	In accordance with the program change, and the improvements needs within the new framework, this adjustment includes carrying out an impact assessment of the practices applied by the project in order to study its scalability at the national level.
Output 1.2.1 Strategy for the permanence of Farmer Learning Communities[83][83] (FLC), developed and implemented.	**Output 1.2.1.** Bioforestry Corridors (BFC) that incorporate the strengthened strategy of CONAFOR?s territorial management.	In accordance with the program change, and the improvements needs within the new framework, current local structures of territorial management of the CONAFOR's *Support Program for Sustainable Forest Development* were considered in the alternative scenario in order to improve and strengthen local strategic stakeholders for territorial governance within the proposed bioforestry corridors.
Output 1.2.2 Green Recovery Training Program, which targets government officials, beneficiaries of SV and relevant stakeholders.	**Output 1.2.2:** ?Green Recovery? Training Programme, addressing Nature-Based Solutions, governance and social economy.	The text has been adjusted to align with the context of the new targeted program. As such, the training program will focus on specific Nature-Based Solutions options. In addition, specific institutional audiences at different levels have been included to ensure increased capacity and sustainability.
Component 2		

Output 2.1.3 New voluntarily conservation areas (ADVC) have been certified by CONANP in the prioritized landscapes.	**Output 2.1.3** New Voluntary Conservation Areas (VCAs) and Other effective area-based conservation measures (OECMs) have been formally accredited or certified by CONANP and/or CONAFOR in prioritized landscapes.	The text has been adjusted in accordance with the context of the new targeted program. It includes additional options for different conservation schemes that are available in the territory linked to the project?s different partner institutions. It includes different conservation schemes that will not only expand the scalability of conservation areas at the national level, but also highlight more than one single instrument.
Output 2.1.4 Community-based monitoring system of areas under productive restoration, developed and implemented within the SV Program.	**Output 2.1.4** Community monitoring system for NBS strengthened.	The text has been adjusted to reflect the context of the new targeted program. Project contributions will focus on contributing to bioforestry corridors in the intervention areas, rather than on productive restoration areas linked to the SV program. In addition, the ?BioComuni? protocol will be strengthened through the project. ?BioComuni? is a biodiversity monitoring protocol run by the country's *ejidos* and communities and supported by the National Forestry Commission, the Mexican Fund for Nature Conservation and the United States Forest Service. Its aim is to strengthen the capacity of *ejidatarios* and commoners to take action to improve the management of their natural resources.
Component 3		
Output 3.1.4 Strengthened local food systems for post COVID-19 recovery	Removed output.	This output was removed to ensure consistency with CONAFOR?s *Support Programme for Sustainable Forest Development*. Strengthened food systems were relevant to SV but do not have a specific programmatic link with CONAFOR. Nevertheless, green value chains and social economy business models for BD products linked to outputs 3.1.1 and 3.1.2 are considered but they are not limited to only food products.

Output 3.2.1 Feasibility analysis of financial incentives for NBS and carbon capture in the SV Program.	Removed output.	This product was eliminated since CONAFOR's *Support Program for Sustainable Forest Development* provides the delivery of subsidies in order to generate greater and better impacts on the ecosystems, stakeholders and people who live in the country's forest areas, with consideration to the differences and inequalities between men and women, as well as the differentiated impacts of climate change.
Output 3.2.2 Financing strategy that promotes landscape restoration and the creation of green businesses, implemented in the framework of SV Program	**Output 3.2.1** (was 3.2.2) Financing strategy that promotes landscape restoration and the creation of green businesses linked to the NBS, implemented within the framework of the CONAFOR?s *Support Programme for Sustainable Forest Development.*	The order of the outputs was adjusted to follow the logic of the project?s intervention. Elements of sustainable management and conservation linked to the proposed Nature-Based Solutions 1 and 2 will be incorporated within the framework of the new targeted program CONAFOR's *Support Program for Sustainable Forest Development*.
Output 3.2.3 Certification mechanisms that promote landscape restoration and the creation of green businesses, implemented within the framework of SV.	**Output 3.2.2** (was 3.2.3) Certification mechanisms that promote sustainable management, conservation, landscape restoration and the creation of green businesses.	The order of the outputs was adjusted to follow the logic of the project?s intervention. Certification mechanisms will be linked to sustainable management and conservation within the framework of the new targeted program CONAFOR's *Support Program for Sustainable Forest Development*.
Output 3.2.4 Public-private-community alliances[84][84] that promote landscape restoration and the creation of green businesses, implemented within the framework of SV.	**Output 3.2.3 (was 3.2.4)** Public?private?community alliances that, promote sustainable management, conservation, landscape restoration and financing of green businesses implemented within the framework of CONAFOR?s *Support Programme for Sustainable Forest Development*	The order of the outputs was adjusted to follow the logic of the project?s intervention. In this sense, contributions to sustainable management and conservation and the financing of social economy organizations are stressed within the framework of the new objective program CONAFOR's *Support Program for Sustainable Forest Development*.

Output 3.2.5 Strengthening of social banking alternatives for financing green businesses.	**Output 3.2.4** (was 3.2.5) Strengthening of social banking alternatives for the financing of green businesses derived from NBS implemented in BFC.	The order of the outputs was adjusted to follow the logic of the project?s intervention. The financing of green businesses linked to the proposed NBS in bioforestry corridors is reflected in the framework of the new target program CONAFOR's *Support Program for Sustainable Forest Development*.
GEF Core Indicators		
GEF Core indicator 11: Number of direct beneficiaries disaggregated by gender: 370,878 direct beneficiaries: Women: 186,161 Men: 67,766	115,000 direct beneficiaries: Women: 47,234 Men: 67,766	This indicator was updated to reflect the people who would be directly involved in the implementation of Types 1 and 2 NBSs under the auspices of the new target program CONAFOR's *Support Program for Sustainable Forest Development*. For the application of Type 1 NBSs and the fulfilment of the Terrestrial protected areas target, the direct beneficiary population is 70 200 people (35 451 women and 34 749 men). For Type 2 NBSs targeted at forest restoration, the beneficiary population is 15 600 (4 103 women and 11 497 men). For the application of Type 2 NBSs targeted at agricultural restoration, the beneficiary population is 29 200 (7 680 women and 21 520 men).
Co Financing		

US $ 66,250,000	*US $***50, 363,532**	The COVID pandemic has had a serious impact on the Mexican economy and therefore on the availability of co-financing resources since the preparation of the PIF. The project team, with the support of FAO, continues to engage project partners to identify potential resources. Co-financing of the SV program was reduced to only those funds directed at targeted landscape within the project?s intervention areas. Meanwhile, this has been supplemented by Co-financing from CONAFOR?s *Support Program for Sustainable Forest Development,* as well as the pre-approved GCF CN in Balsas basin and an IFAD loan located in this zone. Complementary activities with these initiatives are included in the GEF project design in order to articulate climate finance and increase GEBs. During year 1 of project implementation, local co-financing from potential bio corridor and Forest social enterprise (Appendix *Social economy enterprise* output 3.2.1) will be identified, reported and included.

[1] United Nations Environment Programme (UNEP) & World Conservation Monitoring Centre (WCMC): www.biodiversitya-z.org (Summaries of relevant biodiversity information organized by country).

[2] Sarukh?n, J. et al. 2017. Capital natural de M?xico [Natural capital of Mexico]: Summary: knowledge assessment and change trends, sustainability perspectives, human and institutional capacities. National Commission for the Knowledge and Use of Biodiversity (CONABIO). Mexico.

[3] (CONABIO. 2016. Mexican National Biodiversity Strategy and Action Plan 2016?2030 (ENBioMex). National Commission for the Knowledge and Use of Biodiversity, Government of Mexico, 388 pp.)

[4] IUCN, DFID, European Commission. Biodiversity in Development Project. 1. Biodiversity in brief: Relationships between biodiversity and poverty (https://portals.iucn.org/library/sites/library/files/documents/2001-036-3-Es.pdf)

[5] https://www.inecol.mx/inecol/index.php/es/ct-menu-item-25/ct-menu-item-27/17-ciencia-hoy/845-la-ganaderia-y-la-perdida-de-la-biodiversidad

[6] SEMARNAT. 2013. Report on the State of the Environment in Mexico. Compendium of Environmental Statistics. Key Environmental Performance Indicators. 2012 edition. Mexico, 382 pp.

[7] https://www.gob.mx/conagua/articulos/calidad-del-agua

[8] Mateo-Sagasta J., S. Marjani & H. Turral. 2017. Water pollution from agriculture: a global review. FAO & IWMI.

[9] Schreinemachers P. & P. Tipraqsa. 2012. Agricultural pesticides and land use intensification in high, middle and low income countries. Food Policy, 37: 616-626.

[10] https://apps1.semarnat.gob.mx:8443/dgeia/informe15/tema/cap3.html

[11] https://www.ft.com/content/1e25c567-66c3-44e0-86ed-54805a5d6503

[12] CONABIO. 2016. Mexican National Biodiversity Strategy and Action Plan 2016?2030 (ENBioMex). National Commission for the Knowledge and Use of Biodiversity, Government of Mexico, 388 pp.)

[13] CONAFOR (2020). Estimaci?n de la tasa de deforestaci?n en M?xico para el periodo 2001-2018 mediante el m?todo de muestreo. Documento t?cnico. https://idefor.cnf.gob.mx/documents/91/download

[14] Sarukh?n, J. *et al.* 2017. Natural Capital of Mexico (summary updated to 2017). National Commission for the Knowledge and Use of Biodiversity (CONABIO). Mexico.

[15] FAO. 2021. Global Forest Resources Assessment 2020: Main report. Rome, 186 pp.

[16] Environment and Natural Resources Sector Programme 2020?2024. Official Journal of the Federation 07/07/2020 Government of Mexico.

[17] https://www.inecol.mx/inecol/index.php/es/ct-menu-item-25/ct-menu-item-27/17-ciencia-hoy/845-la-ganaderia-y-la-perdida-de-la-biodiversidad

[18] Santos T. and J. Teller?a. 2006. Habitat loss and fragmentation: effect on species conservation. Ecosystems Vol. 15, 2:3-12.

[19] An *ejido* is a form of land tenure that combines communal ownership with individual use. The ejido consists of cultivated land, pastureland, other uncultivated lands, and the town. (Being part of an ejido no longer necessarily involves communal ownership. After the reform of article 27 of the Constitution and the PROCEDE program many ejidos have privatized some or all of their land, but, unless they are formally dissolved as such, they continue to exist legally as ejidos.)

[20] CONAFOR, 2013.

[21] https://apps1.semarnat.gob.mx:8443/dgeia/informe18/tema/cap2.html

[22] CONAFOR National Forest Programme, 2020?2024.

[23] Ashworth, L., Quesada M., Casas A., Aguilar R. & Oyama K. 2009. Pollinator-dependent food production in Mexico. Biological Conservation. 142. 1050-1057. 10.1016/j.biocon.2009.01.016.

[24] FAO, 2020. Global Forest Resources Assessment (FRA).

[25] UNEP. 2013. National Environmental Summary of Mexico. United Nations Environment Programme, 168 pp.

[26] Robles, B. H?ctor-Fundar. 2017. Rural subsidies

[27] Leyva-Ovalle et al. 2017. Monitoring forest degradation in Mexico based on the national forest and soil inventory. Timber and Forestry, Vol. 23 No. 2.

[28] Lanly, Jean-Paul. 2003. Deforestation and forest degradation factors. Proceedings of the XII World Forestry Congress.

[29] *Mainstreaming the Conservation of Ecosystem Services and Biodiversity at the Micro-watershed Scale in Chiapas (GEFID 3816), Conservation and sustainable use of biological diversity in priority landscapes of Oaxaca and Chiapas (GEF ID 9445), and Mainstream Biodiversity in rural landscapes of M?xico* (GEF ID: 10574).

[30] INEGI, 2020

[31] CONAPO-INEGI, 2020.

[32] CONAPO-INEGI, 2020.

[33] https://www.gob.mx/semarnat/articulos/Lacandona-la-gran-selva-maya

[34] https://www.dof.gob.mx/nota_detalle.php?codigo=5609275&fecha=31/12/2020

[35] Constanza et al.1997. The value of the world?s ecosystem services and natural capital. Nature. pp 387: 253-260

[36] The main functions and attributes of the land management model promoted by CONAFOR include: integrative and territorial performance of all the institution?s responsibilities (community forest management, conservation and environmental services, restoration and protection against fires and forest health); promotion, dissemination, supervision, technical support and verification of projects supported by CONAFOR; strengthening of professional care and support, with a view to outreach to the *ejidos*, communities and small forest owners; close and permanent support, with staff living close to forest areas, *ejidos* and communities ? and optimization of the use of operational and support resources for *ejidos*, communities and small-scale forest owners. Information provided by CONAFOR.

[37] https://www.gob.mx/conafor/articulos/mujeres-en-el-sector-forestal?idiom=es

[38] https://www.dof.gob.mx/nota_detalle.php?codigo=5609275&fecha=31/12/2020

[39] Gardu?o, A. and H. Mag?n. 2014. Diagn?stico de las capacidades y situaci?n tecnol?gica del sector forestal y forestal-industrial del pa?s. [Diagnosis of the capacities and technological situation of the forestry and forestry?industrial sector in the country.] University of Guadalajara.

[40] Chapela, G. (Ed.). 2018. Las empresas sociales forestales en M?xico. Claroscuros y aprendizajes. [Social forestry enterprises in Mexico. Clarifications and lessons learned.] Mexico, Mexican Civil Council for Sustainable Forestry, AC, 164 pp.

[41] https://www.conafor.gob.mx/fmfsep/docs/Financiamiento_Forestal-Revista_de_Innovacion_Forestal.pdf

[42] The LGCC establishes provisions for establishing a National Policy on Climate Change Mitigation and Adaptation. On biodiversity, it promotes a special programme to achieve the protection and sustainable management of biodiversity in the face of climate change.

[43] The LFRA regulates environmental liability arising from damage caused to the environment, as well as reparation and compensation for such damage when enforceable through federal judicial processes, alternative dispute resolution mechanisms, administrative procedures and procedures relating to crimes against the environment and environmental management.

[44] https://www.dof.gob.mx/nota_detalle.php?codigo=5609275&fecha=31/12/2020

[45] The *milpa* is a complex agricultural and cultural system with many centuries of existence, in which the seed of native varieties is preponderant, which provides food to families at different times during its development; in this system, crop rotation and their association maintain soil fertility and reduce erosion. The main axis of the polyculture is the maize native races, accompanied by various plants, some planted and others induced or tolerated.

[46] $ MX 179,670,817,656 converted at 21.92 pesos to USD$1, per official UN exchange rate, 1 September 2020.

[47] The programmes covered by this objective are those derived from the National Forestry Programme and other programmes related to social benefit that occur in and affect project areas and scopes.

[48] https://www.gob.mx/conafor/documentos/notas-informativas-2021?idiom=es

[49] https://www.dof.gob.mx/nota_detalle.php?codigo=5609275&fecha=31/12/2020

[50] UN Policy Brief: *The impact of Covid-19 in Latin America and the Caribbean*, July 2020 (https://www.un.org/sites/un2.un.org/files/sg_policy_brief_covid_lac.pdf)

[51] The ACSFI is a statutory body that guides FAO on issues concerning the sustainable consumption and production of forest

products. It also provides a forum for dialogue between Food and Agriculture Organization of the United Nations (FAO) and the

private sector, with a view to identifying strategic actions that promote sustainable forest management.

[52] https://www.fao.org/3/cb1556en/CB1556EN.pdf

[53] CONAFOR?s Support Programme for Sustainable Forest Development. Although the ?BioComuni? protocol has been institutionalized in CONAFOR, the project needs to strengthen our monitoring of biodiversity conservation action outcomes that contribute to national and international commitments.

[54] (Rules of Procedure, Integral Development Plans (IDPs), UMAs, territorial ordinances, among others, guidelines and Best Practice Programmes for PESs and schemes for the payment for environmental services through concurrent funds MLPSA-FCs).

[55] *Promotor?as de Desarrollo Forestal,* in Spanish, which are part of CONAFOR.

[56] CONAFOR has implemented an Integral Development Plans (PDI) model to provide a more comprehensive and long-term follow-up to interventions in the *ejidos* and communities in priority action areas. The project will contribute to the promotion, design and implementation of these plans to strengthen components related to biodiversity and ecological connectivity, with a view to inclusion and gender equality.

[57] https://www.gob.mx/conafor/documentos/consejo-nacional-forestal

[58] https://sds.yucatan.gob.mx/consejos-comites/consejo-forestal.php

[59] Innovative practices include the NBSs, and governance and restoration initiatives implemented in bioforestry corridor landscapes.

[60] The assessment will apply a Nature-Based Solution (NBS) approach to measure the societal and ecosystem impacts of the project field interventions. The aim is to inform policy design and support the upscaling of NBS at programme level. Therefore, the project will integrate the missing pieces of the NBS approach and will support biodiversity mainstreaming in the Government?s signature programme.

[61] The Project will adopt the definition of nature-based solutions (NBS) agreed at the United Nations Environment Assembly (UNEA) on 2 March 2022, as follows: ?actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits?.

[62] **Priority objective 3.** Conserve and restore the capacity to provide ecosystem services in strategic forest areas, through an inclusive and participatory approach that contributes to guaranteeing a healthy environment for the development and well-being of the population. **Priority Strategy 3. 3.** This states the following: Implement the Integration Strategy for the Conservation and Sustainable Use of Biodiversity in the Forestry Sector within the framework of Mexico?s National Biodiversity Strategy

[63] Nature-based solutions as defined by UNEA (2022

[64] FAO will ensure close coordination with the following GEF project: *Securing the Future of Global Agriculture in the Face of Climate Change by Conserving the Genetic Diversity of the Traditional Agro-ecosystems of Mexico* (GEF ID 9330), to avoid duplication of efforts.

[65] (https://advc.conanp.gob.mx/certificacion/).

[66] National Institute of Statistics and Geography (INEGI), based on the National Survey on the Availability and Use of Information Technologies in Households (ENDUTIH) 2020

[67] Encuesta Nacional Agropecuaria, ENA (National Agricultural Survey). INEGI, 2019.

[68] O. Sotomayor, E. Ramirez and H. Martinez, 2021

[69] idem

[70] Euromonitor International is the world?s leading provider of global business intelligence, market analysis and consumer information.

[71] PROFOEM was a project financed by the World Bank and implemented by CONAFOR

[72] Law on Social and Solidarity Economy, latest amendment, Official Federal Gazette (DOF) 12-04-2019, Article 9

[73] Law on Social and Solidarity Economy, latest amendment, DOF 12-04-2019, art. 10.

[74] Building Back Better is a strategy to reduce the risk to people in nations and communities from future disasters and shocks.

[75] https://www.fao.org/3/cb1556en/CB1556EN.pdf

[76] Refers to the reinvestment of profits from business models implemented by social economy organizations

[77] Green social economy businesses are economic activities carried out collectively that offer goods and services generating positive environmental impacts and that incorporate sustainable practices, guaranteeing the conservation of the environment and collective well-being through economic profitability.

[78] https://www.fao.org/in-action/epic/ex-act-tool/overview/en/

[79]**(State Forestry Councils (CEF), Macro regional Councils, *ejidos*, local research and academic institutions**

[80] http://www.fao.org/communication-for-development/en/

87 Support Program for Sustainable Forest Development, Rules of operation (2021) https://dof.gob.mx/nota_detalle.php?codigo=5639498&fecha=28/12/2021#:~:text=El%20Programa%20Apoyos%20para%20el,%2C%20forestales%2C%20sociales%20y%20econ%C3%B3micos.

[82] The assessment will apply a Nature-Based Solution (NBS) approach to measure the societal and ecosystem impacts of the project field interventions. The aim is to inform policy design and support the upscaling of NBS at the Program level (SV Program). Therefore, the project will integrate the missing pieces of the NBS approach and will support biodiversity mainstreaming in the Government?s signature Program (SV).

[83] The Farmer Learning Communities (FLC) is a strategy of the SV Programme, acting as the lynchpin between the Programme?s beneficiaries and technicians. It encompasses technical assistance, participatory-based and social monitoring for the establishment of agroforestry systems.

[84]The producers who have complied with their monthly work plan, receive financial support of $ MX 5,000 (Mexican pesos) of which, $ MX 500 (Mexican pesos) are allocated as savings; of this amount, $ MX 250 must be destined to a savings investment in a financial institution, and $ MX 250 must be destined to the Welfare Fund.

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

278) Map 9 shows the three working macroregions of the GreenMex project and the bioforestry corridors proposed to implement the project. Annex E (Project maps) shows the maps of each macroregion with their respective proposed bioforestry corridors.

Table 20. Extreme coordinates (EPSG4326) of the three GreenMex intervention regions

GreenMex Region	Min. Long.W	Min- LAT N	Max Long W	Max. LAT N	Centroid Longitude W	Centroid Latitude N
Balsas-South Pacific	-103.7118938	15.92286692	-96.42984728	19.86245317	-100.0708705	17.89266005

Durango	-106.205899	21.94237016	-104.0800716	24.67743034	-105.1429853	23.30990025
Lacandon Jungle	-92.02403729	16.07403615	-90.55671879	17.50861855	-91.29037804	16.79132735

Note: Appendix 4 Project Municipality centroid coordinates

Map 9. Proposed bioforestry corridors in the three macroregions of the project.

Source. FAO

1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

N/A

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

279) Mapping of stakeholders and consultations planned for Project preparation was limited as the planned set of consultations could not involve face-to-face meetings and travel in the territories, due to constraints related to the Covid-19 pandemic. While strict lockdowns were not always in place, multiple outbreaks throughout Mexico kept restricted mobility measures in place by the national authorities.

280) Despite these conditions, during the design phase of the project, several consultation processes were carried out with institutional, social and organizational actors related to the project intervention area and scope. In the first weeks of March 2021, an inception workshop was held with the main executing agency and main partner (Ministry of Welfare), which marked the launch of coordinated work with the Ministry?s technical team during March to July 2021. In September 2021, the implementing agency and lead partner role formerly held by the Ministry of Welfare was transferred to the National Forestry Commission, CONAFOR.

281) As of October 2021, work formally started with CONAFOR, beginning with presenting the project and defining a work plan that could be used to draw up the Project Document. During the PPG phase, it was decided to hold consultations with three types of strategic stakeholders: 1) National institutional partners; 2) Territorial institutional actors and experts on connectivity and NBS (researchers and universities); and 3) Forest producer organizations.

282) Four relevant consultations (meetings, workshops and missions) were held with national institutional partners:

i) *Inception workshop*. In November, the kick-off workshop was held with the project partners (CONAFOR, SEMARNAT and CONANP) and the Ministry of Finance and Public Credit (SHCP), endorsing the participation of each partner and defining the vision and scope of the project.

ii) *Project construction mission*. During January 2021, FAO consulted with CONAFOR and facilitated the definition of results framework, work plan, implementation arrangements and operational structure of the project, synergy with other key global fund projects in which CONAFOR participates, and construction of the first version of the budget.

iii) *Technical meetings and consultations with project partners*. Following the mission mentioned in the previous paragraph, CONAFOR, with the support of FAO, held several technical meetings with SEMARNAT and CONANP to present project progress and to define the participation activities of each partner and co-financing. Similarly, CONAFOR consulted with other secondary partners, such as the Ministry of Agriculture and Rural Development and the Ministry of Welfare, to implement actions and synergies in the territories where they converge. Meetings were also held to define synergies with GEF projects (GEF ID: 10689, Fostering sustainable, legal and traceable use and trade of wild native species in Mexico; GEF ID: 9555, Mexico: Sustainable Productive Landscapes) and with the project to be financed by the Green Climate Fund (GCF) that will also benefit from an IFAD loan ?Regional Development and Well-being of the Balsas Basin in Southern Mexico?.

iv) *Validation workshop with key partners*. During February, a workshop was held to validate the project proposal with the main project partners and the SHCP.

283) With regard to consultations with territorial actors (institutional, experts and producer organizations), given the restrictions imposed due to Covid-19 and the consequent impossibility of carrying out on-site visits, the civil society organization (IDESMAC, A. C.) carried out various consultations during November and December 2021, through virtual meetings and some face-to-face meetings with CONAFOR and CONANP staff present in the territories, as well as with some organizations from the forestry sector. IDESMAC obtained information specifically for the design of Components 2 and 3, to:

? diagnose the situation and problems of biodiversity and connectivity in the territories of intervention, as well as social and environmental risks that could result from project implementation;

? identify the institutions and civil organizations working in the project?s area of influence;

? identify Nature-Based Solutions (NBS) applied in forest and agroforestry landscapes in the selected macroregions;

? establish the status of indigenous peoples and gender aspects;

? identify value chains linked to NBS to generate inclusive business models and value chains.

284) Annex I2 includes the FAO matrix with additional details on stakeholder involvement during the design phase. These participatory processes served as the basis for defining mechanisms for stakeholder participation in the implementation phase.

285) Two key institutional actors in forest management in Mexico, the National Forestry Council (CONAF) and CONAFOR?s State Forestry Councils, could not be consulted during project design. However, as mentioned in the alternative scenario, they will be consulted during the first year of the project, particularly over the implementation of C1 and C2.

286) The CONAF has legal personality, as established by the General Law on Sustainable Forest Development, and powers that go beyond the consultation level, with greater scope for designing and evaluating public forestry policies, as well as the obligation to create State Councils and Forest Regions. CONAF is made up of a Chair and a Deputy Chair (secretary of SEMARNAT and Director General of CONAFOR); as well as a Titular Council and a Deputy for each of the eight sectors represented: 1) forest communities, 2) industry, 3) professional, 4) academic), 5) indigenous peoples, 6) civil society, 7) State Councils (North, Central and South regions), and 8) federal government. CONAF?s State Forestry Councils have played an important role in delimiting the Forest Management Units (UMAFORES), which are an essential figure for the management of forest territories, since they include representatives of the Regional Forestry Associations (ARS), as well as the Forestry Technical Service Providers (PSTF). The associations also invite the participation of *ejidos*, communities or private landowners.

287) Although the pandemic has limited the development of participatory processes in the project design, we propose that they establish contact with stakeholders in each of the project intervention territories during the first year.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

<u>Stakeholder participation during project implementation</u>

288) Stakeholder participation in project implementation includes the planning process and involvement in project implementation, as well information dissemination, consultation, monitoring and evaluation, which are summarized below.

289) **Project governance mechanisms**: At executive level, stakeholder participation and representation will be implemented by the project governance structures, namely the Project Steering Committee, the Project Technical Group and the Field Technical Units. The project will promote coordination between institutions, as well as stakeholder coordination and participation at political and technical level; the Project Steering Committee will make decisions regarding overall management and ensure that the project is implemented within the agreed strategic framework. It will also meet at least once a year in a different landscape and representatives of the different sectors involved in each territory will be invited to participate. The Field Implementation Technical Units will be responsible for executing project activities with a participatory approach, and the project?s technical staff will oversee and guide the stakeholder engagement processes.

290) **Interinstitutional and intersectoral coordination mechanisms**: One of the strategies for achieving the project objective is to promote interinstitutional and intersectoral coordination through various actions, including: (i) strengthening institutional arrangements and facilitating interinstitutional coordination at national level to influence forest management instruments; and (ii) managing existing coordination mechanisms or promoting new ones at national level and in the project forest landscapes.

291) **Strengthening spaces for community participation**. The project will carry out actions to support the establishment and strengthening of co-management and community governance mechanisms in each of the three forest landscapes involved in the project, such as the State Forest Councils, Forest Management Units (UMAFORES), Wildlife Management Units (UMA), Local Councils or PNA Committees responsible for managing conservation areas focused on biodiversity and Sustainable Rural Development Councils, given that the project includes agroforestry activities.

292) **Communication and knowledge management plan**. We plan to design a communication strategy that allows for ongoing dialogue with stakeholders and the regular dissemination of information to the general population from the beginning of the project. This will make it possible to coordinate and strengthen the project support network and partners, under a two-way process to ensure effective interaction. The communication strategy involves three essential aspects: 1) strategic communication for each type of key actor and phase of the project in intervention areas, sensitive to cultural, gender and social inclusion aspects; 2) clear and timely messages, by drawing up simple communication materials and messages; 3) adaptive schemes, by conducting periodic strategy reviews,

to adapt to changing conditions that arise during project implementation. The strategy will be implemented in coordination with the communication teams of our project partners.

293) The project?s knowledge management strategy also involves two lines of action: i) creation of local spaces for learning and territorial knowledge management networks and ii) systematization and dissemination of information, lessons learned and best practices. These lines of action ensure that all the various actors can obtain, disseminate and generate knowledge and best practices under conditions of fairness and inclusion.

294) **Workshops and training courses**: The project will implement capacity-building programmes targeting various stakeholders, including: i) national and subnational government technicians from CONANP, CONAFOR and SEMARNAT (see Component 1); ii) agroforestry producer organizations or other ejido, communal or forest management organizations; and iii) producers or enterprises involved in agroforestry post-production. These programmes will include items aimed at promoting stakeholder participation, such as: i) gender and cultural relevance approaches; ii) educational tools aimed at differentiated target audiences with the idea of fostering their participation; iii) participatory learning methodologies, such as local learning spaces that generate and/or strengthen the knowledge and skills of producers along the value chain, through learning-by-doing, knowledge-sharing and participatory action research ; iv) exchange of experiences; v) territorial knowledge management networks; and vi) participatory evaluations. The project will use a participatory approach when working with beneficiary populations at all stages, seeking their empowerment, with an emphasis on women and indigenous peoples.

295) **Gender Action Plan and Free, Prior and Informed Consent (FPIC) Strategy for Indigenous Peoples**: The project includes a Gender Action Plan and a strategy for implementing FPIC in each of the landscapes proposed in the project (see Annex J) with the aim of ensuring the adequate participation of women and indigenous communities present in the project intervention territories. These plans include defining criteria and conditions for participation in the different project activities, considering the conditions under which women and indigenous peoples operate in agroforestry landscapes, as well as their different knowledge, needs and roles, to ensure that these are recognized and addressed in project interventions. In the case of indigenous peoples, the proposed FPIC processes are in line with FAO guidelines.

296) **Monitoring and Evaluation Plan**. When project implementation begins, the M&E Expert and the Chief Technical Adviser (CTA) will set up a system to monitor project progress. Participatory mechanisms and methodologies will be developed to support the monitoring and evaluation of performance indicators and outputs. The project?s M&E system will include consultations with stakeholders, which will involve gathering their views on the project and their participation and

contributions to the project. The project will implement the Participatory Monitoring and Evaluation Process and Approaches. (See Section 9 - Monitoring and Evaluation)

297) **Project-level grievance redress mechanism**. The project will operate a grievance redress mechanism, which will be disseminated to key project stakeholders to inform them of its existence and mode of operation. The Chief Technical Adviser (CTA) will be responsible for documenting all complaints and ensuring that they are addressed in a timely manner (see Annex I2).

298) The following table summarizes the key stakeholders and their role in project implementation. Further details on the envisaged involvement of stakeholders during the project implementation phase are provided in Annex I2.

Table 21. Key stakeholders and their role in project implementation

Participant	Involvement or role in project preparation and design
Federal Public Administration environmental institutional actors	
Ministry of the Environment and Natural Resources (SEMARNAT)	The Ministry of the Environment and Natural Resources will include criteria and instruments that ensure the optimal protection, conservation and use of the country?s natural resources in the different spheres of society and public administration, thus shaping an integral and inclusive environmental policy that allows for sustainable development. SEMARNAT will play a central role in the first component, particularly as regards the incorporation of biodiversity criteria and with its experience in territorial governance; in the second component, they will promote links between the project and other projects at national and subnational level and participate in defining the scope of the monitoring and evaluation system proposed in Component 4.
National Forestry Commission (CONAFOR)	CONAFOR is a decentralized public body of SEMARNAT, whose main aim is to develop, promote and encourage productive, conservation and restoration activities in forestry. In the project, it will act as the executing agency and main implementing partner of the project on behalf of the Government of Mexico.

Participant	Involvement or role in project preparation and design
National Commission of Protected Natural Areas (CONANP)	CONANP is a decentralized body of SEMARNAT that contributes to the preservation and sustainability of ecosystems and natural environments that are representative of Mexico?s biological diversity. Its role in this project will be central to the creation of Voluntary Conservation Areas (VCAs) in Component 2. It will also actively participate in the process of incorporating biodiversity and connectivity criteria.
Inter-ministerial commissions	
National Commission for the Knowledge and Use of Biodiversity (CONABIO)	This Inter-ministerial Commission oversees the activities related to the knowledge, conservation and sustainable use of biodiversity for the benefit of society. This institution is a bridge between academia, government and society; generating information and developing capacities to sensitize different sectors to the importance of biological heritage, and it will therefore play a central role in implementing Component 1, regarding the coordination of intersectoral dialogues.
Inter-ministerial Commission for Sustainable Rural Development (CIDRS)	The Inter-ministerial Commission for Sustainable Rural Development (CIDRS) is the body responsible for supporting, coordinating and monitoring sectoral and special programmes that aim to promote sustainable rural development. It is also responsible for coordinating and promoting actions among the relevant federal agencies and entities. As in the case of CONABIO, its main role is framed within the activities of Component 1 to promote spaces for intersectoral policy dialogue.
Other institutional actors of the Federal Public Administration	
Ministry of Agriculture and Rural Development (SADER)	This is the federal agency responsible for promoting the holistic development of the country?s countryside and oceans in order to allow the sustainable use of its resources, the sustained and balanced growth of its regions, the generation of attractive jobs that encourage rural populations to stay on the land and strengthening of product productivity and competitiveness to consolidate their positioning and access to new markets. SADER plays a key role for Component 1, in developing strengthened institutional strategies that include biodiversity and connectivity, particularly as it oversees the programmes that promote agroecological production systems (Production for Well-being Programme). In component 3, SADER will also play a relevant role in promoting agroforestry products for vertical integration of the value chain.
Ministry of Welfare (BIENESTAR)	This Ministry seeks to establish a welfare state where people as human rights holders ? particularly historically vulnerable groups ? improve their levels of well-being, inclusion and equality. This is the entity in charge of the *Sembrando Vida* Programme, which seeks to address problems of rural poverty and environmental degradation by promoting agroforestry systems and conditional cash transfers to its beneficiaries, making it a key stakeholder in Components 1, 2 and 3.

Participant	Involvement or role in project preparation and design
National Institute of Indigenous Peoples (INPI)	The Institute is the Federal Executive Authority responsible for matters related to indigenous and Afro-Mexican peoples, whose purpose is to define, regulate, design, establish, execute, guide, coordinate, promote, follow up and evaluate policies, programmes, projects, strategies and public actions to guarantee the exercise and implementation of indigenous and Afro-Mexican people?s rights. The project plays an important role in promoting the local intersectoral dialogues involved in Component 1, as well as in mainstreaming the approach to the rights of indigenous and Afro-Mexican peoples into the other three project components.
National Institute for Women (INMujeres)	This is responsible for promoting and creating an enabling environment for non-discrimination, equality of opportunity and treatment between the sexes, the full exercise of all women?s rights and their equal participation in the political, cultural, economic and social life of the country. As in the case of the INPI, it plays a significant role in mainstreaming the gender approach in the project.
Private and social sector	
Forestry Social Enterprises	Social Forestry Enterprises are local governance systems that allow the organization of *ejido* and community members to manage timber and non-timber resources under forest stewardship schemes. Community forestry experiences reveal their potential for conservation of forest and biological resources and as drivers of local and regional development with social and environmental benefits. Their participation will be most significant in components 1 and 3.
Ejidos, communities, indigenous peoples and Afro-Mexicans	The project will be implemented in three territories where 24 percent of the population is made up of indigenous people and 4.4 percent of the population is Afro-Mexican. The project?s area of intervention includes large areas of agricultural units where the land is owned by the *ejido* or under communal ownership and forestry is managed by the community. Therefore, the project will seek to mainstream a holistic biocultural and landscape approach in order to increase the area practicing sustainable use of timber and non-timber forest resources. Indigenous peoples, communities and *ejidos* are historically known for their capacity to govern and manage their territories in a sustainable manner. Through Free, Prior and Informed Consent (FPIC), they will define the conditions under which the project will be designed and implemented themselves. They are a central pillar of the proposal, which is designed to secure their livelihoods and biological and cultural diversity through inclusive conservation.
Civil society organizations	Civil society organizations focused on environmental issues are of utmost importance in forest governance and in the coordination of partnership networks with indigenous peoples, traditional authorities, academia and the private sector. In general terms, the networking carried out by these organizations offers a favorable environment for local public policies, communication for development, the exchange of collective learning and the participatory monitoring of local development projects. They are therefore key actors in the development of Component 1, particularly for capacity-building activities, and Component 3 for the strengthening of markets and value chains, especially those developed by sectors of the population who live under conditions of greater vulnerability such as young people, indigenous peoples and women.
Financial sector	

Participant	Involvement or role in project preparation and design
National Agricultural, Rural, Forestry and Fisheries Development Bank (FND)	This national development bank offers various financial instruments aimed at promoting productive projects, linking credit with the Federal Government?s social programmes, such as the *Sembrando Vida* programme of the Ministry of Welfare and the Production for Well-being programme of the Ministry of Agriculture and Rural Development. The FND will play a crucial role in Component 3 of the project, as a mechanism for financing ventures that promote value chains, with a focus on Nature-based Solutions.
Trust Funds for Rural Development (FIRA)	This institution is dedicated to supporting the development of the rural, agricultural, forestry and fisheries sectors in Mexico. It operates through financial intermediaries and specialized companies, providing credit, guarantees, training, technical assistance and technology transfer to allow rural producers and companies to develop their productive projects. It will play a role in the development of Component 3.

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor; Yes

Co-financier;

Member of project steering committee or equivalent decision-making body;

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

299) A gender analysis was carried out for the project, which informed the design of the Gender Action Plan (GAP) (see *Annex* M for the full text). This assumes a role for women as users and managers of natural resources, playing a key part in their households, communities and ecosystems. The aim of the GAP developed is therefore to include them in the process and outline a range of measures to ensure that both women and men are fully involved in the process. In forestry systems, gender inclusion is particularly necessary, as in many of these communities, women generate more than 50 percent of their income from forests[1]. The same is true for ecosystem restoration processes,

which are effective in attracting as many stakeholders as possible, especially those who are often marginalized by gender, age, ethnicity and other factors.

300) Women as stewards of ecosystems and biodiversity face social, cultural, economic and legal barriers that affect the governance of natural resources, meaning that we risk losing their unique contributions to conservation solutions[2]. This has been further exacerbated by the Covid-19 pandemic, which has disproportionately affected women and girls. Existing data for Mexico indicate that they are recovering more slowly from the pandemic[3].

301) The GAP aims to trigger the process of empowering women inhabitants of the three project macroregions, providing an enabling environment to ensure their participation in the labour market and decision-making in their communities and tapping into their skills and knowledge for the conservation of biodiversity.

Gender analysis in the three project areas

302) The three areas that make up the project are subject to high levels of poverty, and this is particularly true of the Lacandon Jungle region. Households headed by women in the three areas are on the increase, with a higher percentage of households headed by women in the Balsas-South Pacific region. This is important from a gender perspective, as these types of households tend to face more barriers to overcoming poverty[4]. According to the Gender Inequality Index, the scenarios in the Balsas-Pacific region and the Durango region are similar but they show more gender disparity than the national average. Conditions of gender equality in the Lacandon Jungle region are better than in the other regions.

303) Although in all three regions the percentage of land owned by women is close to the national average[5], women are under-represented in decision-making spaces, which is another aspect that needs to be strengthened. There is also evidence of organizations in the regions that manage biodiversity for income-generating products, and thus there is potential to expand their reach and strengthen them. The three project intervention areas show different scenarios according to the gender analysis carried out. These are set out below:

Lacandon Jungle region

304) In this region, women make up 50.2 percent of the population[6]. The region has an average Gender Inequality Index of 0.398[7],[8]. Eight of the 11 municipalities that make up this

region report that more than 80 percent of their population live in poverty[9]. On average, 20.5 percent of households in the region are headed by women[10].

305) Chiapas is the state with the highest educational lag in the country. In the municipalities making up this region, more women than men are affected by educational lag. Men report 7.2 average years of schooling while women report 6.4[11]. In the region, women occupy 8.25 percent of *ejidal* commissariat presidencies. They also account for 28.4 percent of the people holding a land parcel certificate in certified agricultural centres in this region[12]. An analysis of financial inclusion in the region shows that 30 percent of men have access to some type of credit, compared to 29 percent of women. The gender gap in this case is 1 percent[13]. This gap is the smallest when compared to the other two project areas.

306) Mapping of civil society organizations indicates that women are involved in biodiversity-related matters such as products derived from beekeeping (*meliponarios*), forest resources, coffee cultivation, traditional medicine, community allotments, among others.

Durango Region

307) In this region, women make up 50.4 percent of the population[14]. The region has an average Gender-Related Development Index of 0.424[15]. Poverty scenarios in the area vary according to the municipality, however, seven of the eight municipalities that make up the zone report that more than 50 percent of their population is in this situation[16]. An average of 28.6 percent of households are also headed by women in the region[17].

308) The level of education in this region is similar for men and women, with an average of 8.1 years of schooling. Educational lag is slightly higher among men[18]. In terms of access to decision-making spaces, women occupy 7.3 percent of the presidencies of the *ejidal* commissariats. They constitute 26.7 percent of the people holding a land parcel certificate in certified agricultural units in this region[19]. The analysis of financial inclusion in the region shows that 36 percent of men have access to some type of credit, compared to 32 percent of women, with a gender gap of 4[20]. This gap is the largest compared to the other two project areas.

309) Various forestry organizations in this region in which women play an active role produce handicrafts from wood and other forest resources, charcoal, honey, dehydrated food, ecotourism projects, among others. Women are also involved in timber harvesting activities.

Balsas-South Pacific region

310) In this region, women make up 51.9 percent of the population[21]. The region has an average Gender-Related Development Index of 0.417[22]. In the area, poverty scenarios vary by municipality, however, 171 of the 173 municipalities that make up this region report that more than half of their population is in this situation[23]. An average of 28.8 percent of households are also headed by women in the region[24]. In terms of education, women in this region report an average of 6.6 years of schooling, while men report 7.05 years. Educational lag is higher in women (56.7 percent) than in men (54.5 percent)[25].

311) In terms of access to decision-making spaces, women account for only 6.3 percent of *ejido* commissariat presidencies. They account for 29.7 percent of the people holding a land parcel certificate in certified agricultural units in this region[26]. We also conducted an analysis of financial inclusion in the region, which showed that 30.5 percent of men have access to some type of credit, compared to 27.5 percent of women, resulting in a gender gap of 3 percent[27].

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[1] UICN. 2018. Gender-responsive restoration guidelines. A closer look at gender in the Restoration Opportunities Assessment Methodology.

[2] UICN. 2020. Gender & Ecosystem Restoration: unlocking resilience for a post-2020 world. Link: https://www.cbd.int/gender/doc/cbd-gender-ecosystem-restoration-en.pdf Accessed: July 2021

[3] ETOE. 2020. Telephone Survey on Occupation and Employment (ETOE) 2020, INEGI. Link: https://www.inegi.org.mx/investigacion/etoe/

[4] Ochoa, Avalos, M. 2007. Poverty and female headship. Journal of Gender Studies. The Window, no. 25, 2007, pp. 168-198

[5] 26.5 percent of the people who hold a land certificate accrediting them as *ejidatarias or comuneras* in Mexico are women (RAN, 2020).

[6] INEGI. 2021. Population and Housing Census.

[7] When the GDI is close to zero, the development picture is equal; when it is close to one, women are at a great disadvantage compared to men.

[8] UNDP. 2014. Human Development and Gender Indicators in Mexico: new methodology. Identify barriers to achieving equality.

[9] CONEVAL. 2018. Poverty and gender in Mexico. Towards a system of indicators. Information 2010?2016. Excel worksheets Available at: https://www.coneval.org.mx/Medicion/MP/Paginas/Pobreza-y-genero-en-Mexico-2010-2016.aspx

[10] INEGI. 2021. Population and Housing Census.

[11] INEGI. 2021. Population and Housing Census.

[12] RAN. 2020. National Agricultural Registry, 2020, Statistics with a gender perspective, Worksheets. Accessed July 2021 from: http://www.ran.gob.mx/ran/index.php/sistemas-de-consulta/estadistica-agraria/estadistica-con-perspectiva-de-genero

[13] ENIF. 2018. National Survey on Financial Inclusion (ENIF) 2018. INEGI Mexico. Accessed 25 July 2021, from: https://www.inegi.org.mx/programas/enif/2018/

[14] INEGI. 2021. Population and Housing Census.

[15] UNDP. 2014. Indicadores de Desarrollo Humano y G?nero en M?xico: nueva metodolog?a. Identificar las barreras para lograr la igualdad. (Human Development and Gender Indicators in Mexico: new methodology. Identifying barriers to achieving equality.)

[16] CONEVAL. 2018. Poverty and gender in Mexico. Hacia un sistema de indicadores. (Poverty and gender in Mexico. Developing a system of indicators.) Information 2010?2016. Excel worksheets Available at: https://www.coneval.org.mx/Medicion/MP/Paginas/Pobreza-y-genero-en-Mexico-2010-2016.aspx

[17] INEGI. 2021. Population and Housing Census.

[18] INEGI. 2021. Population and Housing Census.

[19] RAN. 2020. National Agricultural Registry, 2020, Statistics with a gender perspective, Worksheets. Accessed July 2021 from: http://www.ran.gob.mx/ran/index.php/sistemas-de-consulta/estadistica-agraria/estadistica-con-perspectiva-de-genero

[20] ENIF. 2018. National Survey on Financial Inclusion (ENIF) 2018. INEGI Mexico. Accessed 25 July 2021, from: https://www.inegi.org.mx/programas/enif/2018/

[21] INEGI. 2021. Population and Housing Census.

[22] UNDP. 2014. Indicadores de Desarrollo Humano y G?nero en M?xico: nueva metodolog?a. Identificar las barreras para lograr la igualdad. (Human Development and Gender Indicators in Mexico: new methodology. Identifying barriers to achieving equality.)

[23] CONEVAL. 2018. Poverty and gender in Mexico. Hacia un sistema de indicadores. (Poverty and gender in Mexico. Developing a system of indicators.) Information 2010?2016. Excel worksheets Available at: https://www.coneval.org.mx/Medicion/MP/Paginas/Pobreza-y-genero-en-Mexico-2010-2016.aspx

[24] INEGI. 2021. Population and Housing Census.

[25] INEGI. 2021. Population and Housing Census.

[26] RAN. 2020. National Agricultural Registry, 2020, Statistics with a gender perspective, Worksheets. Accessed July 2021 from: http://www.ran.gob.mx/ran/index.php/sistemas-de-consulta/estadistica-agraria/estadistica-con-perspectiva-de-genero

[27] ENIF. 2018. National Survey on Financial Inclusion (ENIF) 2018. INEGI Mexico. Accessed 25 July 2021, from: https://www.inegi.org.mx/programas/enif/2018/

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

Does the project?s results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

312) The process of private sector engagement seeks to create specific partnerships with business organizations and private companies, with the aim of improving the integration of value chains that the project will serve in project intervention areas. Specifically, the following areas of engagement are involved:

313) Financial inclusion of the population served by the project. Foster the financial inclusion of social enterprises with commercial banks and SOFOMs that have already opened credit lines for the financing of green and inclusive business models. Strategic partnerships will also be sought with commercial banks within the areas of sustainability and social responsibility to establish new financial products that meet the needs of companies and social organizations, and with credit and risk entities for the preparation of studies and maps of specific value chains to reduce the risk of investments in sectors most neglected by the banks. Emphasis will be placed on facilitating access to private banking for small-scale producers, especially women, young people and indigenous producers, who already struggle to access credit and finance.

314) Product certification seals under biodiversity-friendly schemes. Promote fair trade schemes and the development of efficient supply chains with companies that market BD products or use them as inputs for their products and services. The project will promote green or sustainable products with access to a local/regional certification seal and encourage their access to a variety of markets (e.g. boutique hotels, organic markets and local restaurants). The gender approach will also be considered and a minimum participation quota for women will be established in order to encourage their participation and generate specific socioeconomic benefits for them and their families. This will be accompanied by a large-scale communication strategy targeting the new post-Covid-19 consumer to position BD products and services in the market including BD certificates and product descriptions.

315) Linking producers to digital trade for producers. Promote the use of digital trading platforms positioned in the market for the retail marketing of biodiversity products and services. Specific, differentiating sections will be established within the platforms for this purpose. Component 3 includes activities related to this.

316) Partnerships with business organizations. Coordinating spaces for dialogue, resolving the specific needs of industrial processes and tapping into potential markets with the help of business organizations. This partnership will also seek to establish suppliers for government institutions and programmes aimed at food security, health and nutrition, and housing (timber construction).

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

317) In accordance with FAO?s Environmental and Social Management Guidelines (ESMG)[1], the implementing agency has conducted an Environmental and Social Safeguards (ESS) assessment at the PIF stage and subsequently conducted a full environmental, social and climate risk analysis during the PPG stage. This section identifies social and environmental risks, including those associated with climate change, that could prevent the project objectives from being achieved or that may result from project implementation, and proposes mitigation measures and actions to address these risks.

318) Section A focuses on the risks external to the project and Part B on the identified environmental and social risks of the project (Please refer to Section 11 in the GEF Portal)

Section A: Risks to the project

Table 22. Environmental, social and climate risk analysis of the project and mitigation actions

Description of the risk	Impact	Probability of occurrence	Mitigation actions	Entity in charge

Description of the risk	Impact	Probability of occurrence	Mitigation actions	Entity in charge
1. Conflicts between the interests of the agricultural sector and environmental and conservation interests	Low	Low	Institutional arrangements and coordination and management mechanisms will be established to reach consensus between the productive and environmental sector and the project coordinators, as well as spaces for resolving disputes. Implementation arrangements such as a Liaison Council, a Steering Committee and so on will be established to enable interinstitutional coordination and full achievement of the project objective. Interests will be balanced when designing actions and activities. Education and technical capacity-building activities will help to prevent such conflicts, emphasizing the advantages of combining both types of interest to achieve the best results.	CONAFOR, CONANP, SADER
2. Unwillingness of institutions to increase and strengthen the management, stewardship and operational capacities of PNAs and VCAs for the conservation and use of biodiversity	High	Moderate	Actions are established to strengthen technical and research capacities in PNAs. Partnerships are established with local universities and civil society organizations. Mechanisms for participatory monitoring are established. At the same time, capacity-building of local technical agencies contributing to biodiversity conservation and restoration will be promoted. Technical and research capacities in the PNAs must be strengthened during the first 18 months in order to achieve the necessary conditions for biodiversity monitoring and the fulfilment of the project?s objectives. Strategic axis 6 of CONAFOR?s Integration Strategy for the Conservation and Sustainable Use of Biodiversity establishes the implementation of actions that enable the operation and continuous improvement of national capacities, officials, technical advisers and producers in the field of conservation and sustainable use of biodiversity through the generation and dissemination of knowledge[2]	CONANP, CONAFOR, CONABIO

Description of the risk	Impact	Probability of occurrence	Mitigation actions	Entity in charge
3. Institutions unwilling to participate in the project or to share information	Moderate	Low	Clear definition of roles and responsibilities from the project preparation stage, in accordance with institutional mandates. Establishment of mechanisms for consultation and follow-up, regular high-level meetings and meetings between technical staff of the institutions.	CONAFOR, CONANP
4. Weak involvement and lack of commitment by communities, producers and key local entities	High	Low	The Free, Prior and Informed Consent process will be performed among indigenous peoples and local communities. The inclusion of all local actors and the involvement of women and young people will be promoted in accordance with the principle of collective benefit. Local experiences and knowledge will be considered and consultations with local communities and stakeholders will be undertaken. It will encourage the development of new products and new sources of income and employment that will help improve the quality of life of producers and communities. The management and financing of conservation-friendly incentives will be encouraged.	CONAFOR, CONANP, Project coordination unit

Description of the risk	Impact	Probability of occurrence	Mitigation actions	Entity in charge
5. Women beneficiaries participating in the project without equal opportunities in biodiversity management	High	Moderate	To make visible and value the different ways in which women and men access, use, control and manage biodiversity. A gender-sensitive study was carried out to identify opportunities that contribute to changing the unequal situation between men and women. Subsequently, a Gender Action Plan was drawn up. Women will be involved in project activities to safeguard and promote their knowledge of local biodiversity use. Niche markets for biodiversity products involving mainly women and young people will be identified and developed. The sustainable use and production of forest products will be promoted, with a special focus on women and young people. Women will be involved in the management of carbon sinks.	CONAFOR, Project Coordination Unit
6. Low participation of young people. Their participation is needed to ensure generational turnover and project sustainability.	Moderate	Moderate	The Gender Action Plan considers inclusive actions for all vulnerable groups, including young people. Partnerships will be established with academia and other institutions to include young people in the project. A communication campaign will be designed and launched to promote the participation of young people. Niche markets for biodiversity products involving mainly women and young people will be identified and developed.	CONAFOR, Project Coordinator Social risk specialist

Description of the risk	Impact	Probability of occurrence	Mitigation actions	Entity in charge
7. Insecurity in rural areas due to organized crime	High	Moderate	Dialogues will be generated with local partners to identify safe areas to undertake the work. Key project decisions in the field, particularly those related to the selection of areas, security patrol zones, monitoring visits, security shifts and other actions, will be made in consultation with the communities and security authorities. Work sites will be modified, subject to agreement with local actors, when levels of insecurity prevent activities from taking place.	CONAFOR, CONANP
8. Participation in project activities could lead to a potential risk of exposure to Covid-19	Moderate	Low	In recognition of the current health conditions associated with the Covid-19 pandemic, the project will employ videoconferencing equipment for virtual meetings and workshops, where necessary, and develop a work plan for some field or consultation-related activities to take place as late as possible, to prevent exposure of stakeholders and other participants to the virus. Partnerships will be established with various public and private actors to share health protocols that allow the development of some activities as soon as epidemiological conditions permit.	CONAFOR, Project Coordination Unit

Description of the risk	Impact	Probability of occurrence	Mitigation actions	Entity in charge
9. The negative impacts of Covid-19 could limit participation in the project.	Moderate	Moderate	According to ECLAC, the Covid-19 crisis can be an opportunity to improve production systems and the way sectors relate to each other in order to establish more resilient and sustainable systems[3] Quest to include beneficiaries in sustainable and inclusive value chains. Local trading spaces will be created based on short marketing chains. The project will seek to include criteria for the conservation and sustainable use of biodiversity in target landscapes. The creation of sustainable market-based instruments that contribute to economic recovery will be pursued. Information technology will be used to meet project needs in terms of training, coordination and so on.	Project Coordination Unit

Climate risk analysis

319) According to FAO climate risk screening, the present project has been classified as having a ***Moderate*** climate risk, on a scale of Low, Moderate, High and Very High[4]. The area defined for this project is vulnerable to a variety of climate stressors, including more random rainfall patterns, increased temperature and changes in extreme weather patterns, including hurricanes and tropical cyclones. Increased extreme weather events can lead to flooding, as well as soil erosion[5].

320) The project will be in areas where significant climate change impacts are expected, however, the expected environmental changes linked to climate change and the vulnerability of local communities are not prohibitive factors for the development of project activities. A detailed analysis of the climate risks as well as the results of the climate risk screening checklist are set out in the Annex.

321) Mexico has taken many steps to manage its risk from natural and climatic hazards and improve post-disaster recovery with the establishment of early warning systems and weather stations. However, the country ranks eighty-second out of 181 countries in the ND-GAIN country index (2018), which summarizes a country?s vulnerability to climate change and other global challenges in combination with its readiness to improve resilience[6].

322) Certain climate scenarios provide parameters to explore changing trends under future environmental conditions, reflecting the climate impacts that will be present in the project area in the coming years:

323) The Balsas-South Pacific area is a large region. Although an average annual temperature increases of between 1 and 2.5 ?C is expected throughout the area, one scenario that has been modelled involves an increase in maximum, average and minimum temperatures of 2 ?C and even higher by 2040?50. Total annual rainfall will also vary between +5 and -10 percent. Rainfall is predicted to behave in a heterogeneous manner due to topographic variability and ocean current effects, resulting in decreases in some places and increases in others. However, rainfall may fall by more than 200 mm (2015?2039). Climate changes suggest that rainfall will occur later throughout the year, decreasing in the summer and increasing in the autumn[7], [8], [9]. This may mean an increase in landslides on hillsides, as well as an increase in the frequency and intensity of fires.

324) For the Durango region[10], most future climate scenarios show trends above the minimum likely increase of 2?C, up to the maximum likely increase predicted, which means that there will be warmer temperature events than historically, i.e. it will be warmer during the summer. A decreasing rainfall gradient has been identified in most of the area. These factors can increase the frequency and intensity of forest fires.

325) In the Lacandon Jungle region[11], climate scenario projections for the near future (2015?2039) show an increase of 2?C in the Lacandon Jungle region; long-term forecasts (2080?2099) predict an increase of 3?C and up to 3.4?C in average temperatures. Over the same period, maximum temperatures are expected to increase by 3 to 3.6 ?C, and minimum temperatures are expected to increase by 2.3 to 2.5 ?C. For 2075?2099, reductions in the amount of rainfall are expected to be in the order of -0.7 to -1 mm/day, which is a cause for concern. The climate scenario increases the likelihood of forest fires in the area.

326) The project will work to mitigate the potential impacts of climate change in a number of ways. It will ensure the use of climate information in the development of conservation planning and management tools. It will also seek to: a) strengthen the capacities of national and local institutions in the use of climate data; b) monitor real-time hydrometeorological events and consolidate and improve early warning systems; c) mitigate local human-induced stressors that are degrading habitats; d) disseminate relevant climate information to communities; e) promote practices and measures such as restoration and rehabilitation to maintain ecosystem functioning and provide habitats for species; and f) increase forest cover with a consequent increase in carbon sequestration. All of the above focus on achieving progress in assessing vulnerability to climate change at the most local scale possible, an accurate and objective assessment of vulnerability can greatly facilitate the implementation of adaptation measures.

327) The project can ensure the use of climate information for early warning of weather events through the geospatial platform and capacity-building under Expected Output 1.2.2 (Sustainable recovery training programme), which targets government officials, beneficiaries and relevant stakeholders: the content of the training courses can emphasize the application of climate resilience practices and the platform can also increase the availability and maximize the dissemination of climate information that can be used to reduce climate-related risks:

a. build the capacities of national and local institutions on the use of climate da

b. monitor hydro-meteorological events in real time and consolidate and improve early warning systems.

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[1] FAO. 2015. Environmental and Social Management Guidelines. Food and Agriculture Organization of the United Nations Rome, Italy.

[2] CONAFOR. 2016. Estrategia de integraci?n para la conservaci?n y el uso sustentable de la biodiversidad. (Integration strategy for the conservation and sustainable use of biodiversity.) Executive Summary, Mexico.

[3] ECLAC. Food systems and Covid-19 in Latin America and the Caribbean, December 2020. See: https://repositorio.cepal.org/bitstream/handle/11362/46547/1/cb1433_es.pdf

[4] FAO. 2021. Mainstreaming climate risk management into FAO programming. Food and Agriculture Organization of the United Nations Rome, Italy.

[5] IPCC. 2021. Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V. et al. (eds.)]. Oxford University Press.

[6] https://gain.nd.edu/our-work/country-index/

[7] SMARNCC. 2017. State Climate Change Programme of Michoac?n de Ocampo. Ministry of Environment, Natural Resources and Climate Change. State Government - UNAM. 54 pp.

[8] SEMAEDESO. 2018. Oaxaca State Climate Change Programme 2016?2022. Ministry of Environment, Energy and Sustainable Development, Government of the State of Oaxaca. 373 pp

[9] CONANP and UNDP. 2020. Resumen Ejecutivo del Programa de Adaptaci?n al Cambio Clim?tico del Complejo Mariposa Monarca. (Executive Summary of the Monarch Butterfly Complex Climate Change Adaptation Programme.) National Commission for Protected Natural Areas and United Nations Development Programme. Mx.

[10] SRNMA. 2012. Durango State Climate Change Action Programme 2016?2022. Ministry of Natural Resources and Environment, Government of the State of Durango; INE, SEMARNAT. 334 pp.

[11] SEMAHN. 2011. Climate Change Action Programme for the State of Chiapas. Ministry of Environment and Natural History, Chiapas State Government; INE, SEMARNAT; Conservation International. 137 pp.

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

6.a Institutional arrangements for project implementation.

334) The National Forestry Commission (CONAFOR) will be responsible for the technical quality of the project, with FAO providing oversight as the GEF Implementing Agency, as described below. CONAFOR will act as Executing Agency (EA) and will be responsible for the day-to-day management of the project for the achievement of the results entrusted to it, complying with all the terms and conditions contained in the Operational Partner Agreement (OPA)[1] signed with FAO. Under this agreement, CONAFOR will be the Operational Partner (OP) of the project, responsible to FAO for the timely implementation of the agreed results, operational management for the implementation of activities, timely reporting and effective use of GEF resources for their intended purposes and in line with FAO and GEF policies and requirements.

The project organization structure is as follows:

335) **Project Steering Committee (PSC)**: The PSC will be the decision-making body for project design and implementation. The PSC will be co-chaired by the National Forestry Commission (CONAFOR), the National Commission of Natural Protected Areas (CONANP), the Ministry of Environment and Natural Resources (SEMARNAT) and FAO. The Ministry of Finance and Public Credit (SHCP) will be a permanent guest. These institutions and organizations will be represented within the PSC at the level of National Commissioners, National Representatives, Directors General or Executive Directors, or by persons designated by the office bearers, if they are unable to attend meetings.

336) Decisions of the PSC will be taken by consensus. Institutions representing the Mexican government in the PSC may change during implementation, depending on the needs of the project. The Ministry of Finance and Public Credit (SHCP) will also be part of the PSC through the GEF Operational Focal Point, but only at the level of coordination with CONAFOR, CONANP and SEMARNAT. FAO will be part of the PSC for the project lifetime.

337) The PSC will meet at least twice a year to: (i) monitor and ensure the technical quality of the outputs; (ii) review the strategic alignment of the project; (iii) ensure appropriate co-financing for the project; (iv) provide for the scaling up and replication of project results; (v) approve Annual Work Plans and annual Budgets; vi) approve six-monthly technical and financial reports; vii) provide strategic guidance to the Project Management Unit (PMU) and implementing partners; viii) supervise, guide and

communicate management decisions to the Chief Technical Adviser (CTA) and ix) provide guidance to the CTA on government policies and priorities. The detailed Terms of Reference of the Project Steering Committee will be set out in Annex O.

338) **Technical Project Group (TPG)**: The TPG will report directly to the PSC and will provide information and advice on technical matters. The TPG will work in close collaboration with the Lead Technical Officer (LTO) of the Project. The TPG may make technical and operational decisions that facilitate the implementation of the project, without modifying the approved work plan, budget or results framework set out in this Project Document. Consensual approval by the PSC is required if any changes to these sections are necessary. The Results Framework and the budget distribution between components (Project Budget) contained in this Project Document can only be modified after the Mid Term Review (MTR) (month 30 of implementation).

339) The TPG will also provide technical and operational advice to the Project Management Unit (PMU) and the Field Technical Units (FTUs, described below). Each of the institutions that make up the PSC must designate their own Focal Point to be part of the TPG. As Focal Points, TPG members will: (i) technically supervise project activities in their sector; (ii) ensure the smooth exchange of information and knowledge between their institution and the project; (iii) facilitate coordination and synergy between the project activities and their institution?s work plan; and (iv) facilitate co-financing for the project. The TPG will meet every three months.

340) **Project Management Unit (PMU)**: The PMU will provide the PSC with constant feedback on project implementation. The PMU will be financed with GEF funds. The main functions of the PMU, according to PSC guidelines, will be to ensure the efficient management, coordination, implementation and monitoring of the project through the effective implementation of the AWP/Bs. Financial management of GEF resources will be carried out in accordance with FAO and GEF regulations and procedures. The PMU consists of the Chief Technical Adviser, the CTA and the administrative staff hired by the project (Financial?Administrative Specialist and Procurement Specialist, both based in CONAFOR; the Operational-Administrative Specialist based in FAO Mx).

341) **Chief Technical Adviser (CTA)**: They will act as the PSC Secretary and give advice to the PSC. The CTA will be supported by a Strategic Support Officer (SSO), the Communications and Knowledge-Sharing Specialist (CKSS) (see below) and the expert units in each region (see below). The CTA will be responsible for the technical supervision of all project activities and will be selected through a competitive process, subject to No Objection by PSC members and FAO. They will be based at CONAFOR?s offices in Guadalajara and will work full-time for the life of the project. The CTA will be responsible for coordinating activities with all national actors involved in the different components of the project, as well as with the project partners. Furthermore, the CTA will ensure a close relationship and collaboration between the activities involved in this project and the activities of other relevant national and regional projects or partners. Lastly, they will contribute to the effective dissemination of lessons learned at national and regional level. Detailed Terms of Reference for the roles and responsibilities of the CTA, as well as for the other positions mentioned below, can be found in Annex O.

342) The Financial?Administrative Specialist and the Procurement Specialist will be hired by the CONAFOR and will have the following responsibilities:

? Ensure accounting and finance operations comply with CONAFOR Standards and donor obligations.

? Reviews and approves financial reports to donor.

? Reviews fund request and project work advances to ensure they are within budget and to ensure timely payments.

? Ensuring compliance all the OPIM provisions during implementation, including on timely reporting and financial management.

? Responds to audit and donor requests for documentation and other financial data requests. Also supports Office internal and external audits.

? Serves as the main point of contact for project financial related matters.

? Support the process of planning, implementation, analysis and monitoring of the project activities related to budget.

? Prepare financial reports for donor and ensure they are complete, correct and appropriate.
? Leads the responses any kind of agreements related to the project (consultancy, grants, travel grant, leasing and others).
? Responds to audit and donor requests for documentation and other financial data requests. Also supports Office Internal and external audits.
? Leads the review the financial management of the project, train field staff as required in administrative topics.
? Informing the PSC of any delays and difficulties as they arise during the project implementation to ensure timely corrective measure and support.

343) The **Procurement Specialist.**
? Organize and coordinate the procurement processes of the project, in full compliance with CONAFOR rules, regulations, policies and strategies
? Prepare and update the annual procurement plans, as well as their timely execution, review and, where appropriate, modification as necessary, in coordination and cooperation with the CTA and the respective technical units.
? Prepare bidding based on technical information, specifications and quantities established by the technical staff.
? Carry out the procedures for the publication of calls for acquisitions in COMPRANET (Digital Purchasing system of the Mexican Government).
? Participate in the meetings scheduled to clarify the processes of selection and hiring of human resources, prepare the respective minutes in coordination with the technical areas and guarantee publicity to all those interested in the processes.
? Carry out the final review of the contracts, before requesting the disbursements.
? Prepare correspondence and pertinent communications related to contracting and coordinate public contracting matters, including internal procedures for the approval of documents.
? Keep the records of the procurement and contracting processes of the reference project updated, for adequate control,
? Participate in reviews of bidding documents, requests for proposals and collaborate in ex post reviews of procurement and contracting processes.
? Prepare and submit review reports to FAO on the progress of hiring.

344) The **Operational Administrative Specialist** will be responsible for the following functions:
? ensure compliance with the conditions set out in the Letters of Agreement (LOAs) or Operating Partner Agreements (OPAs) during implementation, including appropriate reporting and financial management;
? approve and manage requests for financial resources using the forms set out in the LOA or OPA annexes;

? monitor the project?s financial resources and accounts to ensure the accuracy and reliability of financial reporting;
? review and authorize funding requests and financial and progress reports, as required by the LOA or OPA, where applicable;
? request and record documentation and evidence describing the correct and prudent use of project resources, in accordance with the terms of the LOA or OPA, including ensuring the availability of supporting documentation as required by FAO or the appointed auditors;
? support the organization of the Mid Term Review (MTR) and Terminal evaluation (FE), in close coordination with FAO Mexico, CONAFOR, national project partners and FAO Headquarters in Rome;
? inform the PSC and FAO of any delays or difficulties that may occur during project implementation in order to ensure timely corrective and supportive measures.

345) The **Strategic Support Officer (SSO)** will support the work of the CTA and other experts and specialists to ensure timely project progress. They will be located at the CONAFOR offices in Guadalajara. They will work together with the PMU and the Field Technical Units (FTUs) to facilitate communication between project participants, ensure that deadlines are met, and that achievements and results are reported. This person will work closely with the CTA and facilitate technical coordination with CONAFOR, CONANP and SEMARNAT.

346) **The Knowledge Management Expert (KME)** will report to the CTA and will work in close coordination with the FTUs. They will be responsible for building alliances and partnerships with different actors to achieve the project results. They will ensure frequent and structured interaction between all levels of project governance in order to ensure cross-cutting knowledge development and to capture, transfer and share lessons learned, identifying synergies and potential innovative solutions. They will be responsible for addressing outputs 1.2.1 and 1.2.2 but will also support all components.

347) **Field Technical Units (FTUs):** There will be three FTUs (one in each region) co-financed with GEF funds. The FTUs will ensure x main functions: i) efficient local management and implementation of the project; ii) trainer of trainers and trainers, specifically the facilitators of the Local Forestry Development Promoters offices and their technical liaisons; the FTUs will be responsible for the timely and efficient implementation of the Annual Operational Plans in each region. Each FTU will be led by a thematic technical expert (ILMS, PNAS and FMAE), and will be supported by an Operational Technical Officer, as detailed below:

? The **Integrated Landscape Management Specialist (ILMS)** will coordinate the three Technical Field Units and supervise the facilitators of the Local Forestry Development Promoters offices. The ILMS will work under the supervision of the CTA, provide technical expertise for the planning, implementation and monitoring of the activities planned in this Project Document. They will be responsible for providing technical expertise regarding natural protected areas and other active conservation schemes, as well as BD and IPM and will coordinate with CONAFOR?s Forestry Development Promoters office. There will be 3 ILMSs, one for each territory.
    - The **Conservation/Restoration Specialist** will report to the CTA and will work in coordination with the ILMS. regions. There will be three, one for each macroregion.
    - The **Market Access Expert (MAE)** will report to the CTA and provide technical expertise for Component 3, managing all field activities related to this component. They will ensure better access by communities to markets and financing solutions. There will be three, one for each macroregion. The MAE will be responsible for
    - **Local Forestry Development Promotion Facilitators (FPF).** There are 44 people (two for each Promoters office) reporting to the ILMS and coordinating with the Technical Liaisons of the Promoters offices. The FPFs will provide technical and operational support in the implementation of all Project activities in the field and promote the

participation and involvement of local communities in project activities, as well as other important actors in the field.

348) **Monitoring & Evaluation (M&E):** The **Monitoring and Evaluation Expert (MEE)** will monitor the indicators and project progress and development. The Risk Management Specialists **(Climate and Environmental Risk Specialist; and Social Safeguards, Gender and Indigenous Peoples Specialist)** will monitor environmental and social risks, as well as the implementation of the Risk Mitigation Plan and the Gender and Indigenous Peoples Action Plan. They will tell the CTA, MEE and FTUs about any red flags indicating a need for corrective action. The MEE and Risk Management Specialists will document and ensure compliance with environmental and social safeguards, in accordance with GEF and FAO rules and procedures.

The following diagram illustrates the project governance structure:

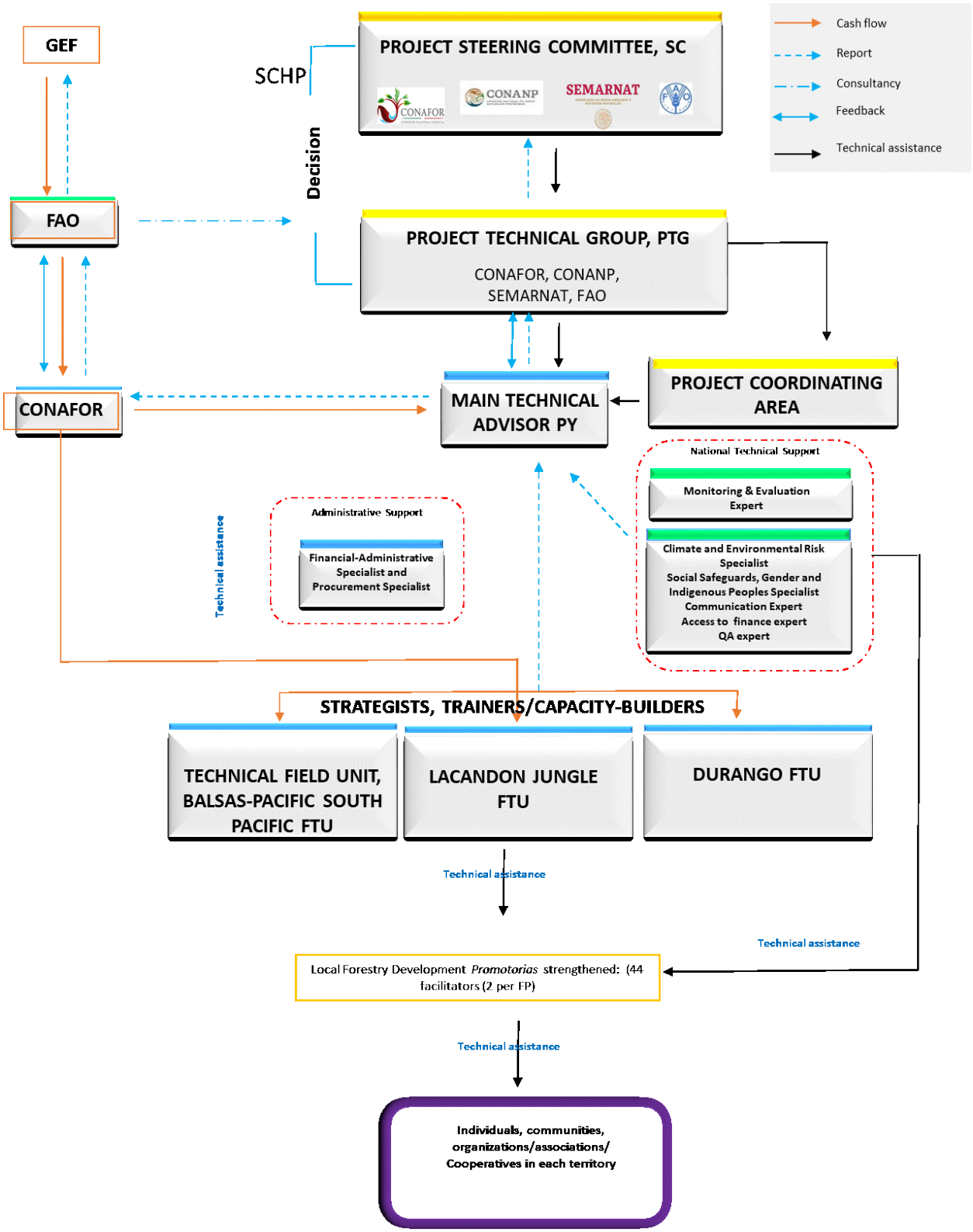

Figure 3. Project governance structure and implementation

349) The following figure shows the project implementation structure. As shown in the figure, CONAFOR will set up an institutional Coordinating Unit for the project. The implementation structure is divided into three levels of intervention: National Technical Support, responsible for the national project implementation strategy; Regional Support, led by the FTUs; and Community Support, led by the Local Forestry Development Facilitators and their technical liaisons.

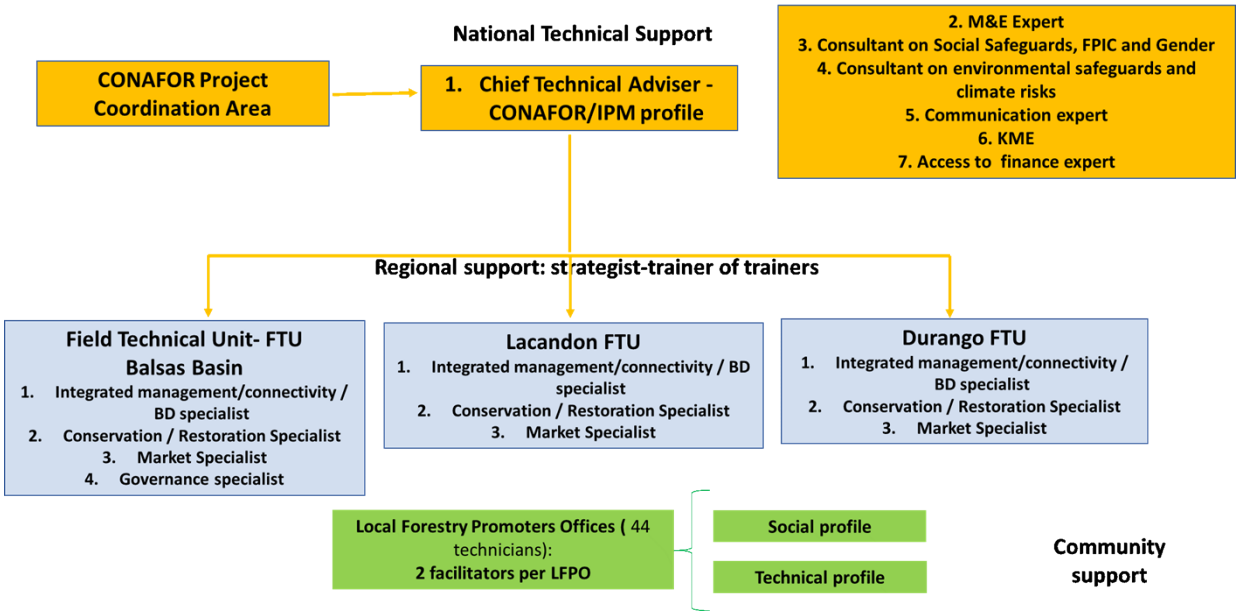

Figure 4. Project implementation structure.

350) The **Food and Agriculture Organization of the United Nations (FAO)** will be the Implementing Agency (IA) for the project, providing management services and support to the project cycle in accordance with GEF policies. In its role as GEF IA, FAO holds responsibility for achieving results.

351) FAO?s internal organizational roles are detailed in Annex K. FAO?s responsibilities as a GEF agency implementing include:

- ? oversee project implementation in accordance with the Project Document, work plans, budgets and agreements with co-financiers, the Operating Partner Agreement and other FAO rules and procedures;
- ? carry out Monitoring & Evaluation activities to ensure that the project results and outputs set out in the Results Matrix are effectively delivered;
- ? provide technical guidance to ensure appropriate technical quality in all activities involved;
- ? conduct at least one monitoring mission per year;
- ? report on project progress to the GEF Secretariat and the Evaluation Office through the Annual Project Implementation Review, the Mid-Term Review, the Terminal evaluation and the Project Closure Report;

? financial reporting to the GEF Trust Fund.

6.b Coordination with other relevant GEF-financed projects and other initiatives.

352) One of the most important public policy challenges in rural Mexico is achieving greater efficiency in terms of quality and outcomes through the various priority programs concentrating the largest shares of government spending in rural areas. This raises the need for maximum synergy, inter-agency coordination and fostering converging actions across federal entities and territories.

353) Several recent and ongoing GEF-funded projects implemented in Mexico offer significant opportunities for collaboration and other synergies. An IFAD credited-Green Climate Fund project, to be co-implemented by CONAFOR and IMTA in the Balsas-South Pacific macroregion, also offers a broad window for synergy and complementarity of actions. The following table (table 24) describes areas of potential collaboration between projects.

Table 24. GEF projects and other global environmental donors offering opportunities for collaboration with the ?Green Mex? project

GEF Project	Project status	Aligned project elements	Areas of potential collaboration

?Fostering sustainable, legal and traceable use and trade of wild native species in Mexico? (GEF ID 10689)[2]	Concept approved	This project will operate in the Nayar, Huasteca, Pur?pecha, Itsmo-Mixteca and Maya Biocultural Regions, where it will work to establish value chains that promote the sustainable, legal and traceable use and trade of selected species, and the strengthening of inspection and surveillance capacities to promote sustainable, legal and traceable trade in native species of wild flora and fauna. Project actions include the development of community-based business models to enable small businesses to sustainably utilize biodiversity with enhanced value chains through strategic multi-stakeholder and multi-sector partnerships; and the development of effective community-based participatory inspection and monitoring committees for legal trade in species.	Exchange of experiences related to the establishment of value chains that promote sustainable, legal and traceable trade in species; strengthening inspection and monitoring capacity to promote such trade; development of community-based business models for the sustainable use of biodiversity; and the development of effective community-based participatory inspection and monitoring committees.
?Mainstreaming Biodiversity Conservation Criteria in Mexico?s Tourism Sector with Emphasis on Biodiversity-rich Coastal Ecosystems? (GEF ID 9613)[3]	Project approved	The aim of this project is to promote biodiversity conservation with emphasis on BD-rich coastal ecosystems through the design and implementation of innovative sustainable tourism policies and models in Mexico at national and local levels. It is being implemented in Quintana Roo, Baja California Sur and Oaxaca. Among its components and actions, the project will consolidate and support diversified ecotourism activities in landscape-level enterprises; support and generate information systems for the design of municipal zoning plans; develop sustainable supply chains; train local communities in biodiversity monitoring; and create alternative tourism business initiatives related to biodiversity.	Exchange of experiences related to the consolidation of local ecotourism enterprises; development of sustainable supply chains; and design of training programmes for local communities on biodiversity monitoring

Sustainable Productive Landscapes Project: (TPS) (GEF ID: 9555)	Execution	Project Development Objective (PDO) is to strengthen sustainable management of productive landscapes and increase economic opportunities for rural producers in priority areas of Mexico. The project is being implemented across seven regions representative of priority sites for biodiversity conservation, ecological connectivity, land and forestry management activities, climate vulnerability and anthropogenic threats (land degradation, deforestation, and forest degradation?as discussed in Annex 1), ecosystem services, and relevance of agricultural production activities. The seven regions hold 540 species of significance for global biodiversity and are: (1) Chihuahua-Durango, (2) Coahuila, (3) Jalisco, (4) Sierra Madre Oriental, (5) Sierra Norte Oaxaca, (6) Usumacinta Basin, and (7) Yucat?n Peninsula. Within these 7 regions, 14 priority intervention sites have been selected for the project, comprising about 3 million hectares, covering 15 states, 106 municipalities, and 569 agrarian units (ejidos and agrarian communities).	Exchange of experiences related: to Integrated landscape management, governance, access to finance and inclusive markets, operative strategics to project implementation.
IFAD-GCF Project (IFAD: Project (ID: 2000002249) ?Resilient Balsas Basin ? Reducing climate vulnerability and emissions through sustainable livelihoods.	Project approved by IFAD	The project?s goal is to contribute to reducing the vulnerability of the poor rural population to climate change, to recover or conserve ecosystems and their services, and to strengthen the production systems in the Balsas Basin. The development objective of the project is to increase the capacity, productivity and market participation of poor rural and indigenous families, particularly women and youth, to promote resilient and sustainable productive systems and improve livelihoods in the Balsas Basin while reducing greenhouse gas emissions	CONAFOR is the Executing Agency for both projects in the Balsas region and will therefore foster opportunities for synergy and complementarity during implementation. It is expected that the beneficiaries of GreenMex will access credits for the projects, derived from the projects.
?Mainstreaming Biodiversity in Rural Landscapes of Mexico? (GEF ID 10574)[4]	Concept approved	This project will incorporate biodiversity in rural landscapes through the implementation of sustainable policies and practices in the agricultural sector in the states of Sonora, Jalisco, Nayarit, San Luis Potosi, Tamaulipas, Nuevo Leon, State of Mexico, Morelos, Guerrero, Oaxaca and Chiapas. The project will strengthen and improve decision-making capacity for sustainable land use in rural landscapes, using capacity-building processes aimed at producers that include understanding and protecting ecosystem services.	Exchange of experiences related to the design and effectiveness of capacity-building processes implemented in Nayarit.

[1] It should be noted that the identified Operational Partner or OP, results to be implemented by the OP, and budgets to be transferred to the OP, are non-binding and may change due to FAO internal partnership and agreement procedures which have not yet been concluded at the time of submission.

[2] http://www.thegef.org/project/fostering-sustainable-legal-and-traceable-use-and-trade-wild-native-species-mexico

[3] http://www.thegef.org/project/mainstreaming-biodiversity-conservation-criteria-mexico-s-tourism-sector-emphasis

[4] http://www.thegef.org/project/mainstreaming-biodiversity-rural-landscapes-mexico

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assesments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

354) The project is consistent with national biodiversity priorities. Mexico ratified the Convention on Biological Diversity on 3 November 1993. At COP-13 of the Convention on Biological Diversity (CBD), held in 2016 in Mexico, a series of diagnostics were developed for the agriculture, forestry, fisheries and tourism sectors, with the aim of reviewing public policy instruments and identifying opportunities for mainstreaming conservation issues and the sustainable use of biodiversity in each sector. Current instruments: 1) Integration Strategy for the Conservation and Sustainable Use of Biodiversity in the Forestry Sector (2016?2022), and 2) National Biodiversity Strategy on Biodiversity in Mexico (ENBioMex) and its Action Plan 2016?2030. In this context, the project will align actions with the progress achieved through these strategies.

355) Regarding the National Biodiversity Strategy of Mexico (NBSM) and its Action Plan 2016?2030, the project is fully aligned with the NBSM, particularly with the strategic axis ?Conservation and Restoration? which proposes actions for the fulfilment of the Vision of Integrated Landscape Management and Connectivity under Action 2.1: Conservation *in situ*. Specifically, this refers to promoting integrated landscape management in 2.1.7. Promote ecosystem connectivity to ensure the continuity of ecological processes. It is also in line with Action 2.3, which refers to the application of an integrated, interdisciplinary, intersectoral and long-term territorial approach that promotes the integrated management of ecosystems and watersheds for their sustainable use and conservation.

356) In terms of programmatic alignment with the country?s sectoral strategies, the project is aligned with and contributes to the results of the following public policy instruments: Environment and Natural Resources Sector Programme 2020?2024, Welfare Sector Programme 2020?2024 and Agriculture and Rural Development Sector Programme 2020?2024.

357) The Sectoral Programme for the Environment and Natural Resources 2020?2024 and the project are congruent in their lines of work, specifically in their contributions to Priority Objective 1, which seeks to promote the conservation, protection, restoration and sustainable use of ecosystems and their biodiversity with a territorial and human rights approach, considering biocultural regions, in order to maintain functional ecosystems that are the basis of the population?s well-being; and Priority Objective 5, aimed at strengthening environmental governance through free, effective, meaningful and co-responsible citizen participation in public policy decisions, ensuring access to environmental justice with a territorial and human rights approach, and promoting environmental education and culture. The specific priority strategies in which the project contributes to results are:

? Priority Strategy 1.1 ? Promote the conservation, protection and monitoring of ecosystems, agro-ecosystems and their biodiversity to guarantee the provision and quality of environmental services, considering regulatory instruments, uses, customs, traditions and world views of indigenous, Afro-Mexican and local communities.

? Priority Strategy 1.2 ? Promote sustainable exploitation of natural resources and biodiversity, based on participatory planning and respecting autonomy and free will, with a territorial approach, in basins and biocultural regions, promoting regional and local development.

? Priority Strategy 5.1. Effectively coordinate governmental action with the balanced participation of the different actors and social groups in order to contribute to effective and efficient public management with a territorial, gender equality and sustainability approach.

? Priority Strategy 5.2. Promote relationship processes and spaces for dialogue with respect for the forms of organization of collectives, groups, communities and other organizations to address specific socioenvironmental issues that affect their well-being and livelihoods.

? Priority Strategy 5.3. Promote open, inclusive and culturally relevant citizen participation in environmental decision-making, guaranteeing the right of access to information, proactive transparency and full respect for human rights, with a gender and ethnic perspective.

358) The project is consistent with the Integration Strategy for the Conservation and Sustainable Use of Biodiversity in the Forestry Sector (2016?2022) in at least five of the nine strategic axes, specifically with axis 1) Promote sustainable forest production incorporating biodiversity conservation and use criteria; axis 2) Strengthen integral restoration programmes with biodiversity criteria. Promote and strengthen education, communication and culture for biodiversity; axis 6) Promote and strengthen education, communication and culture for biodiversity; axis 7) Harmonize the legal framework for the integration of biodiversity in forestry sector plans and programmes; axis 8) Promote interinstitutional and intersectoral coordination to enhance the biodiversity approach in the forestry sector and axis 9) Strengthen biodiversity monitoring and evaluation systems.

359) The Project is congruent with the main national strategy developed in the National Forest Programme 2020?2024, with a direct alignment in its priority objectives 1 and 3, as well as contributing to at least 16 of the specific actions, which refer to the processes of restoration, protection and conservation of forest resources and from a biodiversity and community inclusion approach. The following is a summary of the priority objectives, priority strategies and specific actions of the National Forest Programme to which the project contributes to achieve its results:

Priority objective 1. Promote community forest management for the sustainable and diversified use of forest resources, as well as the integration and development of local networks of competitive value that trigger local economies to improve the quality of life of the population living in forest areas.
Priority strategy 1.1 Design and implement a national strategy for community forest management with a territorial and biocultural approach under the principles of sustainability, equity and inclusion, to strengthen local governance and technical, organizational, associative, planning and business capacities.
Specific action 1.1.4 Support the development of technical, organizational, associative, planning and entrepreneurial capacities that enable the owners and legitimate possessors of forest resources to self-manage and execute the processes of conservation, protection and restoration of forest use.
Priority Strategy 1.3 Promote and support certification processes and the implementation of forestry improvement practices that optimize productive potential, conserve biodiversity and contribute to climate change mitigation and adaptation.
Specific action 1.3.1 Support the implementation of silvicultural and forest management practices on land with timber forest resource harvesting considering biodiversity conservation and management practices.
Specific action 1.3.2 Support the implementation of silvicultural and forest management practices on land with non-timber forest resource harvesting considering biodiversity conservation and management practices.
Specific action 1.3.6 Promote biodiversity mainstreaming actions in forest management programmes considering the conservation of high conservation value forests, priority species and critical habitats.
Priority Strategy 1.5 Develop and strengthen local value networks, to link forest producers, enterprises and industries with each other and with markets, in order to trigger local economies, boost the domestic market and contribute to reducing the forest trade deficit.
Specific action 1.5.1 Promote and support the creation and strengthening of community forestry enterprises, as well as the integration and development of local value networks that contribute to the generation of added value, as well as economic benefits and employment opportunities in the same territory.
Specific action 1.5.3 Promote and support the participation of groups with special needs, such as women, young people and indigenous communities, in the production, industrialization and marketing of raw materials and forestry products.
Priority objective 3. Conserve and restore the capacity to provide ecosystem services in strategic forest areas, through an inclusive and participatory approach that contributes to guaranteeing a healthy environment for the development and well-being of the population.
Priority Strategy 3.1 Conserve forest ecosystems in strategic areas of the country under an active conservation approach, in order to keep providing environmental services for the benefit of the population and contribute to sustainable development.
Specific action 3.1.3 Incorporate or reincorporate land into payment for environmental services schemes through the Biodiversity Endowment Fund in areas with globally important biodiversity for conservation and sustainable management.

Priority strategy 3.3 Implement the Integration Strategy for the Conservation and Sustainable Use of Biodiversity in the Forestry Sector within the framework of Mexico?s National Biodiversity Strategy
Specific action 3.3.1 Promote sustainable forest production according to criteria of connectivity between ecosystems at landscape level, conservation, management and use of biodiversity.
Specific action 3.3.2 Strengthen forest restoration with criteria of conservation and sustainable use of biodiversity.
Specific action 3.3.3 Promote the conservation and protection of biodiversity in forest ecosystems through payment for environmental services schemes.
Specific action 3.3.4 Promote fire prevention and management, pest and disease control in high-value forest lands, to minimize risks to biodiversity, considering climate change scenarios.
Specific action 3.3.6 Promote and support actions to strengthen and develop the knowledge and capacities of technical public servants and forest producers in the management, conservation and sustainable use of biodiversity in forest ecosystems.
Specific Action 3.3.7 Harmonize the legal framework for the integration of biodiversity and climate change scenarios into forestry sector plans and programmes.
Specific action 3.3.8 Promote, formalize and strengthen interinstitutional coordination to enhance actions in the field of knowledge, management, conservation and sustainable use of biodiversity in forest ecosystems, as well as adaptation and mitigation measures to address climate change.
Specific action 3.3.9 Develop, strengthen and promote the use of biodiversity monitoring and assessment systems in priority forest ecosystems.

360) Regarding the **Welfare Sector Programme 2020?2024**, the project contributes directly to priority objectives 2 and 3, focused on reducing socioeconomic inequality gaps between territories and contributing to social welfare through sufficient income, promoting food self-sufficiency, rebuilding the social fabric and generating the productive inclusion of farmers in rural localities to make the land productive. The priority strategies and key actions with which it is specifically aligned are as follows:

? Priority Strategy 2.2. Boost the productive capacities of agricultural, forestry and fishing regions through social economy practices and principles in order to strengthen alternative models of development.

? Specific action 2.2.1. Provide support to craftsmen and craftswomen, primarily in agricultural and forestry regions of indigenous and Afro-Mexican communities that are marginalized or affected by violence. 2.2.2. Incorporate indigenous and Afro-Mexican women in the training

processes of productive projects of social programmes. 2.2.3. Generate processes of social and solidarity economy in agricultural, forestry and fishing regions with the participation of the inhabitants and through viable and sustainable productive projects. 2.2.4. Link productive projects through the coordination of productive chains around agricultural and forestry goods, with cultural relevance and emphasis on indigenous and Afro-Mexican regions.

? Priority Strategy 3.1. Implement agricultural technical support with an intercultural approach, financial and in-kind assistance so that farmers can make the land productive and achieve food and agroforestry self-sufficiency, in coordination with the relevant public institutions.

? Specific action 3.1.1. Hire and train agricultural technicians in *milpa* intercropping with fruit trees, agroforestry systems, sustainable agriculture, biofactories and nurseries.

? Specific action 3.1.2. Provide technical assistance and support to farmers with cultural relevance in the areas of *milpa* intercropped with fruit trees, agroforestry systems, sustainable agriculture, biofactories and nurseries.

361) The Sectoral Programme for Agriculture and Rural Development 2020?2024 establishes three priority objectives: increasing production and productivity in the agricultural and fisheries sector; the inclusion of small and medium-scale producers who have seen their possibilities of insertion in the productive activities of the Mexican countryside limited; and increasing sustainable production practices in the face of agro-climatic risks. Specifically, actions 3.2.4 and 3.4.6 are linked to this Project, as they seek to promote: access to compensation schemes for avoided emissions in agroforestry systems, for communities, ejidos and economic organizations of producers in the sector; and regulatory standards for the use of pesticides, as well as the coordination of local and territorial actions to protect the survival, biodiversity and abundance of pollinators, respectively.

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

362) The project?s knowledge management as a fundamental part of the activities for appropriation and sustainability of learning process of their key actors, will be aligned to the approaches of the FAO Knowledge Management Strategy[1] aimed at stakeholders and project beneficiaries and will incorporate the following: a) participatory and gender-based approach; b) support for ongoing processes focused on finding solutions to local problems; c) differentiated training for different target groups at multiple scales; and d) monitoring and evaluating results and impacts. Emphasis will be placed on preparing information that includes a gender approach in the knowledge products and highlight the experiences of women's work around biodiversity corridors in the target landscapes and other related activities.

363) The design of the strategy will consider criteria and actions to promote participation and dialogue, as well as considerations of cultural sensitivity, social inclusion and gender. In addition, the

project knowledge management strategy has two lines of action: i) creation of local spaces for learning and knowledge management territorial networks and ii) systematization and diffusion of information, lessons and best practices. These lines of action secure that the variety of stakeholders can acquire, spread and generate knowledge and best practices in conditions of equity and inclusion. Project stakeholders can acquire, spread and generate knowledge and best practices in conditions of equity and inclusion. This strategy links outputs 2.1.4 and 4.1.4.

364) Local spaces for learning and territorial networks: The project will promote the exchange of knowledge and experiences between corridors and macroregions by establish a Forest Learning Communities linked by the Territorial Information and Learning Hubs and create a permanent biodiversity monitoring network in the forestry and farming communities. The project will promote Forest Learning Communities exchanges among corridors into the same landscape or between different landscapes to identify and replicate a high-impact actions. The territorial networks for knowledge management will be composed of groups with common goals that voluntarily exchange information. The networks will develop action plans for local involvement. The project Knowledge Management Expert and Field Specialists will lead the development and activities of the local spaces and the territorial networks (see output 2.1.4). A group of community promoters will facilitate the participation of their own communities.

365) The Hub?s information will be integrated into a platform in a website linked to the own government institutions, FAO and other partner organizations platforms. The site will provide updated information to project partners and wide audience. A digital protocol will guide information transfers between the project website and the Integrated Information System (output 2.1.4). The website will be updated periodically to share experiences, disseminate information, highlight project results, and progress, and facilitate the replication of project outputs.

366) Systematization and dissemination of information, lessons and best practices: Knowledge management will be supported by the information provided by the community?s networks through the Hub platform, this will be an input for the generation of documents tailored for decision-makers (e.g. policy briefs) and other project beneficiaries (e.g. brief notes, handbooks, and factsheets). Documents will include information on: i) the relevance of the NSB (1 and 2) practices implemented and replicated for the landscape connectivity; ii) planning and management tools for gender, youth, indigenous and people of African descent inclusion, iii) local mechanisms for inter-institutional coordination; iv) the role of local communities in the implementation of NBS and sustainable management of ecosystems and their biodiversity; v) the relevance of NBS for the connectivity of ecosystems and landscapes; vi) guidelines for developing territorial ecosystems and biodiversity management plans; vii) handbooks for the use of the Integrated Information System and its related apps; viii) implementation and improvement of governance mechanisms into the biodiversity corridors; and ix) supporting sustainable business alternatives for linking biodiversity products in value chains and markets. Experiences and lessons learned from the project implementation will be also published and uploaded to the project website.

367) All project knowledge products will be generated with a gender perspective, highlighting women's work and their participation in initiatives for sustainable biodiversity use and their conservation strategies based in NBS and the generation of marketing methodologies and tools for the implementation of business models, and sharing of successful strategies

368) The project will share knowledge at least with other GEF co-funded projects implemented in Mexico (described in Section 6b - Coordination with other relevant GEF-financed projects and other initiatives) and one IFAD- Green Climate Fund project: i) Sustainable Productive Landscapes Project: (TPS) (GEF ID: 9555); ii) Fostering sustainable, legal and traceable use and trade of wild native species in Mexico (GEF ID: 10689); iii) Mainstreaming Biodiversity in Rural Landscapes of Mexico (GEF ID: 10574); and IFAD Financing Project (ID: 2000002249) ?Resilient Balsas Basin ? Reducing climate vulnerability and emissions through sustainable livelihoods.

369) The project Knowledge Management strategy will be refined in the first semester of PY1 by the KM Expert, under the CTA?s guidance.

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[1] http://www.fao.org/fileadmin/user_upload/capacity_building/KM_Strategy.pdf

9. Monitoring and Evaluation

Describe the budgeted M and E plan

370) The Monitoring and Evaluation (M&E) system for the Green Mex project will be carried out in accordance with FAO and GEF policies and guidelines. Monitoring and evaluation of progress towards the achievement of project results and objectives will be carried out based on the targets and indicators set out in the project results framework (Annex A1). The monitoring instruments will be updated at the mid-term and terminal evaluation. The Green Mex Project?s M&E system will also facilitate learning, replication and scaling up of co-management tools in the field areas where the project is implemented. The project M&E system and results 4.1.1 and 4.1.2 will be managed by the Project M&E expert.

9.1 Monitoring and supervisory responsibilities

371) The M&E roles and responsibilities of the Green Mex project will be carried out through:

? Missions on the ground to monitor the day-to-day technical progress of the project. The following will be in charge: Expert in M&E, Technical Coordination and Field Technical Units supported by FAO;

? Monitoring of follow-up indicators and results by the M&E Expert, the Technical Coordination and FAO LTO in coordination with CONAFOR;

? Mid-term and terminal evaluation (independent consultants); and

? Annual monitoring and supervision missions carried out by the Implementing Agency (FAO).

372) In the first quarter of the first year of the project, the M&E expert will design the project M&E Plan, in consultation with the Chief Technical Adviser and FAO. The M&E Plan will be validated with project stakeholders at the Inception Workshop and subsequently approved by the Project Steering Committee. The M&E Plan will include: (i) updated annual indicators from the Project Results Framework; (ii) baseline update, if necessary, and selected data-collection tools; iii) description of the monitoring strategy, including data-collection and processing, roles and responsibilities, reporting flows and a brief discussion of who, when and how each indicator will be measured (responsibility for project activities may or may not coincide with responsibility for data-collection); iv) updated implementation arrangements, if necessary; v) project workshop timeline, including Start, Mid-Term, Terminal evaluation, among other project milestones.

373) The project inception workshop will address the following: (i) presentation and description of the project results framework with all project stakeholders; (ii) discussion of project indicator targets and baselines; and (iii) clarification of the distribution of monitoring tasks among project partners.

374) The project will also adopt the Participatory Monitoring and Evaluation Process and Approaches, defined as a process based on stakeholder participation and shared control over content, processes, results and adaptive actions.

375) The M&E expert together with relevant community stakeholders will design the M&E engagement action plan during the first semester of the first year. The participatory process will involve: 1) identifying and involving key stakeholders; 2) capacity-building in terms of skills, knowledge and experience; 3) involving stakeholders to define what will be monitored, how and by whom; 4) discussing relevant indicators; 5) discussing how community advocates will collect data; 6) analysing successes and limitations and drawing conclusions; 7) sharing views and findings; and 8) learning and sustaining change. The participatory M&E programme will strengthen knowledge management, Component 2 and Output 4.1.3.

9.2 Indicators and sources of information

376) The monitoring of the outputs and outcomes of the Green Mex project is based on a set of specific indicators in the results framework (Annex A1). The framework?s indicators and means of verification will be applied to monitor both the performance and the impact of the project. Following FAO monitoring procedures and data from progress reporting formats, the data collected will be of sufficient detail to be able to track specific activities, outputs and outcomes and to pinpoint project risks from the outset. Indicators for output targets will be monitored semi-annually and indicators for outcome targets will be monitored annually, if possible, or as part of the mid-term review and terminal evaluation.

377) The main sources of information to support the M&E plan include: (i) participatory progress review workshops with stakeholders, beneficiaries and participatory M&E programme progress; (ii) on-site monitoring of implementation of field interventions; (iii) project progress reports prepared by the PTA with inputs from partners, and other stakeholders; (iv) consultancy reports; v) training reports; vi) mid-term review and terminal evaluation; vii) financial reports and budget reviews; viii) project implementation reports; ix) technical reports and best practices related to progress on outputs and outcome indicators; and x) reports of FAO supervision missions. To assess and confirm the congruence of the results with the project objectives, a physical inspection and/or survey of the activity sites and participants will be carried out.

9.3 Reporting Plan

378) The reports to be prepared specifically under the monitoring and evaluation programme are: i) the Project Inception Report; ii) Annual Work Plans and Budget (AWPB); iii) Project Progress Reports (PPR); iv) Annual Project Implementation Reviews (PIR); v) Technical Reports; vi) Co-Financing Reports and vii) the Terminal report. Regarding the mid-term evaluation and the terminal evaluation of the project, the project?s core indicators worksheet will also be completed to compare progress against the baseline established during project preparation. The reports will be distributed to the Project Steering Committee (PSC).

379) **Workshop and project inception report:** An inception workshop will be held no later than three months after the start of the project. Immediately afterwards, the M&E expert will prepare a project inception report. The report will include a description of institutional roles and responsibilities, progress to date in project establishment and start-up activities, an update on any changes in external conditions that may affect project implementation, and detailed descriptions of the first approved Annual Work Plan, Annual Budget and M&E Matrix. The draft initial report will be circulated to FAO and the Project Steering Committee for review and comments prior to finalization. The report must be approved by the Project Steering Committee and FAO. The FAO Budget Holder will upload the report into the FAO Field Programme Management Information System (FPMIS).

380) **Annual Work Plan and Budget** (AWPB): The subsequent draft AWPB will be submitted to the PSC for approval no later than the first week of December. The AWPB will include detailed activities to be implemented by project outcomes and outputs and will be divided into monthly timelines and targets, and milestone dates for output and outcome indicators to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included, together with all monitoring and supervision activities required during the year. The FAO Representation in Mexico will circulate the draft AWPB to the FAO Project Task Force (PTF) and consolidate and submit FAO?s comments. The Project Steering Committee will review the AWPB, and the TAC will incorporate any comments. The final AWPB will be sent to FAO for final non-objection and to the PSC for approval. The BH will upload the AWPB to the FPMIS.

381) **Project Progress Reports** (PPR): These reports identify constraints, problems or bottlenecks that prevent timely implementation and allow for appropriate corrective action to be taken. The PPRs will be prepared on the basis of systematic monitoring of the output and outcome indicators identified in the Project Results Framework (Annex A1), as well as the approved AWPBs and the M&E Plan. Draft PPRs will be prepared each semester and submitted to the FAO Project Working Group for review. The final versions of the PPRs will be submitted by the PTA to the Project Steering Committee by the second week of July (covering the period January to June) and by the second week of January (covering the period July to December). The July?December report should be accompanied by the updated AWPB for the following project year, which will also be subject to review and no objection by the FAO Project Working Group. The FAO BH is responsible for coordinating the preparation and finalization of the PPR, in consultation with the Project Management Unit, the FAO LTO and the Funding Liaison Officer (FLO). After approval by LTO, BH and FLO. The FLO will ensure that project progress reports are uploaded into FPMIS in a timely manner.

382) **Annual Project Implementation Review** (PIR): The M&E expert, under the supervision of CTA and in coordination with the national partners, will prepare a draft PIR for the period July (previous year) and June (current year) no later than 15 July of each year. Draft PIRs must be submitted to the Chief Technical Officer (LTO), who will finalize and submit them to the FAO Coordination Unit for review by 5 July. The FAO-GEF Coordination Unit and the LTO will discuss the PIR and ratings. The LTO is responsible for conducting the final review and providing technical clearance for the annual PIR. The final version will be submitted by the LTO to the FAO-GEF Coordination Unit for final approval. The FAO-GEF Coordination Unit will submit it to the GEF Secretariat and the Independent Evaluation Office of the GEF, as part of the annual FAO-GEF portfolio monitoring review.[1]

383) **Co-financing reports:** The administrative and financial specialist will compile the required information and reports on in-kind and cash co-financing provided by all co-funders of the project and possibly other new partners not envisaged in the project document. Each year, the Administrative and Financial Specialist will submit the report, through CONAFOR, to FAO Mexico by 10 July, covering the

period from July (the previous year) to June (the current year). This information will be used in the annual PIRs.

384) **GEF-7 core indicators:** The M&E expert will compile the METT and GEF-7 core indicators spreadsheet and send it to FAO for submission to the GEF Secretariat: (i) at the mid-term review of the project; and (ii) with the terminal evaluation. The reference values are included in this project document (see Annex F).

385) **Terminal report:** Within the two months prior to the project completion date, the CTA will generate and submit a draft terminal report for discussion with the FAO Project Working Group and approval by the PSC. The main objective of the terminal report is to provide guidance to the authorities (at ministerial or high-level governmental level) on the policy decisions necessary for the follow-up of the project. The terminal report is a concise description of the main outputs, outcomes, conclusions and recommendations of the project, without unnecessary background, narrative or technical details. The target audience is not necessarily made up of technical specialists, but they should understand the policy implications of the technical findings and the needs to ensure the sustainability of the project results. It evaluates the work, summarizes lessons learned and makes recommendations in terms of their application to integrated landscape management in the context of national and state level development priorities, as well as in terms of practical implementation. This report will specifically include the findings of the terminal evaluation.

9.4 Monitoring and Evaluation Plan

386) The table below provides a summary of the main monitoring and evaluation reports, the persons responsible for each of them, and the deadlines.

Table 25. Monitoring and Evaluation Plan of The Green Mex Project

GEF requirements in the M&E plan	Entities in charge:	Estimated cost (USD)	Timeframe
Inception workshop	Chief Technical Adviser (CTA), M&E Expert, Steering Committee, FAO Mx with the support of the FAO Technical Leader and FAO-GEF Coordinating Unit.	13 925	Within 3 months of CEO approval

GEF requirements in the M&E plan	Entities in charge:	Estimated cost (USD)	Timeframe
Project inception report	CTA, M&E Expert, FAO Mx with the approval of the LTO and FAO Mx Budget Holder (BH).	Time of M&E Expert, CTA and FAO Technical Units	Immediately after the kick-off workshop
GEF-7 monitoring of the project?s core indicators and results framework	CTA, M&E Expert, project partners, local organizations	130 500	Ongoing
Project Progress Reports (PPR)	M&E expert, CTA, with input from stakeholders and other participating institutions	Time of M&E Expert, CTA and FAO Technical Units	Biannual
Annual Project Implementation Review Reports (PIR)	Prepared by M&E Expert, FTU with supervision of CTA, FAO LTO and FAO BH. The FAO-GEF Coordination Unit clears and submits the PIR to the GEF Secretariat.	FAO staff time funded by agency fee, M&E Expert time, CTA and FAO Technical Units covered by project budget	Annually, typically between June and July
Monitoring the implementation of the socioenvironmental, gender and indigenous peoples risk mitigation plan	M&E Expert, Climate and Environmental Risk Management Expert, Specialist in Socioeconomic Risk Management, Gender and Indigenous Communities; CTA; FTU	M&E Expert time and visits covered by project budget	At least one quarterly visit of the M&E unit
BD METT Monitoring Tool	M&E expert and CTA	Time of M&E Expert, CTA, covered by the project?s budget	MTR Updates and Terminal Assessment
Project Steering Committee Meetings / Project Technical Group Meetings	CTA and partners	Face-to-face and/or virtual meetings covered by the project?s training budget	Annually

GEF requirements in the M&E plan	Entities in charge:	Estimated cost (USD)	Timeframe
M&E planning	M&E Expert, CTA, FTU, beneficiaries	Time of M&E Expert, Climate and Environmental Risk Specialist time, Social Safeguards, Gender and Indigenous Peoples Specialist and FAO Technical Units time, other costs covered by project training budget.	During the first six months of project implementation
Build the capacity of the identified beneficiaries in terms of skills, knowledge and experience of M&E	M&E Expert, beneficiaries, CTA	Time of M&E Expert, CTA and time of FAO Technical Unit	Twice during the project lifetime (training of trainers and data-collection)
Collecting and analyzing data on implementation processes	FTU, facilitators from the Forest Promoter Office*s*, M&E experts, CTA	Time of M&E Expert	Twice during the project lifetime (in PY2 and PY4)
Sharing results and findings, learning and sustaining change	FTU, facilitators from the Forest Promoter Offices, M&E expert, CTA	Territorial multi-sectoral dialogues covered by the project?s capacity-building budget.	Immediately after analyzing the data
Mid-Term Review (MTR)	FAO (Budget Holder), external consultant, in consultation with the project team and agencies, including the FAO-GEF Coordination Unit	External consultancy, including travel expenses; administered by FAO Mexico Representative (Budget Holder)) 50 000 Mid-Term Workshop 13 925	Midway through project implementation

GEF requirements in the M&E plan	Entities in charge:	Estimated cost (USD)	Timeframe
Terminal evaluation	The Evaluation Specialist will manage the decentralized independent terminal evaluation of this project under the guidance and support of the FAO Evaluation Office (OED); Independent Evaluation Consultants.	External consultancy, including travel costs; FAO staff time and travel costs will be financed from fees of GEF-7 bodies 80 000 Final Workshop 13 926	To be launched six months before final review meeting
Terminal report	CTA; FAO Mx (with the support of the FAO LTO and the FAO-GEF Unit); M&E Expert		Two months before the project completion date
TOTAL COST		**$302 276**	

9.5 Evaluation provisions

387) An independent mid-term review (MTR) will be carried out at project mid-life in terms of expenditure and/or overall project duration, tentatively in the 4th quarter of project year 3. The BH will arrange an independent MTR in consultation with the Project Steering Committee (PSC), the Project Management Unit (PMU), the lead technical officer (LTO) and the FAO-GEF Coordination Unit in FAO headquarters. The MTR will be conducted to review progress and effectiveness of implementation in terms of achieving project objective, outcomes and outputs. The MTR will allow mid-course corrective actions, if needed. The MTR will provide a systematic analysis of the information on project progress in the achievement of expected results against budget expenditures. It will refer to the project budget (see Annex A2) and the approved AWP/Bs (sentence only valid for the GEF). It will highlight replicable good practices and key issues faced during project implementation and will suggest mitigation actions to be discussed by the PSC, the LTO and FAO-GEF Coordination Unit.

388) The GEF evaluation policy foresees that all medium and large size projects require a separate terminal evaluation. Such evaluation provides: i) accountability on results, processes, and performance; ii) recommendations to improve the sustainability of the results achieved and iii) lessons learned as an

evidence-base for decision-making to be shared with all stakeholders (government, execution agency, other national partners, the GEF and FAO) to improve the performance of future projects.

389) The Budget Holder (BH) will be responsible to contact the Regional Evaluation Specialist (RES) within six months prior to the actual completion date (NTE date). The RES will manage the decentralized independent terminal evaluation of this project under the guidance and support of OED and will be responsible for quality assurance. Independent external evaluators will conduct the terminal evaluation of the project taking into account the ?GEF Guidelines for GEF Agencies in Conducting Terminal Evaluation for Full-sized Projects. OED will provide technical assistance throughout the evaluation process, via the OED Decentralized Evaluation Support team ? in particular, it will also give quality assurance feedback on: selection of the external evaluators, terms of reference (TOR) of the evaluation, draft and final report. OED will be responsible for the quality assessment of the terminal evaluation report, including the GEF ratings (only for GEF projects). After the completion of the terminal evaluation, the BH will be responsible to prepare the management response to the evaluation within four weeks and share it with national partners, GEF, OED and the FAO-GEF Coordination Unit.

390) The TE will identify the impacts of the project, the sustainability of the project results and the degree of achievement of the long-term results. It will also aim to indicate future actions needed to extend the existing project in subsequent phases, to incorporate and extend its products and practices, and to disseminate information to management authorities and institutions with responsibilities in order to ensure the continuity of the processes initiated by the project. It will pay particular attention to performance indicators and will be aligned with the GEF core indicators.

9.6 Disclosure of information

391) The project will ensure transparency in the preparation, implementation, reporting and evaluation of its activities. This includes full disclosure of all non-confidential information and consultation with major groups and representatives of local communities. Dissemination of information will be ensured through publication on websites and dissemination of results through knowledge products and events. Project reports will be shared widely and freely, and conclusions and lessons learned will be made available. Include the capsule theme

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[1] This date may vary from year to year, as it follows the guidance of the GEF Secretariat for the Annual Monitoring Review (AMR).

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

The Project will strengthen the Social Economy of high biodiversity products through the identification and creation of new markets for BD products and through the development of inclusive models in the BD sector. The main hypothesis here is that BD conservation, integrated landscape management and ecosystem connectivity will be reinforced through the creation of socio-economic incentives at local and national levels. As such, the project will promote Pillars 1 and 4 of Decent Work in rural areas: (under Pillar 1) Women and men small-scale producers will be supported in accessing markets and modern value chains, while (under Pillar 4) the project will also support the participation of rural poor in local decision-making and governance mechanisms, especially empowering rural women and youth groups to be involved in these processes. Finally, stakeholders will be incentivized to pursue actions that generate global environmental benefits such as the creation of new conservation areas (VACs and OECMs) and restoration of degraded areas (agricultural and forested areas), ultimately contributing to the reduction of greenhouse gas emissions.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate	Medium/Moderate		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

Based on the selection of the Environmental and Social Safeguards (ESS) checklist, the project has been classified as ***Moderate*** risk. Risks associated with five environmental and social standards or safeguards (ESS) were identified, namely: ESS 2. Biodiversity, ecosystems and natural habitats; ESS

3. Plant Genetic Resources for Food and Agriculture, ESS 7. Decent work; ESS 8. Gender equality; ESS 9. Indigenous peoples and cultural heritage.

Considering the environmental and social factors, the overall risk of the project was assessed as ?moderate?, as the potential negative environmental and social impacts of the project are site-specific, not irreversible and can be easily corrected by appropriate mitigation measures. The PPG phase carried out an environmental and social impact assessment and took the first step towards a Free, Prior and Informed Consent process, which will be carried out during the project lifetime.

During its implementation, the project will anticipate the risk of perpetuating poverty and inequality in rural areas and socially unsustainable food systems. By addressing the reduction of gender gaps within forestry production units and strengthening collaborative capacities within and between cooperatives, decent work and productive employment will remain a priority of the project. While building a progressively broader Free, Prior and Informed Consent process, the project will establish synergies with specific employment and social protection programmes that could facilitate access to social protection or social insurance schemes. The gender action plan and the strengthening of collaborative capacities within and between cooperatives will empower the most vulnerable or disadvantaged categories of workers involved in processing and marketing stages within local communities.

A summary of the Environmental and Social Analysis can be found in Annex I1 (please refer to the Agency Project Document).

The main mitigation measures are: for Environmental and Social Standard 2, establish a network of Voluntary Conservation Areas (VCAs) to foster ecosystem connectivity, and a differentiated action strategy for businesses located in PNAs, which includes training beneficiaries in the Management Plan and Administrative Rules of the PNA in which they are located; for Environmental and Social Standard 3, make exclusive use of native species or local varieties and follow appropriate plant health protocols; for Environmental and Social Standard 7, ensure that disadvantaged categories of workers are empowered and prioritized, and promote the use of technologies, practices, transformation processes and business models that take into account the importance of generating more and better employment opportunities, both directly and indirectly; for Environmental and Social Standard 8, ensure that women and girls are not discriminated against and that gender discrimination and/or inequalities are not reinforced, while complying with the principle of equal opportunities and fair treatment; in Environmental and Social Standard 9, implement an Indigenous Peoples Plan and develop the Free, Prior and Informed Consent (FPIC) process.

The following table summarizes the environmental and social safeguards (ESS) identified and addressed during project preparation, their expected mitigation actions, the actors responsible for implementation and the timeframe.

Table 23. Environmental and social safeguards (ESS) identified and addressed during project preparation

Social and Environmental Risks	Risk classification	Potential impact	Mitigation measure(s)	Indicator / Means(s) of verification	Progress on mitigation measures
ESS 2: Biodiversity, ecosystems and natural habitats	Moderate	The project will be carried out in and around Protected National Areas	- Establishment of a network of Voluntary Conservation Areas (VCAs) to foster ecosystem connectivity. - Training of beneficiaries on the Management Plan and the Administrative Rules of the PNA according to the Buffer Zone in which they are located. - Promotion and encouragement of Community Watch Committees. - Close coordination with CONANP rangers and PNA Directorate staff. - Use indicators to monitor the effectiveness of mitigation.	Degree of fragmentation or fragmentation index[1]	It will be evaluated on a six-monthly basis through project progress reports. Entities in charge: M&E and Climate Expert, and Specialist in Environmental Risk Management FAO will monitor compliance with the standards.

Social and Environmental Risks	Risk classification	Potential impact	Mitigation measure(s)	Indicator / Means(s) of verification	Progress on mitigation measures
ESS 3: Plant genetic resources for food and agriculture	Moderate	- Involves transfer of planting materials - Forestry development is possible	? Exclusive use will be made of native species or local varieties. ? Appropriate plant health protocols, including quarantine measures, prescribed testing for designated pests and pathogens, will be followed. ? The transfer of plant genetic resources across national borders will be in accordance with international standards for access and benefit-sharing under the International Treaty on Plant Genetic Resources for Food and Agriculture and the CDB Nagoya Protocol. ? Producers? rights to plant genetic resources and traditional knowledge associated with access and benefit-sharing arising from their use will be respected. ? Where present, the project will avoid undermining local seed and planting material	Percentage of plots with species diversity Percentage of plots with species adapted to local and drought conditions	CONAFOR works only with native species in accordance with its guidelines and regulations.

Social and Environmental Risks	Risk classification	Potential impact	Mitigation measure(s)	Indicator / Means(s) of verification	Progress on mitigation measures
ESS 7: Decent work	Moderate	? The project operates in a sector dominated by subsistence workers ? Focus on the employment situation of young people ? Focus on women?s employment situation ? Possible existence of migrant workers in the sector	? The project will promote the use of technologies, practices and business models that take due account of the importance of generating more and better employment opportunities for women and young people, both directly and indirectly. ? The basic labour standard for the elimination of employment and occupation-related discrimination will be respected ? The project will promote the inclusion of young people in production, encouraging entrepreneurship through the development of skills in sustainable technologies, processing, marketing, etc. ? The project will seek to strengthen women?s capacities in areas such as management, added value and leadership ? The project will seek to implement a Gender Action Plan	Percentage of young people running sustainable enterprises	The project will be evaluated on a six-monthly basis through project progress reports. Entities in charge: M&E Expert and Socioeconomic Risk Management, Gender and Indigenous Communities Specialist

Social and Environmental Risks	Risk classification	Potential impact	Mitigation measure(s)	Indicator / Means(s) of verification	Progress on mitigation measures
ESS 8: Gender equality	Moderate	? There is a risk of reinforcing existing gender discrimination ? There is a risk of failing to address the different needs and priorities of men and women	? The project will ensure that there is no discrimination against women or girls and that discrimination and/or gender inequalities are not reinforced. ? The project will comply with the principle of equal opportunities and fair treatment, empowering and prioritizing vulnerable women and men. ? The project will develop cooperatives and green businesses led by women and young people. This includes capacity-building and the targeting of funding. ? Tools such as value chain analysis with an emphasis on gender will be used. ? Niche markets for biodiversity products involving mainly women and young people will be identified and developed. ? A gender marker will be	Percentage of women in sustainable entrepreneurships	A Gender Action Plan is in place that contains specific actions for inclusion of vulnerable groups, not only women

Social and Environmental Risks	Risk classification	Potential impact	Mitigation measure(s)	Indicator / Means(s) of verification	Progress on mitigation measures
ESS 9: Indigenous peoples and cultural heritage	Moderate	Indigenous peoples living in and around the project area are identified	? The project seeks to comply with all national and international requirements regarding indigenous peoples and communities, as well as with the provisions of ILO Convention 169. ? Consultation will be carried out through the Free, Prior and Informed Consent (FPIC) process. ? An Indigenous Peoples Plan (IPP) will be implemented.	Percentage of communities with indigenous population served by the project that carried out an FPIC process	A Plan for Indigenous Peoples is in place. Progress was made in defining methods for conducting the FPIC process once epidemiological conditions allow it

[1] The methodology has been developed by CONABIO, IB-UNAM, CONANP, UNDP and INECC.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
FAO ES Screening Checklist GreenMex 24March2022	**CEO Endorsement ESS**	
FAO ESS Screening Checklist _PIF GreenMex 25Sept2020	**Project PIF ESS**	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Objective: To mainstream biodiversity conservation, integrated landscape management and ecosystem connectivity into social policies and programmes in Mexico.							
Component 1: Green Recovery: Setting up the Enabling Environment							
Outcome 1.1: Regulatory framework of CONAFOR?s *Support Programme for Sustainable Forest Development* and institutional strategies strengthened and harmonized for the generation of multiple environmental and socioeconomic benefits.	*Project indicator 1:* Percentage of CONAFOR planning instruments that include environmentally friendly territorial arrangements.	0	30 percent	100 percent	Operating rules or guidelines, Midterm Review (MTR) and Terminal Evaluation (TE) Reports	CONAFOR has the capability to include connectivity criteria and integrated landscape management in its planning instruments. There is interest and political will, despite possible staff changes in CONAFOR.	CONAFOR

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.1.1 Key biodiversity (BD) and integrated landscape management criteria are incorporated into the CONAFOR?s *Support Programme for Sustainable Forest Development*	Project indicator 2: Percentage of project bioforestry corridors (BFCs) that implement the biodiversity and connectivity strategies developed by the Local Forestry Promoters Offices and approved by the respective governance bodies.	0	30 percent of BFCs	100 percent of BFCs implement the biodiversity and connectivity strategies	Documents with the strategy, Minutes signed by the governance bodies, Midterm Review (MTR) and Terminal Evaluation (TE) Reports	CONAFOR has the financial and human resources to continue promoting the territorial management model (Local Forestry Promoters Offices). Forestry sector governance entities (National Forestry Committee and State Committees) provide feedback on the results of the project to incorporate the criteria. Despite institutional staff turnover, national planning	CONAFOR, CTA

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.1.2 (Three) Territorial institutional strategies strengthened and harmonized to promote inclusive economic recovery with a BD-friendly approach.	Project indicator 3: No. of inter-institutional agreements at federal (national) level. Project indicator 4: Percentage of bioforestry corridors involving agreements with stakeholders that strengthen governance strategies in the territory.	0 0 percent	A proposal for an inter-institutional agreement at federal level 40 percent of BFCs	A national inter-institutional agreement 80 percent of BFCs	Agreement signed, MTR and TE reports Governance agreements signed between stakeholders of each BFC, Working minutes, MTR and TE Reports	The governmental institutions present in the territories do not have the capability and political will to strengthen their instruments and functions.	CONAFOR, CONANP, SEMARNAT, CTA. FTU _Local Forestry Promoters Offices (FFP).

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.1.3 Impact assessment of the innovative practices applied by the Project - to be upscaled by the entire CONAFOR?s *Support Programme for Sustainable Forest Development*.	Project indicator 5: Percentage of information obtained from the "assessment" contains conclusive evidence of the impact of the innovative practices applied by the Project.	0 percent	45 percent	100 percent	Impact assessment results report, Midterm Review (MTR) and Terminal Evaluation (TE) Reports	Institutions are willing to carry out the impact assessment and include the results in the design of their institutional programmes.	FAO ESA, FAO ESP, M&E Expert, CONAFOR.

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Outcome 1.2 Increased stakeholder engagement and technical capacities.	GEF Core Indicator 11: Direct beneficiaries as co-benefits of GEF investment. -	0 people Disaggregated by gender: *Women: 0 percent and* *Men: 0 percent*	45,000 persons	115, 000 persons Disaggregated by gender: *Women: 47 234 (41.07 percent) and* *Men: 67 766 (58.93 percent).*	Registers of project participants and beneficiaries. Lists of agricultural units served by the project and CONAFOR. Single applications (of the projects) addressed to CONAFOR.	Political environment and security conditions are favorable to the work in the regions. Human and financial resources existing at CONAFOR are not reduced or eliminated.	CONAFOR, SEMARNAT, M&E Expert (MEE)

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.2.1 Bioforestry Corridors (BFC) that incorporate the strengthened strategy of CONAFOR?s territorial management.	Project indicator 6: Percentage of Bioforestry Corridors with forest learning communities operating effectively and linked to CONAFOR's Training Communities. [1]	0 percent	40 percent of BFCs have forest learning communities linked to the training communities.	70 percent of the corridors have forestry learning communities operating effectively and linked to CONAFOR's Teaching Communities.	Work Reports of the Forest Learning Communities. Reports of Training Communities	Communities benefiting from the project are interested in participating in these communities. The Training Communities continue to be part of the capacity-building mechanism promoted by CONAFOR.	CONAFOR, Facilitators from the Local Forestry Promoters Offices (FFP).

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.2.2 ?Green Recovery ? Training Programme addressing Nature-Based Solutions, governance and social economy.	Project indicator 7: No. of CONAFOR institutional training programmes strengthened in their design and implementation by adding a gender and inclusive perspective, with an approach based on integrated landscape management, NBSs and access to markets and financing.	One CONAFOR training programme.	Curriculum proposal to strengthen CONAFOR's training programme.	One strengthened and institutionalized training programme.	Training programme. Training attendance list. Training materials.	CONAFOR is willing to strengthen its training programme.	CONAFOR CTA Knowledge Management Expert (KME)
Component 2: Green Recovery: Integrated landscape management, inclusive conservation and ecosystem connectivity							

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Outcome 2.1 Nature-based solutions (NBS) applied in prioritized forest and agroforestry landscapes, contributing to ecosystem connectivity, generating multiple environmental and socioeconomic benefits.	*GEF Core Indicator 4:* Area (Ha) of landscapes under improved practices (excluding protected areas): - Durango macroregion; - Balsas and South Pacific macroregion; - Lacandon Jungle macroregion. *GEF Core Indicator 1.1:* Newly created terrestrial protected areas (ha). *GEF Core indicator 3: Hectares of land restored*	- 691,636 ha, Durango; - 53,790 ha, Lacandon Jungle; and - 372,930 ha Balsas and South Pacific.		4 867 049 ha of landscapes subject to improved practices: - 1 568 620 ha, Durango; - 389 702 ha, - Lacandon Jungle; and - 2 908 727 ha, Balsas and South Pacific 100 000 ha (Voluntary Conservation Areas (VCAs) and OECMs). - 25 000 Ha of VCAs: - 75, 000 ha of other active conservation schemes: 151, 000 ha of land restored: - 3.1. Agricultural land: 73 000 ha - 3.2	Midterm Review (MTR) and Terminal Evaluation (TE) Gov. Reports	Communities in the territories maintain their interest in implementing integrated landscape management. The institutions maintain their interest in meeting the goals and achieving inter-institutional cooperation.	CONAFOR, SEMARNAT, CONANP, FAO, M&E expert, FTU, Knowledge Management expert (KME) Consultant on environmental safeguards and climate risks

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 2.1.1 NBS and ecosystem connectivity strategy, developed and implemented in 3 priority landscapes.	Project indicator 8: No. of bioforestry corridors (BFCs) designed (including strategy) that are promoted and implemented, by coordinating governmental programmes in each territory	0 BFCs in the three macroregions	- Durango landscape: two BFCs. - Lacandon Jungle landscape: three BFCs. - Balsas Basin landscape: three BFCs	18 BFCs in the three macroregions promoted. - Durango Landscape: 4 BFCs. - Lacandon Jungle Landscape: 6BFCs. - Balsas Basin Landscape: 8 BFCs. At least 16 BFCs implemented in the three macroregions, through the coordination of government programmes in each territory.	Minutes of the incorporation of BFC governance bodies. Link at a CONAFOR website. Midterm Review (MTR) and Terminal Evaluation (TE) Reports	Stakeholders in the territories are interested in forming BFCs. Institutions are willing to strengthen their governmental programmes with a landscape approach.	CONAFOR, FTU, CTA, SEMARNAT.

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 2.1.2 Investments in NBS and productive diversification are promoted and implemented in selected landscapes, incorporating native species of sociocultural importance and with economic potential.	Project indicator 9: No. of corridors with at least one innovative NBS practice implemented in each corridor.	0 BFCs	- Durango Landscape: two corridors. - Lacandon Jungle Landscape: thee corridors - Balsas Basin Landscape: three corridors	18 BFCs in the three macroregions have at least one innovative NBS practice in each of them.	Midterm Review (MTR) and Terminal Evaluation (TE), Individual applications (for the projects) addressed to CONAFOR.	Government institutions maintain their interest in directing public investment in NBS and productive diversification.	CONAFOR, FTU, Facilitators of the Local Forestry Promoters Offices (FFP).

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 2.1.3 New Voluntary Conservation Areas (VCAs) and Other effective area-based conservation measures (OEMCs) have been formally accredited or certified by CONANP and/or CONAFOR in the prioritized landscapes.	Project indicator 9: Percentage of VCAs and OECMs recognized.	0 percent	VCAs and OECMs VCAs Identification document and OECMs	Recognition of the 100 percent of VCAs and sOECMs identified.	MTR and TE reports Management plans Single applications (of the projects) addressed to CONAFOR.	Human and financial resources existing at CONANP and CONAFOR are not reduced or eliminated	CONANP CONAFOR Facilitators from the Local Forestry Promoters Offices (FFP).

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 2.1.4 Community-based monitoring system for NBS strengthened.	No of operational territorial information and learning hubs (at least one per BFC) linked to Local Forestry Promoters Offices	0 hubs	At least 15 territorial information and learning hubs installed.	18 territorial information and learning hubs (at least one per BFC) linked to Local Forestry Promoters Offices	Online monitoring system BIOCOMIUNI	CONAFOR has developed the monitoring system and mechanisms for its promotion, training and use in communities.	CONAFOR (Community Monitoring Initiative). Facilitators from the Local Forestry Promoters Offices (FFP). Communication Expert KME
Component 3: Green Recovery: Market instruments and sustainable ventures							

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Outcome 3.1: Inclusive and sustainable markets for high-value BD products, identified and strengthened.	Project indicator 10: No. of inclusive business models implemented/landscape. Project indicator 11: No. of economy organizations that participate in inclusive value chains (including short marketing circuits) of importance for BD (at least two led and made up of women). Project indicator 12: Percentage of women and of young people participating in green and inclusive chains.	0 inclusive business models implemented/landscape	At least seven inclusive business models developed/landscape 10 Business plans designed based on social economy business models for BD and NBS.	At least seven inclusive business models implemented/landscape At least 10 economy organizations that participate in inclusive value chains (including short marketing circuits) of importance for BD (at least two led and made up of women). 50 percent of women and 30 percent of young people participate in green and inclusive chains.	Business plans validated for funding. Midterm; Review (MTR) and Terminal Evaluation (TE) reports.	There is interest from social organizations in participating in projects of this nature. Government institutions are still willing to support business models and organizations. Producers and Community Forest Enterprises to able to access to selective markets.	CONAFOR M&E expert Market Access expert Access to Finance expert. Consultant on Social Safeguards, FPIC and Gender

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 3.1.1 Social economy business models for Biodiversity and NBS products implemented.	Project indicator 13: Nine productive projects involving contributions from business models implemented by social economy organizations for their execution [2]. Note: three projects for each macroregion.	0 projects	three projects (one per macroregion)	At least nine productive projects	Approved project documents MTR and TE Reports	There is interest from social organizations in participating in projects of this nature	CONAFOR M&E expert Market Access Expert

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 3.1.2 (Number of) Social Economy Organizations with improved access to green and inclusive value chains.	Project indicator 14: Forestry Entrepreneurship Index in Forestry Social Enterprises Business resilience as reflected in the index: - very low, - low, - average, - high, - and very high	Not defined. During year 1, the degree of business resilience of organizations participating in the project and those present in the 18 BFCs will be diagnosed.	Diagnosis of the business soundness of the Social Economy Enterprises participating in the project. Action plan to improve the resilience of organizations to improve access to green and inclusive value chains.	Forestry Entrepreneurship Index in Forestry Social Enterprises high and very high at least 10 economy organizations that participate in inclusive value chains	Document containing diagnoses of the degree of soundness of forestry companies. Action plan MTR and TE Reports	There is interest from social organizations in participating in projects of this nature Cooperatives in project landscapes interested in operating improving	CONAFOR M&E expert Market Access Expert

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 3.1.3 Institutional innovations to support sustainable market linkages implemented - including certification of BD products and alternative verification and participatory guarantee systems.	Project indicator 15: No of inter-institutional platforms that coordinate the efforts of entities promoting certification, differentiation mechanisms under a market approach, and a communication strategy aimed at the end consumer.	0 platforms	Technical proposal and platform implementation arrangements.	One inter-institutional platform that coordinates the efforts of the entities promoting certification, differentiation mechanisms under a market approach and a communication strategy aimed at the end consumer.	MTR and TE reports		CONAFOR CTA M&E expert Market Access expert Communication expert

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Outcome 3.2 Improved and sustained socioeconomic and environmental benefits through investments of the Social Bank	Project indicator: No. of productive projects that involve contributions from social economy organizations for their implementation. -	0	At least 3 productive projects	9 productive projects that involve contributions from social economy organizations for their implementation.	Approved project documents MTR and TE reports	There is interest from social organizations in participating in projects of this nature. Producers and Community Forest Enterprises to able to access to Social Bank	CONAFOR, M&E expert Access to finance expert

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output: 3.2.1 Financing strategy that promotes landscape restoration and the creation of green businesses linked to NBS, implemented within the framework of the CONAFOR?s *Support Programme for Sustainable Forest Development*.	Project indicator 15: No of savings and loan schemes with social banks that include criteria to promote the restoration, conservation and sustainable use of BD, as well as inclusion and gender criteria. -	0	1	Two savings and loan schemes with social banking that include criteria to promote restoration, conservation and sustainable use of BD, as well as inclusion and gender criteria.	Minutes of savings funds Constitutive acts: Saving and loan Funds	There is interest from social organizations in participating in projects of this nature. Trust is built between people	CONAFOR, M&E expert Access to finance expert

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output: 3.2.2 Certification mechanisms that promote BD sustainable management, conservation, landscape restoration and the creation of green businesses	Project indicator 16: Strategy to support certification process of green businesses of products derived from sustainable management and conservation of BD, and/or landscape restoration,	0	A strategy to support certification process of green businesses of products derived from sustainable management and conservation of BD, and/or landscape restoration on going.	At least 9 products derived from sustainable management and conservation of BD, and/or landscape restoration certificated			CONAFOR, M&E expert Access to finance expert

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output: 3.2.3 Public-private-community alliances that, promote BD sustainable management, conservation, landscape restoration and financing of green businesses linked to NBSs, implemented within the framework of the CONAFOR?s *Support Programme for Sustainable Forest Development*.	Project indicator 17: No of partnership agreements with the public or private sector that promote financing or implement business models in social economy organizations.	0	At least one partnership agreement with the public or private sector	Three partnership agreements with the public or private sector to promote financing or implement business models in social economy organizations.	Documents: agreements		CONAFOR CTA

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output: 3.2.4 Strengthening of social banking alternatives for financing green businesses derived from NBS implemented in BFC.	Project indicator 18: 3 productive projects financed through social banking schemes.	0	Criteria and financial tools proposal to enable the Social Bank to support productive projects.	3 productive projects financed through social banking schemes.	Criteria and financial tools proposal MTR and TE reports	Producer and producers and Community Forest Enterprises to able to access to social banking	CONAFOR, M&E expert Access to finance expert
Component 4: Communication, knowledge management and M&E							
Outcome 4.1: Monitoring and evaluation under a results-based approach, good practices and lessons learned systematized and disseminated.	Project indicator: Project outcomes achieved and demonstrating sustainability	No project outcomes achieved	70% of project outcomes achieved	100% of project outcomes achieved, with sustainability demonstrated	PIRs, PPRs, MTR and TE reports	Project partners remain committed to the project outcomes, and capacities generated are sustained	FAO, M&E Expert

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output: 4.1.1 Project M&E System	Project M&E system developed with relevant stakeholders and guiding on-going adaptive management of the project, including the mainstreaming of gender perspectives into project activities	No M&E system in place	M&E system including monitoring of gender mainstreaming indicators in the Gender Action Plan and Results Framework, developed and under implementation by end of Q2 of project	M&E system has provided on-going guidance for adaptive management and gender mainstreaming throughout project implementation period	PIRs, project M&E reports		FAO, M&E Expert
Output: 4.1.2 Midterm review and terminal evaluation	1 Mid-Term Review and 1 Terminal Evaluation	No Mid Term Review and Terminal Evaluation have been undertaken yet.	1 Mid Term Review Report	1 Terminal Evaluation Report	MTR and TE reports	MTR and TE results used to review project progress and define corrective actions to achieve the project objective and outcomes	FAO Mexico, External consultants, CTA, CONAFOR, M&E Expert

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Output: 4.1.3 Geospatial platform and digital learning community report multiple benefits and support decision-making	1 strengthened Biodiversity Conservation and Monitoring platform (BioComuni)[3]	1 Biodiversity Conservation and Monitoring platform (BioComuni)	Improvement proposal the BioComuni platform to facilitate the local management of biodiversity monitoring indicators and reports	1 strengthened Biodiversity Conservation and Monitoring platform (BioComuni)	BioComuni Platform MTR and TE reports		CONAFOR FAO
Outcome 4.1:4 Knowledge management, cooperation and horizontal management networks created for NBS implementation and landscape restoration.	At least 3 Knowledge management, cooperation and horizontal management networks created	0	At least 3 Knowledge management, cooperation and horizontal management networks designed	At least 3 knowledge management, cooperation and horizontal management networks in progress	MTR and TE reports		CONAFOR, FAO, KME, Communication Expert

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
<u>Outcome 4.1:5</u> Communication strategy for the positioning and dissemination of the environmental benefits derived from the project and CONAFOR?s *Support Programme for Sustainable Forest Development.*	Communication strategy for the positioning and dissemination of the environmental benefits derived from the project and the CONAFOR?s *Support Programme for Sustainable Forest Development*	No Communication strategy in place	Project?s Communication strategy with gender sensitive developed and under implementation by end of Q2 of project	Communication strategy has provided positioning and dissemination of the environmental benefits derived from the project and the CONAFOR?s Support Programme for Sustainable Forest Development		Human and financial resources existing at CONAFOR are not reduced or eliminated.	CONAFOR, FAO, M&E Expert, Communication Expert, KME

Results chain	Indicators	Baseline	Midterm target	Final target	Means of verification	Assumptions	Responsible for data collection
Outcome 4.1:6 Best practices and lessons learned systematized and disseminated.	Number and type of knowledge products containing best practices and lessons learned published and disseminated (including chapters on gender mainstreaming)	0	Best practices and lessons learned on sustainable fisheries management and marine conservation documented At least 1 report from each seascape produced on best practices Project partner websites disseminate experiences At least 3 women's testimonies included in communication products	Best practices and lessons learned synthesized, replicated and scaled up by SbN At least 3 reports from each landscape and 1 documentary film produced on best practices Project partner websites disseminate experiences and promote replication At least 6 women's testimonies included in communication products	Project information is available throughout the BioComuni Publications. Documentaries. Websites. Press clippings. PPR/PIR.	Human and financial resources existing at CONAFOR are not reduced or eliminated.	CONAFOR, FAO, M&E Expert, Communication Expert, KME

[1] Note: CONAFOR provides instructor communities, which are communities of outreach workers organised by themes.

[2] These productive projects involve reinvesting the profits from business models implemented by social economy organizations.

[3] Three years after its launch, a second edition will take place to improve the protocol to facilitate its implementation in the field. Additionally, the BIOCOMUNI platform will be updated and improved to have an information system that facilitates local management and allows obtaining indicators and reports on biodiversity monitoring.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

GEF Secretariat comments	**Agency response**	**Reference**
No pending comments	N/A	N/A
STAP comments		
Concur ? no pending comments	N/A	N/A
GEF Council Comments: Switzerland		
Switzerland is supportive of the project. However, we identified some weakness and hope that these will be addressed in the further development and implementation of the project: 1. Project Indicator 1: 20% of SV Program sites implementing environmentally friendly territorial plans. We encourage to revisit this number as indicated in the agency response.	Thank you for your support for this project. Please note that during the PPG, the project indicators were updated and expanded to reflect the analysis and consultations held with project partners. As such, Project Indicator 1 has been revised as follows: ?% of CONAFOR planning instruments operating in each bioforestry corridor (BFC) with territorial governance arrangements in place to facilitate an integrated view of the landscape and connectivity in each of the three territories? for which the target is 100% by Project End.	Annex 1. Project Results Framework

2. Component 3 including several of the project indicator are somewhat weak, lack detail and/or ambition (e.g. -Project Indicator 7: Project Indicator 7: Added value generated by newly created social economy ventures (MXN). -Project Indicator 8: 50% of green businesses approved for financing through social banking alternatives o It will be important to create synergies and links to the activities of national development banks (NAFIN, FIRA ? e.g. Proinfor with KfW) and other national and local organization including CSOs (e.g. Sierra Gorda ecological group)	As a result of the analysis and consultations held with project partners during the design phase, Project Indicators 7 and 8 have been replaced with the following: Project Indicator 15: # of savings and loan schemes with social banks that include criteria to promote the restoration, conservation and sustainable use of the BD, as well as inclusion and gender criteria. Project indicator 17: # of collaboration agreements with the public or private sector that promote financing or implement business models in social economy organizations. Project indicator 18: # of productive projects financed through social banking schemes. These revised indicators are more specific to the project interventions with regards to the impact of the proposed financing strategy to promote landscape restoration and green businesses linked to NbS.	Annex 1. Project Results Framework
3. Moreover, while we understand the challenges posed by COVID19 we urge the agency to consult with local stakeholders (peasants and indigenous communities) nevertheless.	The restrictions surrounding the COVID19 pandemic continued to limit the project?s consultations with local stakeholders; the planned set of consultations could not involve face-to-face meetings and travel in the territories. Despite these conditions, during the PPG, several consultation processes were carried out with institutional, social and organizational actors related to the project intervention area and scope, including 3 workshops held in Tuxtla, Chilpancingo and Durango. Furthermore, the project includes a Gender Action Plan (Annex M) and a strategy for implementing FPIC in each of the landscapes proposed in the project (see Annex J) with the aim of ensuring the adequate participation of women and indigenous communities present in the project intervention territories. During the first year of the project implementation, the project will conduct further consultations with local stakeholders and put the GAP and other engagement plans into action, including FPIC with the indigenous communities identified within the intervention areas, as needed. To support these processes, the project coordination unit will include environmental and social safeguards specialists.	ProDoc Part II, Section 2; Annex I2; Annex J; Annex M

GEF Council Comments: UK		
How will the two projects in Mexico be coordinated given they're with two different implementing partners and in the same sector?	The project steering committees and the GEF OFP will ensure coordination and support said coordination. During the PPG, initial coordination discussions were held between the two projects to identify opportunities for synergy and complementarity in their interventions. These discussions will continue throughout implementation as both projects advance in their interventions.	
Is the FAO confident that working with Sembrando Vida (SV) will, at minimum, deliver environmental benefits in the areas it will operate despite the programme?s negative impacts, and if possible that Bienestar are signed up to apply learning and make changes more widely?	The GEF support is aimed at generating global environmental benefits as presented in the project strategy and supported by the GoM. The shift in Executing Agency from the Ministry of Welfare to CONAFOR, and environmental institution and partner, brings an institutional experience with and understanding of environmental benefits, including in the GEF context, that will benefit the project. As such, FAO is fully confident that CONAFOR will deliver the environmental benefits described in this Project Document.	
The proposal aims to ?only? work in a few geographies to try to improve the SV programme (Montes Azules, Huasteca, Durango). Will this be enough to achieve the programmatic shift required at national scale to provide reassurance SV does not have adverse impacts/effects?	The proposed interventions are targeted at those geographies (Durango, Lacandon Jungle, and Balsas-South Pacific) where GEF support can generate global biodiversity benefits and demonstrate opportunities for producing positive environmental benefits within the CONAFOR?s *Support Programme for Sustainable Forest Development*. As such, Project Indicator 1 has been revised as follows: ?% of CONAFOR planning instruments operating in each bioforestry corridor (BFC) with territorial governance arrangements in place to facilitate an integrated view of the landscape and connectivity in each of the three territories? for which the target is 100% by Project End. Furthermore, the project will ensure that the regulatory framework of CONAFOR?s *Support Programme for Sustainable Forest Development* and institutional strategies are strengthened and harmonized to enable the generation of multiple environmental and socioeconomic benefits not only in the project?s intervention areas, but eventually for all territories where the *Programme* is implemented.	

What are the assumptions/requirements to ensure this project will have positive transformational impact on SV as a whole?	Please see the project's theory of change and the assumptions identified.	
Is there reassurance/confidence that the responsible ministry for SV (Bienestar) will take on board the changes that may be recommended as a result of this project?	CONAFOR is the new Executing Agency for this project. It is the responsible ministry for the project?s base programme, *Support Programme for Sustainable Forest Development,* and is fully supportive of the project.	

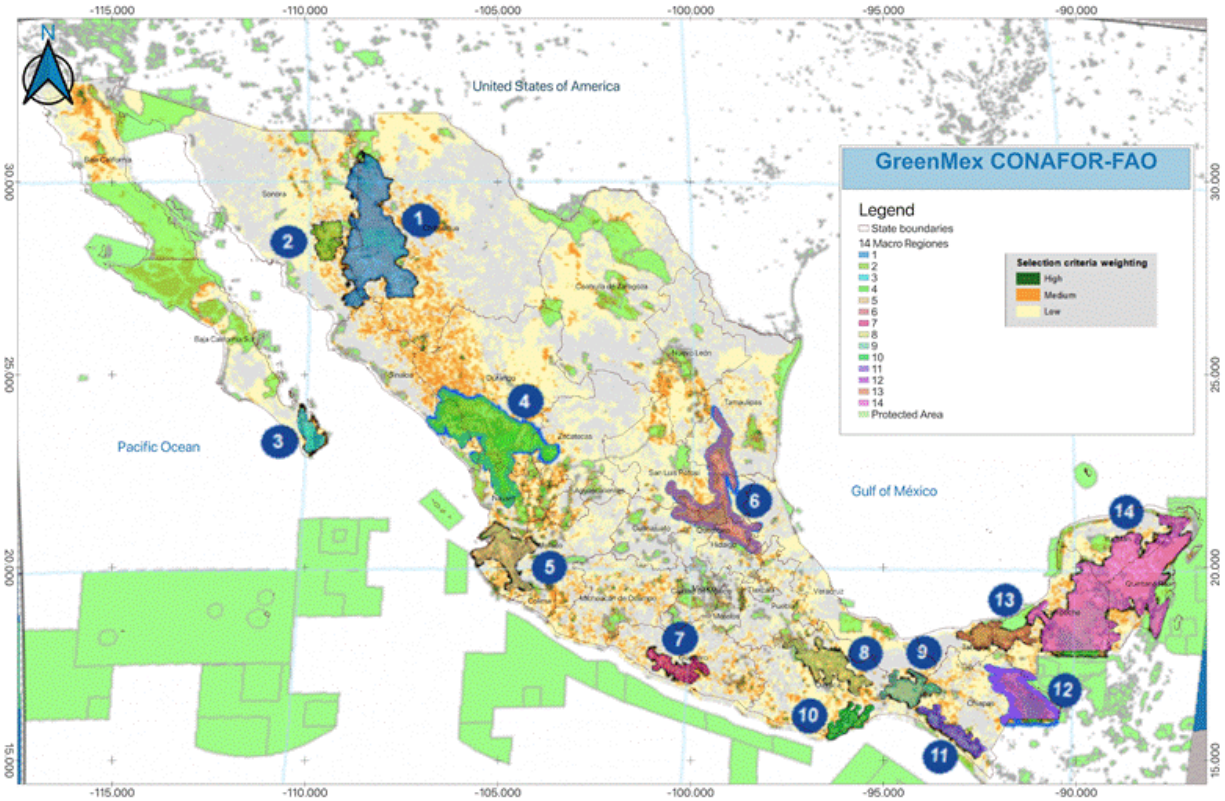
ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF:			
Project Preparation Activities Implemented	***GETF/LDCF/SCCF Amount ($)***		
	Budgeted Amount	***Amount Spent to date***	***Amount Committed***
Activity 1: Analysis of the current institutional and regulatory framework and definition of institutional baselines related to the project, including co-financing	45,000	32,391	12,609
Activity 2: Measurement of baseline indicators in the three areas of intervention, productive diversification and evaluation of socio-environmental and climatic risks	90,000	64,783	25,217
Activity 3: Economic analysis and market opportunities of social economy organizations -	75,000	64,783	10,217

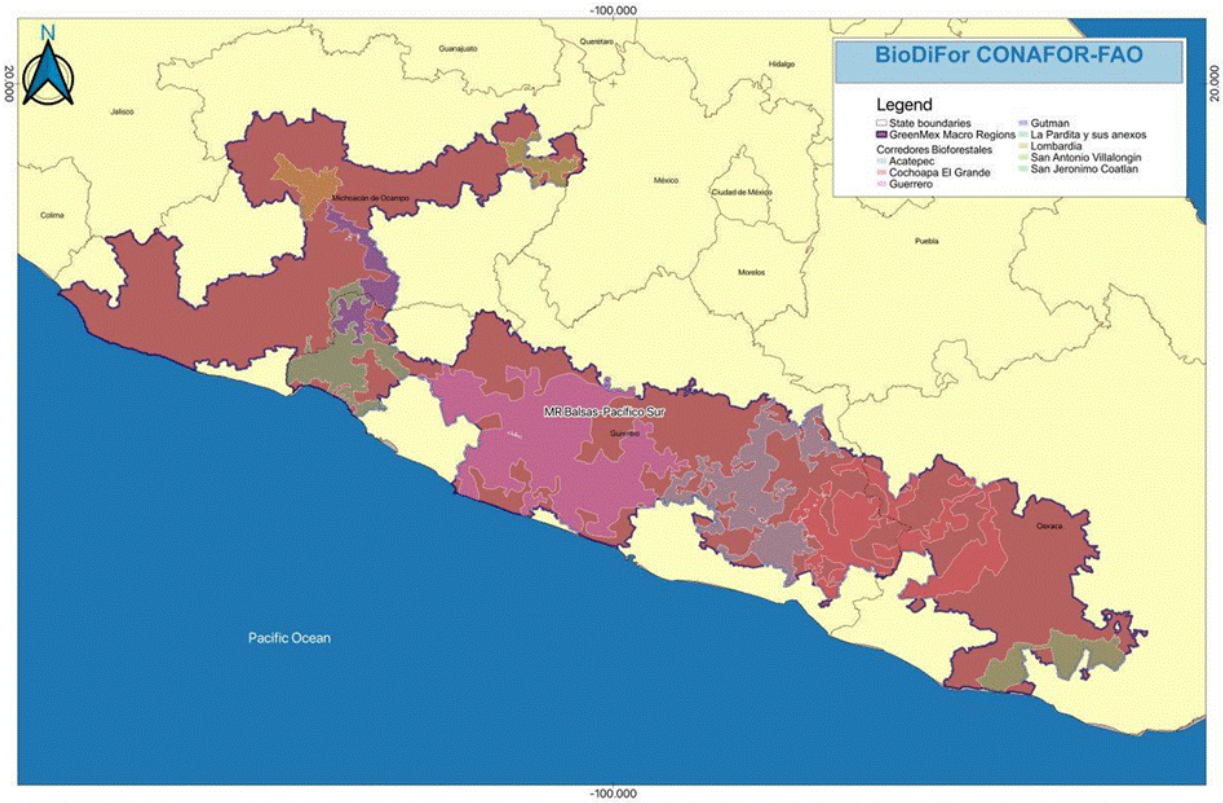
Activity 4: Design of institutional arrangements, coordination mechanisms and execution of the project	30,000	21,594	8,406
Activity 5: Consultations with key actors and incorporation of the gender perspective -	30,000	10,797	19,203
Activity 6: Synthesis of information, integration of the project document and formulation of the budget	30,000	21,594	8,406
Total	**300,000**	**215,942**	**84,058**

ANNEX D: Project Map(s) and Coordinates

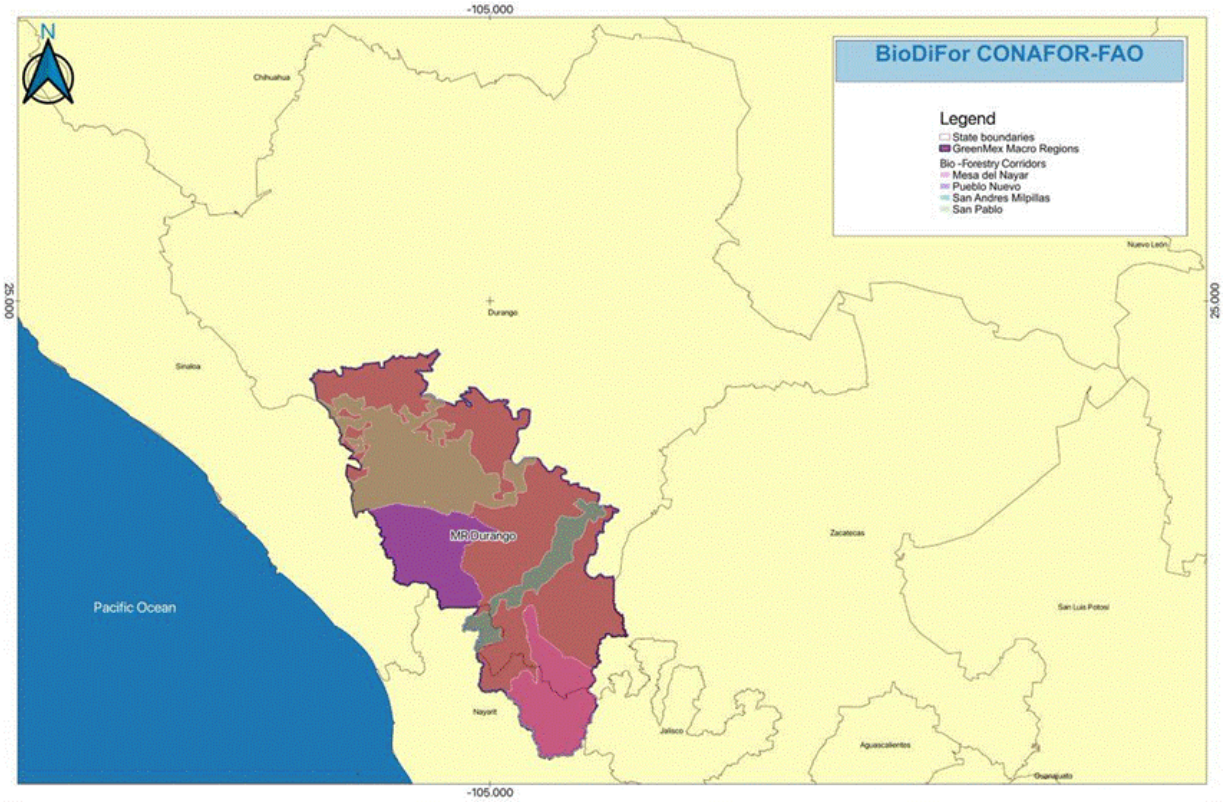
Please attach the geographical location of the project area, if possible.



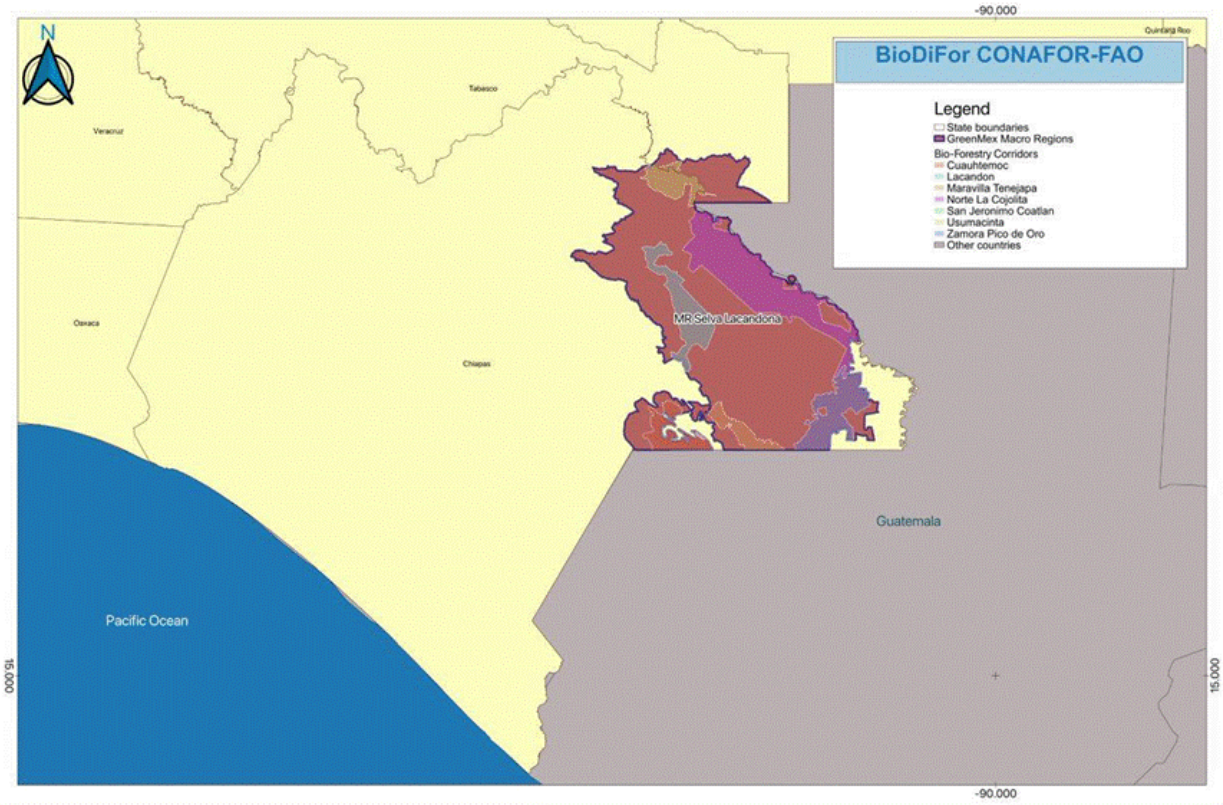
Map 10. Macroregions of high biodiversity in Mexico, identified in the first phase of geospatial analysis for the prioritization of territories where the project will be active.



Map 11. Balsas-South Pacific macroregion and the eight proposed bioforestry corridors.



Map 12 Durango macroregion and the four proposed bioforestry corridors



Map 13 Lacandon Jungle macroregion and the seven proposed bioforestry corridors

ANNEX E: Project Budget Table

Please attach a project budget table.

	C1	C2	C3	C4	Subtotal	M&E	PMC	Total	CONAFOR	FAO	Total GEF
5013 Consultants											
Chief Technical Advisor	0	0	0	0	0		201,846	201,846	201,846		201,846
Financial?Administrative Specialist	0	0	0	0	0		84,548	84,548	84,548		84,548
Procurement specialist	0	0	0	0	0		78,717	78,717	78,717		78,717
Monitoring and Evaluation Expert	13,050	13,050	0	104,400	130,500	130,500		130,500		130,500	130,500

Climate and Environmental Risk Specialist	0	20,602	0	82,406	103,008			103,008		103,008	103,008
Social Safeguards, Gender and Indigenous Peoples Specialist	30,902	15,451	20,602	36,053	103,008			103,008		103,008	103,008
Strategic Support Officer	79,109	15,822	31,644	31,644	158,219			158,219		158,219	158,219
Solution Specialist	24,121	54,273	30,152	12,061	120,606			120,606		120,606	120,606
Access to finance expert	0	0	69,971	0	69,971			69,971	69,971		69,971
Knowledge Management Expert	31,487	3,936	11,808	31,487	78,717			78,717	78,717		78,717
Communication Expert (CE)	15,743	3,936	19,679	39,359	78,717			78,717	78,717		78,717
Integrated Landscape Management Specialist	61,224	171,429	0	12,245	244,898			244,898	244,898		244,898
Conservation/Restoration Specialist	41,983	167,930	0	0	209,913			209,913	209,913		209,913
Governance specialist	24,490	41,983	3,499	0	69,971			69,971	69,971		69,971
Market Access Expert	0	0	199,417	10,496	209,913			209,913	209,913		209,913
Local Forestry Development Promotor?a Facilitators	663,848	1,593,236	398,309	0	2,655,394			2,655,394	2,655,394		2,655,394
Local New Voluntary Conservation Areas Facilitators		391,156	0	0	391,156			391,156	391,156		391,156
Sub-total national Consultants	985,958	2,492,803	785,079	360,150	4,623,990	130,500	365,112	4,989,102			
Impact assesment	40,000		0	0	40,000			40,000		40,000	40,000
Sub-total international Consultants	40,000	0	0	0	40,000	0	0	40,000			
5013 Sub-total consultants	**1,025,958**	**2,492,803**	**785,079**	**360,150**	**4,663,990**	**130,500**	**365,112**	**5,029,102**	**4,373,761**	**655,341**	**5,029,102**

5014 Contracts									0		0
Contract 2: Output 1.1.3 Information gathering and geospatial data analysis	110,000	0	0	0	110,000			110,000		110,000	110,000
Contract 3: Output 1.1.3 Greenhouse gas monitoring	135,896	0	0	0	135,896			135,896	135,896		135,896
Contract 4: Output 3.1.1 value chains maps by product and services : 1) timber, 2) non-timber, 3) honey (including melipona), 4) nature tourism, 5) handicrafts, and 6) agriculture (agroforestry systems) 7. .	0	0	51,020	0	51,020			51,020	51,020		51,020
Contract 5: Market studies in bioforest corridors and feasibility analysis for the commercialization of biodiversity products	0	0	29,155	0	29,155			29,155	29,155		29,155
Contract 6:Differentiation mechanisms including a communication strategy aimed at the final consumer.	0	0	97,182	0	97,182			97,182	97,182		97,182

Contract 7: Feasibility analysis and study involving local financial engineering in the BFCs, to create a proposal for inclusive schemes for access to finance (savings and credit) with a gender perspective and criteria for sustainable uses of the BD, operated by social and development banks, considering savings as an NBS-related investment vehicle.	0	0	145,773	0	145,773			145,773	145,773		145,773
Contract 8: Training programme on e-commerce, use of platforms and digital marketing for social economy organizations.	0	0	29,155	0	29,155			29,155	29,155		29,155

Contract 9: Feasibility analysis and study involving local financial engineering in the BFCs, to create a proposal for inclusive schemes for access to finance (savings and credit) with a gender perspective and criteria for sustainable uses of the BD, operated by social and development banks, considering savings as an NBS-related investment vehicle.	0	0	19,436	0	19,436			19,436	19,436		19,436
Contract 10: Design of tools and methodologies to identify, support and evaluate green and inclusive business development projects.	0	0	9,718	0	9,718			9,718	9,718		9,718
Contract 11: Professional services - Audiovisual edition for capsules for results dissemination	0	0	53,450	0	53,450			53,450	53,450		53,450

Output 3.1. Development of tools and/or methodologies for implementing business models (tools for production, management and marketing and methodologies for market prospecting-formation of clusters, promotion and communication) (Beneficiary Grants)	0	0	2,000,000	0	2,000,000			2,000,000		2,000,000	2,000,000
Mid-Term Review	0	0	0	50,000	50,000	50,000	-	50,000		50,000	50,000
Terminal Evaluation	0	0	0	80,000	80,000	80,000	-	80,000		80,000	80,000
Executing Partner Fiduciary Review (Audit)	0	0	0	0	0	0	45,125	45,125		45,125	45,125
Control Agreement (spot checks)	0	0	0	0	0	0	21,375	21,375		21,375	21,375
Terminal Report	0	0	0	0	0	0	6,550	6,550		6,550	6,550
5650 Sub-total Contracts	245,896	0	2,434,888	130,000	**2,810,784**	130,000	**73,050**	2,883,834	**570,784**	**2,313,050**	**2,883,834**
5021 Travel									0		0
National Travel of Local Forestry Development Promotor?a Facilitators (~40 Trips * 44 Field Project consultants)	366,514	366,514	122,171	0	855,199	0	0	855,199	855,199	0	855,199
National Travel of Field National Unit (~45 Trips * 10 consultants)	196,793	131,195	0	0	327,988			327,988	327,988		327,988

National Travel ATP (~50 Trips)	0	0	0	0	0		24,295	24,295	24,295		24,295
National Travel PMU (~50 Trips)	0	0	0	24,295	24,295	0	0	24,295	24,295	0	24,295
National Travel of institutions (~50 Trips)	24,295	0	0	0	24,295	0	0	24,295	24,295	0	24,295
National Travel of for planning & training events (~10 Trips * 10 consultants)	0	0	0	48,591	48,591			48,591	48,591		48,591
National Travel of Field Project consultants (~40 Trips * 44 Local New Voluntary Conservation Areas Facilitators)	0	50,986	0	0	50,986			50,986	50,986		50,986
5021 Sub-total travel	587,602	548,695	122,171	72,886	**1,331,355**	**0**	**24,295**	**1,355,650**	**1,355,650**	**0**	**1,355,650**
5023 Training			0	0	0				0		0
Inception Workshop	0	0	0	16,681	16,681	13,925	0	16,681	16,681	0	16,681
Mid Term Workshop	0	0	0	16,681	16,681	13,925	0	16,681	16,681	0	16,681
Final Workshop	0	0	0	16,682	16,682	13,926	0	16,682	16,682	0	16,682

Output 1.1 Participatory construction with key stakeholders for the inclusion of key BD and integrated landscape management (ILM) criteria: State Forest Councils (regional policies), National Forest Council (climate change, biodiversity and plenary committee) and officials, outreach workers and academic institutions, for participatory construction and inclusion of key BD and IPM criteria in regional policies.	1,458	0	0	0	1,458			1,458	1,458		1,458
Output 1.1.2 National (1) and regional interinstitutional dialogues (3) to identify opportunities for interinstitutional coordination and synergy.	9,718	0	0	0	9,718			9,718	9,718		9,718
Output 1.1.2 Dialogues between different actors in bioforestry corridors.	13,120	0	0	0	13,120			13,120	13,120		13,120

Output 1.1.2 Dissemination of strategies and monitoring of action implementation in territorial interinstitutional governance bodies.	7,289	0	0	0	7,289			7,289	7,289		7,289
Output 1.2.1 Diagnosis and analysis meetings : a) of CONAFOR?s territorial management model; b) governance structures in the territories; and c) problems in the territories	4,373	0	0	0	4,373			4,373	4,373		4,373
Output 1.2.1 Strategy design: planning and elaboration of the work plan (working meetings with the strategic actors)	6,803	0	0	0	6,803			6,803	6,803		6,803
Output 1.2.2 Implementation of the training programme (local development forestry Promotor?as, forestry promotores, producers and producer companies)	41,983	0	0	0	41,983			41,983	41,983		41,983
Output 2.1.1: Bioforestry corridors validation wokshops with key stakeholders	0	13,120	0	0	13,120			13,120	13,120		13,120

Output 2.1.1 Raise the awareness of and train forest Promotor?as, project and institutional technicians on bioforestry corridors for the implementation of the connectivity strategy. (6 workshops: 2 x region).	0	4,373	0	0	4,373			4,373	4,373		4,373
Output 2.1.1 Promotion, awareness-raising and strengthening of governance bodies accredited in the territories for the implementation of bioforestry corridors	0	13,120	0	0	13,120			13,120	13,120		13,120
Output 2.1.2 Setting up of forest learning communities (FLCs) at the level of each Bioforestry Corridor	0	17,493	0	0	17,493			17,493	17,493		17,493
Output 2.1.1, 2.1.2, 3.1 Diagnosis and participatory planning		21,429	9,184	0	30,612			30,612	30,612		30,612

Output 2.1.2 / Output 2.1.4 Setting up of producer networks on Type 2 applied forestry agricultural NBSs / Knowledge exchanges between schools?hubs at macroregional level Tours, workshops,	0	594,752	0	0	594,752			594,752	594,752		594,752
Output 3.1.3 Creation of an exchange network of social enterprises with experience in marketing certified products.	0	0	5,831	0	5,831			5,831	5,831		5,831
Output 3.1.3 Organization of a discussion forum to establish clear strategies for linking certified products to sustainable markets.	0	0	5,831	0	5,831			5,831	5,831		5,831
Output 3.1.3 Establishment of an inter-institutional panel with entities that support and promote certification and differentiation mechanisms.	0	0	8,746	0	8,746			8,746	8,746		8,746

Output 3.2.3 Enter into three private or public sector agreements to strengthen value chains in the BFCs and to promote the financial inclusion of social economy organizations.	0	0	14,577	0	14,577			14,577	14,577		14,577
Output 4: Community consultations, FPIC process, stakeholder mapping, definition of stakeholders in the areas of intervention	0	0	0	13,120	13,120			13,120	13,120		13,120
Output 4.1.3 Capacity building - information for decision-making platform	0	0	0	4,373	4,373			4,373	4,373		4,373
Output 4.1.1 Project team planning and monitoring workshops	0	0	0	48,591	48,591			48,591	48,591		48,591
5023 Sub-total training	84,742	664,286	44,169	116,128	**909,325**	41,776	0	**909,325**	**909,325**	**0**	**909,325**
5024 Expendable procurement			0	0	0				0		0
Stationery and dworkshop materials	0	51,813	0	0	51,813		41,337	93,150.00	93,150		93,150
Virtual meeting licenses		1,000		0	1,000			1,000	1,000		1,000
Dissemination materials (posters, infographics, manuals, booklets)	0	10,000	0	0	10,000			10,000	10,000		10,000
5024 Sub-total expendable procurement	0	62,813	0	0	**62,813**	0	41,337	**104,150**	**104,150**	**0**	**104,150**

5025 non-expendable procurement											
Technological equipment (Computers) for project technical personnel	0	58,747	0	0	58,747	0	0	58,747		58,747	58,747
5025 Sub-total non-expendable procurement	0	58,747	0	0	**58,747**	0	0	**58,747**	**0**	**58,747**	**58,747**
5028 GOE budget (Gastos generales)			0	0	0				0		0
Network Communication Services	0	28,863	0	0	28,863	0		28,863	28,863		28,863
Miscellaneous	0	33,611	0	0	33,611			33,611	33,611		33,611
Mobility expenses (car rentals for field activities)	0	176,385	0	0	176,385	0		176,385		176,385	176,385
6300 Sub-total GOE budget	0	238,859	0	0	**238,859**	0	0	238,859	**62,474**	**176,385**	**238,859**
TOTAL	**1,944,199**	**4,066,202**	**3,386,308**	**679,164**	**10,075,873**	**302,276**	**503,794**	**10,579,667**	**7,376,145**	**3,203,522**	**10,579,667**

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

N/A

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencys is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement

with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

N/A

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).

N/A