



GLOBAL ENVIRONMENT FACILITY  
INVESTING IN OUR PLANET

Naoko Ishii  
CEO and Chairperson

October 19, 2017

Dear Council Member:

UNDP as the Implementing Agency for the project entitled: ***Guatemala: Promoting Sustainable and Resilient Landscapes in the Central Volcanic Chain***, has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with UNDP procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by Council in April 2016 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by UNDP satisfactorily details how Council's comments and those of the STAP have been addressed. I am, therefore, endorsing the project document.

We have today posted the proposed project document on the GEF website at [www.TheGEF.org](http://www.TheGEF.org). If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Naoko Ishii  
Chief Executive Officer and Chairperson

Attachment: GEFSEC Project Review Document  
Copy to: Country Operational Focal Point, GEF Agencies, STAP, Trustee



# GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

For more information about GEF, visit [TheGEF.org](http://TheGEF.org)

## PART I: PROJECT INFORMATION

Project Title: Promoting sustainable and resilient landscapes in the central volcanic chain of Guatemala			
Country(ies):	Guatemala	GEF Project ID: <sup>1</sup>	9059
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5581
Other Executing Partner(s):	Ministry of the Environment and Natural Resources (MARN)	Submission Date:	04 Oct 2017
GEF Focal Area (s):	Multi-focal Areas	Project Duration (Months)	84
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP <input type="checkbox"/>	
Name of Parent Program	[if applicable]	Agency Fee (\$)	1,003,004

### A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES<sup>2</sup>

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in \$)	
			GEF Project Financing	Co-financing
BD-1 Program 1	Outcome 1.1. Increased revenue for protected area systems and globally significant protected areas to meet total expenditures required for management. Outcome 1.2: Improved management effectiveness of protected areas.	GEFTF	2,232,765	9,181,000
BD-4 Program 9	Outcome 9.1 Increased area of production landscapes and seascapes that integrate conservation and sustainable use of biodiversity into management	GEFTF	2,702,821	11,095,000
LD-2 Program 3	Outcome 2.2: Improved forest management and/or restoration <sup>[LSEP]</sup>	GEFTF	2,494,079*	10,245,000
SFM-1	Outcome 2: Innovative mechanisms avoid the loss of high conservation value forest <sup>[LSEP]</sup>	GEFTF	1,857,416	7,655,101
SFM-2	Outcome 3: Increased application of good management practices in all forests by relevant government, local community (both women and men) and private sector actors.	GEFTF	1,857,416	7,655,101
<b>Total project costs</b>			<b>11,144,497</b>	<b>45,831,202</b>

\* The project will be applying the STAR partial flexibility mechanism of GEF-6 resources: CCM STAR allocation (US \$2,000,000) is being channeled to LD for a total of \$2,770,000 for this focal area. Amounts allocated to the FSP including fees are shown in Tables D and E.

### B. PROJECT DESCRIPTION SUMMARY

<b>Project Objective:</b> To mainstream biodiversity conservation and sustainable land management objectives into production landscapes of the Central Volcanic Mountain Range in Guatemala, contributing to the welfare of local populations and the delivery of multiple global environmental benefits.						
Project Components / Programs	Type <sup>3</sup>	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Confirmed Co-financing
1. Development of	TA	- Farmers agree to adopt	Certified and non-certified	GEFTF	2,091,620	8,816,240

<sup>1</sup> Project ID number remains the same as the assigned PIF number.

<sup>2</sup> When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#) and [CBIT programming directions](#).

<sup>3</sup> Financing type can be either investment or technical assistance.

<p>an enabling environment for the delivery of multiple global environmental benefits through models of sustainable agriculture/non-timber forest production and economic incentives derived from improved markets and ecosystem services</p>	<p>sustainable production practices that lead to the certification and non-certification of 78,679 hectares (ha) (these production practices will be implemented through Component 2).</p> <ul style="list-style-type: none"> <li>– Two (2) projects for payments for watershed services (PWS) that generate environmental benefits (conservation of biodiversity and forests) at the local level and contribute to the well-being of small landowners and farmers (the two PWS projects will implemented in Component 2).</li> <li>– Two (2) projects for compensation for carbon sequestration and restoration certified and verified provide additional income to small landowners (the two projects will implemented in Component 2).</li> <li>– Increase in net income of beneficiaries: a) Municipalities: Up to \$24.72/household per year resulting from PWS pilot projects and users' willingness to pay; b) land/production unit owners: up to US \$34.62/ha/year, equal to 8,656 tons/ha/year of sequestered carbon (standing forest); c) small landowners and farmers: Up to 10.2% for agricultural and certified and non-certified agriculture/_non-timber forest products (NTFP).</li> <li>– Capacity of small producers and farmers increased by up to 18% for the implementation of biodiversity-friendly production practices, SFM and SLM as measured through UNDP capacity development indicators.</li> </ul>	<p><u>agriculture/ NTFP systems:</u></p> <ul style="list-style-type: none"> <li>– Certification systems for agricultural products and NTFP</li> <li>– Improved marketing strategies and protocols for certified and non-certified agricultural products and NTFP</li> <li>– Competitiveness incentive program (e.g., preferential buying from project areas, price premiums, and extension services) promote the production of certified and non-certified products and increase income opportunities for small farmers derived from the adoption of biodiversity-friendly production practices</li> <li>– Financial and profitability analysis compares the income from control group production units with income from certified project production units</li> </ul> <p><u>SFM incentives:</u></p> <ul style="list-style-type: none"> <li>– Carbon sequestration certification and verification program in place following the CDM methodological framework.</li> <li>– Platform for facilitating access to incentives programs (e.g., PINPEP, PROBOSQUE, others) supporting farmers implementing reforestation actions and the mix of native trees and agricultural systems to enhance environmental services (hydrological regulation, biodiversity habitat, carbon storage, and soil protection).</li> </ul> <p><u>Payments for Watershed Services (PWS):</u></p> <ul style="list-style-type: none"> <li>– Payment system (compensation/recognition) for watershed services in place that benefits users and providers.</li> </ul>	<p>969,426 (BD) 436,242 (LD) 685,952 (SFM)</p>	
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			<ul style="list-style-type: none"> <li>– Technical guideline for watershed-related payments (compensation/recognition) designed</li> <li>– Protocols and enhanced capacity of environmental authorities for planning and monitoring PWS projects</li> <li>– Benefit-sharing mechanism for watershed-related payments (compensation/ recognition)</li> </ul> <p><u>Capacity development:</u></p> <ul style="list-style-type: none"> <li>– Training program increases local knowledge and skills (2,780 small producers and farmers [beneficiaries] differentiated by gender trained by project end) regarding: <ul style="list-style-type: none"> <li>a) standards for certification of biodiversity- and forest-friendly production; forestry incentives, including carbon sequestration and compensation; and methods, standards, and procedures related to PWS;</li> <li>b) business management (e.g., business plan development and basic accounting) of certified and non-certified products, forestry incentives, and PWS; and,</li> <li>c) M&amp;E of certified and non-certified production systems, forestry incentives, and PWS</li> </ul> </li> <li>– Participatory monitoring program to assess biodiversity conservation, SFM, and SLM, harmonized with national and local monitoring programs</li> </ul>			
2. Delivering multiple environment benefits by connecting core protected areas within sustainably managed production landscapes in the	TA	<ul style="list-style-type: none"> <li>– Strengthen ecosystem structure and functionality of forests in the central volcanic range in Guatemala through: <ul style="list-style-type: none"> <li>a) 73,076 tCO<sub>2</sub>-eq sequestered through restoration of 4,500 ha</li> </ul> </li> </ul>	<p><u>Ecosystem connectivity:</u></p> <ul style="list-style-type: none"> <li>– Land use planning strategy supports the implementation and/or strengthening of 31 diversified nurseries, improves production and access to native germplasm</li> </ul>	GEFTF	7,909,617 3,461,357 (BD) 1,800,863 (LD) 2,647,397 (SFM)	34,182,510

Central Volcanic Mountain Chain in Guatemala		<p>of degraded forests using native species, natural regeneration, and landscape management tools (biological corridors, forest enrichment, live fences, windbreaks, etc.)</p> <p>b) 52,045.5 ha of biological corridors connect agriculture /forestry production systems with protected areas.</p> <p>c) 19% reduction in deforestation (1,154 ha) in selected landscapes of the central volcanic range: 247,734.6 tCO<sub>2</sub>-eq over a 7-year period (i.e., project duration).</p> <p>d) 78,679 ha of certified and non-certified agriculture/forest production systems (including agroforestry systems in coffee landscapes)</p> <ul style="list-style-type: none"> <li>- Stable populations of indicator species (mammals, birds, and amphibians; species listed in Annex A) as a result of enhanced connectivity facilitated by the biological corridors after seven years.</li> <li>- Improvement of the management effectiveness score of the target Municipal Regional Parks (MRP) (measured by METT) within the pilot landscape: <ul style="list-style-type: none"> <li>a) Tecpán MRP: from 22 to 37</li> <li>b) – Quetzaltenango MRP: from 38 to 49</li> <li>c) Zunil MRP: from 32 to 41</li> <li>d) Esquipulas Palo Gordo MRP: from 37 to 47</li> <li>e) San Cristóbal Cucho MRP: from 35 to 45</li> </ul> </li> <li>- Decrease in 28.12% in</li> </ul>	<p>for agroforestry and silvopastoral systems; ensures soil stabilization; and contributes to the connectivity of biological corridors</p> <ul style="list-style-type: none"> <li>- Voluntary agreements through different participatory conservation models (e.g., privately owned farms, landowners, communal lands, etc.) used for establishing landscape management tools (i.e., biological corridors, forest enrichment for conservation and fuelwood management, natural regeneration, reforestation, rehabilitation of riparian forests, live fences, windbreaks, etc.), to strengthen ecosystem connectivity and reduce deforestation in production and natural landscapes</li> <li>- Participatory SLM plans for the middle and upper sections of six (6) watersheds (229,831.87 ha) include measures to reduce soil degradation and contribute to enhancing ecosystem connectivity</li> <li>- Participatory energy-efficient stoves program reduces firewood consumption and greenhouse gas (GHG) emissions</li> <li>- Production plans and protocols support the implementation of certified and non-certified sustainable agricultural and NTFP production practices in project sites (private farms, community forests, etc.), at the same time they enhance ecosystem connectivity</li> <li>- Five (5) participatory management plans for MRPs strengthen local management, conservation, monitoring and control, and integration of the PAs into the biocultural landscape</li> </ul>			
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		<p>the financial gap to cover basic management costs and investments in 5 MPRs as a result of new PA financing mechanisms (e.g., payment for ecosystem services [PES] and sustainable tourism).</p> <ul style="list-style-type: none"> <li>– Increase in the management and technical capacity of 200 PA officials, municipal officials, and members of the private sector and as measured by UNDP capacity development indicators: <ul style="list-style-type: none"> <li>a) Municipal PA staff: 12%</li> <li>b) CONAP: 16%</li> <li>c) Private sector: 11%</li> <li>d) Other municipal officials: 18%</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>– Six (6) proposals for the categorization of national-level PAs (Permanent Closure Zone [PCZ]) and two (2) proposals for the recategorization of National Parks [NP], developed in a participatory manner, include technical feasibility studies considering current national-level categories of the National Park System – SIGAP), thus contributing to the conservation and sustainability of the areas</li> <li>– Financing mechanisms for the management of five (5) MRPs covering 13,662.57 ha implemented, including PES and sustainable tourism</li> <li>– Conservation and management program for three priority areas (4,655.3 ha) for the protection of species of amphibians (San Rafael Pie de la Cuesta MRP, San Marcos; San Pedro Sacatepéquez MRP, San Marcos; and Zunil MRP, Quetzaltenango)</li> </ul> <p><u>Capacity development:</u></p> <ul style="list-style-type: none"> <li>– Strengthened institutional capacity program for national and regional officials and field personnel (PA staff; environmental, forestry, and agricultural officials) to support the sustainable management and conservation of biodiversity in production landscapes, the use of SFM and SLM methodologies and tools, and the quantification and evaluation of reduced deforestation</li> <li>– Development planning for 31 municipalities incorporates principles for biodiversity conservation, SFM, SLM, sustainable agriculture, and gender, and their implementing measures</li> <li>– Thirty-one (31)</li> </ul>			
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			<p>environmental/forestry municipal offices with basic equipment and skilled staff for control, surveillance, and reduction of threats to biodiversity, soils, and forests, and gender equality and social inclusion</p> <ul style="list-style-type: none"> <li>– Training and logistical support provided to municipal environmental authorities for implementing biodiversity conservation, SFM, and SLM, as well as their enforcement capabilities</li> <li>– Municipal-level monitoring and enforcement system facilitates decision-making and the assessment of SFM, SLM, and biodiversity conservation benefits in the prioritized landscapes in the Central Volcanic Mountain Range, and articulated with the national monitoring systems</li> </ul>			
3. Knowledge Management and Monitoring and Evaluation (M&E)	TA	<ul style="list-style-type: none"> <li>– Ten (10) publications that document successful experiences about the mainstreaming of objectives of biodiversity conservation, SFM, and SLM in sustainable production landscapes and biological corridors in the Central Volcanic Mountain Chain.</li> <li>– Website serves as a virtual knowledge platform for disseminating information about the project</li> </ul>	<ul style="list-style-type: none"> <li>– The experiences and lessons learned from mainstreaming biodiversity conservation and sustainable land management objectives into production landscapes of the Central Volcanic Mountain Range in Guatemala systematized</li> <li>– Thematic studies and other knowledge are documented, and communication and public awareness raising materials with a gender perspective produced and available for dissemination</li> </ul>	GEFTF	612,570 275,657 (BD) 134,765 (LD) 202,148 (SFM)	650,000
Subtotal					10,613,807	43,648,750
Project Management Cost (PMC) <sup>4</sup>				GEFTF	530,690	2,182,452
<b>Total project costs</b>					<b>11,144,497</b>	<b>45,831,202</b>

### C. CONFIRMED SOURCES OF [CO-FINANCING](#) FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for [co-financing](#) for the project with this form.

<sup>4</sup> For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount (\$)
Recipient Government	Ministry of the Environment and Natural Resources (MARN)	In-kind	1,946,192
Recipient Government	Ministry of the Environment and Natural Resources (MARN)	Grants	4,578,289
Recipient Government	National Council on Protected Areas (CONAP)	In-kind	22,981,608
Recipient Government	National Council on Protected Areas (CONAP)	Grants	763,826
CSO	Asociación Sotz'il	In-kind	50,000
CSO	Asociación Sotz'il	Grants	450,000
Donor Agency	Fondo para la Conservación de Bosques Tropicales (FCA)	In-kind	500,000
Private Sector	Private Institute for Climate Change Research (ICC)	In-kind	183,231
Private Sector	Private Institute for Climate Change Research (ICC)	Grants	231,765
Private Sector	Guatemalan National Coffee Association (ANACAFE)	In-kind	2,630,118
CSO	Association of Private Natural Reserves of Guatemala (ARNPG)	In-kind	8,590,980
CSO	Association of Private Natural Reserves of Guatemala (ARNPG)	Grants	90,627
GEF Agency	UNDP	Grants	2,834,566
<b>Total Co-financing</b>			<b>45,831,202</b>

**D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS**

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee <sup>a)</sup> (b) <sup>2</sup>	Total (c)=a+b
UNDP	GEF TF	Guatemala	Biodiversity	(select as applicable)	4,935,586	444,203	5,379,789
UNDP	GEF TF	Guatemala	Land Degradation	(select as applicable)	2,494,079	224,467	2,718,546
UNDP	GEF TF	Guatemala	SFM	SFM	3,714,832	334,334	4,049,166
<b>Total Grant Resources</b>					<b>11,144,497</b>	<b>1,003,004</b>	<b>12,147,501</b>

a ) Refer to the Fee Policy for GEF Partner Agencies



## E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS<sup>5</sup>

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	52,045.5 hectares
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	229,831.87 hectares

## F. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? No

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/CBIT Trust Fund) in Annex D.

## PART II: PROJECT JUSTIFICATION

### A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF<sup>6</sup>

A.1. *Project Description*. Elaborate on:

- 1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed. NA
- 2) The baseline scenario or any associated baseline projects. NA
- 3) The proposed alternative scenario, GEF focal area<sup>7</sup> strategies, with a brief description of expected outcomes and components of the project.

1. A description of the project's outputs and activities is included in Section III: Results and Partnerships of the GEF-UNDP project document.

4) Incremental/additional cost reasoning and expected contributions from the baseline, the GEF TF and co-financing.

2. The project design is closely aligned to the original PIF. The structure of the project components closely resembles the PIF that was approved by the GEF. However, as per UNDP guidelines regarding Knowledge Management and M&E, a stand-alone Component 3 was included in the project results framework and also in the total budget and work plan. This component outlines the knowledge management strategy of the project focusing on the production of knowledge products, and the wider communication and dissemination of project lessons and experiences to support the replication and scaling-up of project results. In addition, minor changes were made to the project's outputs, which do not represent a departure from the project's strategy as defined originally in the PIF nor will they have an impact on the funds originally budgeted; these change can be observed in Section II: Strategy of the GEF-UNDP Project Document.

### *Baseline Scenario*

<sup>5</sup> Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the GEF-6 Programming Directions, will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

<sup>6</sup> For questions A.1 –A.7 in Part II, if there are no changes since PIF, no need to respond, please enter "NA" after the respective question.

<sup>7</sup> For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which Aichi Target(s) the project will directly contribute to achieving..

3. Although important investments will be made under the “business as usual” scenario, these investments alone will not overcome the barriers that currently prevent mainstreaming biodiversity conservation and sustainable land management objectives into production landscapes of the Central Volcanic Mountain Range in Guatemala and the delivery of multiple global environmental benefits. The baseline programs include multiple investments that are planned for the 2018-2025 period.

4. Existing and planned investments for baseline programs and activities for the 2018-2025 time period are estimated at USD \$55,464,136. Baseline activities include a total of USD \$9,647,436 by CONAP for PA-related operations and investments. INAB will invest USD \$6,609,983 through the PINPEP and PROBOSQUE incentives programs (reforestation and natural forest management) and support to Municipal Forestry Offices and training in forestry management and control of forest fires. In addition, the MARN will invest USD \$7,380,720 to reduce land degradation and support sustainable agricultural practices. It will also make investments for the development of policies, strategies and programs and/or projects on climate change mitigation, including USD \$121,131 in the preparation of the National REDD+ strategy and USD \$852,000 for the Third National Communication on Climate Change (2018-2021), the latter with funds provided by the GEF. The MARN will also invest in the region USD \$152,611 in socio-environmental training and awareness-raising actions.

5. Other baseline investment include: a) Ministry of Agriculture and Livestock (MAGA): USD \$16,954,414 in agricultural and forestry training and extension services that will help reduce soil degradation, increase soil carbon stocks, and promote SLM; b) Helvetas Guatemala: USD \$556,359 to reduce threats to biodiversity and water resources and improve local governance of water resources management; c) National Coffee Association (ANACAFE): USD \$6,313,333 to support sustainable coffee production; d) Guatemalan Exporters Association (AGEXPORT): USD \$4,000,000 to support rural value chains for sustainable products; e) CARE Foundation: USD \$166,779 for the conservation of biodiversity and restoration of connectivity of the Sierra María Tecún cloud forest; f) Guatemalan Institute of Tourism (INGUAT): USD \$2,526,910 for the conservation of forests and biodiversity outside and within protected areas through a Regional Community Tourism Maya Project; and g) the Tropical Agronomic Research and Teaching Center (CATIE): USD \$182,460 for the conservation and sustainable management of the natural ecosystems in the Acatenango-Fuego volcanic complex.

#### *GEF Increment to Generate Global Benefits*

6. Component 1: The alternative GEF scenario will facilitate an enabling environment to implement models of sustainable agriculture/forestry production and economic incentives derived from improved markets and ecosystem services. Incremental financing will be in the amount of \$10,907,860 USD; USD \$2,091,620 will be provided by the GEF and USD \$8,816,240 will be provided by co-financing sources. The GEF alternative will include investments from the MARN, CONAP, FCA, ICC ANACAFE, ARNPG, and UNDP. Investments will be directed to the design of models of sustainable agriculture and forestry production and economic incentives derived from improved markets and ecosystem services; project’s global environmental benefits will be delivered through Component 2.

7. Component 2: The alternative GEF scenario will deliver multiple environment benefits by connecting core protected areas within sustainably managed production landscapes in the Central Volcanic Mountain Range in Guatemala. The incremental financing expected for this component is USD \$42,092,126; USD \$7,909,617 will be provided by the GEF and USD \$34,182,509 will be provided by co-financing sources. The GEF alternative will include investments from the MARN, CONAP, Asociación Sotz’il, FCA, ICC ANACAFE, ARNPG, and UNDP.

8. Component 3: Knowledge management and M&E. The knowledge management strategy of the project is outlined in this component, which has a total cost of USD \$1,262,570, out of which GEF will provide USD \$ 612,570 and the cofinancing sources will provide USD \$650,000.

9. Project management costs amount to USD \$2,713,142, out of which GEF will provide USD \$530,690 and the co-financing sources will provide USD \$2,182,452. The GEF alternative has a total cost of USD \$112,439,835, 9.9% of which will be provided by GEF (excluding PPG funds).

#### 5) [Global environmental benefits](#) (GEFTF):

10. The project’s global environmental benefits include:

- 78, 679 hectares (ha) of certified and non-certified agriculture/forest production systems.
- Key ecosystems that provide ecosystem services are conserved and used in a sustainable manner.
- Stable populations of indicator species (mammals, birds, amphibians, and plants) in forest/agricultural landscapes after seven years (project duration).
- Enhanced Biological corridors (52,045.5 ha) provide connectivity to forest remnants and contribute to the conservation to biological important areas of the Central Volcanic Mountain Range of Guatemala.
- Species of global importance benefited include: the horned guan (*Oreophaps derbianus*), the highland guan (*Penelopina nigra*), the quetzal (*Pharomachrus mocinno*), the pink-headed warbler (*Ergaticus versicolor*), the golden-cheeked warbler (*Dendroica chrysoparia*), the azure-rumped tanager (*Tangara cabanisi*), the Guatemalan fir (*Abies guatemalensis*), and species from the genera *Pinus* and *Quercus*.
- Improved management effectiveness for 5 regional level PAs (13,662.57 ha).
- Carbon sequestration: 73,076 tCO<sub>2</sub>-eq in seven years (reforestation, restoration, and sustainable agroforestry and agricultural systems).
- Reduction in firewood consumption and GHG emissions: 32,662 tCO<sub>2</sub>-e over a seven-year period.
- Six (6) sustainable land management plans (watershed management plans) for the middle and upper sections of 6 watersheds (229,831.87 ha) in the Pacific slope of Guatemala.
- Reduction by 19% (1,154 ha; 247,734.60 tCO<sub>2</sub>-eq by project end) in deforestation in prioritized landscapes in Central Volcanic Mountain Range, including buffer zones of existing PAs.

6) Innovativeness, sustainability and potential for scaling up.

NA

A.2. *Child Project?* If this is a child project under a program, describe how the components contribute to the overall program impact.

No

A.3. Stakeholders. Identify key stakeholders and elaborate on how the key stakeholders engagement is incorporated in the preparation and implementation of the project. Do they include civil society organizations (yes ☒ /no ☐)? and indigenous peoples (yes ☒ /no ☐)? <sup>8</sup>

11. The successful implementation of the project will largely depend on effective communication and coordination with the multiple project stakeholders and the implementation of mechanisms to ensure these stakeholders' participation. The key national stakeholders include MARN, CONAP, MAGA, INAB, ARNPG, among others. At the local level, the most relevant stakeholders are municipalities, municipal development councils (COMUDES), community development councils (COCODES), organizations of small farmers and producers, women groups, local communities, and indigenous peoples. Among the private sector, ANACAFE and FEDECOCAGUA will play an active role in the project. The project's Stakeholder Engagement and Communication Plan is included in Annex K of the GEF-UNDP Project Document and a list of people consulted during project development is included in Annex P of the GEF-UNDP Project Document.

A.4. Gender Equality and Women's Empowerment. Elaborate on how gender equality and women's empowerment issues are mainstreamed into the project implementation and monitoring, taking into account the differences, needs, roles and priorities of women and men. In addition, 1) did the project conduct a gender analysis during project preparation (yes ☒ /no ☐)?; 2) did the project incorporate a gender responsive project results framework, including sex-disaggregated indicators (yes ☒ /no ☐)?; and 3) what is the share of women and men direct beneficiaries (women X%, men X%)? <sup>9</sup>: Women: 48.9%; Men: 51.1%

12. According to the project objective and the proposed actions, it is categorized as *Gender responsive: results addressed differential needs of men or women and equitable distribution of benefits, resources, status and rights but do not address root causes of inequalities in their lives.*

<sup>8</sup> As per the GEF-6 Corporate Results Framework in the GEF Programming Directions and GEF-6 Gender Core Indicators in the Gender Equality Action Plan, provide information on these specific indicators on stakeholders (including civil society organization and indigenous peoples) and gender.

<sup>9</sup> Same as footnote 8 above.

13. The project will incorporate gender considerations into all phases of its life cycle. The project conducted a gender analysis during project preparation and developed a Gender Mainstreaming Plan to ensure gender equality and women's empowerment issues are mainstreamed into the project implementation and monitoring. The Gender Mainstreaming Plan is included as Annex M of the GEF-UNDP Project Document.

*A.5 Risk.* 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):

14. Project risks were updated based on the results of the social and environmental safeguards assessment (SESP). The updated risk are included in Annex H: UNDP Risk Log of the GEF-UNDP Project Document.

*A.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.

15. Institutional arrangements are described in Section VII: Governance and Management Arrangements of the GEF-UNDP Project Document.

16. In addition to coordination with other relevant GEF-financed projects and other initiatives identified at the PIF stage, the project will cooperate with the following GIZ-funded projects in Guatemala. The Adaptation Project for Rural Development to Climate Change - ADAPTATE II, will contribute to reducing the vulnerability of the population and ecosystems to climate change in the Dry Corridor through the management of environmental goods and services. The ADAPTATE II initiative is being implemented between January 2016 to December 2018; the main areas of cooperation identified are the exchange of information on best agricultural practices for organic coffee production, adaptation strategies to climate change for the strengthening of value chains, and lessons learned from a gender approach in value chains.

17. The Central America for Central America Coffee rust integral management programme (PROCACIGA) to be financed by the European Union, will address climate change and its environmental effects through the adoption and application of measures for adaptation, mitigation, and reduction of disaster risk. Actions will include introducing environmental sustainable agroforestry farming practices and diversified cropping patterns, which in addition will provide biodiversity conservation and ecosystem services benefits. The PROCAGICA program has not yet begun operating in Guatemala, the project implementation team will maintain communication with the GIZ in Guatemala to establish synergies between the two projects in these areas, as well as in economic aspects and strengthening local producers' organizations, once both initiatives begin implementation.

Additional Information not well elaborated at PIF Stage:

*A.7 Benefits.* Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

18. The project will ensure the direct, free, and equal participation of all national, subnational, and local stakeholders in the planning and implementation of measures to mainstream biodiversity conservation and sustainable land management objectives into production landscapes of the Central Volcanic Mountain Range in Guatemala, contributing to the welfare of local populations and the delivery of multiple global environmental benefits. At the local level, the project will provide monetary and non-monetary benefits equally to the local stakeholders independently of their condition, which will result in the following: a) increase in income of small farmers and producers, including women and indigenous people, resulting from the implementation of sustainable agriculture/forestry production practices and use of economic incentives (e.g., price premiums through environmental certification, forestry-related cash payments, and sale of carbon credits) to promote sustainable production and forest conservation; b) access to markets for sustainable products of small farmers and producers; c) improved access to plant material for the implementation of agroforestry and silvopastoral systems, and soil stabilization through municipal or community nurseries; d) improved cooking, heating, and health conditions of local families through the use of energy-efficient stoves, which will reduced firewood consumption and GHG emissions; e) empowerment of local communities through

their direct participation in the development of management plans for five MRPs, the development of SLM plans for six watersheds, and a monitoring program to assess biodiversity conservation, SFM, and SLM benefits; and f) improve income for municipalities implementing PWS schemes and other financing mechanisms that will contribute to the financial sustainability of MRPs allowing them to improve protected area management and the delivery of ecosystem services, including drinking water for rural and urban communities.

19. In addition the project will train local community members, including indigenous peoples, and women's groups, and municipal officials, PA staff, environmental, forestry, and agricultural officials so that they become the principal facilitators and decision makers for the conservation of biodiversity, SFM, SLM in their region. The training program will benefit over 3,000 people, including 2,780 local community members (1,781 men and 999 women).

20. Through the conservation and sustainable use of locally and globally important ecosystems (e.g., pine-oak forests, cloud forest, tropical moist forest) and reduced deforestation, the services these ecosystems provide (maintenance of soil quality, control of erosion, food and forest materials production, regulation of water regimes, carbon storage, climate regulation, and habitat for biodiversity) will be improved with a positive impact on the well-being of the communities that reside in the prioritized production landscapes of the Central Volcanic Mountain Range of Guatemala. Finally, the project will provide lessons learned, and generate knowledge that will be used for replication and scaling-up of projects results benefiting farmers and producers, PA managers, municipal officer, among others, in other regions of the country.

**A.8 Knowledge Management.** Elaborate on the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.

21. Project Component 4: Knowledge management and M&E outlines the knowledge management strategy for the project. This strategy includes specific outputs regarding how best practices will be documented and experiences will be shared with other biodiversity, land degradation, and SFM projects using existing information-exchange platforms. This will include: a) the development of ten (10) media productions that document and disseminate the successful experiences regarding the mainstreaming of objectives of biodiversity conservation, SFM, and SLM in sustainable production landscapes and biological corridors; and b) a virtual knowledge platform for disseminating information about the project. In addition, the results from the project will be disseminated within and beyond the project intervention area through a number of existing information-sharing networks and forums. A description of the knowledge management approach for the project is provided in Section III: Results and Partnerships of the GEF-UNDP Project Document.

## **B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:**

**B.1 Consistency with National Priorities.** Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.:


NA

**C. DESCRIBE THE BUDGETED M & E PLAN:** The budgeted M&E plan is included in Section VI: Monitoring and Evaluation (M&E) Plan of the GEF-UNDP Project Document

### **PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)**

#### **A. GEF Agency(ies) certification**

**This request has been prepared in accordance with GEF policies<sup>10</sup> and procedures and meets the GEF criteria for CEO endorsement under GEF-6.**

<b>Agency Coordinator, Agency Name</b>	<b>Signature</b>	<b>Date (MM/dd/yyyy)</b>	<b>Project Contact Person</b>	<b>Telephone</b>	<b>Email Address</b>
Adriana Dinu - UNDP GEF Executive Coordinator		10/04/2017	Santiago Carrizosa, Senior Technical Advisor, EBD	+507 302- 4510	<a href="mailto:santiago.carrizosa@undp.org">santiago.carrizosa@undp.org</a>

<sup>10</sup> GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT  
GEF6 CEO Endorsement /Approval Template-August2016

**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).

Please refer to Section V. Project Results Framework of the GEF-UNDP Project Document

**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).

Reviewer's comments	Responses	Reference in CEO Endorsement Document
<b>Secretariat Comment at CEO Endorsement (FSP)/Approval (MSP): July 29, 2015</b>		
<p>5. Are the components in Table B sound and sufficiently clear and appropriate to achieve project objectives and the GEBs?</p> <p>When presenting final project design at CEO Endorsement, please include an explanation on how the results gleaned from applying the guiding questions identified by STAP are incorporated into project design.</p>	<p>The project design team considered all the recommendations suggested by STAP, including the following:</p> <ol style="list-style-type: none"> <li>1. Providing a more detailed description of the social and economic aspects of the project's prioritized landscape. This information is included as <i>Annex O: Target Landscape Profile</i>, of the GEF-UNDP Project Document.</li> <li>2. The completion of a detailed stakeholder analysis that was used to develop the Stakeholder Engagement and Communication Plan, and included as <i>Annex K</i> of the GEF-UNDP Project Document. This was also considered in the development of the project's Gender Mainstreaming Plan, which is included as <i>Annex M</i> of the GEF-UNDP Project Document.</li> <li>3. Providing more detailed information as to how climate change predictions for Guatemala (using the year 2000 as the baseline) may affect the project, including forest ecosystems and their services as well as agriculture and land management approaches. This information is included as part of the risk assessment of the project.</li> <li>4. Detailing the type of governance arrangement that is being considered for the carbon sequestration market. In this regard, the project will work primarily with individual farmers/producers or groups of farmers/producers. Although the project will not consider communal or common property forests as part of the carbon sequestration program, the governance arrangement will be considered part of voluntary conservation agreements that allow the implementation of carbon sequestration initiatives.</li> <li>5. The viability of a carbon market was also considered in the design of the carbon sequestration program. This is included as part of the description of such a program, which will be implemented through Output 1.5.</li> <li>6. An analysis of the market for certified products was also considered, particularly considering economies of scale by working with groups rather than individuals; 16 organized groups of producers (coffee, vegetables, and non-timber forest products) were identified. This approach is expected to reduce production and transaction costs, establish strategic commercial alliances between producers' groups and buyers, and negotiate more attractive prices, among other benefits. These elements are the description of the certified and non-certified agricultural/non-timber forest systems to be implemented by the project (Outputs 1.1, 1.2, 1.3, and 1.4).</li> <li>7. Regarding adopting the RAPTA Framework for establishing baselines (social, economic, and biophysical) and identifying impact indicators, the project team and project partners would like to thank STAP for the suggestion, although it was not adopted.</li> </ol> <p>Specific information on all comments suggested by STAP is included below as part of the responses to the reviewer's</p>	<p>Refer to responses to STAP comments</p>



	comments.	
<p>5. Are the components in Table B sound and sufficiently clear and appropriate to achieve project objectives and the GEBs?</p> <p>By the time of submitting the CEO Endorsement please consider a wider range of potential indicators to assess biodiversity condition in the project sites.</p>	<p>The project considers the following indicator to assess the biodiversity condition in the project sites:</p> <ol style="list-style-type: none"> <li>1. 52,045.5 ha of corridors that establish connectivity between agricultural/forest production systems and protected areas.</li> <li>2. Presence of key species in production landscapes, conservation forests, and PAs by the end of the project:</li> </ol> <p><u>Birds:</u></p> <ul style="list-style-type: none"> <li>– <i>Cardellina versicolor</i></li> <li>– <i>Oreophasis derbianus</i></li> <li>– <i>Pharomachrus mocinno</i></li> <li>– <i>Penelopina nigra</i></li> <li>– <i>Tangara cabanisi</i></li> <li>– <i>Setophaga chrysoparia</i></li> <li>– <i>Aulacorhynchus prasinus</i></li> <li>– <i>Pteroglossus torquatus</i></li> </ul> <p><u>Amphibians:</u></p> <ul style="list-style-type: none"> <li>– <i>Plectrohyla guatemalensis</i></li> <li>– <i>Agalychnis moreletii</i></li> </ul> <p><u>Mammals:</u></p> <ul style="list-style-type: none"> <li>– <i>Microtus guatemalensis</i></li> <li>– <i>Sturnira hondurensis</i></li> </ul>	Annex A: Project Results Framework
<b>STAP Scientific and Technical screening of the Project Identification Form (PIF): March 19, 2016</b>		
<p>1. The PIF provides a clear justification for the selection of the target regions, based on four factors (page 10), which are linked to people's dependence on ecosystem services. In order to have a complete picture of the interactions between social, economic and biophysical features, STAP recommends detailing further the social and economic aspects in each site. This information seems absent in the PIF.</p>	<p>The project will be implemented in a prioritized landscape with a total area of 3,897 square kilometers (km<sup>2</sup>) located within the Central Volcanic Mountain Range, and in areas of importance for biological connectivity that have been prioritized by the Government of Guatemala. A detailed description of this landscape is included as <i>Annex O: Target Landscape Profile</i> of the GEF-UNDP Project Document, which includes detailed descriptions of the social and economic aspects of this landscape.</p>	GEF-UNDP Project Document: Annex O: Target Landscape Profile of the
<p>2. STAP suggests conducting a stakeholder analysis, to identify the appropriate individuals to include, and how, at the appropriate times during the project design and implementation. Defining a multi-stakeholder engagement plan, that also details the governance arrangement in each site will be important, given the diverse needs and governance type (e.g. communal forest versus government forest) present in the project sites. The project should also specify how</p>	<p>A stakeholder analysis was conducted during the final project design that served as the basis for defining a detailed multi-stakeholder engagement plan; this plan is included as <i>Annex K: Stakeholder Engagement and Communication Plan</i> of the GEF-UNDP Project Document. The plan groups stakeholders according to their type (e.g., government, private sector, civil society) and provides information on the overall role of each stakeholder in the project and the specific actions in which they will participate.</p> <p>The stakeholder analysis also served as the basis for the development of the Gender Mainstreaming Plan, which is included as <i>Annex M</i> of the GEF-UNDP Project Document.</p>	GEF-UNDP Project Document: Annex K: Stakeholder Engagement and Communication Plan; Annex M: Gender Analysis and Project Gender Mainstreaming Plan

the different roles of the stakeholders will combine to achieve the project objective.		
<p>3. STAP is pleased to see a description of the climate change predictions for Guatemala, and how the country might be affected by changes in temperature. In the project document, STAP recommends detailing further the climate information by defining a baseline year for the climate changes (2050 is given as the projection year). Furthermore, it will be important to describe in greater detail how households, or communities, have dealt with previous, or present, shocks and stresses due to climate (or other factors) that might affect the viability of the project. In particular, STAP suggests detailing how climate change might affect ecosystems and its services, as well as agriculture and land management approaches. It also would be useful to detail how integration between biodiversity conservation, sustainable forest and land management would be required.</p>	<p>Guatemala has developed two climate change scenarios; the first was developed by the National Institute of Seismology, Volcanology, Meteorology and Hydrology, and the second was prepared by the University of Nebraska at Lincoln. Both were developed using the year 2000 as the baseline, and include projections to the year 2050. These projections indicate that the average temperature will continue to increase, with expected increases of between 2.5 degrees Celsius (°C) and 4.1°C. With respect to total annual precipitation, it is expected that beginning in the 2030s there will be a tendency for reduction, and by the 2050s these reductions will be on the order of 9.5% to 12.4% over the baseline. The region of the Central Volcanic Mountain Range is among the regions in the country where these changes will be smaller.</p> <p>Projected climate changes suggest a shift in life zones that will affect their associated ecosystems and biodiversity. By 2050, climate conditions are expected to favor the expansion of dry and very dry forests, which currently cover about 20% of the country; by the 2050s and 2080s, the expansion of these conditions could rise to 40% and 65%, respectively. In contrast, there will be a decrease in humid, very humid and rainy forests, which currently cover almost 80% of the country, including the Central Volcanic Mountain Range. It is projected that by the 2050s and 2080s this coverage would be reduced to 60% and less than 35%, respectively. Shifts could also be observed along altitudinal gradients affecting the associations of pine and oaks forests in the region, including those within PAs.</p> <p>The changes mentioned above may result in less water availability for local communities who depend on these forests for a stable supply of water for human consumption and for crop irrigation. Small farmers and producers may be among the most highly impacted by these changes. For example, assessments conducted in the driest regions of the country indicate that some farmers may lose up to 55% of their production of basic grains in times of drought. Although the small farmers and producers in the prioritized landscape of the project may not be affected as severely, they may face a more erratic and unpredictable precipitation distribution, with drought episodes and high precipitation in the same year.</p> <p>The integration between biodiversity conservation, sustainable forest SFM, and SLM will reduce the vulnerability of ecosystems, biodiversity, and local communities to climate change. The implementation of complementary activities in the prioritized areas will promote connectivity between core protected PAs within sustainably managed production landscapes, thereby improving the resilience of biodiversity to climate change through enhanced habitats that provide more stable resources to species, increase their mobility, and provide refuge against temperature changes and shifts in forest distribution. The implementation of SFM and SLM will result in more stable and resilient forests (for example, diversity of age groups and improved resilience for regeneration), which will</p>	<p>GEF-UNDP Project Document. Annex H: UNDP Risk Log</p>

	<p>result in the protection of soils and regulation of water cycles. This in turn will create more stable micro-climatic conditions and a steadier flow of ecosystem services, benefiting the associated forest species and leading to reduced vulnerability of small farmers and producers and urban populations to climate variability.</p>	
<p>4. In component 1, STAP suggests detailing the type of governance arrangement (e.g. communal forest) that is being considered for the carbon sequestration market. Forest governance is important to consider in carbon markets, as trade-offs might exist between generating social-ecological benefits that further strengthen communal forest management and those benefits that primarily strengthen market efficiency. UNPD could refer to the following paper for further information on the impact of carbon markets on forest governance: Osbourne, T. <i>"Tradeoffs in carbon commodification: A political ecology of common property forest governance"</i>. 2015. Geoforum. Volume 67, pages 64-77.</p>	<p>The proposed governance scheme for forest carbon project management is framed within Article 12 of Guatemala's Framework Law on Climate Change, which establishes that only landowners comprising individuals, legal persons, municipalities, communities, or others, may apply for the benefits derived from carbon sequestration projects if land ownership by individuals, legal persons, municipalities, and communities is demonstrated. The project will work primarily with individual farmers/producers or groups of farmers/producers; communal or common property forests are not being considered as part of the carbon sequestration program.</p> <p>The Project Team (i.e., Project Coordinator and staff from the Project Coordination Unit) with the support of the MARN will serve as the facilitator for the development of the carbon sequestration certification and verification program. The Project Team will establish voluntary agreements for the implementation of landscape management tools (LMTs; e.g., micro-corridors, forest enrichment, live fences, and windbreaks) with each individual beneficiary or groups of beneficiaries of the carbon initiatives. These agreements will allow individuals or groups of farmers and producers to assume ownership of the carbon sequestration process and receive the benefits, provided that they comply with the technical requirements for measurement, calculation, and monitoring of carbon, which will be certified by the Colombian Institute of Technical Standards (ICONTEC). The voluntary agreements will allow individuals or groups of farmers to manage the forests within their land according to the terms they define for reducing potential tradeoffs</p>	<p>GEF-UNDP Project Document: Section III. Results and Partnerships</p>
<p>5. STAP suggests that the project developers give careful consideration to the viability in the carbon market (and to other payment for ecosystem services they opt to use) by considering the scale of the intervention, the market stability and transaction costs to ensure there will be sufficient demand at the price necessary to create an effective incentive.</p>	<p>A carbon sequestration certification and verification program will be developed following the CDM AMS0007 – A/R Small-scale Methodology. This program was conceived in such a way that the risks of market price variations and the transaction costs are reduced. In order to promote the reforestation and rehabilitation of degraded lands and the implementation of LMT, which will be the basis for the implementation of carbon sequestration projects, the existing forest incentive programs in the country (PINPEP and PROBOSQUES) will be utilized. These programs will contribute to financing the initial implementation and maintenance activities of the carbon sequestration program until the carbon removals are certified and credits are sold in the carbon market.</p> <p>The scale of the project and the potential for the generation of emissions reduction certificates were also considered. As such, the proposed transaction costs of the carbon project are reduced. The implementation of the carbon sequestration certification and verification program includes the definition of the project's conservation and connectivity strategy, which includes the identification of the specific areas of intervention (up to 4,500 ha) in the prioritized areas of connectivity of the biological corridor of the Central Volcanic Mountain Range; this will be done following the standards of the Framework Law on Climate</p>	<p>GEF-UNDP Project Document: Section III. Results and Partnerships</p>

	<p>Change (Decree 7-2013) that guides the national carbon market. In addition, rather than creating a national voluntary carbon market, the project will support existing initiatives in the country. In particular, the project will support the REDUZCO2 platform, which is a voluntary mechanism for greenhouse gas (GHG) emission reduction. The project will make use of this platform for the exchange of carbon certificates, which will facilitate the sale of carbon credits and grant more control over price variations. The project will contact national companies that produce electricity using fossil fuels, who, according to the Framework Law on Climate Change, have an obligation to offset their emissions. These companies are considered to be the potential buyers of the emissions reduction certificates generated by the project. With the development of these activities, governance of the carbon sequestration initiatives and promotion and marketing of carbon credits generated will be ensured under favorable market conditions.</p>	
<p>6. STAP suggests that the project developers undertake a similar analysis of the market for certified produceâ€ scale of the market, prices as supply increases, transaction costs and requirements to access the market.</p> <p>Additionally, STAP recommends that UNDP considers its key messages on developing sustainable certification projects detailed in "Environmental Certification and the Global Environment Facility":  <a href="http://www.stapgef.org/environmental-certification-and-the-global-environment-facility/">http://www.stapgef.org/environmental-certification-and-the-global-environment-facility/</a></p>	<p>A market analysis for certified products was conducted considering economies of scale by working with groups rather than individuals; 16 organized groups of producers (coffee, vegetables, and non-timber forest products) were identified. These groups will offer volumes of products for the supply of national and international markets with the capacities to negotiate fixed and attractive pricing, and reduced transaction costs (e.g., production costs).</p> <p>In order to have more stable access to markets and long-term relationships with buyers of biodiversity-friendly products, the project will establish synergies with the institutional mechanisms for market access of the following groups: 1) in the case of coffee, the Guatemalan National Coffee Association (ANACAFE) and the Federation of Coffee Producers' Agricultural Cooperatives of Guatemala (FEDECOCAGUA); and 2) in the case of non-timber forest products, the Association of Private Natural Reserves of Guatemala (ARNPG). This favors the feasibility of establishing strategic commercial alliances between producers' groups and buyers, and ensures their sustainability. These partnerships will also be useful for producers to acquire agricultural inputs and services (e.g., coffee plantation renovation, basic infrastructure for wet benefits of coffee, field technicians for technical assistance, etc.) in exchange for improving and maintaining the implementation of best production practices and post-harvest practices as stipulated in the standards of the certifications. In addition, these strategies will reduce the incidence of intermediaries within certified value chains, establish medium- and long-term price agreements, reduce costs, secure stable volumes of products for the market, strengthen ownership of the producers' groups of their sustainable agricultural systems, and provide buyers with products that meet the quality standards demanded by the market.</p> <p>The approach to facilitating market access within the project is based on the adoption of best practices both during production and post-harvest. This will ensure that the products are derived from an environmentally sustainable process and have the level of quality that meets the standardized requirements. In addition, an economic analysis of prices of certified and non-certified products was performed that yielded positive profitability data that was above the "break-even" point of production for products</p>	<p>GEF-UNDP Project Document: Section III. Results and Partnerships</p>

	with certified best practices. In the case of non-certified products, there were high transaction costs and yields that were below the equilibrium point of production.	
7. The Resilience, Adaptation Pathways and Transformation Assessment (RAPTA) Framework (to which UNDP contributed) would be useful in identifying adaptive management strategies that contribute to the sustainability and resilience of the central volcanic chain in Guatemala. RAPTA can be used for project design, helping to establish baselines (social, economic and biophysical) and to identify impact indicators that assess the resilience and sustainability of the proposed integrated activities with diverse stakeholders. The RAPTA guidelines can be found at: <a href="http://www.stapgef.org">www.stapgef.org</a> or by contacting the STAP Secretary, Thomas Hammond: <a href="mailto:Thomas.Hammond@unep.org">Thomas.Hammond@unep.org</a>	Thank you for your suggestion regarding the RAPTA Framework. Although the framework is applicable for assessing and managing the resilience of any social-ecological system, the project design team and project partners opted for establishing baselines (social, economic, and biophysical) and identifying impact indicators based on the information identified in the PIF and during the project preparation process with technical assistance from experts and local stakeholders.	NA
<b>Comments submitted by council members on the GEF XX Work Program: Germany</b>		
1. Since October 2013, the Climate Change Framework Legislation exists (Decreto 07-2013). Articles 15c and 15d together with Art. 17 determine the cooperation and responsibilities between the various government institutions. The full proposal should reflect the legal requirements set by the Framework Legislation and how the project contributes to its objectives.	There are several groups of coordination between the entities responsible for managing natural resources in Guatemala. One of these is the Interagency Coordination Group (IGC) for the Conservation and Sustainable Management of Natural Resources, which was established in June 2011 by the Ministry of the Environmental and Natural Resources (MARN), the Ministry of Agriculture, Livestock, and Nutrition (MAGA), the National Forest Institute (INAB), and the National Council on Protected Areas (CONAP), which has provided follow up the REDD+ process in the country. A second group of coordination is the Forest and Land Use Interinstitutional Monitoring Group (GIMBUT) formed by MARN, CONAP, INAB, MAGA, the National Geographic Institute (IGN), the Presidential Secretariat for Planning and Programs (SEGEPLAN), the University of El Valle in Guatemala (UVG), University of San Carlos in Guatemala (FAUSAC), and the Universidad Rafael Landívar (URL). This group monitors changes in land use in the country. The project will work to strengthen these groups in compliance with the Framework Law on Climate Change (Decree 7-2013). This will include activities to develop a participatory monitoring program to assess biodiversity conservation, SFM, and SLM, which includes the participation of the GIMBUT, as well as through project activities that include the participation of members of the IGC. All members of the IGC will be part of the Project Board.	GEF-UNDP Project Document: Section III. Results and Partnerships; Section VII. Governance and Management Arrangements

<p>2. As regards the Payment for Watershed Services, the full proposal should clearly identify how the water-users, communities and municipalities will structure their cooperation under Component 1. The proposal needs to specify clearly the flow of funds, the transparency and conditions of payments for services.</p> <p>The municipalities are obliged by municipal law (e.g. Articles 35a, 142, 143 of the Municipal Code, Decreto 12-2002) with certain tasks that affect directly the use and payment of water services. Germany strongly recommends that the full proposal seriously considers the existing legal regulations in order to establish a functioning and legally backed PWS.</p>	<p>Two Payment for Watershed Services (PWS) initiatives will be implemented through the project; one in the municipality of Concepción Chiquirichapa, department of Quetzaltenango, and the second in the municipality of Esquipulas Palo Gordo, department of San Marcos. In both cases, the PWS projects will be developed in the Municipal Regional Park (MRP) of each municipality with the objective of conserving and protecting natural resources, specifically the protection of water resources and forests within PAs and watersheds that provide water for human consumption, irrigation, and for commercial purposes.</p> <p>The parties participating in the PWS schemes are the following:</p> <ul style="list-style-type: none"> <li>• <u>The water users</u>: The local population, represented by the water users' committee of the urban centers of municipality of Concepción Chiquirichapa and the municipality of Esquipulas Palo Gordo, and residents of rural area outside the PA who receive water captured through the MRP for domestic use and agricultural activities.</li> <li>• <u>The water providers</u>: The municipality of Concepción Chiquirichapa and the municipality of Esquipulas Palo Gordo MRPs, who are owners of the MRPs that supply the water resources, and responsible for managing the MRPs.</li> <li>• <u>Technical support</u>: INAB, CONAP, Helvetas Guatemala, and the full-size project team will support the formation of the water users' committee and provide technical support and training for implementing the PWS scheme, as well as the development of tools necessary for the operation and expansion of the PWS system through awareness-raising campaigns.</li> </ul> <p>In addition, Municipal Council Agreements will be established in which the importance of conserving water sources is recognized and a PWS is endorsed as the mechanism to support the conservation and management of water and forest resources in each municipality. The Municipal Council Agreements will also define the financial mechanism designed to manage the funds for the compensation scheme. Two options will be considered: Under the first option, funds will be received by each municipality as part of water bills and will be included in the municipal budget through the creation of a specific budget item in the Annual Work Plans. These funds will be used exclusively to receive payments from the PWS and will be invested in water and forest protection and conservation within the MRPs. The second option will include the creation of a specific municipal fund for water service compensation that is separate from the municipal budget, based on a municipal ordinance (the abovementioned Municipal Council Agreement), and to which the payments received from the PWS will be allocated and used for water and forest protection and conservation in the MRPs. The Municipal Financial Management Department (DAFIM) and the full-size team will evaluate the best option during the final design of the PWS schemes.</p> <p>The PWS initiatives will be implemented within the following legal framework: Article 613 of the Civil Code grants management and oversight of public water services to the</p>	<p>GEF-UNDP Project Document: Section III. Results and Partnerships</p>
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	<p>municipalities within their respective jurisdictions, with the exceptions of coastal areas, rivers, and navigable lakes. The Municipal Code (Decree 12-2002) gives the municipality and the Municipal Council oversight of the management and protection of renewable and non-renewable natural resources in the municipality (Articles 65 and 68). The Health Code (Decree 90-97) establishes that it is the Ministry of Public Health and Social Assistance's duty, in coordination with the sector's institutions, to oversee the protection, conservation, and rational use of potable water sources, and compels the municipalities of the countries, as the main providers of potable water service, to protect and conserve the water sources and ensure universal coverage within their jurisdictions in terms of quantity and quality of service. Guatemala currently does not have a legal framework at the national level that specifically regulates payments for environmental services (PES); however, recently the PROBOSQUE Law (Decree No. 2-2015) was enacted to grant authority to INAB to promote this class of compensation to environmental services providers and to offer technical support and training to those interested in implementing PES programs.</p>	
<p>3. Germany considers it important that the full proposal considers current projects and programs of other donor organisation and indicates areas of cooperation. GIZ for instance (Program ADAPTATE II) is active in the project area (San Marcos, Quetzaltenango, Sololá) working together with ANACAFE and MAGA on aspects of organic coffee farming in the context of adaption to climate change. The EU regional Program PROCAGICA, implemented by GIZ, will also promote organic coffee farming in the region.</p>	<p>The project formulation team held a bilateral meeting with María Teresa Escamilla from GIZ-Guatemala to discuss areas of cooperation with the Adaptation Project for Rural Development to Climate Change – ADAPTATE II, which works in the protection of water, soils, and forests resources in selected watersheds that are vulnerable to climate change and where the project proposed herein will be implemented. The ADAPTATE II initiative is being implemented between January 2016 to December 2018; the main areas of cooperation identified are the exchange of information on best agricultural practices for organic coffee production, adaptation strategies to climate change for the strengthening of value chains, and lessons learned from a gender approach in value chains.</p> <p>The PROCAGICA program has not yet begun operating in Guatemala. This EU Program will support the regional and national efforts to control coffee leaf rust. The overall objective of the project is to address climate change and its environmental effects through the adoption and application of measures for adaptation, mitigation, and reduction of disaster risk. Actions will include introducing environmental sustainable agroforestry farming practices and diversified cropping patterns, which in addition will provide biodiversity conservation and ecosystem services benefits. The project implementation team will maintain communication with the GIZ in Guatemala to establish synergies between the two projects in these areas, as well as in economic aspects and strengthening local producers' organizations, once both initiatives begin implementation.</p>	<p>GEF-UNDP Project Document: Section III. Results and Partnerships</p>

<p>4. Since the government has changed in January 2016, a confirmation of the allocation of funds by the new government should be sought, especially regarding the Ministry of Environment and Natural Resources (MARN) whose financial resources have been cut for 2016 and only serve to maintain operations.</p>	<p>Project cofinancing includes an allocation of USD \$6,524,481 by the MARN. The UNDP Country Office will monitor the co-financing contributions by the MARN during project implementation.</p>	<p>Part I: Project Information, C. Confirmed Sources of Co-Financing for the Project by Name and by Type</p>
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# ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS<sup>11</sup>

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: <b>250,000</b>			
<i><b>Project Preparation Activities Implemented</b></i>	<i><b>GETF/LDCF/SCCF/CBIT Amount (\$)</b></i>		
	<i><b>Budgeted Amount</b></i>	<i><b>Amount Spent Todate</b></i>	<i><b>Amount Committed</b></i>
Componente A	168,320	106,500	67,937
Componente B	20,420	11,300	9,120
Componente C	17,670	17,613	0
Componente D	28,670	18,500	4,500
Componente E	14,920	6,000	8,530
<b>Total</b>	<b>250,000</b>	<b>159,913</b>	<b>90,087</b>

<sup>11</sup> If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

**ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)**

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)

NA



Empowered lives.  
Resilient nations.

### United Nations Development Programme

<b>Project title:</b> Promoting sustainable and resilient landscapes in the Central Volcanic chain of Guatemala	
<b>Country:</b> Guatemala	<b>Implementing Partner:</b> Ministry of the Environment and Natural Resources (MARN)
<b>Management Arrangements:</b> National Implementation Modality (NIM)	
<b>UNDAF/Country Programme Outcome:</b> a) Impoverished rural populations develop new sustainable economic opportunities to compete in market systems; b) The Urban and Rural Development Councils system and related government institutions work together to develop policies and investments that promote the protection, responsible use, and conservation of natural resources, as well as resilience of the community in dealing with natural climate events; and c) Indigenous populations, primarily youth and women, are active citizens and participate effectively in decision making related to development themes at the community, municipal, subnational, and national levels.	
<b>UNDP Strategic Plan Output:</b> Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals, and waste	
<b>UNDP Social and Environmental Screening Category:</b> Low	<b>UNDP Gender Marker:</b> GEN2
<b>Atlas Project ID/Award ID number:</b> 00085085	<b>Atlas Output ID/Project ID number:</b> 00092856
<b>UNDP-GEF PIMS ID number:</b> 5581	<b>GEF ID number:</b> 9059
<b>Planned start date:</b> 01/2018	<b>Planned end date:</b> 01/2025
<b>LPAC date:</b>	
<b>Brief project description:</b>  The project objective is to mainstream biodiversity conservation and sustainable land management objectives into production landscapes of the Central Volcanic Mountain Range in Guatemala, contributing to the welfare of local populations and ensuring the delivery of multiple global environmental benefits. The project's objective will be achieved through a multifocal strategy that includes three interrelated outcomes that will develop an enabling environment for the delivery of multiple global environmental benefits through models of sustainable agriculture/non-timber forest production and economic incentives derived from improved markets and	

ecosystem services, and delivery of multiple environment benefits by connecting core protected areas within sustainably managed production landscapes in the Central Volcanic Mountain Range in Guatemala. Through this strategy, the project will contribute to reducing the accelerated loss of ecosystem connectivity, which is primarily due to the expansion of agricultural activities. The project will deliver global environmental benefits related to biodiversity conservation, reduced land degradation, and sustainable forest management using a participatory approach and ensuring the equal distribution of benefits among men and women. This will result in a 19% reduction of deforestation (1,154 hectares; 247,734.60 tCO<sub>2</sub>-eq by the end of the project) in the prioritized landscapes of the Central Volcanic Mountain Range, including the buffer zones of existing protected areas. The project will span 7 years with a total investment of USD \$11,144,497, which is to be provided by the GEF.

#### FINANCING PLAN

GEF Trust Fund	USD \$11,144,497
<b>(1) Total Budget administered by UNDP</b>	<b>USD \$11,144,497</b>
<b>PARALLEL CO-FINANCING</b> <i>(all other co-financing that is not cash co-financing administered by UNDP)</i>	
Ministry of the Environment and Natural Resources (MARN)	USD \$6,524,481
National Council on Protected Areas (CONAP)	USD \$23,745,434
Asociación Sotz'il	USD \$500,000
Fondo para la Conservación de Bosques Tropicales (FCA)	USD \$500,000
Private Institute for Climate Change Research (ICC)	USD \$414,996
Guatemalan National Coffee Association (ANACAFE)	USD \$2,630,118
Association of Private Natural Reserves of Guatemala (ARNPG)	USD \$8,681,607
UNDP	USD \$2,834,566
<b>(2) Total co-financing</b>	<b>USD \$ 45,831,202</b>
<b>(3) Grand Total Project Financing (1)+(2)</b>	<b>USD \$56,975,699</b>

#### SIGNATURES

<b>Signature:</b> print name below	<b>Agreed by Government</b>	<b>Date/Month/Year:</b>
<b>Signature:</b> print name below	<b>Agreed by Implementing Partner</b>	<b>Date/Month/Year:</b>

<b>Signature:</b> print name below	<b>Agreed by UNDP</b>	<b>Date/Month/Year:</b>
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## LIST OF ACRONYMS

ANAM	National Association of Municipalities
ARNPG	Association of Private Natural Reserves of Guatemala
ANACAFE	Guatemalan National Coffee Association
ANF	National Forestry Agenda
AWP	Annual work plans
BD	Biodiversity
BMP	Best management practice
°C	Degrees Celsius
CBD	Convention on Biological Diversity
CDM	Clean Development Mechanism
CDRO	Asociación de Cooperación para el Desarrollo Rural de Occidente
CO <sub>2</sub> -eq	Carbon dioxide equivalent
COCODE	Community Development Council
COMUDE	Municipal Development Council
CONAP	National Council on Protected Areas
CONRED	National Coordination for Disaster Reduction
COP	Conference of Parties
CSO	Civil society organization
DAFIM	Municipal Financial Administration
DAPMA	Department of Protected Areas and the Environment
DMM	Municipal Women's Office
ERC	Evaluation Resource Centre
FEDECOCAGUA	Federation of Coffee Producers' Agricultural Cooperatives of Guatemala
FFMC	Municipal and Communal Forestry Strengthening Department
FSP	Full-Sized Project
FUNDAECO	Foundation for Ecodevelopment and Conservation
GCP	Green Commodities Programme
GEF	Global Environment Facility
GEFSEC	Global Environment Facility Secretariat
GHG	Greenhouse gas
GIMBUT	Forest and Land Use Interinstitutional Monitoring Group
GoG	Government of Guatemala
ha	Hectares
HACCP	Hazard Analysis and Critical Control Point
ICC	Institute for Climate Change Research
ICONTEC	Colombian Institute of Technical Standards
IEO	Independent Evaluation Office
IFN	National Forest Inventory
INAB	National Forest Institute



INSIVUMEH	National Institute for Seismology, Volcanology, Meteorology and Hydrology of Guatemala
JAS	Japanese Agriculture Standard
km <sup>2</sup>	Square kilometers
LAC	Latin America and the Caribbean
LD	Land degradation
LMT	Landscape management tool
LULUCF	Land use, land use change, and forestry
m <sup>3</sup>	Cubic meters
M&E	Monitoring and evaluation
MAGA	Ministry of Agriculture, Livestock, and Nutrition
MARN	Ministry of the Environmental and Natural Resources
masl	Meters above sea level
METT	Management Effectiveness Tracking Tool
MINFIN	Ministry of Finance
MOCUPP	Land Use Change Monitoring System within Production Landscapes
MPA	Marine protected area
MRP	Municipal Regional Park
MSP	Medium-Sized Project
MTR	Mid-term review
NGO	Non-governmental organization
NIM	National Implementation Modality
NP	National park
NTFP	Non-timber forest product
OAI	Office of Audit and Investigations
OFM	Municipal forest office
PA	Protected area
PCU	Project Coordination Unit
PCZ	Permanent Closure Zone
PDD	Project design document
PES	Payment for ecosystem services
PIF	Project Identification Form
PIN	Project initial idea
PINFOR	Forest Incentives Program
PINPEP	Incentives Program for Small Holders of Land Suitable for Forestry or Agroforestry
PIR	Project Implementation Report
PNR	Private natural reserve
PoA	Program of Activities
POPP	Programme and Operations Policies and Procedures
PPG	Project Preparation Grant
PRF	Project results framework
PROBOSQUE	National Forest Conservation Incentives Program

PRONACOM	National Competitiveness Program
PWS	Payment for watershed services
RCU	Regional Coordination Unit
RTA	Regional Technical Advisor
SBAA	Standard Basic Assistance Agreement
SDG	Sustainable Development Goal
SEGEPLAN	Presidential Secretariat for Planning and Programs
SFM	Sustainable forest management
SIA-MARN	National Information System of the MARN
SIGAP	Guatemalan System of Protected Areas
SLM	Sustainable land management
SSTrC	South-South and Triangular Cooperation
STAP	Scientific Technical Advisory Panel
t/ha/year	Tons per hectare per year
TAC	Technical Advisory Committee
tCO <sub>2</sub> -eq	Tons of carbon dioxide equivalent
TE	Terminal evaluation
ToR	Terms of Reference
UGAM	Municipal Environmental Management Unit
UNDAF	UNDP Development Assistance Framework
USAC	University of San Carlos in Guatemala

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## I. DEVELOPMENT CHALLENGE

1. Guatemala has a surface area of 108,890 square kilometers (km<sup>2</sup>), 34.2% (37,225.95 km<sup>2</sup>) of which is covered by forest. There are approximately 15 million people living in the country, 41% of this population is classified as indigenous. The topography of Guatemala is highly varied with a mountain range that spans the country from southeast to northeast, and has 37 volcanoes along the length of the Pacific coast. Guatemala is considered to be one of the 19 “megadiverse” countries by the Convention on Biological Diversity (CBD) due to its high biological and cultural diversity. The country’s altitudinal and microclimatic variations and its biogeographical position within the Americas (the country is situated along the border of the neotropical and neoarctic regions) mean that Guatemala has numerous habitats and is within an area of global biodiversity importance. Guatemala has the greatest number of ecological zones (14 Life Zones as per Holdridge) among the Central American countries, including: a) mountainous ecoregions, which are considered a high conservation priority at the regional and global levels; b) tropical forest of the Sierra Madre; and c) mixed Central America forests, which are considered vulnerable to threats and are categorized as a medium conservation priority.

2. The pine-oak forests in Guatemala cover approximately 20,106 km<sup>2</sup> (18.46% of the total area) and are concentrated at altitudes between 800 and 2,200 meters above sea level (masl). Among these forests there is predominance of species of the genera *Pinus* sp. and *Quercus* sp. These genera are found in association with other species such as *Cupressus lusitanica*, *Liquidambar styraciflua*, *Alnus* spp., and *Ostrya* spp. The understory generally contains species from the genera *Eugenia* and *Myrica*, and *Hedyosmum piper*. The pine-oak forests are home to a high level of biodiversity and serve as a refuge for dozens of globally important plant and animal species such as the Guatemalan fir (*Abies guatemalensis*), the horned guan (*Oreophasis derbianus*), the highland guan (*Penelopina nigra*), the resplendent quetzal (*Pharomachrus mocinno*), the golden-cheeked warbler (*Dendroica chrysoparia*), the azure-rumped tanager (*Tangara cabanisi*), and the pink-headed warbler (*Ergaticus versicolor*). In addition, 7.72% of the total area of the region’s protected areas (PAs) includes the Pine-Oak Forest Ecoregion. Approximately 9.94% of the pine-oak forests in the country are protected through the Guatemalan System of Protected Areas (SIGAP).

### *Global environmental problem*

3. According to the latest National Forest Inventory, Guatemala had a net loss of 38,597 hectares (ha) of forest annually between 2006 and 2010, which is equivalent to a rate of 1% per year<sup>1</sup>, 1,378 ha of which is attributed to Central Volcanic Mountain Range of Guatemala, the region prioritized for this project (Figure 1). A land use, land use change, and forestry analysis (LULUCF, National Forest Institute [INAB] methodology) determined that the greatest annual loss of forest cover was due to agricultural expansion and the non-sustainable use of the forests. In the case of the pine-oak forests, the main factors that have contributed to their loss and/or degradation include changes in land use (i.e., agricultural expansion), forest fires, and use of the forest for fuelwood. In pine-oak forest landscapes it is common to find plant associations that include pure stands of oaks or pines, patches of oak mixed with other hardwoods, or just pine and cypress, as well as pine or pine-oak with agro-ecosystems of coffee, corn, and potatoes. According to the Forest Cover Map (2010) and Forest Cover Dynamic Map (2006–2010) of Guatemala, PAs that were established to protect pine-oak forest have also been affected. The PAs that experienced a loss of forest cover at rates between -1.0% and -4.0% are the Tacaná Volcano Permanent Closure Zone (PCZ), Zunil Municipal Regional Park (MRP), Santo Tomás Volcano PCZ, Quetzaltenango-Saqbé MRP, and the Chicabal Volcano PCZ.

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<sup>1</sup> Forest Cover Map of Guatemala 2010 and Forest Cover Dynamics 2006-2010, developed by INAB, CONAP, and the Universidad del Valle de Guatemala (2012).

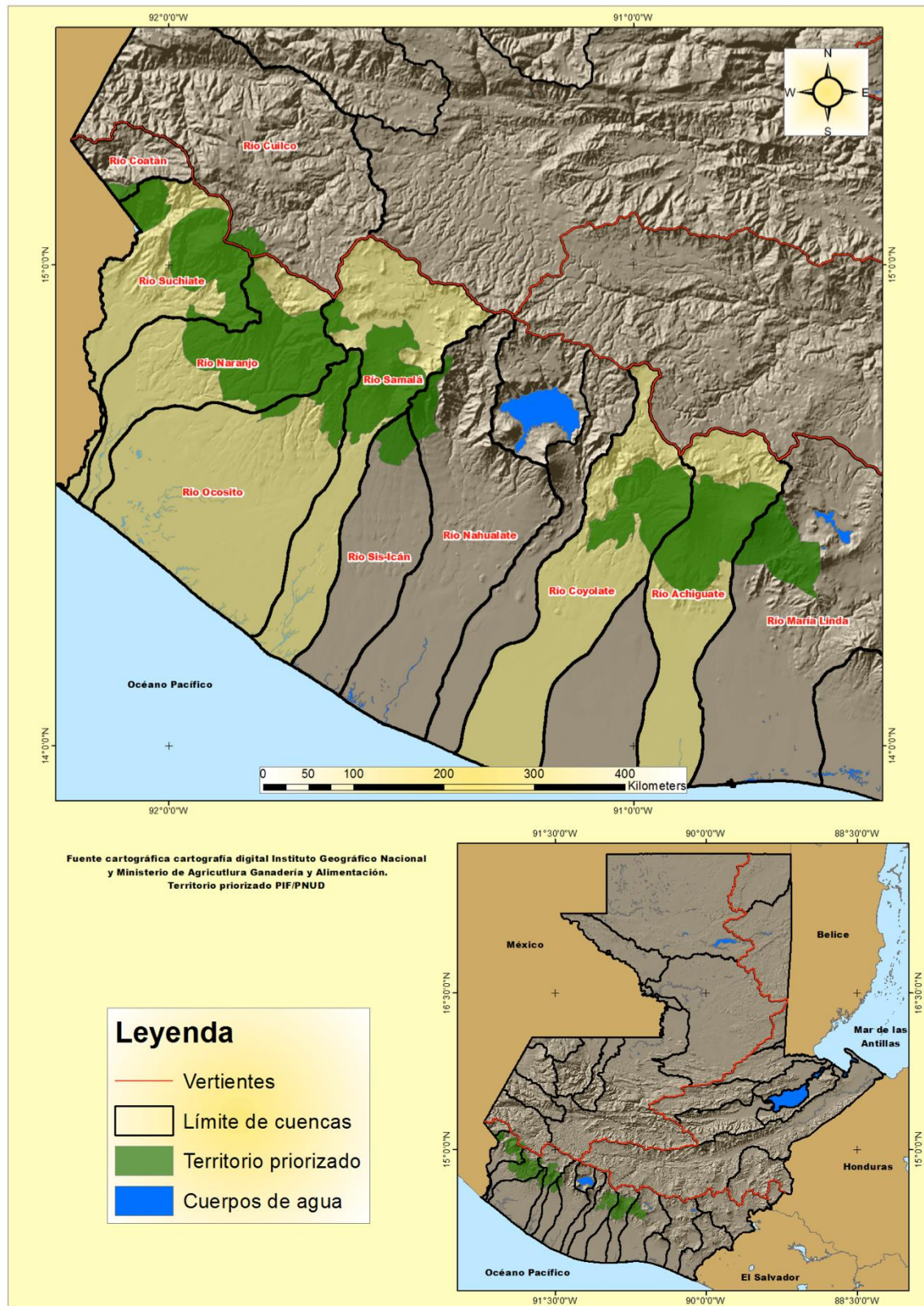


Figure 1 – Location of the Central Volcanic Mountain Range of Guatemala and prioritized landscapes.

4. The causes leading to the loss of biodiversity in the Central Volcanic Mountain Range of Guatemala are directly related to the expansion of agriculture, livestock farming, and forestry industries, as well as illegal hunting and logging and forest fires. These activities affect large expanses of natural ecosystems and deplete and degrade the natural populations living within them. These activities also contaminate the soil, water, and atmosphere, and are the primary factors driving the loss of forests, soil erosion and degradation, sedimentation, and the alteration of the waterways. Historically the rural population of Guatemala has relied in great measure on agricultural production for subsistence. The National Forest Inventory (IFN) estimates that 98% of humans living in proximity to forested areas practice some type of agricultural activity. Agricultural expansion in Guatemala implies a conversion of forested land to agricultural land that is primarily used for subsistence crops such as corn, beans, wheat, barley, fava beans, potatoes, vegetables, and fruit in the highlands and coffee, tomatoes, and fruit in the lowlands. The *minifundio* (farms less than 1 ha in size) predominates in the highlands, while there is a mix of *minifundios* and *latifundios* (farms greater than 50 ha) in the lowlands. The basic grains (e.g., corn, beans, wheat, and barley) are used 100% for local and regional consumption, the fruits that are cultivated serve as contributions to the regional economy, and crops such as coffee and vegetables are exported to more than 10 countries. Agrochemicals are commonly used (principally fertilizers) and many agricultural lands are located on slopes greater than 30%, where soil conservation methods are not practiced. The residues from agrochemicals are spread via runoff to the streams, rivers, lakes, and lagoons, thereby generating contamination due to excessive nutrients. Current non-sustainable agricultural practices have had a negative impact on forests, soil productivity, and biodiversity. In addition, minimal oversight and enforcement by environmental authorities, including weak surveillance and control of the PAs, have further contributed to promote environmental degradation in the region.

5. In Guatemala, people depend largely on the forest as their primary source of fuel. In rural areas, 95.3% of the population uses fuelwood as an energy source (2.7 cubic meters per person per year [ $\text{m}^3/\text{person}/\text{year}$ ]); while in urban areas 50% of the population depends on fuelwood as an energy source ( $1.0 \text{ m}^3/\text{person}/\text{year}$ ). The use of firewood outside of the PAs is regulated through use permits; however, this area was reduced from 22,060 ha in 2006 to 7,782 ha in 2010, with a volume of use that varied between 515,370 and 276,036  $\text{m}^3/\text{year}$ . This reduction suggests that there has been a decrease in the number of forest patches; likely fewer use permits requested, and an increase in illegal harvesting. Fuelwood represents 67% of the total wood extracted from forests; the total volume of illegal timber extraction is estimated to be 31.6  $\text{m}^3/\text{year}$ . The total annual supply of fuelwood is 17.96 million  $\text{m}^3$  and the demand is 27.98 million  $\text{m}^3$ ; as such, to meet this demand more than 10 million  $\text{m}^3$  must be extracted. This extraction is at a higher rate than the forest can grow, thus the consumption of fuelwood is not sustainable at the national level.

6. The country is also experiencing accelerated soil degradation and a high level of dependence on agrochemicals to compensate for the loss of soil productivity. The Pacific slope in particular is subject to an increasingly marked process of erosion (710 tons per ha per year [ $\text{t}/\text{ha}/\text{year}$ ]); this is more than double the rate of soil erosion on the country's Mexican slope (330  $\text{t}/\text{ha}/\text{year}$ ) and almost six times more than the Atlantic slope (122  $\text{t}/\text{ha}/\text{year}$ ). The rate of soil erosion for the Central Volcanic Mountain Range is estimated to be 452 million  $\text{t}/\text{year}$ . Thirty-one (31) municipalities within this region include semiarid (70.06  $\text{km}^2$ ) and dry sub-humid (623.2  $\text{km}^2$ ) environments, which include some of the most degraded lands in the region.

7. National climate change projections developed by the Guatemalan Ministry of the Environment and Natural Resources (MARN) indicate that the average annual temperatures in the country could increase between 0.5 degrees Celsius ( $^{\circ}\text{C}$ ) and  $4^{\circ}\text{C}$  by the year 2050 and the total precipitation could decrease. This would result in the expansion of semiarid areas, especially in the western region of the country, and intensification of the late summer phenomenon, which are known as the "dog days" of summer (July through September). The forest resources that are the most vulnerable to variations in temperature are coniferous forests, due to the potential expansion of the driest areas. Modeling performed for the different scenarios for temperature changes suggests that between 41,377 ha (0.38%) and 400,000 ha (3.67%) of the surface area of Guatemala will suffer severe alterations in its forest cover by the year 2050. It is estimated that more than 12% of the national territory is highly susceptible to desertification and more than 49% is subject to the direct effects of drought. The increase in temperature will also increase the probability of forest fires, which, according to the IFN, has affected up to 30% of the forests in the past. Guatemala has also been affected during the past two decades by an increase in the number of hurricanes, tropical storms, and

torrential rains. The consequences of this are loss of forest cover in the highlands due to landslides and the accelerated loss of soil.

8. The long-term solution is to mainstream biodiversity conservation and sustainable land management (SLM) objectives into production landscapes of the Central Volcanic Mountain Range in Guatemala, thereby contributing to the welfare of local populations and the delivery of multiple global environmental benefits. However, there are currently two barriers that prevent this objective from being achieved.

<p>1. Small farmers and producers lack the training and incentives to implement the sustainable production practices necessary to generate global environmental benefits and improve their quality of life.</p>	<p>There is limited knowledge among small farmers and producers about the technical and institutional policy frameworks that would allow them to take full advantage of the payment for ecosystem services (PES) initiatives, including payment for watershed services (PWS). Overall, there is limited experience in the country regarding PES. Similarly, small farmers and producers have limited knowledge about the technical, institutional, and economic frameworks enabling them to access carbon markets. Their capacity for implementing environmentally friendly production practices is further limited by: a) a lack of knowledge about certification standards and best practices for certifying biodiversity-friendly agricultural production, SLM, and agroforestry products; b) limited access to credit or subsidies to cover the costs of certification and other related costs; and c) limited capacity to access markets for certified and non-certified products. In addition, small farmers and producers lack the skills necessary to develop business plans for certified and non-certified products, including basic accounting, financial planning, production processes, and information on quality control standards and national and international market preferences. Furthermore, with the end of the Forest Incentives Program (PINFOR) mechanism in 2016 and a projected decrease in investment through the Incentives Program for Small Holders of Land Suitable for Forestry or Agroforestry (PINPEP) mechanism (only USD \$3.9 million will be invested over the next 5 years compared with USD \$12.6 million invested during the last 10 years), incentives for farmers to implement sustainable production practices will be reduced. Finally, there is a lack of the necessary baseline information (biophysical, socioeconomic, and market information) for developing impact indicators to support the long-term management and monitoring of environmentally friendly production practices.</p>
<p>2. Environmental authorities and municipalities have limited training and information and limited planning and management capacities for implementing regional planning efforts for biodiversity conservation, sustainable forest management (SFM), and SLM in forest/production landscapes.</p>	<p>The national environmental authorities (e.g., MARN, National Council on Protected Areas [CONAP], INAB, the Ministry of Agriculture, Livestock, and Nutrition [MAGA]), and the municipalities lack the tools necessary for the collaborative planning and development of landscape-level initiatives that address issues related to the loss of biodiversity and forest cover simultaneously with the degradation of soils that results primarily from non-sustainable production practices in forest/agricultural landscapes. This includes the lack of and/or outdated management plans for national and regional PAs; the lack of conservation and management programs for areas prioritized for the conservation of endangered species; and the absence of SLM plans to reduce soil degradation, enhance forest cover, and promote ecosystem connectivity. At the local level, municipalities have limited capacity to enforce regulations regarding forest management and biodiversity conservation because of the lack of skilled staff and equipment to control and/or reduce threats to biodiversity and the forests that remain. In addition, the municipalities lack the capacity to engage landowners (privately owned farms, communal forests, etc.) in long-term conservation agreements that will allow them to use landscape management tools (LMT) such as biological corridors, forest enrichment, live fences, and windbreaks to strengthen ecosystem connectivity in production landscapes. Finally, the municipal environmental authorities lack the training and logistical support necessary to implement biodiversity conservation, SFM, and SLM measures, as well to monitor the status of biodiversity, forests, soils, and ecosystems services at the farm and landscape levels.</p>

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## II. STRATEGY

9. The project's objective is to mainstream biodiversity conservation and SLM objectives into the production landscapes of the Central Volcanic Mountain Range in Guatemala, contributing to the well-being of local populations and the delivery of multiple global environmental benefits. The Global Environment Facility (GEF) investment will counteract the loss of pine-oak forest (broadleaf forests, mixed forests, and coniferous forests), biodiversity of global importance, and the degradation of soil in the Central Volcanic Mountain Range. This will be achieved through three interrelated outputs as follows:

- Outcome 1 – Development of an enabling environment for the delivery of multiple global environmental benefits through models of sustainable agriculture/non-timber forest production and economic incentives derived from improved markets and ecosystem services.
- Outcome 2 – Delivering multiple environment benefits by connecting core PAs within sustainably managed production landscapes in the central volcanic chain in Guatemala.
- Outcome 3 – Knowledge management and monitoring and evaluation (M&E).

10. **Project Outcome 1** will develop an enabling environment to allow mainstreaming of biodiversity conservation and SLM considerations into the production landscapes of the Central Volcanic Mountain Range of Guatemala through models of sustainable agriculture and forestry production and economic incentives derived from improved markets and ecosystem services. First, economic incentives will be provided through the certification of biodiversity-friendly agricultural production systems and the sale of non-certified products derived from sustainable agriculture (coffee and vegetables) and harvesting and cultivation of non-timber forest products (NTFP; honey, and the ornamental palm pacaína [*Chamaedorea elegans*]) in both domestic and export markets. Supporting certified and non-certified products will increase income opportunities for small farmers who have adopted biodiversity-friendly production practices, SFM, and ensure reduced soil degradation. The certification systems that will be promoted are: coffee (Fair Trade and Bird-Friendly); vegetables (GLOBAL G.A.P and Hazard Analysis and Critical Control Points [HACCP]), honey (Japanese Agriculture Standard [JAS] and Fair Trade), and pacaína (Rainforest Alliance). Other certification schemes may be explored during project implementation based on market conditions and interest by small farmers and producers. The project will identify national and international buyers for certified and non-certified products, including purchasing conditions (standards, frequency, prices, etc.), development of business plans for each product to support their marketing, and enhancing local capacities to facilitate the adoption of best production practices, strengthening business management, and monitoring of certified or non-certified production. The participation of the private sector will provide be a key aspect of the project to identify incentive mechanisms (e.g., price premiums, extension services, preferential purchasing from prioritized areas of the project) for promoting certified and non-certified products and procedures to operationalize environmentally friendly production. The Guatemalan National Coffee Association (ANACAFE) will provide its institutional training platform to promote best agricultural practices to organized coffee farmers, will make available marketing mechanisms, and will facilitate Bird Friendly and Fair Trade certification of coffee produced in the project's prioritized areas; the Federation of Coffee Producers' Agricultural Cooperatives of Guatemala (FEDECOCAGUA) will also provide support for the implementation of coffee certification schemes, and the Guatemalan Association of Private Natural Reserves (ARNPG) will support the certification for pacaína by the Rainforest Alliance. The GLOBAL G.A.P and HACCP certification will be promoted for vegetables, and the JAS and Fair Trade will be promoted for honey production. In addition, the project will liaise with the National Competitiveness Program (PRONACOM) to strengthen market strategies for certified products. The project will support a total of 78,679 ha of sustainable agriculture/agroforestry production systems (certified and non-certified) that will be implemented through Component 2.

11. A financial and profitability analysis that compares revenue from control farms (i.e., farms without the project's intervention) to beneficiary farms (i.e., farms with the project's intervention) focusing on coffee production, will serve to assess changes in net income from small landowners and farmers (beneficiaries differentiated by gender) as a result of the GEF investment, as well as the environmental benefits derived from the implementation of the environmentally friendly agricultural production models and SFM and SLM.

12. Second, project Outcome 1 will facilitate access to SFM incentives through two (2) carbon sequestration compensation projects as part of a carbon sequestration certification and verification program; these projects will include agroforestry systems with coffee and agroforestry systems with annual crops, as well as the protection and restoration of the natural vegetation (i.e., use of LMT) in production lands. GEF resources will be used to design a program for carbon sequestration certification and verification, following the methodological framework of the Clean Development Mechanism (CDM) (AR-AMS0007, *A/R Small-scale Methodology: Afforestation and Reforestation Project Activities Implemented On Lands Other Than Wetlands*, version 3.1 [CDM, 2017]). The carbon sequestration amount will be certified and verified by an organization (i.e., ICONTEC) approved by the United Nations Framework Convention on Climate Change and carbon credits will be sold through voluntary national markets. The project will strengthen and consolidate the voluntary carbon mitigation platform REDUZCO2, which is currently being established in Guatemala and through which the project will be able to exchange carbon certificates. This approach is based on a successful experience using a CDM methodology and the sale of carbon credits in national markets under the GEF-UNDP Project 3590, *Mainstreaming Biodiversity in the Coffee Sector in Colombia*. GEF-UNDP Project 3590 was considered successful based on the achievement of the targets set for emissions benefits under three (3) pilot areas. More specifically, over 7,662 tons of carbon dioxide equivalent (CO<sub>2</sub>-eq) were sequestered under the project by establishing 450 ha of LMT as part of a greenhouse gas (GHG) emission offset program for the three (3) pilot areas. The CDM methodological framework (AR-AMS0001 methodology) was used to estimate the previous carbon sequestration amount, which was verified by the Colombian Institute of Technical Standards (ICONTEC). The project generated demand for the purchase of all 7,662 tons of CO<sub>2</sub>-eq at an average price of USD \$6.30/ton of CO<sub>2</sub>-eq (tCO<sub>2</sub>-eq). The economic benefits were shared with farmers who participated in the project according to number of certified ha planted per farm. The project ended in 2014 and this pilot carbon sequestration initiative is being replicated by the Colombian Coffee Federation in other municipalities. For the project proposed herein, a total of 73,076 tCO<sub>2</sub>-eq will be sequestered over a 7-year period in an area of 4,500 ha and the governance for carbon sequestration initiatives will be ensured as well as the promotion and marketing of carbon credits that will be generated.

13. Access to SFM incentives for small-scale producers and farmers will also be made available through INAB's PINPEP and PROBOSQUE programs. Both mechanisms include cash incentives to landowners and/or owners of forested lands for carrying out reforestation, natural forest management, and implementing agroforestry systems according to a plan approved and supervised by INAB. The project will strengthen the management capacities at the municipal and local levels to support small landowners in developing management plans and documentation to access the PINPEP and PROBOSQUE incentives programs, and to support the management mechanisms for oversight and monitoring.

14. Third, project Outcome 1 will allow the implementation of two projects for PWS in which upstream providers of the service will be compensated by downstream water users for maintaining and conserving upstream forests to ensure the availability and/or quality of the water. More specifically, the PWS projects will contribute to the protection of forest water resources within two MRPs in the municipalities of Concepción Chiquirichapa, department of Quetzaltenango, and Esquipulas Palo Gordo, department of San Marcos. A willingness-to-pay analysis performed indicated that water users are willing to pay up to 2.18 times than current rates (USD \$0.69/month) if the additional resources are invested in ensuring protection of the water sources within the MRPs. Potential users include the local communities, represented by local water users' committees, the urban populations of municipal capital towns, and rural communities who use water for domestic use and agricultural production. This will serve as the basis for defining how the PWS projects will be implemented through Component 2, and will include voluntary mechanisms for participation and legally binding mechanisms to ensure the delivery of services as well as payments from water users (e.g., urban households and agricultural farms) and other related responsibilities and obligations. Limitations to existing administrative and technical capacities of environmental authorities for the implementation and monitoring of the PWS project will be overcome as the training program increases local knowledge and skills developed by the project. This will include the development of PWS technical standards as well as protocols and specific capacity-building actions (workshops, seminars, etc.) for monitoring the environmental and socioeconomic benefits of the PWS initiatives.

15. Finally, the project will strengthen the capacity of up to 2,780 small producers and farmers (differentiated by gender) for the certification of biodiversity- and forest-friendly products and implementation of the carbon



sequestration and compensation program, PWS projects, and access to forest incentives. Capacity building will be further enhanced through the development of a participatory monitoring program to assess biodiversity conservation, SFM, and SLM benefits. The monitoring system will include a computer-based platform operated by the National Information System of the MARN (SIA-MARN) with links to CONAP's Biodiversity Clearing House Mechanisms and the Forest and Land Use Interinstitutional Monitoring Group (GIMBUT). UNDP development indicators (i.e., contained in the UNDP Capacity Development Scorecard) will be used to track progress made in improving capacity for planning, implementation, and monitoring. All activities under this output will follow the recommendations included in the project's Gender Mainstreaming Plan as well as the Stakeholder Engagement and Communication Plan to ensure the effective participation of national and municipal government agencies, the private sector, as well as local organizations and communities which include women and indigenous groups; and the equitable distribution of all related benefits.

16. **Project Outcome 2** will deliver multiple global environmental benefits (biodiversity conservation, reduced land degradation, reduced deforestation and carbon emissions, and increased carbon storage) through the implementation of landscape-level initiatives that address the loss of biodiversity and forest cover and the degradation of soils that result primarily from non-sustainable production practices in forest/agricultural landscapes. The project will consolidate 52,045.5 ha of biological corridors, including: a) implementation of LMT (forest enrichment, live fences, windbreaks, etc.) that connect agriculture/forestry production systems with existing PAs, thereby helping to strengthen the ecosystem structure and functionality of forests and to maintain stable populations of key species (mammals, birds, amphibians, and plants) in the Central Volcanic Mountain Range; and b) rehabilitation of 4,500 ha of degraded forests through reforestation with native species and natural regeneration, thereby improving carbon stocks by up to 73,076 tCO<sub>2</sub>-eq. Establishing LMT (i.e., biological corridors, forest enrichment for conservation and fuelwood management, live fences, windbreaks, etc.) at the farm level will constitute the building blocks for establishing connectivity between the PAs and forest patches located outside the PAs. Seventeen (17) conservation agreements with landowners' groups and associations (privately owned farms, communal forests, etc.) will be established for the implementation of LMT and reforestation, and to facilitate access to plant material from 31 community, private, municipal nurseries, including native germplasm for agroforestry and silvopastoral systems. Ecosystem connectivity will be further enhanced through SLM plans for the middle and upper sections of six watersheds (229,831.87 ha; Achiguate, Coyolate, Naranjo, Ocosito, Samalá, and Suchiate rivers), which will include actions to protect and restore the forest cover along streams and springs, in addition to measures to reduce soil degradation at the farm and landscape levels reduction and control of soil erosion and sedimentation, and restoration of stream/river banks. In addition, the project will allow the installation of 1,000 energy-efficient stoves for approximately the same number of families in the communities that reside in key areas for ecosystem connectivity who use fuelwood as their principal source of energy. Avoided GHG emissions resulting from the implementation of the energy-efficient stoves program are estimated to be 32,662 tCO<sub>2</sub>-e over a 7-year period.

17. Under Outcome 2 the project will also develop five participatory managements plans for the following MRPs: a) Tecpán Municipal Forest (1,706.25 ha), b) Saqbé Quetzaltenango (5,615.43 ha), c) Zunil (4,325 ha), d) Esquipulas Palo Gordo Municipal Forest (1,797.39 ha), and e) San Cristóbal Cucho Municipal Forest (218.50 ha) Financing mechanisms will be implemented to reduce the financial gap by up to 25% to cover basic management of these MRPs. These actions and the strengthening of the municipal capacities in planning, participatory management and monitoring, as well as oversight and control, will contribute to increasing the management effectiveness of the MPRs as measured by GEF's Management Effectiveness Tracking Tool (METT) by up to 15%. In addition, eight proposals for the recategorization of national PAs to National Parks [NPs] and six PCZs will be developed to integrate them with the surrounding forest/production landscapes and emphasize their importance as the principal landscape elements for biodiversity conservation through improved ecosystem connectivity for the delivery of ecosystem services. CONAP has identified the need to recategorize the PAs established before 1980, particularly the PCZs, so that they are categorized under the current national categories established by the SIGAP (e.g., Forest Reserve and Natural Monument) and based on updated technical criteria and conservation objectives. Conservation and management programs in three prioritized areas for the conservation of 19 endangered, vulnerable, and threatened species of amphibians in the municipal forests of Rafael Pie de La Cuesta (department of San Marcos), San Pedro Sacatepéquez (department of San Marcos), and the Zunil MRP (department of Quetzaltenango) will further contribute to the preservation of forests patches. As a result of the implementation of these landscape-level initiatives, up to a 19% reduction in deforestation (1,154 ha) will be achieved, and will reduce emissions of up to

247,734.6 tCO<sub>2</sub>-eq over a 7-year period. The development of production plans and protocols to support the implementation of best agricultural and forestry production practices in the selected project sites, including private farms, community forests, and municipal forests, will establish 78,679 ha of certified and non-certified agriculture/forest production systems (including agroforestry systems in coffee landscapes).

18. The project will improve the management and technical capacity of 598 PA officials, municipal officials, and local communities in the planning, implementation, and monitoring of actions to reduce the loss of biodiversity and forest cover and reduce soil degradation of the selected forest/production landscapes of the Central Volcanic Mountain Range in Guatemala. Changes in management and technical capacities will be measured using the UNDP Capacity Development Scorecard. More specifically, the project will implement an institutional capacity-building program for national and regional officials and field personnel to support the sustainable management and conservation of biodiversity in production landscapes, the use of SFM and SLM methodologies and tools, and the quantification and evaluation of reduced deforestation. In addition, and jointly with municipal authorities and local communities (COMUDES and Community Development Council - COCODES), the project will review and update the development plans, land use plans, and institutional strategic plans for 31 municipalities to ensure that principles for biodiversity conservation, SFM, SLM, and gender equality and their measures for implementation, are incorporated into the plans. The project will equip and train staff from 31 environmental/forestry municipal offices to improve the capacity of municipal environmental authorities to enforce local regulations regarding biodiversity conservation and forests and land use. Finally, municipal-level monitoring and enforcement systems will be implemented to facilitate decision-making and the assessment of SFM, SLM, and biodiversity benefits in two landscapes in the Central Volcanic Mountain Range, and will be articulated with national monitoring systems (MARN, CONAP, INAB, MAGA, and National Coordination for Disaster Reduction [CONRED]).

19. **Project Outcome 3** provides the necessary means for M&E of project results to inform adaptive management and improve the implementation of the project. A mid-term review (MTR) will be conducted between the second GEF Project Implementation Report (PIR) and third PIR, and the terminal evaluation (TE) will be conducted by independent evaluation teams and compiled into reports. Outcome 3 will consolidate best practices and lessons learned resulting from project implementation and will support the dissemination of lessons learned and experiences at the sub-national (other municipalities and production landscapes in Guatemala) and national levels, as well as to other countries in Latin America and the Caribbean.

20. The project design considers the assumption that achievement of the proposed outcomes relies on the willingness of the governments of Guatemala, the institutions that represent them, and key national, sub-national, and local stakeholders to overcome the identified barriers that limit capacities and to jointly develop strategic planning and implement solutions to counter the loss of biodiversity, land degradation, and deforestation ("Theory of Change"). The project strategy builds on the active participation of public, private, and civil society partners in Guatemala and will result in the mainstreaming of biodiversity conservation and SLM objectives into the production landscapes of the Central Volcanic Mountain Range, thereby contributing to the well-being of local populations and ensuring the delivery of multiple global environmental benefits. The interrelated outcomes described above will be the means through which this is achieved (see Figure 2).

#### *Global environmental benefits*

21. The project will deliver global environmental benefits related to biodiversity conservation, reduced land degradation, and SFM. This will be achieved with equal participation by men and women, ensuring that both men and women benefit equally from the project and that the concerns and experiences of the women involved are an integral part of the development, implementation, and M&E of the project. The global environmental benefits to be delivered are:

- 78,679 hectares (ha) of certified and non-certified agriculture/forest production systems.
- Key ecosystems that provide ecosystem services are conserved and used in a sustainable manner.
- Stable populations of indicator species (mammals, birds, amphibians, and plants) in forest/agricultural landscapes after seven years (project duration).
- Enhanced Biological corridors (52,045.5 ha) provide connectivity to forest remnants and contribute to the conservation to biological important areas of the Central Volcanic Mountain Range of Guatemala.

- Species of global importance benefited include: the horned guan (*Oreophasis derbianus*), the highland guan (*Penelopina nigra*), the quetzal (*Pharomachrus mocinno*), the pink-headed warbler (*Ergaticus versicolor*), the golden-cheeked warbler (*Dendroica chrysoparia*), the azure-rumped tanager (*Tangara cabanisi*), the Guatemalan fir (*Abies guatemalensis*), and species from the genera *Pinus* and *Quercus*.
- Improved management effectiveness for 5 regional level PAs (13,662.57 ha).
- Carbon sequestration: 73,076 tCO<sub>2</sub>-eq in seven years (reforestation, restoration, and sustainable agroforestry and agricultural systems).
- Reduction in firewood consumption and GHG emissions: 32,662 tCO<sub>2</sub>-e over a seven-year period.
- Six (6) sustainable land management plans (watershed management plans) for the middle and upper sections of 6 watersheds (229,831.87 ha) in the Pacific slope of Guatemala.
- Reduction by 19% (1,154 ha; 247,734.60 tCO<sub>2</sub>-eq by project end) in deforestation in prioritized landscapes in Central Volcanic Mountain Range, including buffer zones of existing PAs.

22. The project's strategy includes actions to address objectives of the GEF Biodiversity (BD) Focal Area, the Land Degradation (LD) Focal Area, and the SFM Focal Area. More specifically, the project is framed within BD Objective 1 (BD-1: Improve Sustainability of Protected Area Systems, Program 1: Improving Financial Sustainability and Effective Management of the National Ecological Infrastructure); BD Objective 4 (BD-4: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes/ Seascapes and Sectors, Program 9: Managing the Human-Biodiversity Interface); LD Objective 2 (LD-2: Generate sustainable flows of ecosystem services from forests, including in drylands, Program 3: Landscape Management and Restoration); SFM Objective 1 (SFM-1: Maintained Forest Resources: Reduce the pressures on high conservation value forests by addressing the drivers of deforestation); and SFM Objective 2 (SFM-2: Enhanced Forest Management: Maintain flows of forest ecosystem services and improve resilience to climate change through SFM).

23. The project will contribute to achieving the objectives of the National Policy for Biological Diversity and the CBD Action Plan 2011-2020 through the restoration and reforestation of degraded areas and the conservation and sustainable use of biodiversity in natural forests, including measures to strengthen PAs' management and their buffer zones in the Central Volcanic Mountain Range of Guatemala, as well as the consolidation of the area's biological corridor through improved connectivity between existing PAs and forest patches in an agricultural/livestock production landscape. Additionally, the project responds to the Protected Areas Law, Decree 4-89 (modified by Decree 10-96), which establishes that biodiversity is an integral part of Guatemalan patrimony, and as such, should be conserved through the effective management of the country's PAs. Guatemala became a member country of the CDB through its ratification on July 10, 1995. The 10th Conference of Parties (COP 10, ratified in Aichi, Japan), Decision X/2: Strategic Plan for Biodiversity 2011-2020, sets forth strategic objectives and goals for biodiversity (Aichi Targets) for the members of the CBD. The project will contribute to achieving Aichi Targets 2, 5, 7, 11, 14, 15, and 18.

24. The project follows the guidelines established in the national policy for the Conservation, Protection, and Improvement of the Environmental and Natural Resources (2007) for the development of standards for conservation and sustainable use of forests and inclusion of forests and prioritized areas for reforestation as key elements in the country's land use plans. The project is consistent with the Forest Law of Guatemala (1996) and the National Forest Policy. The National Forest Policy establishes that the municipalities shall collaborate with INAB to ensure legal compliance and that the municipal governments shall develop, approve, and implement development plans for local use of forest resources. The forestry legislation, together with the Guatemalan Municipal Code (1999), favors the decentralization of forest management and provides a clear definition of the role of the municipalities, including: a) the development of forest policy and management plans at the local level; b) activities around the granting of licenses, control, and inspection; and c) establishing monitoring mechanisms, which includes the establishment of the municipal forest offices (OFMs). The project addresses these directives and promotes the collaborative association between the INAB and municipalities for forest management. The project will serve to strengthen the OFMs by equipping and training personnel for improved planning, management, and monitoring skills. The project will also focus on two actions in the National Forestry Agenda (ANF), which were approved by the INAB within the framework of Guatemala's National Forestry Program: a) the conservation of forests, including forests associated with PAs that comprise the SIGAP, and b) the promotion of economic compensation mechanisms for carbon sequestration. The project will make use of the PINPEP mechanism and the PROBOSQUE initiative if approved by the

Government of Guatemala (GoG), to provide incentives to small farmers and land owners for the implementation of SFM activities and to contribute to their well-being.

25. The project will also take action to reduce GHG emissions as established in the framework of the National Climate Change Policy (2009) and the Framework Law for Regulating the Reduction of Vulnerability, Obligatory Adaptation to the Effects of Climate Change, and Mitigation of Greenhouse Gases. The project will contribute to that which is stipulated in the law in the following manner: a) the reduction of GHG emissions, and b) the reduction of forest fires and the effective management of biological corridors and forest ecosystems to increase their resilience to climate variability and climate change, and to ensure the maintenance of ecological processes and natural goods and services.

26. The project is also aligned with the UNDP Development Assistance Framework (UNDAF) 2015-2019 for Guatemala, which supports the achievement of the following: a) impoverished rural populations develop new sustainable economic opportunities to compete in market systems; b) the Urban and Rural Development Councils system and related government institutions work together to develop policies and investments that promote the protection, responsible use, and conservation of natural resources, as well as resilience of the community in dealing with natural climate events; and c) indigenous populations, primarily youth and women, are active citizens and participate effectively in decision-making related to development themes at the community, municipal, sub-national, and national levels.

27. In addition, the project is part of UNDP's effort to support the progress of Guatemala towards achieving the Sustainable Development Goals (SDGs). In particular, the project will contribute to achieving the following SDGs: Goal 1: End poverty in all its forms everywhere; Goal 2: Zero hunger; Goal 5: Achieve gender equality and empower all women and girls; Goal 6: Clean water and sanitation; Goal 7: Affordable and clean energy; Goal 8: Decent work and economic growth; Goal 12: Responsible consumption and production; Goal: Climate action; and Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.

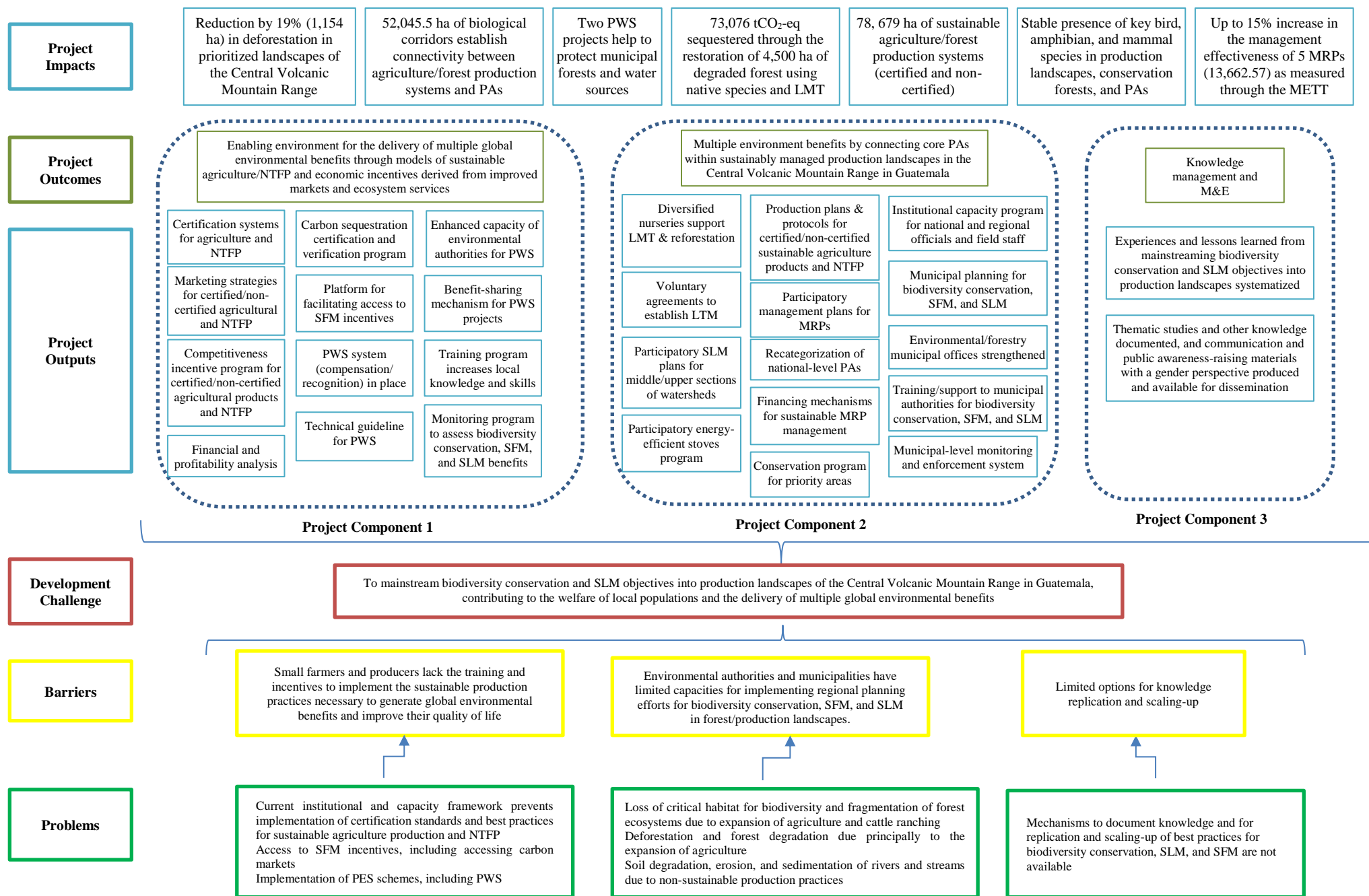


Figure 2. Theory of Change

### *The baseline scenario*

28. **Biodiversity:** The problem that the baseline activities address is the prevention of biodiversity habitat loss in the humid and very humid montane forests of Guatemala through the protection of the forests. The PAs are an essential component of the strategy to conserve forests and biodiversity in the country. The SIGAP, which is managed by CONAP, currently has 322 areas that cover 34,841.99 km<sup>2</sup> (31.06% of the country's territory). In the region there are 78 PAs, 38 of which are PAs under different management categories. The remaining 40 are private natural reserves (PNRs) registered with the SIGAP that cover an area of 1,959.20 km<sup>2</sup> (1.8% of the country's territory). Guatemala's PAs are insufficiently financed, and the data related to current levels of investment and income generation are not generally available. For the year 2010, CONAP required USD \$24.24 million to cover the basic management costs of the PAs, and the budgetary resources that were available that year to cover operating costs and investment in the PAs, including funding from the GoG, donations, loans, and investments from the PAs themselves was USD \$19.29 million. This resulted in a financial gap of USD \$4.95 million. In addition, it is estimated that over the next few years this gap will grow because of increased operating costs and investment for the PAs due to inflation rate growth in Guatemala. The available financing for CONAP has decreased slightly since 2008, and it is projected that the funds available will be USD \$7.6 million per year for the period of 2012-2017.

29. **Forests:** The problem that the baseline activities address is the deforestation and non-sustainable use of forests. One of the primary activities promoted by the GoG has been reforestation, especially through PINFOR, which offers economic incentives for the reforestation of an area at least 2 ha in size and that is duly inscribed in the Property Registry. Between 1998 and 2012 reforestation of 112,341.94 ha and the use of 216,235.38 ha of forest was achieved through PINFOR with an approximate investment of USD \$181 million. PINFOR will end in 2016 and the INAB has proposed that PROBOSQUE take its place; the program has already been submitted to the national congress for approval. The program known as PINPEP offers economic incentives in the form of cash payments to increase the coverage of small land areas through reforestation and natural forest management. Since its creation in 2006, PINPEP has benefitted 11,583 men and 5,108 women in the management of 1,247.71 ha of natural forest for production; 15,241.29 ha of natural forest for protection; 1,289.71 ha of forest plantations; and 1,502.59 ha of agroforestry systems, with a total investment of approximately USD \$12.55 million. The projected investments through PINPEP for the period of 2015-2022 will be USD \$5,893,569.

30. Investments at the regional and national levels are focused on projects and programs developed by INAB to promote SFM. These include: a) strengthening institutional capacities to improve enforcement of the law and forest governance in Guatemala; b) strengthening the Guatemalan forestry information system to increase market and commercial transparency and decision-making in the forestry sector; c) information system for productivity of forests in Guatemala; d) creation of a program to strengthen the traceability of legally obtained forest products in Guatemala; and e) increased control and efficiency of forest products through the creation of a program to improve the performance of the primary processing forestry industry. Through these initiatives, a total of USD \$495,180 was projected to be invested during 2015-2016. In addition, investments from PINFOR, PINPEP, and the INAB Office of Community Forests funded the establishment of 19 OFMs. Training in forestry management and control of forest fires for municipal staff and the local communities of the departments in the project region will be a main activity of the baseline.

31. **Land Degradation:** The problem addressed by the baseline activities is the degradation of soil caused primarily by the expansion of non-sustainable agricultural production practices. National-level investments are focused on the formulation of policies and the requirements of technical and legal instruments for implementing the United National Convention on the Fight Against Desertification and Drought in Guatemala. This will be undertaken through programs and/or projects addressing land degradation, desertification, and drought. These programs include the Rural Development Program for Adaptation to Climate Change, the Project for the Integrated Management and Protection of Natural Resources in the Dry Corridor for Adaptation to Climate Change, and sustainable natural resources management with a total budget of USD \$7,380,720 for 2013-2018. The expected contribution of these projects is increased forest and vegetation cover through the integrated management of natural resources and watersheds to prevent land degradation and enhance water availability, among other benefits.

32. The project's overall area of work is located within Guatemala's Pacific slope in the upper and middle parts of the Sierra Madre (Figure 1). To the north, the border of the project region constitutes the northern part of the

political boundary of the 79 municipalities that comprise it (7,176 km<sup>2</sup>); to the south, the border of the PAs located within this region; to the east, the department of Santa Rosa; and to the west, the border with Mexico. An area for direct project intervention has been prioritized within this region. This area includes 31 municipalities (3,897 km<sup>2</sup>; 54.28% of the overall project area) located within the volcanic range and the areas of biological connectivity (one in the department of Sololá, six in the department of Quetzaltenango, five in the department of Sacatepéquez, four in the department of Escuintla, 10 in the department of San Marcos, two in the department of Chimaltenango, and three in the department of Suchitepéquez).<sup>2</sup> The prioritized area includes the upper and middle parts of 6 watersheds (229,831.87 ha)<sup>3</sup> in the volcanic range, and the PAs within the area of biological connectivity located within those watersheds. The GoG has prioritized the Central Volcanic Mountain Range other areas of the country with higher rates of deforestation due to the following reasons: a) the Central Volcanic Mountain Range includes areas of low forest cover with medium-to-steep slopes and is a highly important water recharge area (currently serving more than 8 million people and providing water to the agricultural production systems of the highlands, middle, and lower Pacific slope); b) it includes the last remnants of pine-oak forest in the highlands, which serve as areas of connectivity between existing PAs that are of paramount importance for the conservation of the region's unique biodiversity and to sustain the supply of environmental goods and services; c) it contains a high number of PAs (88), including 48 regional and national PAs and 40 PNRs, which will directly benefit from the project through their improved sustainability; and d) the range is home to over 2,000 urban areas and the project will contribute to raising awareness by providing training in environmental issues to reduce pressure from the population on natural resources (biodiversity, forests, water, and soils). The region has an approximate population of 9,101,841 (48.22% men and 51.78% women), of which 43.43% are indigenous. Population growth rate is 2.93 (greater than the national average of 2.34). Illiteracy among the population is at 13.50%; the level of poverty is 56.15%, and extreme poverty is 11.86%. Poverty and the size of the population exert high pressure on the region's biodiversity, soil, water, and forests. An important characteristic of Guatemala is the existence of communal lands, which are lands that are owned, possessed, or used by indigenous communities or rural peasants as collective entities, with or without legal status. They are the lands that traditionally have been owned or used under a communal regimen, although they are registered in the name of the government, municipalities, or individual persons. There are a total of 514 areas in the region that are classified as communal lands, which cover a total surface area of 115,275 ha. A description of the target landscape within the project's overall area of work is included in Annex O.

33. **Project Identification Form (PIF) Conformity:** The project design is closely aligned to the original PIF. The structure of the project components closely resembles the PIF that was approved by the GEF. However, the following changes were made, which do not represent a departure from the project's strategy as defined originally in the PIF nor will they have an impact on the funds originally budgeted:

PIF Outputs (Component 1)	Project Document Outputs (Component 1)
Certification systems for agriculture and forestry production	Certification systems for agricultural products and NTFP
Improved partnerships, alliances, marketing strategies and protocols for certified and non-certified agricultural and forest products	Improved partnerships, alliances, marketing strategies and protocols for certified and non-certified agricultural products and NTFP
-Financial and profitability analysis compares the income from control group farms with income from certified project farms	Financial and profitability analysis compares the income from control group production units with income from certified project production units

<sup>2</sup> Municipality of Nahualá (Department of Sololá); Municipalities of San Marcos, Sibinal, Tajumulco, Nuevo Progreso, El Tumbador, San Pablo, El Quetzal, La Reforma, San Cristobal Cucho, and Esquipulas Palo Gordo (Department of San Marcos); Municipalities of Quetzaltenango, San Juan Ostuncalco, San Martín Sacatepéquez, Zunil, Colomba, and El Palmar (Department of Quetzaltenango); Municipalities of Antigua Guatemala, Santa María de Jesús, Ciudad Vieja, San Miguel Dueñas, and Alotenango (Department of Sacatepéquez); Municipalities of Escuintla, Siqinalá, Palín, and San Vicente Pacaya (Department of Escuintla); Municipalities of San Francisco Zapotitlán, Zunilto, and Pueblo Nuevo (Department of Suchitepéquez); and Municipalities of Acatenango and Yepocapa (Department of Chimaltenango).

<sup>3</sup> Río Achiguate, Río Coatán, Río Coyolate, Río Cuilco, Río María Linda, Río Nahualate, Río Naranjo, Río Ocosito, Río Samalá, Río Sis-Icán, and Río Suchiate.

Carbon sequestration certification and verification program in place following the Clean Development Mechanism (CDM) methodological framework (e.g., AR-AMS0001)	Carbon sequestration certification and verification program in place following the CDM AMS0007, A/R Small-scale Methodology
Incentives (e.g., PINPEP, other) in support of farmers implementing reforestation actions and the mix of native trees and agricultural systems to enhance environmental services (hydrological regulation, biodiversity habitat, carbon storage, and soil protection).	Platform for facilitating access to incentives programs (e.g., PINPEP, PROBOSQUE, others) supporting farmers implementing reforestation actions and the mix of native trees and agricultural systems to enhance environmental services (hydrological regulation, biodiversity habitat, carbon storage, and soil protection).
Payment system for watershed services in place that benefits users and providers	Payment system (compensation/recognition) for watershed services in place that benefits users and providers
Technical guideline for watershed-related payments	Technical guideline for watershed-related payments (compensation/recognition) designed
-Benefit-sharing mechanism for watershed-related payments	Benefit-sharing mechanism for watershed-related payments (compensation/recognition)
Training program increases local knowledge and skills (up to 2,000 farms/community forests, beneficiaries differentiated by gender trained by project end)	Training program increases local knowledge and skills (2,780 small producers and farmers [beneficiaries differentiated by gender] trained by project end)
Participatory monitoring program to assess biodiversity conservation, SFM, and SLM	Participatory monitoring program to assess biodiversity conservation, SFM, and SLM, harmonized with national and local monitoring programs
PIF Outputs (Component 2)	Project Document Outputs (Component 2)
-Thirty one (31) community/municipal nurseries improve production and access to native germplasm for agroforestry and silvopastoral systems, soil stabilization, and contribute to connectivity of biological corridors in Component 2	Land use planning strategy supports the implementation and/or strengthening of 31 diversified nurseries, improves production and access to native germplasm for agroforestry and silvopastoral systems; ensures soil stabilization; and contributes to the connectivity of biological corridors
Conservation agreements with landowners (privately owned farms, communal forests, etc.) used for establishing landscape management tools (i.e., biological corridors, forest enrichment for conservation and firewood management, live fences, windbreaks, etc.), strengthening ecosystem connectivity and reducing deforestation in productive and natural landscapes	Voluntary agreements through different participatory conservation models (e.g., privately owned farms, landowners, communal lands, etc.) used for establishing landscape management tools (i.e., biological corridors, forest enrichment for conservation and fuelwood management, natural regeneration, reforestation, rehabilitation of riparian forests, live fences, windbreaks, etc.), to strengthen ecosystem connectivity and reduce deforestation in production and natural landscapes
-SLM plans for the middle and upper sections of up to eleven (11) watersheds (274,593.17 ha) include measures to reduce soil degradation and contribute to enhance ecosystem connectivity	Participatory SLM plans for the middle and upper sections of six (6) watersheds (229,831.87 ha) include measures to reduce soil degradation and contribute to enhancing ecosystem connectivity



Energy-efficient stoves program reduces firewood consumption and greenhouse gas (GHG) emissions)	Participatory energy-efficient stoves program reduces firewood consumption and GHG emissions
Production plans and protocols support the implementation of certified and non-certified sustainable agricultural and forestry production practices in project sites (private farms, community forests, etc.), while contributing to enhance ecosystem connectivity	Production plans and protocols support the implementation of certified and non-certified sustainable agricultural and NTFP production practices in project sites (private farms, community forests, etc.), at the same time they enhance ecosystem connectivity
Five (5) participatory management plans for Municipal Regional Parks (MRP) strengthen local management, surveillance and control, and administration	Five (5) participatory management plans for MRPs strengthen local management, conservation, monitoring and control, and integration of the PAs into the biocultural landscape
Six (6) proposals for the re-categorization of national-level PAs (one National Park and six Permanent Closure Zones), include technical feasibility studies considering current national-level categories of the National Park System - SIGAP (e.g., Forest Reserve and Natural Monument)	Six (6) proposals for the categorization of national-level PAs (PCZs) and two (2) proposals for the recategorization of NPs, developed in a participatory manner, include technical feasibility studies considering current national-level categories of the National Park System – SIGAP), thus contributing to the conservation and sustainability of the areas
Financing mechanisms for the management of five (5) MRPs covering 14,611 ha implemented, including payment for ecosystem services (PES) and sustainable tourism	Financing mechanisms for the management of five (5) MRPs covering 13,662.57 ha implemented, including PES and sustainable tourism
-Conservation and management program for three priority areas (4,610 ha) for the protection of species: municipal forests of Rafael Pie de La Cuesta, municipal forests of San Pedro, Department of San Marcos; and the Zunil MRP, Department of Quetzaltenango) (including the conservation status of six [6] national endemic species of amphibians and nine [9] sub-national endemic species of amphibians).	Conservation and management program for three priority areas (4,655.3 ha) for the protection of species of amphibians (San Rafael Pie de la Cuesta MRP, San Marcos; San Pedro Sacatepéquez MRP, San Marcos; and Zunil MRP, Quetzaltenango
Development plans for 31 municipalities incorporate principles for biodiversity conservation, SFM, SLM, and their implementing measures	Development planning for 31 municipalities incorporates principles for biodiversity conservation, SFM, SLM, sustainable agriculture, and gender, and their implementing measures
Thirty-one (31) environmental/ forestry municipal offices fully equipped and with skilled staff for control, surveillance, and reduction of threats to biodiversity, soils, and forests	Thirty-one (31) environmental/forestry municipal offices with basic equipment and skilled staff for control, surveillance, and reduction of threats to biodiversity, soils, and forests, and gender equality and social inclusion

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### III. RESULTS AND PARTNERSHIPS

#### i. Expected Results:

34. The project's objective is to mainstream biodiversity conservation and SLM objectives into the production landscapes of the Central Volcanic Mountain Range in Guatemala, contributing to the well-being of local populations and the delivery of multiple global environmental benefits. The GEF investment will counteract the loss of pine-oak forest (broadleaf forests, mixed forests, and coniferous forests), biodiversity of global importance, and the degradation of soil in the Central Volcanic Mountain Range of Guatemala.

**Outcome 1. Development of an enabling environment for the delivery of multiple global environmental benefits through models of sustainable agriculture/non-timber forest production and economic incentives derived from improved markets and ecosystem services.**

#### ***Certified and non-certified agriculture/NTFP systems:***

##### Output 1.1 – Certification systems for agricultural products and NTFP.

35. The project will consolidate differentiated certification schemes for agricultural products and NTFP that will ensure the protection of biodiversity, forests, land, and water. The project will involve the production of coffee, vegetable gardens (e.g., Chinese pea and onions), honey, and pacaína, which are produced by different agricultural groups in the project's prioritized landscapes. The certification systems that will be promoted are: coffee (Fair Trade and Bird-Friendly); vegetables (HACCP), honey (JAS and Fair Trade), and pacaína (Rainforest Alliance). Other certification schemes will be explored during project implementation based on market conditions and interest by the groups of producers (e.g., ISEAL as deforestation free certification). Certification schemes will be developed acknowledging traditional practices and knowledge held by the indigenous populations and ensuring the inclusion of the gender perspective in the production processes, organizational governance, commercialization, the distribution of benefits derived from commercialization, and facilitating access to new markets. Differentiated certifications will contribute to increased productivity and will lead to increased family incomes.

36. The activities for developing this output are as follows: a) national- and international-level market study for each product identified (coffee, vegetables, honey, and pacaína). This study will identify national and international buyers, the purchasing conditions (standards, frequency, prices, etc.), and complementary certifications; and b) design and implementation of business plans for the prioritized agriculture (coffee and vegetables) products and NTFP (honey and pacaína). These business plans will promote business management strategies and certification for each product, including the development of business objectives, analysis of production costs; define the minimum production necessary to obtain earnings; create databases of national and international buyers; and identify priorities to implement the business plan. The business plans will be developed jointly with all members of each organized producers' group. The development of capacities to facilitate adopting best practices (agricultural, organizational, environmental, etc.), and for strengthening business management and monitoring of certified or non-certified production will be accomplished through Output 1.11. The activities related to this project output will be implemented in close coordination with ANACAFE for Bird Friendly, Fair Trade certification and other certifications they promote<sup>4</sup>, PRONACOM to strengthen market strategies for certified products, and FEDECOCAGUA to exchange experiences with other groups of farmers about the implementation of coffee certification schemes, the ARNPG for certification for pacaína as market incentive for its associates (individual and communal PNRs), and with international coffee buyers who have been already supporting groups of farmers (e.g. Starbucks and Nestle).

##### Output 1.2 – Improved partnerships, alliances, marketing strategies and protocols for certified and non-certified agricultural products and NTFP.

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<sup>4</sup> Rainforest Alliance, Utz Certified Good Inside, Nespresso Private Regulations, GlobalGAP (source: [http://anacafe.org/glifos/index.php?title=04AMB:Ambiente\\_sellos](http://anacafe.org/glifos/index.php?title=04AMB:Ambiente_sellos)).

37. The project will engage markets for certified and non-certified agricultural products and NTFP for promoting partnerships and strategic alliances with national and international buyers' networks (private or public sector) such as Pro-Markets Platform led by IFAD (International Fund for Agricultural Development) jointly with AGEXPORT or others that allow access to new and improved markets for certified and non-certified products. The marketing strategies to support the commercialization of certified and non-certified sustainable agricultural products and NTFP will be differentiated depending on the level of capacity and knowledge of each agricultural and producer's group, as the Project Preparation Grant (PPG) findings indicated that there are differences in knowledge and experience with certification and market access among the different groups. Because coffee cultivation covers 33.31% (91,402.37 ha) of the prioritized landscape and is considered an environmentally sustainable commodity (Green Commodity), strategic alliances with international companies through the UNDP Green Commodities Programme (GCP) will be developed. In addition, the project will provide additional support to institutional marketing strategies established in ANACAFE and FEDECOCAGUA for coffee, the Asociación Cooperación para el Desarrollo Rural de Occidente (CDRO) for vegetables and honey, ARNPG for pacaína, and MAGA for groups of agricultural producers.

38. To comply with this output, the activities to be implemented by the project are as follows: a) analyze current marketing strategies for each product considering its potential for certification or non-certification, as well as the interest of group of producers of participation in each scheme, or by the level of capacity of each group of producers; b) improve administrative and business capacity for marketing. This should be conceived within the business plans of Output 1.1 and developed in this output through workshops for developing marketing capacities, differentiated by each group of organized agricultural and NTFP producers; c) design and implement marketing strategies and protocols differentiated by certified or non-certified and by groups of organized agricultural producers. This will be included the advertising of the project's selected products at the national level (national agricultural and forest product fairs) and international level (GCP's Community of Practice, fairs or forums for commercialization of environmentally sustainable products); and d) establish alliances and partnerships with national and international buyers (public and private entities) of certified and non-certified products with the objective of creating capacities for negotiating and managing value chains in the short, medium, and long term (e.g., farmer credit investment in sustainable production, coffee plant renovation, post-harvest quality management techniques, technical assistance to improve agricultural practices, etc.). This activity will be differentiated according to the level of skills held by the groups of agricultural producers. The business and administrative capacity of producers' groups with a focus on marketing will be further strengthened through targeted training to be delivered through Output 1.11. The project will establish at least one marketing alliance per producers' group. The main stakeholders involved in the development of these marketing strategies and protocols are MINECO – PRONACOM, AGEXPORT, FEDECOCAGUA, ANACAFE, ARNPG, CDRO, and MAGA.

Output 1.3 – Competitiveness incentive program (e.g., preferential buying from project areas, price premiums, and extension services) promote the production of certified and non-certified products and increase income opportunities for small farmers derived from the adoption of biodiversity-friendly production practices.

39. The project will design and carry out actions to generate competitive incentives for producers, cooperatives, and associations through certified and non-certified products, which will increase opportunities for farmers to receive economic benefits from the adoption of biodiversity-friendly production practices. Incentives will include: a) preferential buying from project areas; b) price premiums as a result of the implementation of best production practices; and c) access to extension services to improve production practices and business and marketing strategies, facilitate access to existing incentives such as MAGA's efficient water management for irrigation incentive (which provides favorable credit conditions and which public recognition and awards to producer associations that make the best use of waters resources), and facilitate public-private partnerships, among others. The implementation of the competitiveness incentives program will lead to increased productivity, increased producer incomes, reduced incidence of pests and diseases, increased product quality, reduced production costs, and increased organization to make production processes more efficient. The design and implementation of the program will happen in close collaboration with PRONACOM, AGEXPORT, MAGA, Helvetas Guatemala, CONAP, ANACAFE, ARNPG, FEDECOCAGUA, CDRO, the Institute for Climate Change Research (ICC), among the main groups.

40. The specific activities for the implementation of the competitiveness incentive program: a) the design of the program for promoting the production of certified and non-certified products increasing opportunities to generate economic and non-economic benefits for farmers, through preferential price incentives, technical assistance,

business and marketing strategies, public-private partnerships, among others, considering the project's Gender Mainstreaming Plan (Annex M); and b) facilitate access to benefits of certification such as access to markets, premium prices, preferential purchases, technical assistance, etc., in order to strengthen sustainable production chains for the selected products (coffee, honey, vegetables, and pacaína). The development of organizational, management, and operational capacities needed to support the implementation of the program will be achieved through Output 1.11.

Output 1.4 – Financial and profitability analysis compares the income from control group production units with income from certified project production units.

41. This output will establish changes in profitability derived from the adoption and implementation of best management practices (BMPs) and certification, focusing mainly on coffee production. To achieve this, during the first year of project implementation a financial and profitability analysis of the production units without certification (control group) will be completed, which will serve as the baseline against which economic benefits with certification at the end of the project will be compared. The comparative analysis will include variations in production costs and income derived from the implementation of BMPs and the certifications implemented. The project will work in close collaboration with ANACAFE and the groups of producers that will participate in the financial and profitability analysis and which include: Cooperativa Integral El Socorro, R.L. with 22 members; Cooperativa Integral de Comercialización Nueva Victoria, R.L. with 43 members; Cooperative de Mujeres con Esencia de Café, R.L. with 23 members; and the Asociación Nueva Alianza with 40 members. The representative sample of the production units to perform the analysis will be 30% (or 36 production units; one unit = one member) of which at least 10 to 12%<sup>5</sup> should be managed or owned by women.

42. Specific activities related to this output include the following: a) selection of production units that will serve as control groups in conjunction with ANACAFE; b) establishing the baseline (production costs and income) through a survey among coffee producers' groups that are supported by ANACAFE—this will include meetings and workshops held to conduct the survey with members of ANACAFE and owners of the selected production units; and c) comparing the control production units with production units that are certified—two assessments will be completed during the life of the project (at the mid-term and end of the project).

**SFM incentives**

Output 1.5 – Carbon sequestration certification and verification program in place following the CDM AMS0007, A/R Small-scale Methodology

43. The project will execute a program for carbon sequestration certification and verification through two carbon sequestration initiatives and using the AR-AMS0007, *A/R Small-scale Methodology: Afforestation and Reforestation Project Activities Implemented on Lands Other Than Wetlands*, version 3.1 (CDM, 2017); the area covered under this program encompasses at least 4,500 ha. To implement this program, consideration will be given to Article 12 of the country's Climate Change Framework Law<sup>6</sup>, which establishes that only landowners comprising individuals, legal persons, municipalities, communities, or others, may apply for the benefits derived from the carbon sequestration projects if they are able to demonstrate ownership of the land. The principal agencies that will provide support to the implementation of the carbon sequestration certification and verification program are CONAP, MARN, INAB, ARNPG, MAGA, ANACAFE, FEDECOCAGUA, and ICC.

44. The activities for the implementation of the carbon sequestration certification and verification program are the following: a) definition of the project's conservation and connectivity strategy and identification of the specific areas of intervention in the prioritized areas of connectivity of the biological corridor of the Central Volcanic Mountain Range; this will be done following the standards of the Climate Change Law (Decree 7-2013) that guides the national carbon market; and b) formulation and verification of the GHG emissions compensation program (i.e., ICONTEC GHG Emissions Compensation Program), which include the following activities: i) conducting awareness-raising activities with beneficiaries about the carbon PES scheme to be certified; ii) characterization of land use/land

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<sup>5</sup> In line with the Gender Mainstreaming Plan.

<sup>6</sup> Congreso de la República. 2013. Decreto 7-2013. *Ley Marco para regular la reducción de la vulnerabilidad, la adaptación obligatoria ante los efectos del cambio climático y la mitigación de gases de efecto invernadero*. Guatemala: autor.

cover of the specific areas of intervention; iii) final definition of the LMT to be established (spatial dimensions and arrangement) and subsequently implemented: LMT I<sup>7</sup>: Protection and restoration of the natural vegetation; LMT II<sup>8</sup>: Agroforestry systems with coffee; and LMT III<sup>9</sup>: Agroforestry systems with annual crops. This takes into consideration the small- to medium-scale<sup>10</sup> carbon sequestration initiatives; the species to be used; the documentation required for establishing voluntary agreements for LMT implementation with each beneficiary or groups of beneficiaries (Output 2.2), these agreements will allow individuals or groups of farmers and producers to assume ownership of the carbon sequestration process and receive the benefits, provided that they comply with the technical requirements for measurement, calculation, and monitoring of carbon; and the databases or tracking system, which will include at the least information about the owners of the farms in which the LMT are implemented (including land tenure and legal aspects), identification number, coordinates of the farm, types of LMT implemented, year of implementation, and dimensions and number of trees; iv) quantification of the removals/compensations attributable to the implementation of LMT for GHG Emission Compensation Program; v) certification by ICONTEC, which includes visits to the farms of the beneficiaries, and auditing and adjustment of the program according to the recommendations of the auditors; vi) follow-up activities on the development of the program, such as inputs for recertification and audits of the program; vii) developing a sustainability strategy for the program, including the promotion and sale of carbon credits, resources for the audits for monitoring and technical support to the beneficiaries for managing the LMTs; and viii) outlining procedures and producing reports for the carbon credits sold.

45. The project will also contribute to strengthening and consolidating the national carbon market mechanism; currently a voluntary carbon-mitigation platform (REDUZCO2) is being established in Guatemala, and the project will work to strengthen and make use of this platform for the exchange of carbon certificates and as part of efforts to consolidate a national voluntary carbon market. In addition, the project will contact national companies that produce electricity using fossil fuels, which according to the Framework Law on Climate Change have an obligation to offset their emissions; these companies are considered to be the potential buyers of the emissions reduction certificates generated by the project. With the development of these activities, the governance of the carbon sequestration initiatives and the promotion and marketing of carbon credits that will be generated will be ensured; the implementation of the two carbon sequestration initiatives will be achieved through Output 2.2.

Output 1.6 – Platform for facilitating access to incentives programs (e.g., PINPEP, PROBOSQUE, others) supporting farmers implementing reforestation actions and the mix of native trees and agricultural systems to enhance environmental services (hydrological regulation, biodiversity habitat, carbon storage, and soil protection).

46. The project will design a platform to facilitate access to incentives for improving SFM. The principal objective will be to facilitate access to incentives for small-scale producers and farmers in the prioritized area of the project to implement LMT in their land; this will be achieved by promoting the forestry incentives currently available in the country, PINPEP and PROBOSQUE). Both mechanisms are coordinated by the INAB and include cash incentives, which the GoG grants through the Ministry of Finance (MINFIN) to landowners and/or owners of forested lands for carrying out reforestation, natural forest management, and implementing agroforestry systems according to a plan approved and supervised by INAB. The project will encourage equal access for men and women to these incentives.

47. The following activities will be developed through these outputs: a) validate jointly with the MAGA, INAB, CONAP, and MARN, the prioritized areas where the restoration of degraded lands and the consolidation and strengthening of areas of connectivity in the biological corridor of the Central Volcanic Mountain Range will be promoted; b) identify the municipalities whose jurisdictions encompass the identified and validated prioritized areas (these are the municipalities that will be prioritized with this platform); c) promotion of incentives among small

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<sup>7</sup> These systems are oriented towards restoring land that is in a resting phase (covered by shrub vegetation—*guamiles* and bushes), using available forest incentives in the country (PINPEP and PROBOSQUES).

<sup>8</sup> These tools will diversify coffee production with the incorporation of fruit trees and forests, or with commercially valuable crops. In the case of coffee cultivations with low levels of shade, shade will be increased using nitrogen-fixation species.

<sup>9</sup> These systems will be implemented in upper part (cold region) of the watersheds, where the land is highly fragmented and land use is for small-scale landholders. Trees with multiple uses and highly valuable fruit trees will be used in the production systems, which will also contribute to the adoption of soil conservation and protection practices into this area.

<sup>10</sup> Small-scale afforestation/reforestation projects are considered in the CDM methodology, those that aim for the net absorption of GHG to be less than 16,000 tCO<sub>2</sub>/year, and those projects developed or carried out by low-income communities and individuals (COP/MOP, 2006).

landowners and farmers in the area prioritized by the project and identify those interested in implementing LMTs; d) strengthen the management capacities of the OFMs, Municipal Environmental Management Units (UGAMs), the Department of Protected Areas and the Environment (DAPMA), or their equivalents, to support the small landowners in developing management plans and paperwork to access the PINPEP and PROBOSQUE incentives programs, and to support the management mechanisms such as supervision and monitoring by the Municipal and Communal Forestry Strengthening Department (FFMC) of INAB and its regional delegations (Mazatenango, Coatepeque, San Marcos, Quetzaltenango, and Chimaltenango), as well as the delegations of CONAP (Quetzaltenango). The platform will be made operational through Output 2.2.

### ***Payments for Watershed Services***

#### **Output 1.7 – Payment system (compensation/recognition) for watershed services in place that benefits users and providers.**

48. The development and implementation of two PWS projects will be supported through this output. One will be in the municipality of Concepción Chiquirichapa, department of Quetzaltenango, and the second will be in Esquipulas Palo Gordo, department of San Marcos. In both cases, the PWS projects will be developed in the MRP of each municipality with the objective of conserving and protecting natural resources, specifically the protection of water resources and forests within protected areas and watersheds that provide water for human consumption, irrigation, and for commercial purposes. For the first project, because it is a PWS under the initial stages of development, the project will support its complete implementation. The project will build upon work performed by Helvetas Guatemala during 2014 and 2015 to support INAB and the municipalities of San Juan Olintepeque and Concepción Chiquirichapa (department of Quetzaltenango) to strengthen the capacities of local stakeholders for the conservation and management of the protected areas (Cacique Dormido MRP), municipal forests, and community and private forests to ensure water availability and biodiversity conservation; and to establish a payment for environmental services (PES) mechanism. The second project will be supported beginning at its initial stage and will build upon efforts by Helvetas Guatemala and INAB, with the participation of 105 families in the municipality of Esquipulas Palo Gordo (department of San Marcos) to establish a PES mechanism to support the protection of 62 ha of forest that contain six water sources that supply drinking water to the community. Support to the PWS projects will be provided in line with the Article 613 of the Civil Code, which stipulates that each municipality is responsible for managing and monitoring the public waters within their jurisdiction (except for marine areas, navigable rivers, and lakes), the Municipal Code (Decree 12-2002), which assigns responsibility to the municipality and to the municipal council for managing and protecting all renewable and non-renewable resources within the municipality (Articles 65 and 68), and the Health Code (Decree 90-97) establishes that it is the Ministry of Public Health and Social Assistance's duty, in coordination with the sector's institutions, to oversee the protection, conservation, and rational use of potable water sources, and compels the municipalities of the countries, as the main providers of potable water service, to protect and conserve the water sources and ensure universal coverage within their jurisdictions in terms of quantity and quality of service.

49. The implementation process for the PWS projects will include four phases developed through Outputs 1.8, 1.9, and 1.10 and builds upon the results of surveys conducted during the PPG about the willingness-to-pay, preliminary water supply and demand assessments, and the identification of providers (municipalities) and users (rural and urban communities) of the environmental service. These phases are as follows: a) Preparation phase: includes building awareness, creation of the basic elements that make up the project, such as defining the fee collection mechanism, creating agreements between the suppliers (municipality) and receivers (water users), and developing further studies on the willingness-to-pay, delinquency of payment, and establishing the water flows baseline at the source (springs/water heads) that provides water for local community use; b) Implementation phase: entails putting the PWS project into action, such as collecting fees and carrying out the participatory plan for managing the MRP's water sources; c) M&E phase: includes defining indicators and M&E activities in a participatory manner; and d) Consolidation and expansion phase: defining the activities that guide the actions towards more effective and efficient project management and seeking new suppliers and users of watershed services. In addition, Municipal Council Agreements will be established in which the importance of conserving water sources is recognized and a PWS is endorsed as the mechanism to support the conservation and management of water and forest resources in each municipality. The Municipal Council Agreements will also define the financial mechanism designed to manage the funds for the compensation scheme.

50. The first phase will be developed jointly with the municipal offices (OFMs and DAPMAs), CONAP, local water committees, INAB, and Helvetas Guatemala, and considering the Gender Mainstreaming Plan (see Annex M). These activities are associated with campaigns to build awareness among the municipalities (municipal councils) and users of the municipal water systems about the importance of reciprocity for the water services provided by the in the MRPs (water production areas) and the importance of participatory and inclusive management practices to conserve the water sources. The objective of this awareness-raising will be to organize users' committees and to promote and monitor the process to implement the PWS project. Finally, it will include the development of studies on the ability to pay, levels of delinquency, and measurement of water flows from the sources for potable water distribution systems, and the measurement of flows to develop the baseline for the environmental services to be compensated.

Output 1.8 – Technical guideline for watershed-related payments (compensation/recognition) designed.

51. The project will develop the technical, administrative, and coordination elements and governance necessary to design and implement each PWS project to organize transactions and define payment procedures, receipts, transfers of funds, and budgetary execution that are critical for the fee collection process. The development of these guidelines requires the equal participation of the stakeholders (men and women) participating in the compensation scheme (suppliers [municipality] – receivers [water system users]). The design will be in close coordination with the members of the municipal council, OFM, and DAPMA, representatives of the local water committees, regional representatives of INAB and CONAP, Helvetas Guatemala, among the main groups. These technical guidelines for each PWS project designed will consider the institutional recommendations of the INAB framed within the manual for establishing local compensation schemes, including water and carbon.

52. The specific activities that will be carried out as part of this output are the following: a) defining, through participatory means, the mechanism to collect fees according to the conditions and ability to pay (this will depend on whether the fee collection mechanism uses a special receipt, inclusion in the water service fee, or other means); b) defining agreements and commitments between suppliers (municipalities) and receivers (users of the municipal potable water systems)—this will be done through an official contract or agreement, the agreements will be signed between users of the municipal water services (committee) and the municipality through the DAPMA; and c) consulting and lobbying for approval of the municipal ordinance that formally creates the PWS project and its budget—this will require consultation with the municipal council to create and approve the municipal ordinance recognizing the PWS and its budget to receive and carry out the compensations.

Output 1.9 – Protocols and enhanced capacity of environmental authorities for planning and monitoring PWS projects.

53. Through this output the project will design and implement protocols that are based on guidance documents and manuals that guide the municipalities regarding the necessary actions during each phase of the process for operation of the water compensation scheme. These guides and manuals will be in Spanish and when necessary in an indigenous language (written as well as visual), and will follow the recommendations of the Gender Mainstreaming Plan (Annex M). They will include guidelines regarding the flow and transfer of resources from fee collection to their use, a water sources management plan for each MRP, and a protocol for evaluating and monitoring the compliance indicators for the supplier/receiver commitments. Capacities for improving the two PWS projects will be delivered through Output 1.11. Activities to create and improve capacities in the PWS projects will be evaluated and the mid- and end-points of the project using the UNDP Capacity Development Scorecard.

54. The specific activities to be developed are the following: a) development of protocols to manage and monitor the PWS project mechanics and the management plan with a focus on managing water sources—this protocol defines and creates guidance for the administrative and monitoring elements of the PWS project; b) consultation and follow-up on the implementation process, which consists of defining the agenda for coordination among users compensating with labor (i.e., those who cannot afford to make cash payments), which can be carried out with support from INAB and Helvetas Guatemala during the time required for consolidating the PWS project; and c) design and construction of a system of indicators to measure and verify compliance with the commitments between suppliers and receivers and consolidation of the baseline. The project will coordinate with INAB, Helvetas Guatemala, CONAP, and the municipalities to carry out this output.

Output 1.10 – Benefit-sharing mechanism for watershed-related payments (compensation/recognition).

55. The main benefit of the PWS project (compensation and payment) is the conservation of the water resources of the MRPs. Both suppliers (municipalities) and receivers (water users) will benefit, and will participate in the management of the water resources implementing appropriate conservation actions that maintain the water supply and quality. The project will promote the participation and involvement of INAB, Helvetas Guatemala, and CONAP in this process through their continued collaboration with the municipality and local water users' committees (which includes the active participation of women).

56. The activities that will be developed as part of this output are the following: a) development of indicators for measuring the distribution of benefits using the indicators developed for M&E of commitments made between the municipality and the water system users (carried out as part of Output 1.9). These indicators will be designed considering the opinions and needs of both men and women who form part of the municipal water system user committees, as well as the municipality; b) presentation of the results of M&E of compliance with the defined commitments and the baseline of the M&E indicators, which will establish whether the expected goals and objectives of each PWS project are achieved; c) definition of actions to consolidate the PWS projects and ensure compliance with the commitments among suppliers (conservation actions) and receivers (payments) of the water service, and presentation of the results of the mid-term evaluation of the PWS project; d) evaluation of the integration of suppliers from areas surrounding the MRP into the PWS project, including identification of opportunity and interest of landowners in water recharge areas to manage water sources; e) evaluation of the interest of rural communities (suppliers) from areas near the MRPs and who own land that is critical for water production to participate in the PWS projects; and f) systematization, exchange, and dissemination of successful experiences and lessons learned from the PWS projects to allow their replication in other municipalities with similar characteristics. These activities will reduce the financial gap for the basic management of the Esquipulas Palo Gordo MRP and the Concepción Chiquirichapa MRP, which will in turn bring improved protection of water sources in both MRPs, restore forest cover in degraded sites, reduce soil erosion within the MRPs, and improve the quality and availability of water for local communities.

### ***Capacity development***

Output 1.11 – Training program increases local knowledge and skills (2,780 small producers and farmers [beneficiaries differentiated by gender] trained by project end) regarding: a) standards for certification of biodiversity- and forest-friendly production; forestry incentives, including carbon sequestration and compensation; and methods, standards, and procedures related to PWS; b) business management (e.g., business plan development and basic accounting) of certified and non-certified products, forestry incentives, and PWS; and c) M&E of certified and non-certified production systems, forestry incentives, and PWS.

57. The project will design and implement a training program to strengthen the capacities of small agricultural producers participating in the project and individuals or groups associated with the design and implementation of PWS projects, a carbon sequestration and compensation program, the certification of biodiversity- and forest-friendly production, and the use of forest incentives. The objective of the program is to create and strengthen the capacities to adopt, implement, and evaluate best production and management practices by small producers with biodiversity conservation, SLM, and SFM benefits. The design and implementation of the program will consider the guidelines for gender established in the Gender Mainstreaming Plan (Annex M). The main characteristic of the training program is the flexibility and adaptability in the transfer of knowledge to the training needs of the small farmers and producers. As such, the program implementation will involve methodologies and work plans differentiated in their teaching and with a focus on gender to respond to the different needs of all participating groups. By project end, a total of 2,780 local community members (1,781 men and 999 women) will have benefited from the training program.

58. The training program will include: a) an inclusive and participatory validation process of the training needs of small producers and farmers assessed during the PPG phase; b) definition of training activities considering differentiated modules of knowledge transfer through an inclusive and participatory process so that the small producers and farmers enhance their knowledge and skills in five prioritized topics: agribusinesses and certified and non-certified production, biodiversity conservation and standards for certification, SFM (forestry incentives, carbon sequestration, PWS), SLM, and best production practices and monitoring of certified and non-certified production systems; c) implementation of training modules using diverse teaching/learning methodologies such as formal



modular courses, workshops, and talks for organized groups of producers, field visits and exchange of experiences with other groups, etc., should be considered. Training activities will have the support staff from the program's partner institutions (e.g., MAGA, ANACAFE, FEDECOCAGUA, AGEXPORT, ARNPG, CDRO, ICC, and municipalities), and will establish synergies with other experienced partners such as Neumann Foundation that works on coffee farmer training. Finally, the project will implement an annual M&E system to assess the impact of the training activities, which will be used to adjust training efforts as needed. In addition, the M&E system will be complemented by the evaluation of the capacities of groups of small producers and farmers using the UNDP Capacity Development Scorecard; this evaluation will be carried out at the mid-point and end-point of the project.

**Output 1.12 – Participatory monitoring program to assess biodiversity conservation, SFM, and SLM, harmonized with national and local monitoring programs.**

59. The project will develop a participatory monitoring program to evaluate project activities for biodiversity conservation, SFM, and SLM. The program will collect, store, and analyze field data, and will be harmonized the monitoring programs of the different stakeholders such as MAGA, MARN, CONAP, INAB, ARNPG, CECON/ University of San Carlos in Guatemala (USAC), CEMEC/CONAP, ICC, and the municipalities. The main objective of the monitoring program is to generate useful and updated technical and scientific information to support decision-making aimed at improving the performance of the implementation of SLM, SFM, and biodiversity conservation policies, programs, plans, and strategies associated with the management of production landscapes in the Central Volcanic Mountain Range. The program will include a computer platform that will consist of three components: biodiversity, forests, and land. Each component will include links to national monitoring systems as well as indicators and protocols for data collection, analysis, and reporting. The SIA-MARN will host the platform, and the MARN will be responsible for its administration and maintenance once the project is completed. In regards to the biodiversity component of the platform, links will be established with CONAP's Biodiversity Clearing House Mechanisms; for the forest and land components, the platform will receive support from the GIMBUT, which will provide information related to the monitoring forest and non-forest cover in the country using different land use change monitoring methods such as the Land Use Change Monitoring System within Production Landscapes (MOCUPP) or other available approaches and techniques. The monitoring program will follow the recommendations included in the project's Gender Mainstreaming Plan and the Stakeholder Engagement and Communication Plan to ensure the participation of women, local communities, and indigenous peoples.

60. The activities that will be carried out under this output include: a) performing a participatory analysis to validate municipal and institutional capacities for monitoring of SFM, SLM, and biodiversity using capacity assessments conducted during the PPG and outlining strategies to improve monitoring capacities; b) designing the participatory monitoring program and computer platform to monitor SFM, SLM, and biodiversity, including: i) establishing links with similar monitoring initiatives, ii) defining mechanisms for the operation of the program and participatory methodologies for the M&E of indicators related to SFM, SLM, and biodiversity conservation, iii) defining procedures for collecting and systematizing information, and iv) establishing strategic partnerships with public and private institutions to ensure the sustainability of the program; c) training the staff of MARN, CONAP, and members of GIMBUT and other partners that will be part of the program's operation; and d) informing all project partners about the monitoring program and the benefits.

**Outcome 2. Delivering multiple environment benefits by connecting core PAs within sustainably managed production landscapes in the Central Volcanic Mountain Range in Guatemala.**

***Ecosystem connectivity***

**Output 2.1 – Land use planning strategy supports the implementation and/or strengthening of 31 diversified nurseries, improves production and access to native germplasm for agroforestry and silvopastoral systems; ensures soil stabilization; and contributes to the connectivity of biological corridors.**

61. The implementation and/or strengthening of at least 31 nurseries will consolidate and strengthen biodiversity conservation in strategic areas for biological connectivity, and will contribute to SFM and SLM in the project's prioritized area through the production of native germplasm for implementing LMT and for soil stabilization. The nurseries will be developed under community-based, private, or municipal management. To determine this, an assessment of the existing nurseries in the prioritized landscape will be carried out, which will determine the

number, location, production capacity, and identification of stakeholders operating the nurseries and their experience in management and production of native species, seedbanks, collection and management of forest seeds, and the general management of the nurseries. This activity will be performed jointly with INAB's Municipal and Community Forest Strengthening Department when it is within the PAs of the CONAP.

62. In addition, 31 agreements will be established to strengthen the existing nurseries and to build new municipal, communal, or private nurseries, and plans will be developed for implementation and/or strengthening. The nurseries will be strategically located within or near farms or production units where LMT will be implemented and in prioritized locations for the reforestation and restoration of degraded lands and forests. Plans will be developed in coordination with CONAP, INAB, ARNPG, ICC, ANACAFE, FEDECOCAGUA, and the municipalities. The project will provide a subsidy of 40% of the total cost of the plants to be used to improve production conditions of the nurseries (e.g., irrigation systems, protective structures, etc.), purchase of inputs (e.g., bags, collection or purchase of seeds, etc.). Operators of the nurseries will provide the labor for collecting soil and filling the bags. The activity must begin with the production of plants in the second year of project execution, starting with approximately 290,000 plants that year, which will address the demands of the LMT and reforestation. During the third year, plant production will increase to 435,000 plants, and from the fourth to the sixth years, it will be necessary to produce 725,000 each of those years. This quantity includes the replacement of 30% of the plants that die or are damaged during their transfer to the field. Finally, along with staff from INAB's Municipal and Community Forest Strengthening Department, the project will conduct field visits to monitor and provide technical assistance to the nursery program participants; this will be a permanently occurring action while the project supports the nurseries.

Output 2.2 – Voluntary agreements through different participatory conservation models (e.g., privately owned farms, landowners, communal lands, etc.) used for establishing landscape management tools (i.e., biological corridors, forest enrichment for conservation and fuelwood management, natural regeneration, reforestation, rehabilitation of riparian forests, live fences, windbreaks, etc.), to strengthen ecosystem connectivity and reduce deforestation in production and natural landscapes.

63. The project will promote the establishment and implementation of seventeen (17) different models of voluntary agreements for biodiversity conservation among the various stakeholders of the Central Volcanic Mountain Range in Guatemala. These agreements will serve to consolidate the connectivity of 52,045.5 ha of biological corridors through the implementation of the LMT (i.e., biological corridors, forest enrichment for conservation and fuelwood management, natural regeneration, reforestation, rehabilitation of riparian forests, live fences, windbreaks, etc.), adoption of BMPs in a 78,679-ha landscape, and facilitated access to native germplasm through the 31 diversified nurseries developed under Output 2.1. The participatory voluntary conservation agreements will include the MARN as the project's primary executing agency, and will be signed between the following groups: a) the ARNPG and individual and communal PNRs or their members; b) the municipalities and groups of agricultural producers operating in the MRP buffer zones; c) organized groups of coffee producers and ANACAFE or FEDECOCAGUA; d) communities and local non-governmental organizations (NGOs) or local indigenous organizations (e.g., Sotz'il and CDRO); and e) others who undertake to consolidate the biological corridor of the Central Volcanic Mountain Range.

64. The following activities to be developed under this output will be coordinated with the CONAP, MARN, INAB, and MAGA: a) identification of stakeholders interested in implementing LMT, including women, and characterization of the potential participating farms regarding their environmental, social, cultural, and economic aspects as well information about production systems, women's participation, land ownership, among other information. This information will be useful for knowing the capacities and needs for establishing the voluntary conservation agreements and the LMT; b) providing information to stakeholders during field visits and informational meetings to build awareness about the importance of the LMT in strengthening ecosystem connectivity in the Central Volcanic Mountain Range; c) facilitation of the participatory processes for negotiating and signing the voluntary agreements, including mutually agreed-upon collaborative actions that will be in the framework agreement that contains, at a minimum, the objectives, goals, commitments, M&E of the agreement, mechanisms for the resolution of conflicts, and other relevant information (this activity will be facilitated by the project in coordination with the CONAP and the MARN); and d) creation of an action plan to implement the LMT. The action plans will clearly define the yearly actions to be implemented and those responsible for the costs and financing. The implementation of LMT will result

in the mitigation of 73,076 tCO<sub>2</sub>-eq in up to 4,550 ha, which will contribute to strengthen the connectivity landscapes of the Central Volcanic Mountain Range.

Output 2.3 – Participatory SLM plans for the middle and upper sections of six (6) watersheds (229,831.87 ha) include measures to reduce soil degradation and contribute to enhancing ecosystem connectivity.

65. The project will develop six SLM plans for the middle and upper sections of the six prioritized watersheds<sup>11</sup>, which correspond to 83.7% of the total land area for the project. The SLM plans will follow an integrated watershed management focus based on a land degradation analysis and the actions differentiated by watershed. The SLM plans will place special emphasis on promoting best practices in the sustainable use and management of natural resources; improving sustainable agriculture, sustainable agroforestry, and silvopastoral systems with native species; reducing deforestation through incentives for the protection, conservation, and regeneration of forests (carbon sequestration projects, PINPEP, PROBOSQUES); and increasing, strengthening, and consolidating areas of connectivity and improved biodiversity and forest values at the landscape level through the management of PAs' buffer zones and corridors along the volcanic chain. The SLM plans will be developed in coordination with GoG agencies (MAGA, CONAP, INAB, the Presidential Secretariat for Planning and Programs [SEGEPLAN], and the MARN), local governments (municipal councils, COMUDES, COCODES), indigenous groups and local communities (individual farmers, organized groups, civil society organizations [CSOs], and other residents of each watershed), and the private sector (ANACAFE, FEDECOCAGUA, ARNPG, ICC, etc.). The development of the SLM plans for each watershed will follow the guidelines stipulated in the Gender Mainstreaming Plan and will include the following activities: a) identification of local stakeholders in the middle and upper parts of the watershed that will be benefit from SLM plans; b) creation of a watershed planning team composed by representatives of the identified stakeholders led by the MARN with support from MAGA. This team will be the platform for consultation during the development of the SLM plans; c) socialization of the project and technical characterization of the six watersheds regarding land cover; its land use potential; levels of land degradation; social, environmental, institutional, legal, and policy aspects, etc.; d) development of the SLM plans through participatory and inclusive processes that provide feedback for and validate the work programs in each plan; e) meetings held with interested groups at the local level (farmers, organized groups, CSOs, COCODES, COMUDES, municipalities, private sector, academic sector, and the central government) of each watershed to socialize the plans; and f) publication and distribution of the SLM plans of each watershed.

Output 2.4 – Participatory energy-efficient stoves program reduces firewood consumption and GHG emissions.

66. For the energy-efficient stoves program, the project will install 1,000 energy-efficient stoves in an equal number of households in the rural communities of the project's prioritized municipalities, which use fuelwood as the primary energy source. The energy-efficient stoves program will be implemented mainly in the rural areas of the municipalities in the department of Quetzaltenango, primarily the middle and upper parts of the Naranjo River watershed, where the supply of firewood is low and the demand is high. In this region, the project could directly benefit 6.77% of the households, with the goal of 1,000 stoves during the life of the project. The energy-efficient stoves will reduce firewood consumption, helping to reduce GHG emissions<sup>12</sup> and degradation of forests and ecosystems in the region. Considering that there are more than 20 different models of portable and permanent stoves in the country<sup>13</sup>, the project will strengthen existing demonstration centers or show rooms that show the different options of energy-efficient stoves that are considered suitable for the region. Household members from areas prioritized by the project in the middle and upper parts of the Naranjo River watershed will select, in accordance with their needs and capacities, the stove option that works best for them. The program will subsidize between 20% and 40% of the cost of the stove, and will facilitate access to credit for purchasing the stove and access to training for members of the household on the stoves' construction, use, and maintenance.

67. The activities that will be carried out for the program are as follows: a) ensure the participation of the partners who will promote the program, including i) INAB, through the Municipal and Communal Forestry Strengthening Department, and its link to the municipalities, to ensure the sustainability of the program, ii) BANRURAL, or other

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<sup>11</sup> Watersheds of the Achiguate, Coyolate, Naranjo, Ocosito, Samalá, and Suchiate rivers.

<sup>12</sup> This especially in the municipalities where the demand for firewood surpasses the sustainable supply that the forests, plantations, and agroforestry systems can provide.

<sup>13</sup> Global Alliance for Clean Cookstove. 2014. *Guatemala Country Action Plan for Clean Cookstoves and Fuels*. Guatemala: GACC.

local financial entity, to create lines of credit for the beneficiary households; and iii) MEM and MAGA (the MAGA Rural Extension Program, through its social workers in the municipalities), to provide technical support; b) the project will select a suite of stove options in accordance of the needs and experiences in the region. Once the stove models are defined, the strategies for implementation will be designed considering: i) a framework agreement for the beneficiary households, ii) the amount of subsidies and/or economic support that will be given to the beneficiary households, and iii) the amount the stoves are sold for, and the lines of credit that are available; c) strengthening of the demonstration centers/show rooms, which will be located in the capital municipal cities of the areas selected by the project to ensure that they are visited by the largest number of people, through mechanisms for promotion and technical assistance from the program; d) providing technical support to the beneficiaries of the program, including both male and female heads of household, with training on the safe use and management of the stoves, as well as repair and maintenance. The trainings will be carried out as demonstration/practice, with both men and women participating, and using all the stove models that are at the demonstration center. The groups participating will consist of no more than 24 persons and will carry out diverse demonstrations of the different stoves' uses; e) establishing the baseline of the beneficiary household, determining the quantity of firewood consumed by the households prior to adopting the new technology, as well as the firewood that they consume following the adoption of the stoves. The difference between the two pieces of information will help to determine the amount of firewood consumption saved and the associated reduction in GHG emissions; and f) establishing energy woodlots or agroforestry systems (including live fences) in the land owned by the households benefiting from the energy-efficient stoves through carbon sequestration projects or reforestation strategies through nurseries. These activities will be developed in coordination with INAB (Municipal and Communal Forestry Strengthening Department) and the municipalities (OFMs or UGAMs) prioritized in the Central Volcanic Mountain Chain, and will follow the guidelines of the project's Gender Mainstreaming Plan. The GHG emissions avoided by implementing the energy-efficient stoves programs are anticipated to amount to 32,661 tCO<sub>2</sub>-e<sup>14</sup> during a period of 6 years.

Output 2.5 – Production plans and protocols support the implementation of certified and non-certified sustainable agricultural and NTFP production practices in project sites (private farms, community forests, etc.), at the same time they enhance ecosystem connectivity.

68. Through this output, the project will put production plans and protocols into place that support the adoption of certified and non-certified sustainable agricultural and NTFP production practices in the 78,679-ha prioritized production landscape, which comprise a set of guidance tools and work manuals for the producers' organizations during each of the links of the production chain. The objective will be to enable productivity and reduce the negative impacts to ecosystems and the environment in general, thereby creating conditions that support ecosystem connectivity and economic benefits to local farmers and producers through the certification and non-certification of sustainable production practices in line with Outputs 1.1, 1.2, and 1.3.

69. Training will be provided (Output 1.11) to achieve this, as well as implementation of the best business, agriculture, and manufacturing<sup>15</sup> practices that help the small farmers and producers to obtain certification and contribute to strengthening ecosystem connectivity in the prioritized landscape. The production plans and protocols will be developed in coordination with CONAP, MAGA, MARN, INAB, AGEXPORT, FEDECOCAGUA, ANACAFE, ARNPG, and other agencies with experience in sustainable agricultural- and forest-related production to ensure these production practices incorporate SFM, SLM, and biodiversity conservation considerations. The activities to implemented include: a) assessment and systematization of best agricultural and NTFP production practices to be implemented (e.g., water and soil conservation, reduction of soil erosion, protection of riverbanks, reduction in the use of agrochemicals, sustainable harvesting of NTFP, etc.); and b) development of sustainable production plans for

<sup>14</sup> Estimated using information about the population and number of households using firewood in the watersheds of the Achiguate and Salamá rivers, and the average consumption of firewood per capita in the urban and rural areas of Quetzaltenango. The project will install energy-efficient wood stoves in 6.77% of the households of the prioritized municipalities: Studies on the efficiency of these stoves indicate 37.9% savings (CATIE. 1994. *Estufas ahorradoras de leña para el hogar rural: validación y construcción*. Turrialba, Costa Rica: author). As such, 19,643 tons of firewood will be conserved through the project.

<sup>15</sup> Good Manufacturing Practices are a basic tool for obtaining safe products for human consumption, focusing on hygiene and handling. They contribute to the assurance of the production of safe and healthy food for human consumption. They are required for the application of the Hazard Analysis and Critical Control Point (HACCP) System, a Total Quality Management (TQM) program or from a Quality Management System such as ISO 9001. They constitute a set of basic principles with the objective of ensuring that the products are manufactured in adequate sanitary conditions and the risks inherent in production and distribution are reduced.

cooperatives, associations, and organized groups of small farmers and producers. The production plans will include the steps necessary for evaluating the best agricultural and forest production practices implemented and their related costs (e.g., compliance with certification standards, certification, administrative manuals, agricultural inputs authorized by the certification, basic infrastructure to mitigate environmental impacts as established in the certifications, among others). Depending on the group of farmers, the plans may include access to forestry incentives available through Output 1.6 and LMT through conservation agreements in Output 2.2; c) Implementation of certified and non-certified sustainable agricultural and NTFP production practices in project sites; and d) training of small farmers and producers through Output 1.11.

Output 2.6 – Five (5) participatory management plans for MRPs strengthen local management, conservation, monitoring and control, and integration of the PAs into the biocultural landscape.

70. Using a participatory and inclusive approach, the project will develop five management plans for the following MRPs: a) Tecpán Municipal Forest (1,706.25 ha), b) Quetzaltenango (5,615.43 ha), c) Zunil (4,325 ha), d) Esquipulas Palo Gordo Municipal Forest (1,797.39 ha), and e) San Cristóbal Cucho Municipal Forest (218.50 ha) (Figure 3). The development of these management plans will be under the technical and legal leadership of CONAP, following the guidelines contained in the manual *Actualización de lineamientos para la elaboración de planes maestros de Áreas Protegidas del Sistema Guatemalteco de Áreas Protegidas*, Technical Document No. 103 (01-2012) and the project's Gender Mainstreaming Plan (see Annex M). The management plans will support achieving the objectives for the creation of each MRP as well as considerations for conservation, research, land use planning, and public use of the PAs, among other considerations (Article 18 of the Protected Areas Law [Decree 4-89]). The project will facilitate the institutional arrangements for coordination between CONAP and the local planning team for each PA. This will consolidate the methodology for designing each management plan specific to the MRP with the participation of the local communities (men and women), indigenous groups, municipal governments, the private sector, other local and regional stakeholders, and for the development of management proposals that are sensitive to local ecological, socioeconomic, and cultural needs. The management plans will include guidelines for reducing threats; monitoring biodiversity; strengthening the local and regional connectivity of ecosystems; the promotion, conservation and sustainable use of environmental services (water, forest carbon, ecotourism, etc.); control and monitoring; and improving the area's governance, among other aspects associated with the conservation of biodiversity in these areas.

71. The following activities will be carried out during the development of the management plans: a) raising awareness at the local level and through different media of the management plan development process, with participation from CONAP, the municipality, local communities, indigenous populations, and other local stakeholders. Working together, these groups will achieve a greater understanding of the biodiversity conservation objectives of each MRP and will be empowered during the management plan design process; b) participatory development of the management plans in accordance with the CONAP manual *Actualización de lineamientos para la elaboración de planes maestros de Áreas Protegidas del Sistema Guatemalteco de Áreas Protegidas*, Technical Document No. 103 (01-2012). This activity will be developed with the participation of organized groups, vulnerable populations, the municipality, COMUDES, COCODES, the private sector, indigenous populations, local communities, and other local stakeholders, emphasizing a focus on gender and social inclusion; and c) production, publication, and socialization at the local level of the management plans approved by the municipalities and CONAP.

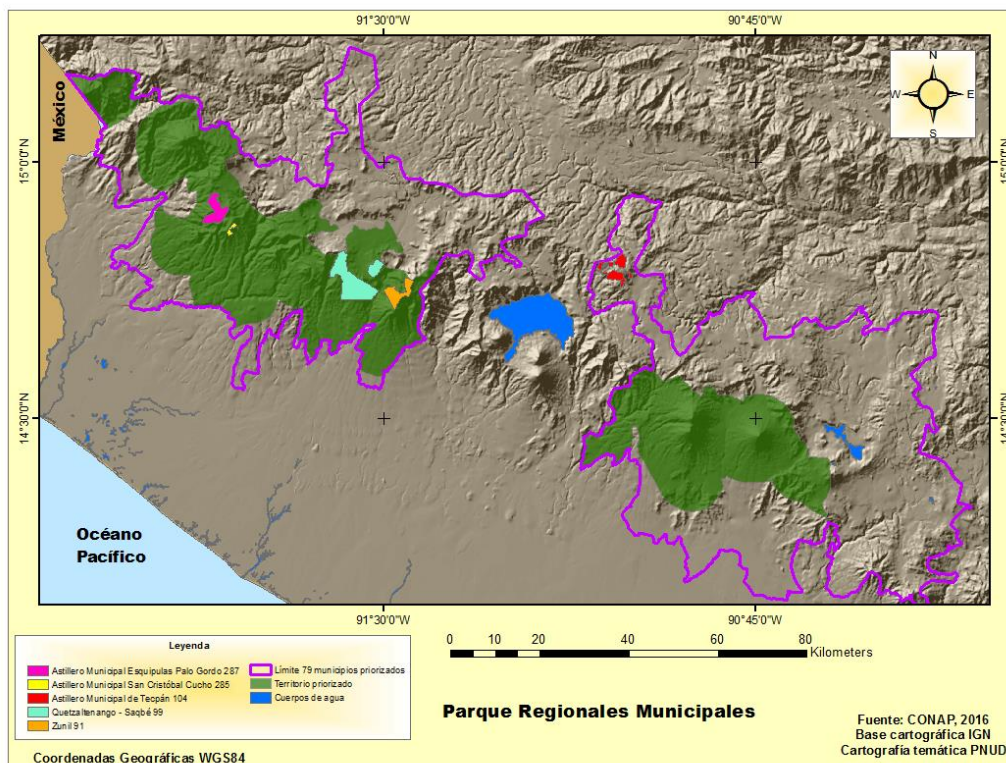


Figure 3 – Location of the MRPs within the prioritized landscape of the Central Volcanic Mountain Range.

Output 2.7 – Six (6) proposals for the categorization of national-level PAs (PCZs) and two (2) proposals for the recategorization of NPs, developed in a participatory manner, include technical feasibility studies considering current national-level categories of the National Park System – SIGAP), thus contributing to the conservation and sustainability of the areas.

72. The project will facilitate technical and financial conditions, institutional arrangements (including informing members of the national congress), and agreements with local stakeholders so that the categorization and recategorization of eight protected areas of the SIGAP within the Central Volcanic Mountain Range is carried out in a participatory and inclusive manner and according to CONAP's priorities (see Annex J). The eight PAs are: Cerro El Baúl NP (240 ha), Iximché NP (50.21 ha), Volcán de Fuego PCZ (6,698.44 ha), Volcán Acatenango PCZ (5,265.92 ha), Volcán de Agua PCZ (5,436.93 ha), Volcán Pacaya PCZ (1,172.10 ha), Volcán Santo Tomás PCZ (5,702.13 ha), and Volcán Zunil PCZ (5,201.31 ha) (see Figure 4). The recategorization will contribute towards a land use agreement that will consolidate biological corridors, SFM, SLM, and biodiversity conservation in line with local social, environmental, and agricultural conditions. The process will be led by CONAP under the guidelines of the *Instructivo para realizar el Estudio Técnico de las Áreas Protegidas del SIGAP*, which is a regulatory document that dictates the technical study for the recategorization of PAs. This regulatory document provides interpretation of Article 12 of the Protected Areas Law and Article 11 of the Protected Areas Regulation, which refer to the general procedure for the declaration and requirements of a technical study to achieve legal declaration, respectively. The process of approval of the categorization and recategorization of eight PAs include: a) participatory development of a technical study led by CONAP; b) recommendation by CONAP for the legal categorization and recategorization, which is proposed as an initiative of law to the Legislative Body for its corresponding creation (per Article 12 of the Protected Areas Law); c) approval by the Executive Secretariat of CONAP and definition of the guidelines for programming, administration, financing, and monitoring (per Article 12 of the Protected Areas Law); d) identification according to the newly defined management category, the agency or agencies that will manage the PAs, which could be CONAP through its Executive Secretariat or a public and private nonprofit national entity per the CONAP co-management regulation; and e) development of the management plan, which will be presented to CONAP in accordance with the established



guidelines (*Actualización de lineamientos para la elaboración de planes maestros de Áreas Protegidas del Sistema Guatemalteco de Áreas Protegidas*, Documento Técnico No. 103, 01-2012). The project will facilitate the participation of members of the national congress's Environmental and Natural Resources Commission in the consultation and validation processes. It will also support the establishment of a negotiating team to support CONAP in the presentation of the proposals to the national congress.

73. The specific activities related to this output are: a) identification of local stakeholders and creation of a database with technical information for each of the PAs to be recategorized; b) raising awareness and consultation with the local stakeholders about the recategorization process, following the guidelines of the Gender Mainstreaming Plan (Annex M) and Stakeholder Engagement and Communication Plan (Annex K), representatives of congress, mayors, and governors; c) participatory development of the technical studies for recategorization in accordance with CONAP's *Instructivo para realizar el Estudio Técnico de las Áreas Protegidas del SIGAP*. This will include the development of consultation and validation workshops with all the stakeholders that present within each of the areas to be recategorized and with members of the national congress's Environmental and Natural Resources Commission; d) production, publication, and socialization of the technical studies and the proposal for recategorization; and e) presentation and negotiation of the proposals for recategorization before the national congress. Members of CONAP and its Executive Board will carry out this activity with support from the project to lobby with representatives of the commission and leaders of the political parties to raise awareness about the importance of the process.

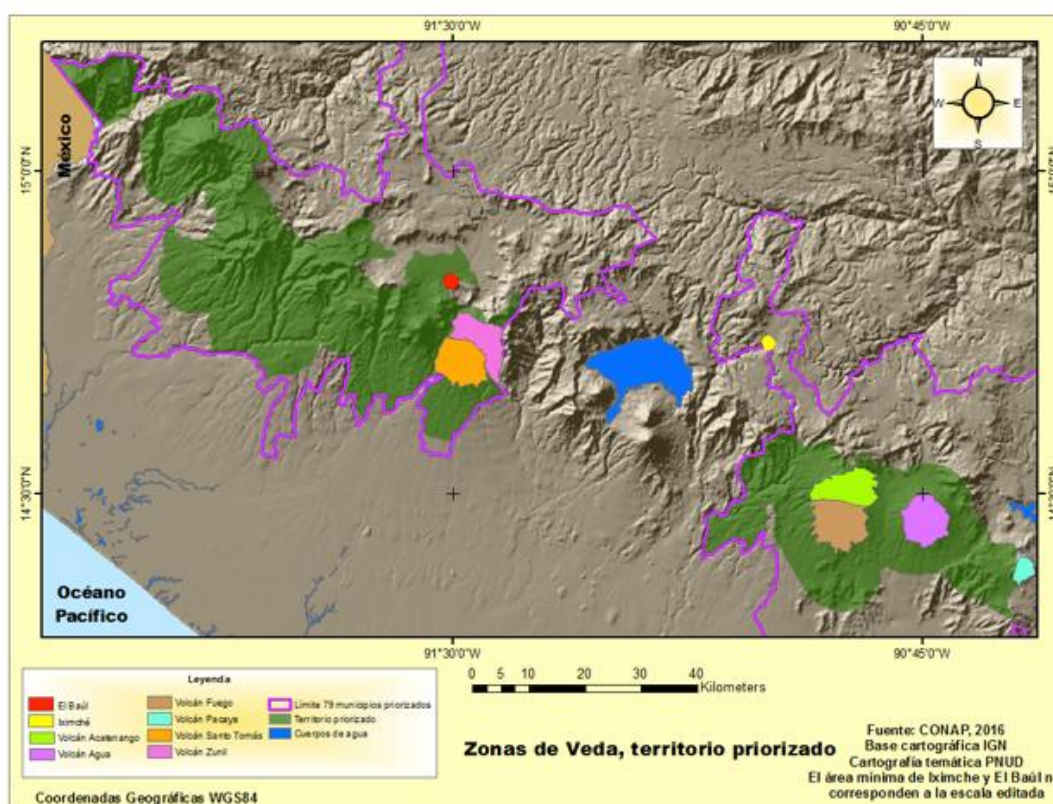


Figure 4 – Locations of the PAs to be categorized and recategorized within the prioritized landscape of the Central Volcanic Mountain Range.

Output 2.8 – Financing mechanisms for the management of five (5) MRPs covering 13,662.57 ha implemented, including PES and sustainable tourism.

74. The project will develop, in coordination with the municipalities and with support from the CONAP, strategic and prioritized financing mechanisms to generate income in five MRPs: a) Tecpán Municipal Forest, b) Saqbé, department of Quetzaltenango, c) Zunil, department of Quetzaltenango, d) Esquipulas Palo Gordo Municipal Forest, department of San Marcos, and e) San Cristóbal Cucho Municipal Forest, department of San Marcos. This output will entail an analysis of the legal and technical/administrative feasibility, collection levels, and political and social feasibility, so that the municipalities of each MRP are empowered and agree upon the economic, environmental, social, and institutional contributions that the MRPs provide. The financing mechanisms will be aligned technically and administratively for implementing the management plans, with special emphasis on seeking the economic sustainability of their areas and contributing to the reduction of at least 25% of the financial gap of each MRP by project's end (the financial gap for the five PAs is USD \$231,300 as established through the Biodiversity Tacking Tool [BD-1] during the PPG), as well as increasing the availability of resources to cover the necessary costs for a basic management scenario. Special attention will be given to promoting payment for environmental services and sustainable tourism. The financing mechanisms to be used to reduce the financial gap for the five MRPs are as follows:

Municipal Regional Park	Proposed Financing Mechanisms
1. Tecpán Municipal Forest	<ul style="list-style-type: none"> <li>- Entrance fees</li> <li>- PWS</li> <li>- Ecotourism concession</li> <li>- Fees for the installation of communication antennas.</li> <li>- Forest conservation incentives</li> <li>- National and international cooperation projects</li> </ul>
2. Saqbé Quetzaltenango	<ul style="list-style-type: none"> <li>- Entrance fees</li> <li>- Concessions for Radio Communication</li> <li>- Ecotourism concession</li> <li>- Forest conservation incentives</li> </ul>
3. Zunil, Quetzaltenango	<ul style="list-style-type: none"> <li>- Entrance fees</li> <li>- PWS</li> <li>- National and international cooperation projects</li> </ul>
4. San Cristóbal Cucho Municipal Forest, San Marcos	<ul style="list-style-type: none"> <li>- Entrance fees</li> <li>- Ecotourism concession</li> <li>- Forest conservation incentives</li> <li>- PWS</li> </ul>
5. Esquipulas Palo Gordo Municipal Forest, San Marcos	<ul style="list-style-type: none"> <li>- Entrance fees</li> <li>- Ecotourism concession</li> <li>- PWS</li> </ul>

75. The activities that will be carried out under this output are: a) validate the financing mechanisms of each MRP identified during the PPG with the participation of CONAP, municipal authorities, local stakeholders (NGOs, indigenous groups, women's groups, landowners, etc.) considering their social, economic, environmental, and administrative feasibility and potential to generate income for each PA; b) implementation of the select financing mechanisms using agreed-upon schedules and guidelines for implementation, which will be led by each municipality (e.g., OFM, DAPMA, and UGAM) with the support of CONAP and other support agencies identified by each municipality; and c) development of M&E of each financial mechanism through periodic evaluations of the implementation process. This is key to providing feedback on the institutional performance of the mechanism and guiding decision-making the collection and reinvestment of funds back into each MRP more efficient. The implementation of the financing mechanism will be carried out within the framework of the implementation of the management plan of each MRP.

Output 2.9 – Conservation and management program for three priority areas (4,655.3 ha) for the protection of species of amphibians (San Rafael Pie de la Cuesta MRP, San Marcos; San Pedro Sacatepéquez MRP, San Marcos; and Zunil MRP, Quetzaltenango).



76. A conservation and management program for the protection of amphibian species will be developed in three prioritized MRPs covering 4,655.3 ha: a) San Rafael Pie de la Cuesta MRP (45.30 ha), department of San Marcos; b) San Pedro Sacatepéquez MRP (285 ha), department of San Marcos; and c) Zunil MRP (4,325.00 ha), department of Quetzaltenango. The project will develop actions that promote the conservation of amphibians in these areas, with special emphasis on species that are endemic or are at risk of extinction. There are at least 29 amphibian species of importance that are distributed in at least one of the three areas prioritized for the development of the amphibian conservation and management program. Nineteen (19) species have been selected to participate in the program and will be monitored during project implementation. These species are as follows: *Incilius bocourti*, *Incilius tacanensis*, *Hyalinobatrachium fleischmanni*, *Craugastor lineatus*, *Craugastor pygmaeus*, *Craugastor stuarti*, *Agalychnis moreletii*, *Plectrohyla avia*, *Plectrohyla guatemalensis*, *Plectrohyla hartwegi*, *Plectrohyla matudai*, *Plectrohyla sagorum*, *Ptychohyla euthysanota*, *Hypopachus variolosus*, *Bolitoglossa engelhardti*, *Bolitoglossa flavimembris*, *Bolitoglossa franklini*, *Bolitoglossa morio*, and *Bolitoglossa occidentalis*. Information about the conservation status and threats to each species is provided in Annex R. The project will consolidate the program jointly with CONAP and the municipalities in charge of each MRP. The program will have, at a minimum, the following sub-programs: a) biological and ecological monitoring, b) environmental education, and c) social participation and alliances.

77. The project will develop the following activities to implement this program: a) design of the amphibian conservation and management program. This activity will be developed in coordination with academic entities (USAC, Universidad del Valle Guatemala, among others) and government experts (CONAP, MARN) to develop strategic alliances and exchange of experiences on in situ conservation actions. Participation of local stakeholders will be considered, mainly indigenous peoples whose ancestral knowledge will strengthen the program. This activity involves informing of the project to the municipal officials of San Rafael Pie de la Cuesta, San Marcos; San Pedro Sacatepéquez, San Marcos; and Zunil, Quetzaltenango, as well as with academic groups, CONAP, INAB, MARN, and other local stakeholders; b) Definition of a monitoring methodology. This methodology will be used to measure parameters for evaluating the conservation status of each of the areas (e.g., habitat and microhabitat conditions, water quality analysis, etc.); c) field-level monitoring of the amphibian communities, including parameters to evaluate the conservation status of the prioritized areas; monitoring information will feed into the monitoring programs outlined in Output 1.12 and Output 1.14, and the project results framework (PRF; Section V); and d) the design and implementation of an environmental education strategy focused on valuing the conservation of these amphibian species and their habitat.

### **Capacity development**

Output 2.10 – Strengthened institutional capacity program for national and regional officials and field personnel (PA staff; environmental, forestry, and agricultural officials) to support the sustainable management and conservation of biodiversity in production landscapes, the use of SFM and SLM methodologies and tools, and the quantification and evaluation of reduced deforestation (598 people trained by project’s end).

78. The project will design a program to strengthen institutional capacities based on the training needs defined in the baseline during the PPG. The main training needs are: strengthening knowledge about SFM, SLM, quantification and evaluation of deforestation, biodiversity conservation in production landscapes, use of technological tools for environmental management, gender equality and social inclusion, agribusinesses, and associated regulations and policies. These training needs, which will be addressed using different teaching/learning methods (workshops, field visits, certifications, etc.), will complement the project’s efforts for building capacity and that include making available to different stakeholders sets of planning tools (Outputs 1.8, 1.9, 1.10, 2.3, 2.6, 2.11, and 2.12) and access to technology and equipment (Output 2.11). The program will train 138 government representatives (MARN, INAB, and CONAP headquarters and regional offices; 108 men and 30 women), and 460 representatives from the private and civil sectors (ANACAFE and ARNPG; 284 men and 176 women) encouraging the participation of at least 30% indigenous and non-indigenous women; the program will follow the guidelines of the Gender Mainstreaming Plan. Through this program the project partners and stakeholders will be empowered and will appropriate the importance of sustainable management and conservation of biodiversity in production landscapes, the use of SFM and SLM methodologies and tools, and the quantification and evaluation of reduced deforestation.

79. The specific activities to be developed are the following: a) design the program for strengthening capacities that includes differentiated teaching modules and materials; b) carry out training sessions in the field that will benefit at least 598 people trained at the end of 7 years; and c) evaluate the impact of the capacity strengthening through interviews to follow up on what has been learned using the UNDP Capacity Development Scorecard. This evaluation will be performed twice more during the life of the project, at the mid-point and end-point.

Output 2.11 – Development planning for 31 municipalities incorporates principles for biodiversity conservation, SFM, SLM, sustainable agriculture, and gender, and their implementing measures.

80. The project will support up to 31 municipalities that form part of the project's prioritized landscape by incorporating principles of biodiversity conservation, SFM, SLM, sustainable agriculture, and gender, and their implementing measures, into the institutional development planning for their jurisdictions (i.e., municipal development plans, land use plans, and institutional strategic plans). This process will undergo consultations with COMUDES and COCODES, in each municipality to encourage and citizen participation. To guide this participation, the project, jointly with the MARN, National Association of Municipalities (ANAM), and SEGEPLAN, will establish memoranda of understanding with each municipality to strengthen municipal planning. These agreements will create an enabling framework for incorporating other support from the project to the municipalities, such as equipment and training (Outputs 2.12 and 2.13). This planning process will also consider the guidelines established in the project's Gender Mainstreaming Plan. The activities to incorporate principles of biodiversity conservation, SFM, SLM, implementation measures, sustainable agriculture, and gender into the municipal planning framework as the following: a) joint review (the project, municipality and its key offices [OFM or equivalent, Municipal Women's Offices - DMM, Municipal Financial Administration - DAFIM], MARN, SEGEPLAN, and ANAM) about the current status of municipal planning to determine the needs for supporting development planning and incorporating principles of biodiversity conservation, SFM, SLM, sustainable agriculture, and gender; b) outlining of the planning framework to be used in the development planning process in each of the municipalities. This activity will encourage the wide participation and inclusion of stakeholders and representatives of the local communities, indigenous peoples, private sector, academic sector, and local civil society groups, ensuring and considering the opinions of women representatives and other members of vulnerable groups (e.g., elderly person committees, etc.); c) conducting meetings and workshops for consultation and validation of proposals, including the budget for implementation, financing mechanisms, monitoring, and work schedule; and d) approval, production, publication, and socialization of the planning framework developed.

Output 2.12 – Thirty-one (31) environmental/forestry municipal offices with basic equipment and skilled staff for control, surveillance, and reduction of threats to biodiversity, soils, and forests, and gender equality and social inclusion.

81. The project will strengthen up to 31 municipalities' OFMs, DAPMAs, and UGAMs. The project will provide computer equipment (hardware and software), field and mobilization equipment for SFM, SLM, and BD conservation activities, and connection with the municipal monitoring platform that will be developed under Output 2.14. This equipment will improve these offices' capacity to analyze, propose, and respond to the demands of the municipality regarding SFM, SLM, and biodiversity conservation, including monitoring and surveillance.

82. The project will establish a cooperation agreement with INAB through its Municipal and Community Forestry Strengthening Department and the beneficiary municipality. This will include the allocation and costing by each municipality of the personnel required to operate the OFMs, UGAMs, or DAPMAs. The assigned personnel will be trained through as part of the planned activities under Output 2.13, including the use of training modules on biodiversity conservation, SFM, SLM, control of forest fires, and increase of carbon stocks (mainly through SFM practices, reforestation, natural regeneration, and agroforestry activities). In addition, the project will provide support to reforestation efforts through the diversified nursery strategy to be developed in the Output 2.1 and of which municipal staff will be active participants. Finally, the project will help outlining procedures for the municipal staff to coordinate and implement their actions with local associations and organizations, COCODES, INAB, and other project partners.

Output 2.13 – Training and logistical support provided to municipal environmental authorities for implementing biodiversity conservation, SFM, and SLM, as well as their enforcement capabilities.

83. The project will train at least 792 persons from the 31 prioritized municipalities to implement biodiversity conservation, SFM, and SLM, and verify compliance. This municipal institutional strengthening will be complemented by the equipment provided under Output 2.12, the development planning instruments created under Output 2.11, and the biodiversity, SFM, and SLM monitoring that will be developed under Output 2.14. In addition, the ability of the municipalities to respond to needs of the small-scale producers and farmers and to facilitate their use of incentives programs (PINPEP and PROBOSQUES) managed by the INAB will be strengthened. These capacities will be mainly benefit the UGAMs, OFMs, DAPMAs, DMMs, DAFIMs, members of the municipal council, and mayors. Training activities will follow the guidelines of the Gender Mainstreaming Plan.

84. The activities under this output are: a) development of training activities (e.g., workshops, short courses) on the topics defined during the PPG. These training activities will allow participants to improve their knowledge and skills considering the needs within each municipality regarding biodiversity conservation, SFM, and SLM. The training activities should be closely coordinated with the DMMs and UGAMs, in order to include both men and women; b) field visits to areas along the Central Volcanic Mountain Range where the project will be implementing multiple activities (e.g., forest incentives, PSA projects, conservation agreements and LMT, reforestation activities, protected areas, etc.) in coordination with CONAP, MARN, INAB, MAGA, or local entities involved; and c) and exchange of experiences with other projects or municipalities in the region of the Central Volcanic Range in order to capitalize and improve municipal performance in SFM, SLM, and biodiversity conservation. The purpose of these exchanges is to transfer knowledge (lessons learned) to replicate and adapt existing models of local environmental management in other municipalities and in the prioritized project area.

Output 2.14 – Municipal-level monitoring and enforcement system facilitates decision-making and the assessment of SFM, SLM, and biodiversity conservation benefits in the prioritized landscapes in the Central Volcanic Mountain Range, and articulated with the national monitoring systems.

85. The project will develop a municipal monitoring platform linked with the monitoring program to be developed under Output 1.12 and other national monitoring systems (e.g., MARN, CONAP, and INAB). This platform will use a set of databases that will be interconnected and will include a set of procedures and indicators to evaluate SFM, SLM, and biodiversity conservation benefits. Initially, the monitoring platform will be implemented in the five municipalities whose MRPs will be strengthened (Outputs 2.6 and 2.8); eventually, it will be expanded to include all the 31 municipalities with the project prioritized landscape. Monitoring information will support decision-making within each municipality regarding SFM (e.g. deforestation hotspots), SLM, and biodiversity conservation. Thereby, local governments will be able to establish corrective actions in conjunction with CONAP or INAB on those deforestation and land degradation hotspots by facilitating access to PINPEP and PROBOSQUE incentive programs.

86. Implementation of the monitoring platform will include the following activities: a) design of the municipal monitoring program considering the assessments of monitoring evaluation capacities conducted during the PPG. This includes the development of protocols to collect information, the definition of indicators related to SFM, SLM, and biodiversity conservation, and reporting procedures. The platform will be housed in the SIA-MARN with a direct link to the municipalities and the monitoring program to be developed under Output 1.12; b) training staff from the OFM, DAPMAs, or UGAMs in managing databases and issuing evaluation reports; c) evaluating jointly with the CONAP, MARN, INAB, MAGA, and CONRED the reports generated by the system; d) communication of monitoring results among the project stakeholders, including COMUDES, local communities, and indigenous populations (COCODES). The communication of monitoring results will place special attention to whom the information will be directed, and depending on the stakeholders, it will include local languages; and e) assess the impact of the municipal monitoring system and make changes and adjustments as needed. This activity will be performed jointly with CONAP, INAB, MAGA, MARN, and CONRED, among others.

### **Outcome 3. Knowledge management and M&E.**

87. This project component will compile and share lessons learned in a systematic and efficient manner, with special emphasis placed on the development and dissemination of knowledge. The component will also support adaptive management so that the project integrates experiences that result during implementation of the activities in the new programmatic cycles of the project. A communications/knowledge management expert specialist will be part of the Project Coordination Unit (PCU), who will be responsible for systematizing and documenting experiences and lessons learned, and communicating them within and beyond the project intervention area.

Output 3.1 – The experiences and lessons learned from mainstreaming biodiversity conservation and sustainable land management objectives into production landscapes of the Central Volcanic Mountain Range in Guatemala systematized.

88. The project will identify lessons learned related to the implementation of strategies to promote biodiversity conservation, SFM, and SLM. This effort will bring forth useful lessons and successful experiences that result from actions to make economic incentives available to small farmers and producers, the implementation of LMT to enhance connectivity and restore degraded forests, improve PA management effectiveness, implement SLM practices in prioritized watersheds, train national and local stakeholders to improve their knowledge and skills, and implement monitoring systems with local community participation to support decision-making and control and surveillance. Identifying the lessons learned and BMPs will help to: a) guide future actions; b) guide dialogue at the national, sub-national, and local levels with regard to policies and strategies for reducing loss in forest cover, decrease carbon emissions, improve connectivity, enhance carbon stocks, and reduce land and soil degradation; and c) improve the impact of the projects and programs financed by GEF.

Output 3.2 – Thematic studies and other knowledge are documented, and communication and public awareness-raising materials with a gender perspective produced and available for dissemination

89. Data, analysis, and lessons learned that result from the implementation of project activities, which will be reported periodically during project implementation with active participation from the key stakeholders, will be the main source for producing project documents and developing communication and informational materials. The documents and materials that are produced (e.g., technical reports and publications, videos, brochures, fact sheets, electronic news and blogs) will be published through printed and digital media. In the case of digital media, the material will be disseminated through existing information platforms of key project stakeholders (e.g., MARN, MAGA, CONAP, INAB, and GIMBUT). The printed materials will be distributed directly to the public, private, and civil sector institutions and organizations working in production landscapes in the Central Volcanic Mountain Range in biodiversity conservation and SLM.

90. Results from the project will also be disseminated within and beyond the project intervention area through a number of existing information sharing networks and forums. In addition, the project will participate, as is relevant and appropriate, in UNDP-GEF sponsored networks that are organized for senior staff working on projects that share common characteristics. The UNDP-GEF Regional Coordination Unit (RCU) has established an electronic platform for sharing lessons learned among the project managers. The project will identify and participate, as is relevant and appropriate, in scientific, policy-based, and/or any other networks that may be of benefit to project implementation. The project will identify, analyze, and share lessons learned that might be beneficial for the design and implementation of similar future projects. Identifying and analyzing lessons learned is an ongoing process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered no less frequently than once every 12 months. The UNDP-GEF shall provide a format for this exchange and will assist the project team in categorizing, documenting, and reporting the lessons learned. Specifically, the project will ensure coordination in terms of avoiding overlap, sharing best practices, and generating knowledge products of best practices in the area of biodiversity conservation, SFM, and SLM with the current projects of Guatemala's portfolio.

ii. Partnerships:

91. The project will build upon the following past and ongoing initiatives for the conservation of biodiversity, SFM, and SLM.

92. The project will incorporate best management practices and lessons learned through the GEF-UNDP project *Mainstreaming Biodiversity in the Coffee Sector in Colombia* regarding marketing of certified and non-certified agricultural and forest products, PES, and compensation for carbon sequestration and restoration programs. The main objective of Colombian coffee project was to create an enabling environment for the conservation and sustainable use of biodiversity in coffee production landscapes that contributes to the livelihoods of the local populations and provides multiple global environmental benefits. The project concluded in 2014; the final project evaluation determined that the project was successful in achieving its goals and results, and that its impact was positive.

93. The project will coordinate actions and share lessons learned with the ongoing GEF-UNDP project *Conservation and Sustainable Use of Biodiversity in Coastal and Marine Protected Areas (MPAs)*. In particular, coordination will be sought for the complementary planning of actions, using a watershed approach, which will be conducive to: a) prevention and reduction of the degradation of forests, soils, and water courses in the watersheds of the Pacific slope where both projects will implement actions; b) the control and reduction of contamination resulting from different land uses, including solid waste and wastewater management in the upper watersheds to reduce levels of contamination flowing to coastal areas; and c) increased participation of local communities (COMUDES and COCODES) in decision-making processes with regard to the reduction of agricultural-based impacts on the natural ecosystems of the upper and mid portions of the watersheds that drain to the Pacific coast of Guatemala. The coordination of actions and exchange of information will be achieved through regular team meetings between the implementation teams of the two projects, with support of the MARN and UNDP.

94. The exchange of lessons learned will also be sought with the GEF-UNDP project *Sustainable Forest Management and Multiple Global Environmental Benefits*, which is currently under implementation. This SFM project, which is being implemented directly by the UNDP, will provide multiple global environmental benefits through strengthened land and forest management and the conservation of biodiversity in a mountain dry forest landscape in southwestern Guatemala and a mountain humid forest landscape in western Guatemala. The exchange of information and lessons learned between the two projects will be achieved through technical staff meetings, participatory forums, and platforms for disseminating information from the MARN, UNDP, and the GEF.

95. The GEF-UNDP project *Promoting ecotourism to strengthen the financial sustainability of the SIGAP* will provide experiences and lessons learned regarding the participatory development and updating of management plans for PAs, as well as for their financial sustainability. This ecotourism/PA project, which is currently being implemented by the CONAP as the Executing Agency, will contribute to the strengthening of the financial sustainability of the SIGAP through the development of new financial mechanisms associated with ecotourism in line with the objectives of biodiversity conservation in selected PAs and their surrounding landscapes in the Western Guatemala Highlands. These PAs are the Lake Atitlán Watershed Multiple Use Reserve—RUMCLA, the Todos Santos Cuchumatán MRP, and the Tacaná Volcano, Tajumulco Volcano, and the Chicabal Lake-Volcano PCZs).

96. Actions will also be coordinated with the Adaptation Fund project *Climate Change-Resilient Production Landscapes and Socio-Economic Networks Advanced in Guatemala*. The objective of this project is to increase resilience to climate change in the production landscapes and socioeconomic systems of the five pilot municipalities in the central highlands that are threatened by climate change. This project has the UNDP and the MARN as its implementing partners, which will facilitate the exchange of information and lessons learned.

97. Finally, the project will cooperate with the following GIZ-funded projects in Guatemala. The Adaptation Project for Rural Development to Climate Change - ADAPTATE II, will contribute to reducing the vulnerability of the population and ecosystems to climate change in the Dry Corridor through the management of environmental goods and services. The ADAPTATE II initiative is being implemented between January 2016 to December 2018; the main areas of cooperation identified are the exchange of information on best agricultural practices for organic coffee production, adaptation strategies to climate change for the strengthening of value chains, and lessons learned from a gender approach in value chains.

98. The Central America for Central America Coffee rust integral management programme (PROCAGICA) to be financed by the European Union, with participation of the GIZ, will address climate change and its environmental effects through the adoption and application of measures for adaptation, mitigation, and reduction of disaster risk. Actions will include introducing environmental sustainable agroforestry farming practices and diversified cropping patterns, which in addition will provide biodiversity conservation and ecosystem services benefits. The PROCAGICA program has not yet begun operating in Guatemala, the project implementation team will maintain communication with the GIZ in Guatemala to establish synergies between the two projects in these areas, as well as in economic aspects and strengthening local producers' organizations, once both initiatives begin implementation.

iii. Stakeholder engagement:

99. The successful implementation of the project will largely depend on the effective communication and coordination with the multiple project stakeholders and the implementation of mechanisms to ensure these stakeholders' participation. The key national and sub-national stakeholders include the MARN, CONAP, MAGA, INAB, ARNPG, among others. At the local level, the most relevant stakeholders are municipalities, COCODES, organizations small farmers and producers, women groups, local communities, and indigenous peoples. Among the private sector, ANACAFE and FEDECOCAGUA will play an active in the project to improve marketing strategies in the coffee sector. The project's Stakeholder Engagement and Communication Plan is included in Annex K and a list of people consulted during project development is included in Annex P.

iv. Mainstreaming gender:

100. According to the project objective and the proposed actions, it is categorized as *Gender-responsive: results addressed differential needs of men or women and equitable distribution of benefits, resources, status, and rights, but do not address root causes of inequalities in their lives.*

101. During the PPG a gender analysis for the prioritized landscape and a detailed Gender Mainstreaming Plan (included as Annex M) was developed to ensure gender mainstreaming in the project; specific gender-based indicators will be used for monitoring and a gender specialist will be part of the PCU to facilitate improvements on gender equality and women's empowerment. In addition, the project will receive technical support and guidance from the MARN's Gender Office for mainstreaming gender issues into the project.

v. South-South and Triangular Cooperation (SSTrC):

102. There is great potential for south-south cooperation with the other countries in the region for implementing similar initiatives (e.g., Costa Rica and Honduras) through exchanges with the Country Offices and the Regional Office for Latin America and the Caribbean (LAC) of the UNDP. Technically qualified staff and groups of experts in the issues addressed by the project who are from these countries will have many opportunities to exchange experiences and knowledge. Finally, successful experiences will have a prominent place in the lessons learned that will be disseminated to ensure their widespread adoption and replication in other LAC countries.

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## IV. FEASIBILITY

i. Cost-efficiency and effectiveness:

103. A strategy to deliver multiple environmental benefits (biodiversity conservation, reduced carbon emissions, increased carbon stocks, and reduced land degradation) through the development of an enabling environment for the implementation of models of sustainable production and economic incentives derived from improved markets and ecosystem services for the sustainable management of production landscapes, and through improving connectivity of core PAs within sustainably managed production landscapes in the Central Volcanic Mountain Range in Guatemala will be more cost-effective in the short, medium, and long terms than the alternative strategy. The alternative strategy would result in the continuation of the current deforestation rate of approximately 418.3 ha annually<sup>16</sup> in the Central Volcanic Mountain Range, increasing the loss of key habitat for biodiversity, ecosystem fragmentation, decreasing natural forest cover, and increasing land and soil degradation.

104. Under the GEF scenario, the different national, sub-national, and local stakeholders will work together to reduce loss in forest cover in production landscapes based on a shared vision for managing these landscapes to conserve biodiversity and to promote SFM and SLM. This strategy will remove institutional, technical, informational, capacity, market, and financial barriers that currently exist in addressing the threats and causes of deforestation, principally from the expansion of subsistence and commercial agriculture. Under the GEF scenario, the demand for forested lands to establish non-sustainable production systems in rural landscapes will be reduced by making economic incentives available to small farmers and producers to implement best production practices (certification

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<sup>16</sup> Estimated based on loss of forest cover data for the 2006-2010 period.

and non-certification of sustainable agricultural products and NTFP, carbon sequestration certification and verification, payments for forest conservation and sustainable management, and PWS), and by strengthening the capacity of national and local environmental authorities to effectively monitor changes in production practices, conservation efforts through PAs, and to enforce forest and land use regulations.

105. The GEF project scenario will increase carbon stocks through the implementation of LMT that contribute to the accumulation of organic material in the soils and forest biomass, and reduce land degradation through the implementation of participatory strategies for prioritized watersheds, which will result in reduced erosion and sedimentation and increased capacity of the soils for retaining, infiltrating, circulating, storing water, and recycling nutrients. In addition, the GEF project will promote forest connectivity by enhancing the management of national- and municipal-level PAs, thereby contributing to the protection of biodiversity of global, national, and local importance as well as to protect forests within PAs that are the main source of water for local rural and urban communities surrounding the PAs. This will translate into direct benefits for the local producers through improved productivity and water and food supply, thus providing additional incentives for them to transform non-sustainable production landscapes into sustainable production landscapes.

106. Under the business-as-usual scenario, there will be greater loss of forest cover and habitat fragmentation, reduced carbon stocks, increased GHG emissions, and loss of biodiversity, as well as reduced ecosystem services thus bearing a negative impact on local communities. This would occur within the context of low institutional capacity and limited local participation in decision-making for planning, implementing, and monitoring biodiversity conservation, SFM, and SLM. The business-as-usual scenario would result in increased environmental and social impacts, which would prove to be costlier in both the short and long terms than the GEF strategy proposed herein.

ii. Risk Management:

107. As per standard UNDP requirements, the Project Manager will monitor risks quarterly and report on the status of risks to the UNDP Country Office. The UNDP Country Office will record progress in the UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high (i.e. when impact is rated as 5, and when impact is rated as 4 and probability is rated at 3 or higher). Management responses to critical risks will also be reported to the GEF in the annual PIR. The detailed risk management strategy for the project is included in Annex H.

iii. Social and environmental safeguards:

108. The overall project risk categorization is **low risk**. During the project design stage, the social and environmental screening was completed (Annex F); risk mitigation and risk assessment measures have been fully incorporated into the UNDP Risk Log and presented to the LPAC as an annex to this project document (see Annex H). The Risk Log will be updated in the ATLAS system for the duration of the project, as necessary. Environmental and social grievances during implementation would be reported to the GEF in the annual PIR. Environmental and social grievances will be reported to the GEF in the annual PIR.

iv. Sustainability and Scaling-Up:

109. The basis for the ecological sustainability of the project resides in the consolidation of biological corridors through enhanced ecosystem connectivity, improved management effectiveness of the PAs, and SLM at the local (privately owned farms, communal forests, etc.) and landscape (watersheds and municipalities) levels. Through the project, improved capacities and tools will be available to PA managers and municipal environmental authorities for more effective planning and management of conservation areas and production landscapes. In addition, monitoring systems will be in place that allow them to monitor changes in forest cover, increase in connectivity, threats to PAs, and changes to agricultural practices in the prioritized production landscapes.

110. The socioeconomic sustainability of the project will be achieved through the participation of local communities (including women), the private sector, and local governments (municipalities) in the planning and implementation of activities to reduce pressure on forest patches and existing PAs in the Central Volcanic Mountain Range; the benefits that small landowners and farmers will obtain from incentives and payments for the protection and sustainable use of forest and biodiversity; and the adoption of environmentally friendly production practices.

111. The basis for the institutional sustainability of the project lies in its ability to improve the capacities of national and local authorities, the private sector, and CSOs to jointly plan for and manage sustainable agriculture/forest landscapes. To this end, the project will develop municipal-level monitoring and enforcement systems to facilitate decision-making and the assessment of SFM, SLM, and biodiversity conservation benefits; train and provide logistical support to municipalities; increase local knowledge and skills of small farmers and producers for the implementation of BMPs (biodiversity, forest, and land); and train national and regional officials and field personnel to provide technical support to local stakeholders.

112. The financial sustainability of the project will be achieved through making economic incentives available to small farmers and producers to transform non-sustainable production landscapes into sustainable production landscapes. It is expected that once these incentives materialize, small farmers and producers will continue implementing sustainable production practices beyond project completion. The financial sustainability will also include making financing mechanisms available for the management of MRPs, including PES and sustainable tourism, which will continue to be implemented by municipal authorities once the project ends.

113. Scaling-Up. The project proposes the following innovative actions: a) implementation of PWS projects that contribute to biodiversity and forest conservation by promoting transactions (monetary compensation, goods, or services) between the landowners and/or landholders where the forest ecosystems that provide these services are located, and end-users who benefit from their permanent provision; in this case, between the inhabitants of the upper portions of the watersheds and the high-producing systems of the lower portions of the watersheds that use the water resources; b) the creation of technical protocols or documents to strengthen agricultural, agroforestry, marketing, and communication activities for improved and sustainable biodiversity-friendly products; c) the implementation of monitoring and control systems at the municipal level to support decision-making for the conservation of biodiversity and forests, the provision of ecosystem services, and the enhancement of ecosystem connectivity. The results from these actions shall be documented during project execution and presented to the government institutions, universities, NGOs, municipalities, the private sector, and civil society to disseminate best practices and lessons learned so that these can be replicated in at least 10 more watersheds in other regions of the Pacific slope and the Atlantic/Gulf of Mexico slope.



## V. PROJECT RESULTS FRAMEWORK

<b>This project will contribute to the following Sustainable Development Goals:</b> Goal 1: End poverty in all its forms everywhere; Goal 2 (2.3, 2.4): Zero hunger; Goal 5 (5.1, 5.5): Achieve gender equality and empower all women and girls; Goal 6 (6.6): Clean water and sanitation; Goal 7 (7.3): Affordable and clean energy; Goal 8 (8.9 – Indicator. 8.9.2): Decent work and economic growth; Goal 12: Responsible consumption and production; Goal 13 (13.1 – Indicator 13.1.1): Climate action; Goal 15 (15.1, 15.2, 15.3, 15.4, 15.5, 15.9, 15.a): Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.					
<b>This project will contribute to the following country outcome included in the UNDAF/Country Programme Document:</b> a) Impoverished rural populations develop new sustainable economic opportunities to compete in market systems; b) The Urban and Rural Development Councils system and related government institutions work together to develop policies and investments that promote the protection, responsible use, and conservation of natural resources, as well as resilience of the community in dealing with natural climate events; and c) Indigenous populations, primarily youth and women, are active citizens and participate effectively in decision-making related to development themes at the community, municipal, sub-national, and national levels.					
<b>This project will be linked to the following output of the UNDP Strategic Plan:</b> Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.					
	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
<b>Project Objective:</b>  To mainstream biodiversity conservation and sustainable land management objectives into production landscapes of the Central Volcanic Mountain Range in Guatemala, contributing to the welfare of local populations and the delivery of multiple global environmental benefits.	<b>Indicator 1:</b> Number of people benefiting (direct and indirectly), and ensuring gender equality and ethnic origin (indigenous and non-indigenous) for solutions to managing natural resources and ecosystem services	– Direct: 0 – Indirect: 0	– Direct: 25,755 (Men: 13,166; Women: 12,589) – Indirect: 343,797 (Men: 170,530; Women: 172,267)  – Direct: Indigenous: 10,781 (Men: 5,511; Women: 5,270) Non-indigenous: 14,974 (Men: 7,655; Women: 7,319) – Indirect: Indigenous: 143,495 (Men: 72,111; Women: 71,384) – Non-indigenous: 199,302 (Men: 100,156; Women: 99,146)	– Direct: 73,587 (Men: 37,619; Women: 35,968) – Indirect: 979,421 (Men: 492,192; Women: 487,229)  – Direct: Indigenous: 30,804 (Men: 15,748; Women: 15,056) Non-indigenous: 42,783 (Men: 21,871; Women: 20,912) – Indirect: Indigenous: 409,986 (Men: 206,032; Women: 203,954) Non-indigenous: 569,435 (Men: 286,160; Women: 283,275)	– Willingness by decision makers to incorporate objectives of biodiversity conservation, SLM, and SFM in sustainable production landscapes and biological corridors of the Central Volcanic Mountain Range – There is willingness by the local land owners and farmers to incorporate environmental sustainability criteria as part of their production activities – Optimal sampling
	<b>Project Indicator 2:</b> Reduction in deforestation in prioritized landscapes of the Central Volcanic Mountain Range	– 0 ha	– 11% (391.1 ha; 83,950.80 tCO <sub>2</sub> -eq)	– 19% (1,154 ha; 247,734.6 tCO <sub>2</sub> -eq at the end of the project)	
	<b>Indicator 3:</b> Area (hectares – ha) of biological corridors that establish connectivity between agriculture/forest production systems and PAs	– 0 ha	– 18,215.9 ha	– 52,045.5 ha	

<p><b>Component 1:</b> Development of an enabling environment for the delivery of multiple global environmental benefits through models of sustainable agriculture/forest production and economic incentives derived from improved markets and ecosystem services.</p>	<p><u>Indicator 4:</u> Number of new voluntary agreements established with producers to establish landscape management tools for adopting sustainable production practices covering 78,679 ha</p>	<p>– 0 conservation agreements</p>	<p>– 3 conservation agreement with ANACAFE/ARNPG and coffee growers' groups: Coffee agroforestry system for 300 ha</p> <p>– 4 conservation agreements with ARNPG and Private Natural Reserves: Coffee agroforestry system for 400 ha</p> <p>– 5 conservation agreements with FEDECOCAGUA and coffee growers' groups: Coffee agroforestry system for 1,300 ha</p> <p>– 3 conservation agreement with Sotz'il and organized farmers' groups: Agricultural and vegetable-growing systems for 12,771.55 ha</p> <p>– 2 conservation agreement with CDRO organized farmers' groups: sustainable agriculture (vegetable gardens) for 10 ha</p>	<p>– 3 conservation agreement with ANACAFE/ARNPG and coffee growers' groups: Coffee agroforestry system for 300 ha</p> <p>– 4 conservation agreements with ARNPG and Private Natural Reserves: Coffee agroforestry system for 400 ha</p> <p>– 5 conservation agreements with FEDECOCAGUA and coffee growers' groups: Coffee agroforestry system for 1,300 ha</p> <p>– 3 conservation agreement with Sotz'il and organized farmers' groups: Agricultural and vegetable-growing systems for 12,771.55 ha</p> <p>– 2 conservation agreement with CDRO organized farmers' groups: sustainable agriculture (vegetable gardens) for 10 ha</p>	<p>– There is willingness for payment for environmental services by the key national sectors</p> <p>– There is willingness by the local land owners and farmers to incorporate sustainable environmental criteria as part of their production activities</p> <p>– National and international markets are available and stable for certified/non-certified sustainable forest products</p>
	<p><u>Indicator 5:</u> Number of initiatives for the payment for watershed services (PWS) generating equitable environmental benefits (biodiversity and forest conservation) at the local level that contribute to the well-being of land/production unit owners being implemented as a result of the project</p>	<p>– Zero (0)</p>	<p>– One (1): PWS with the Concepción Chiquirichapa MRP, Quetzaltenango, in the process of being consolidated</p>	<p>– Two (2): PWS with the Concepción Chiquirichapa MRP, Quetzaltenango, developed, and PWS with the Esquipulas Palo Gordo MRP, San Marcos, in the process of being consolidated</p>	
	<p><u>Indicator 6:</u> Number of projects for compensating carbon sequestration and restoration of degraded forests that provide additional benefits to land/production unit owners implemented as a result of the project</p>	<p>Zero (0)</p>	<p>One (1)</p>	<p>Two (2)</p>	

	<p><b>Indicator 7:</b> Benefits to land/production unit owners (differentiated by gender and ethnic origin) as a result of economic incentives and sustainable production</p>	<p><b>PWS Projects 1 and 2</b> Fee for municipal potable water service: USD \$0.00 /user/month</p> <p><b>Carbon sequestration</b></p> <ul style="list-style-type: none"> <li>– LMT I. Protection and restoration of natural vegetation: USD \$0.00/ha/year.</li> <li>– LMT II. Agroforestry systems with coffee: USD \$0.00/ha/year</li> <li>– LMT III. Agroforestry systems with annual crops: USD \$0.00/ha/year</li> </ul> <p><b>Certified/non-certified</b></p> <ul style="list-style-type: none"> <li>– Coffee: USD \$1,172.25/ha/year</li> <li>– Onions: USD \$1,576.65/ha/year</li> <li>– Chinese peas: USD \$5,297.54/ha/year</li> <li>– Honey: USD \$476.77/ha/year</li> </ul>	<p><b>PWS Projects 1 and 2</b> Fee for municipal potable water service: USD \$0.82 /user/month</p> <p><b>Carbon sequestration</b></p> <ul style="list-style-type: none"> <li>– LMT I. Protection and restoration of natural vegetation: USD \$0.00/ha/year.</li> <li>– LMT II. Agroforestry systems with coffee: USD \$0.00/ha/year</li> <li>– LMT III. Agroforestry systems with annual crops: USD \$0.00/ha/year</li> </ul> <p><b>Certified/non-certified</b></p> <ul style="list-style-type: none"> <li>– Coffee: USD \$1,230.86/ha/year</li> <li>– Onions: USD \$1,623.95/ha/year</li> <li>– Chinese peas: USD \$5,456.47/ha/year</li> <li>– Honey: USD \$500.61/ha/year</li> </ul>	<p><b>PWS Projects 1 and 2</b> Fee for municipal potable water service: USD \$2.75/user/month</p> <p><b>Carbon sequestration</b></p> <ul style="list-style-type: none"> <li>– LMT I. Protection and restoration of natural vegetation: USD \$20.42/ha/year.</li> <li>– LMT II. Agroforestry systems with coffee: USD \$34.62/ha/year</li> <li>– LMT III. Agroforestry systems with annual crops: USD \$11.66/ha/year</li> </ul> <p><b>Certified/non-certified</b></p> <ul style="list-style-type: none"> <li>– Coffee: USD \$1,292.40/ha/year</li> <li>– Onions: USD \$1,705.15/ha/year</li> <li>– Chinese peas: USD \$5,729.29/ha/year</li> <li>– Honey: USD \$525.64/ha/year</li> </ul>	
	<p><b>Indicator 8:</b> Change in the capacity of organized male and female producers and farmers for implementing best practices in production systems that are friendly to biodiversity, SFM, SLM, and PWS schemes, as measured through the UNDP Capacity Development Scorecard</p>	<p><b>Organizations of producers and farmers</b></p> <ul style="list-style-type: none"> <li>– Cooperativa El Socorro, R. L.: 15%</li> <li>– Cooperativa Integral de Comercialización Nueva Victoria, R. L.: 15%</li> <li>– Asociación de Ecoturismo de Chicua - ASAEDICH-: 22%</li> <li>– Asociación Integral de Desarrollo Ambiental - ASINDA-: 26%</li> <li>– Asociación de Desarrollo de Loma Linda - ASODIL-: 22%</li> <li>– Importadora y Exportadora Agrícola e</li> </ul>	<p><b>Organizations of producers and farmers</b></p> <ul style="list-style-type: none"> <li>– Cooperativa El Socorro, R. L.: 23%</li> <li>– Cooperativa Integral de Comercialización Nueva Victoria, R. L.: 23%</li> <li>– Asociación de Ecoturismo de Chicua -ASAEDICH-: 30%</li> <li>– Asociación Integral de Desarrollo Ambiental -ASINDA-: 34%</li> <li>– Asociación de Desarrollo de Loma Linda -ASODIL-: 30%</li> <li>– Importadora y Exportadora Agrícola e Industrial Nueva Alianza, S. A.: 38%</li> <li>– Cooperativa Santiaguito R.L.: 76%</li> </ul>	<p><b>Capacity of producers and farmers</b></p> <ul style="list-style-type: none"> <li>– Cooperativa El Socorro, R. L.: 33%</li> <li>– Cooperativa Integral de Comercialización Nueva Victoria, R. L.: 33%</li> <li>– Asociación de Ecoturismo de Chicua -ASAEDICH-: 40%</li> <li>– Asociación Integral de Desarrollo Ambiental - ASINDA-: 44%</li> <li>– Asociación de Desarrollo de Loma Linda -ASODIL-: 40%</li> <li>– Importadora y Exportadora Agrícola e Industrial Nueva Alianza, S. A.: 48%</li> </ul>	<ul style="list-style-type: none"> <li>– Sampling efforts are optimal</li> <li>– Beneficiaries apply additional knowledge acquired</li> </ul>

		<p>Industrial Nueva Alianza, S. A.: 30%</p> <ul style="list-style-type: none"> <li>– Cooperativa Santiaguito R.L.: 70%</li> <li>– Asociación de Apicultores Las Brisas, -ASABRICAP-: 26%</li> <li>– Asociación de Desarrollo Integral Tierra Fértil –ADIFERT-: 7%</li> <li>– Cooperativa Integral Agrícola 21 de octubre R.L.: 78%</li> <li>– Cooperativa Integral de Comercialización Chanchimiel, R. L.: 30%</li> </ul> <p><b>Capacity in PWS</b></p> <ul style="list-style-type: none"> <li>– Municipality of Esquipulas Palo Gordo, San Marcos: 20%</li> <li>– Municipality of Concepción Chiquirichapa, Quetzaltenango: 15%</li> </ul>	<ul style="list-style-type: none"> <li>– Asociación de Apicultores Las Brisas, -ASABRICAP-: 34%</li> <li>– Asociación de Desarrollo Integral Tierra Fértil –ADIFERT-: 15%</li> <li>– Cooperativa Integral Agrícola 21 de octubre R.L.: 83%</li> <li>– Cooperativa Integral de Comercialización Chanchimiel, R. L.: 38%</li> </ul> <p><b>Capacity in PWS</b></p> <ul style="list-style-type: none"> <li>– Municipality of Esquipulas Palo Gordo, San Marcos: 32%</li> <li>– Municipality of Concepción Chiquirichapa, Quetzaltenango: 27%</li> </ul>	<ul style="list-style-type: none"> <li>– Cooperativa Santiaguito R.L.: 81%</li> <li>– Asociación de Apicultores Las Brisas, -ASABRICAP-: 44%</li> <li>– Asociación de Desarrollo Integral Tierra Fértil –ADIFERT-: 25%</li> <li>– Cooperativa Integral Agrícola 21 de octubre R.L.: 89%</li> <li>– Cooperativa Integral de Comercialización Chanchimiel, R. L.: 48%</li> </ul> <p><b>Capacity in PWS</b></p> <ul style="list-style-type: none"> <li>– Municipality of Esquipulas Palo Gordo, San Marcos: 44%</li> <li>– Municipality of Concepción Chiquirichapa, Quetzaltenango: 39%</li> </ul>	
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#### **Outputs:**

##### Certified and non-certified agriculture/forest production systems:

1. Certification systems for agricultural products and NTFP.
2. Improved partnerships, alliances, marketing strategies and protocols for certified and non-certified agricultural products and NTFP.
3. Competitiveness incentive program (e.g., preferential buying from project areas, price premiums, and extension services) promote production of certified and non-certified products and increase income opportunities for small farmers derived from the adoption of biodiversity-friendly production practices.
4. Financial and profitability analysis compares the income from control group production units with income from certified project production units.

##### SFM incentives:

1. Carbon sequestration certification and verification program in place following the CDM methodological framework.
2. Platform for facilitating access to incentives programs (e.g., PINPEP, PROBOSQUE, others) supporting farmers implementing reforestation actions and the mix of native trees and agricultural systems to enhance environmental services (hydrological regulation, biodiversity habitat, carbon storage, and soil protection).

##### Payments (compensation/recognition) for Watershed Services:

1. Payment system (compensation/recognition) for watershed services in place that benefits users and providers.
2. Technical guideline for watershed-related payments (compensation/recognition) designed.
3. Protocols and enhanced capacity of environmental authorities for planning and monitoring PWS projects.
4. Benefit-sharing mechanism for watershed-related payments (compensation/recognition).

##### Capacity development

1. Training program increases local knowledge and skills (2,780 small producers and farmers [beneficiaries] differentiated by gender trained by the end of the project) regarding:
  - a) Standards for certification of biodiversity- and forest-friendly production; forestry incentives; including carbon sequestration and compensation, and PWS-related methods, standards, and procedures;

b) Business management (e.g., business plan development and basic accounting) of certified and non-certified production, forestry incentives, and PWS; and c) Monitoring of certified and non-certified production systems, forestry incentives, and PWS.					
2. Participatory monitoring program to assess biodiversity conservation, SFM, and SLM, harmonized with national and local monitoring programs.					
<b>Component 2:</b> Delivering multiple environment benefits by connecting core protected areas within sustainably managed production landscapes in the Central Volcanic Mountain Chain in Guatemala	<b>Indicator 9:</b> Sequestered carbon (tCO <sub>2</sub> -eq) through the restoration of 4,500 ha of degraded forest using native species, natural regeneration, and LMT (biological corridors, forest enrichment, live fences, windbreaks, etc.)	– 0 tCO <sub>2</sub> -eq	– 4,089 tCO <sub>2</sub> -eq	– 73,076 tCO <sub>2</sub> -eq	– There are no substantial changes in land use/cover – Sampling efforts are optimal – Environmental variability within normal range
	<b>Indicator 10:</b> Area (ha) of sustainable agriculture/forest production systems (certified and non-certified), including agroforestry systems	– 0 ha	– 27,537 ha	– 78,679 ha	
	<b>Indicator 11:</b> Presence of key species in production landscapes, conservation forests, and PAs by the end of the project	<b>Birds:</b> – <i>Cardellina versicolor</i> – <i>Oreophasis derbianus</i> – <i>Pharomachrus mocinno</i> – <i>Penelopina nigra</i> – <i>Tangara cabanisi</i> – <i>Setophaga chrysoparia</i> – <i>Aulacorhynchus prasinus</i> – <i>Pteroglossus torquatus</i> <b>Amphibians:</b> – <i>Plectrohyla guatemalensis</i> – <i>Agalychnis moreletii</i> <b>Mammals:</b> – <i>Microtus guatemalensis</i> – <i>Sturnira hondurensis</i>	<b>Birds:</b> – <i>Cardellina versicolor</i> – <i>Oreophasis derbianus</i> – <i>Pharomachrus mocinno</i> – <i>Penelopina nigra</i> – <i>Tangara cabanisi</i> – <i>Setophaga chrysoparia</i> – <i>Aulacorhynchus prasinus</i> – <i>Pteroglossus torquatus</i> <b>Amphibians:</b> – <i>Plectrohyla guatemalensis</i> – <i>Agalychnis moreletii</i> <b>Mammals:</b> – <i>Microtus guatemalensis</i> – <i>Sturnira hondurensis</i>	<b>Birds:</b> – <i>Cardellina versicolor</i> – <i>Oreophasis derbianus</i> – <i>Pharomachrus mocinno</i> – <i>Penelopina nigra</i> – <i>Tangara cabanisi</i> – <i>Setophaga chrysoparia</i> – <i>Aulacorhynchus prasinus</i> – <i>Pteroglossus torquatus</i> <b>Amphibians:</b> – <i>Plectrohyla guatemalensis</i> – <i>Agalychnis moreletii</i> <b>Mammals:</b> – <i>Microtus guatemalensis</i> – <i>Sturnira hondurensis</i>	– Interest is maintained by the municipal and central governments, the local communities, and the production sectors to improve the management of PAs
	<b>Indicator 12:</b> Change in the management effectiveness (as measured through the METT) of five (5) prioritized MRPs present in prioritized zones for ecosystem connectivity	– Tecpán MRP: 22 – Quetzaltenango MRP: 38 – Zunil MRP: 32 – Esquipulas Palo Gordo MRP: 37 – San Cristóbal Cucho MRP: 35	– Tecpán MRP: 29 – Quetzaltenango MRP: 43 – Zunil MRP: 36 – Esquipulas Palo Gordo MRP: 42 – San Cristóbal Cucho MRP : 40	– Tecpán MRP: 37 – Quetzaltenango MRP: 49 – Zunil MRP: 41 – Esquipulas Palo Gordo MRP: 47 – San Cristóbal Cucho MRP : 45	
	<b>Indicator 13:</b> Change in the financial gap for covering basic management costs and investments in five (5) MRPs as	– USD \$248,215	– USD \$223,394 (10% reduction)	– USD \$178,413 (approx. 28.12% reduction)	

	a result of new financing mechanisms for PAs				
	<p><b>Indicator 14:</b> Change in management and technical capacity of 200 officials of PAs, municipal officials, and members of the private sector as measured through the UNDP Capacity Development Scorecard</p>	<p><b>Protected areas</b></p> <ul style="list-style-type: none"> <li>– Municipality of Tecpán: 33%</li> <li>– Municipality of Quetzaltenango: 47%</li> <li>– Municipality of Zunil: 44%</li> <li>– Municipality of San Cristóbal Cucho: 24%</li> <li>– Municipality of Esquipulas Palo Gordo: 51%</li> </ul> <p><b>Central government</b></p> <ul style="list-style-type: none"> <li>– CONAP (Headquarters): 62%</li> <li>– CONAP, Western Highlands Division: 67%</li> <li>– CONAP, Central Highlands Division: 51%</li> </ul> <p><b>Private sector</b></p> <ul style="list-style-type: none"> <li>– ANACAFE: 80%</li> <li>– ARNPG: 81%</li> </ul> <p><b>Municipalities</b></p> <ul style="list-style-type: none"> <li>– Municipality of Acatenango: 18%</li> <li>– Municipality of San Pedro Yepocapa: 27%</li> <li>– Municipality of San Juan Ostuncalco: 24%</li> <li>– Municipality of San Marcos: 53%</li> <li>– Municipality of San Pablo: 29%</li> </ul>	<p><b>Protected areas</b></p> <ul style="list-style-type: none"> <li>– Municipality of Tecpán: 39%</li> <li>– Municipality of Quetzaltenango: 53%</li> <li>– Municipality of Zunil: 50%</li> <li>– Municipality of San Cristóbal Cucho: 30%</li> <li>– Municipality of Esquipulas Palo Gordo: 57%</li> </ul> <p><b>Central government</b></p> <ul style="list-style-type: none"> <li>– CONAP (Headquarters): 70%</li> <li>– CONAP, Western Highlands Division: 75%</li> <li>– CONAP, Central Highlands Division: 59%</li> </ul> <p><b>Private sector</b></p> <ul style="list-style-type: none"> <li>– ANACAFE: 85%</li> <li>– ARNPG: 87%</li> </ul> <p><b>Municipalities</b></p> <ul style="list-style-type: none"> <li>– Municipality of Acatenango: 26%</li> <li>– Municipality of San Pedro Yepocapa: 35%</li> <li>– Municipality of San Juan Ostuncalco: 32%</li> <li>– Municipality of San Marcos: 61%</li> <li>– Municipality of San Pablo: 36%</li> </ul>	<p><b>Protected areas</b></p> <ul style="list-style-type: none"> <li>– Municipality of Tecpán: 45%</li> <li>– Municipality of Quetzaltenango: 59%</li> <li>– Municipality of Zunil: 56%</li> <li>– Municipality of San Cristóbal Cucho: 36%</li> <li>– Municipality of Esquipulas Palo Gordo: 64%</li> </ul> <p><b>Central government</b></p> <ul style="list-style-type: none"> <li>– CONAP (Headquarters): 78%</li> <li>– CONAP, Western Highlands Division: 83%</li> <li>– CONAP, Central Highlands Division: 67%</li> </ul> <p><b>Private sector</b></p> <ul style="list-style-type: none"> <li>– ANACAFE: 91%</li> <li>– ARNPG: 93%</li> </ul> <p><b>Municipalities</b></p> <ul style="list-style-type: none"> <li>– Municipality of Acatenango: 36%</li> <li>– Municipality of San Pedro Yepocapa: 45%</li> <li>– Municipality of San Juan Ostuncalco: 42%</li> <li>– Municipality of San Marcos: 71%</li> <li>– Municipality of San Pablo: 47%</li> </ul>	<ul style="list-style-type: none"> <li>– Sampling efforts are optimal</li> <li>– Beneficiaries (men and women) apply additional knowledge acquired</li> </ul>
<p><b>Outputs:</b></p> <p><u>Ecosystem connectivity</u></p> <ol style="list-style-type: none"> <li>1. Land use strategy supports of the implementation/strengthening of at least 31 diversified nurseries, improves production and access to native germplasm for agroforestry and silvopastoral systems, soil stabilization; and contributes to the connectivity of biological corridors in Component 2.</li> <li>2. Voluntary agreements through different participatory conservation models (e.g., privately owned farms, landowners, communal lands, etc.) used for establishing LMT (i.e., biological corridors, forest enrichment for conservation and firewood management, natural regeneration, reforestation, rehabilitation of riparian forests, live fences, windbreaks, etc.), strengthening ecosystem connectivity and reducing deforestation in production and natural landscapes.</li> </ol>					

3. Participatory SLM plans for the middle and upper sections of at least six (6) watersheds<sup>17</sup> (229,831.87 ha) include measures to reduce soil degradation and contribute to enhance ecosystem connectivity.
4. Participatory energy-efficient stoves program reduces firewood consumption and greenhouse gas (GHG) emissions.
5. Production plans and protocols support the implementation of certified and non-certified sustainable agricultural and NTFP production practices in project sites (private farms, community forests, etc.), while contributing to enhance ecosystem connectivity.
6. Five (5) participatory management plans for MRPs strengthen local management, conservation, monitoring and control, and its integration with the biocultural landscape.
7. Six (6) proposals for the categorization of national-level PAs (PCZs) and two (2) proposals for the recategorization of NPs, developed in a participatory manner, include technical feasibility studies considering current national-level categories of the National Park System – SIGAP), thus contributing to the conservation and sustainability of the areas.
8. Financing mechanisms for the management of five (5) MRPs covering 13,662.57 ha implemented, including PES and sustainable tourism.
9. Conservation and management program for three (3) prioritized areas (4,655.3 ha) for the protection of amphibians (San Rafael Pie de la Cuesta MRP, San Marcos; San Pedro Sacatepéquez MRP, San Marcos; and Zunil MRP, Quetzaltenango).

#### Capacity development

10. Strengthened institutional capacity program for national and regional officials and field personnel (PA staff; environmental, forestry, and agricultural officials) to support the sustainable management and conservation of biodiversity in production landscapes, the use of SFM and SLM methodologies and tools, and the quantification and evaluation of reduced deforestation (598 people trained by project end).
11. Development planning for 31 municipalities incorporates principles for biodiversity conservation, SFM, SLM, sustainable agriculture, and gender, and their implementing measures.
12. Thirty-one (31) environmental/forestry municipal offices equipped and with skilled staff for control, surveillance, and reduction of threats to biodiversity, soils, and forests, gender equality and social inclusion.
13. Training and logistical support provided to municipal environment authorities for implementing biodiversity conservation, SFM, and SLM, as well as their enforcement capabilities.
14. Municipal-level monitoring and enforcement system facilitates decision-making and the assessment of SFM, SLM, and biodiversity benefits in the prioritized landscapes in the central volcanic range, and articulated with the national monitoring systems.

<b>Component 3:</b> Knowledge Management and M&E	<b>Indicator 15:</b> Number of media outlets and technical publications that document successful experiences about the mainstreaming of objectives of biodiversity conservation, SFM, and SLM in sustainable production landscapes and biological corridors in the Central Volcanic Mountain Chain.	– 0	– 5	– 10	– Wide and opportune dissemination – Optimal sampling
	<b>Indicator 16:</b> Website serves as a virtual knowledge platform for disseminating information about the project.	– 0	– Website designed	– Website operating	

#### Outputs:

1. The experiences and lessons learned from mainstreaming biodiversity conservation and sustainable land management objectives into production landscapes of the Central Volcanic Mountain Range in Guatemala systematized.
2. Thematic studies and other knowledge are documented, and communication and public sensitization materials with a gender perspective produced and available for dissemination.

<sup>17</sup> Achiguate, Coyolate, Naranjo, Ocosito, Samalá, and Suchiate rivers watersheds.

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## VI. MONITORING AND EVALUATION (M&E) PLAN

114. The project results as outlined in the PRF will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results.

115. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the [UNDP POPP](#) and [UNDP Evaluation Policy](#). While these UNDP requirements are not outlined in this project document, the UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the [GEF M&E policy](#) and other relevant GEF policies.

116. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&E activities including the GEF Operational Focal Point and national/regional institutes assigned to undertake project monitoring. The GEF Operational Focal Point will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements (notably the GEF Tracking Tools) across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF agencies.

### **M&E oversight and monitoring responsibilities:**

117. Project Manager: The Project Manager is responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Project Manager will ensure that all project staff maintain a high level of transparency, responsibility, and accountability in M&E and reporting of project results. The Project Manager will inform the Project Board, the UNDP Country Office and the UNDP-GEF Regional Technical Advisor (RTA) of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

118. The Project Manager will develop annual work plans (AWPs) based on the multi-year work plan included in Annex A, including annual output targets to support the efficient implementation of the project. The Project Manager will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. gender strategy, knowledge management strategy, etc.) occur on a regular basis.

119. Project Board: The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the AWP for the following year. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.

120. Project Implementing Partner: The Implementing Partner is responsible for providing any and all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary and appropriate. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes, and is aligned with national systems so that the data used by and generated by the project supports national systems.

121. UNDP Country Office: The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the AWP. Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities including the annual



GEF PIR, the independent MTR and the independent terminal evaluation (TE). The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

122. The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the [UNDP POPP](#). This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the GEF PIR and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g., annual GEF PIR quality assessment ratings) must be addressed by the UNDP Country Office and the Project Manager.

123. The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure in order to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF IEO.

124. UNDP-GEF Unit: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF RTA and the UNDP-GEF Directorate as needed.

125. **Audit**: The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies on NIM implemented projects.<sup>18</sup>

**Additional GEF monitoring and reporting requirements:**

126. Inception Workshop and Report: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, amongst others:

- a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project implementation;
- b) Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
- c) Review the results framework and finalize the indicators, means of verification and monitoring plan;
- d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;
- e) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements; the gender strategy; the knowledge management strategy, and other relevant strategies;
- f) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; and
- g) Plan and schedule Project Board meetings and finalize the first AWP of the project.

127. The Project Manager will prepare the inception report no later than one month after the inception workshop. The inception report will be cleared by the UNDP Country Office and the UNDP-GEF RTA, and will be approved by the Project Board.

128. GEF Project Implementation Report (PIR): The Project Manager, the UNDP Country Office, and the UNDP-GEF RTA will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project implementation. The Project Manager will ensure that the indicators included in the PRF are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

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<sup>18</sup> See guidance here: <https://info.undp.org/global/popp/frm/pages/financial-management-and-execution-modalities.aspx>.

129. The PIR submitted to the GEF will be shared with the Project Board. The UNDP Country Office will coordinate the input of the GEF Operational Focal Point and other stakeholders to the PIR as appropriate. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

130. Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information-sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based, and/or any other networks, which may be of benefit to the project. The project will identify, analyze and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

131. GEF Focal Area Tracking Tools: The following GEF Tracking Tool(s) will be used to monitor global environmental benefit results: a) Biodiversity Focal Area: BD-1 (Catalyzing Sustainability of Protected Area Systems, Programs 1) and BD-4 (Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes/ Seascapes and Sectors - Program 9; b) Land Degradation Focal Area: LD-2 (Ecosystem services in forest landscapes - Program 3); and c) Sustainable Forest Management Focal Area: SFM-1 (Maintained Forest Resources: Reduce the pressures on high conservation value forests by addressing the drivers of deforestation) and SFM-2 (Enhanced Forest Management: Maintain flows of forest ecosystem services and improve resilience to climate change through SFM).

132. The baseline/CEO Endorsement GEF Focal Area Tracking Tool(s) – submitted in Annex D to this project document – will be updated by the Project Manager/Team and shared with *the* mid-term review consultants and terminal evaluation consultants (not the evaluation consultants hired to undertake the MTR or the TE) before the required review/evaluation missions take place. The updated GEF Tracking Tool(s) will be submitted to the GEF along with the completed MTR report and TE report.

133. Independent Mid-term Review (MTR): An independent MTR process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the third PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center \(ERC\)](#). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF RTA, and approved by the Project Board.

134. Terminal Evaluation (TE): An independent TE will take place upon completion of all major project outputs and activities. The TE process will begin three months before operational closure of the project, allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center](#). As noted in this guidance, the evaluation will be "independent, impartial, and rigorous." The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing, or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF RTA, and will be approved by the Project Board. The TE report will be publicly available in English on the UNDP ERC.

135. The UNDP Country Office will include the planned project TE in the UNDP Country Office evaluation plan, and will upload the final TE report in English and the corresponding management response to the UNDP ERC. Once

uploaded to the ERC, the UNDP IEO will undertake a quality assessment and validate the findings and ratings in the TE report, and rate the quality of the TE report. The UNDP IEO assessment report will be sent to the GEF IEO along with the project TE report.

136. **Final Report:** The project's terminal PIR along with the TE report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling-up.

**Mandatory GEF M&E Requirements and M&E Budget:**

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget <sup>19</sup> (USD\$)		Timeframe
		GEF grant	Co-financing	
Inception Workshop	UNDP Country Office	USD \$5,000	USD \$5,000	Within two months of project document signature
Inception Report	Project Manager	None	None	Within two weeks of inception workshop
Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP	UNDP Country Office	None	None	Quarterly, annually
Monitoring of indicators in project results framework	Project Manager M&E Specialist	None, covered through Outcome 3	USD \$5,000	Annually
GEF PIR	Project Manager and UNDP Country Office and UNDP-GEF team	None	None	Annually
NIM Audit as per UNDP audit policies	UNDP Country Office	USD \$35,000 (USD 5,000/yr.)	None	Annually or other frequency as per UNDP audit policies
Lessons learned and knowledge generation	Project Manager Communications/ Knowledge Management Specialist	None, covered through Outcome 3	USD \$10,000	Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	Project Manager UNDP Country Office	None	None	Ongoing
Addressing environmental and social grievances	Project Manager UNDP Country Office BPPS as needed	None for time of project manager, and UNDP Country Office	None	
Monitoring of Gender Mainstreaming Plan	Gender Specialist M&E Specialist	None, covered through Outcome 3	None	Ongoing

<sup>19</sup> Excluding project team staff time and UNDP staff time and travel expenses.

<b>Monitoring of Stakeholder Engagement and Communication Plan</b>	Project Manager M&E Specialist	None, covered through Outcome 3	None	Ongoing
<b>Project Board meetings</b>	Project Board UNDP Country Office Project Manager	USD \$5,6000 (USD \$800/yr.)	USD \$7,000 (USD \$1,000/yr.)	At minimum annually
<b>Supervision missions</b>	UNDP Country Office	None <sup>20</sup>	None	Annually
<b>Oversight missions</b>	UNDP-GEF team	None <sup>20</sup>	None	Troubleshooting as needed
<b>Knowledge management as outlined in Outcome 3</b>	Project Manager	USD \$182,500	USD \$10,000	On-going
<b>GEF Secretariat learning missions/site visits</b>	UNDP Country Office and Project Manager and UNDP-GEF team	None	None	To be determined
<b>Mid-term GEF Tracking Tool to be updated</b>	Project Manager	USD \$5,000	USD \$10,000	Before MTR mission takes place
<b>Independent MTR and management response</b>	UNDP Country Office and Project team and UNDP-GEF team	USD \$28,000	USD \$28,000	Between 2 <sup>nd</sup> and 3 <sup>rd</sup> PIRs
<b>Terminal GEF Tracking Tool to be updated</b>	Project Manager	USD \$5,000	USD \$10,000	Before TE mission takes place
<b>Independent TE included in UNDP evaluation plan, and management response</b>	UNDP Country Office and Project team and UNDP-GEF team	USD \$41,000	USD \$41,000	At least three months before operational closure
<b>Translation of MTR and TE reports into English</b>	UNDP Country Office	USD \$10,000	None	
<b>TOTAL indicative COST</b> Excluding project team staff time, and UNDP staff and travel expenses		<b>USD \$317,100</b>	<b>USD \$126,000</b>	

<sup>20</sup> The costs of UNDP Country Office and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

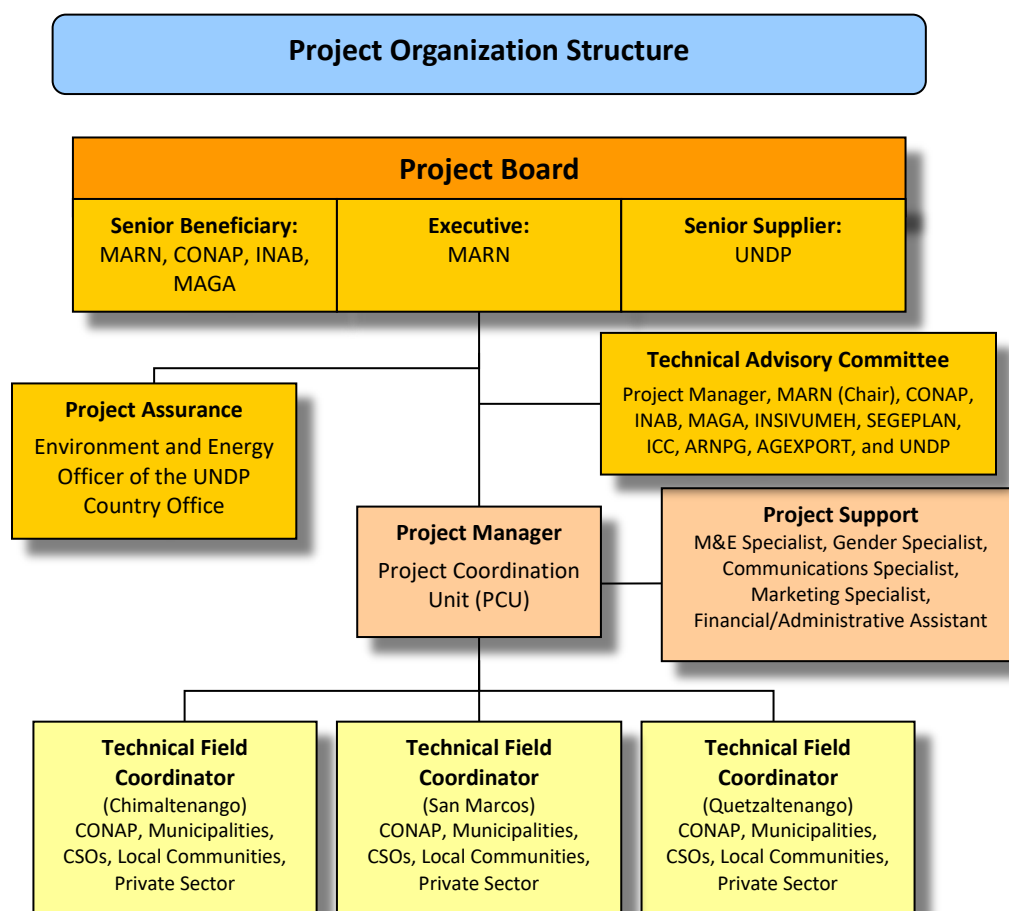
## VII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

137. Roles and responsibilities of the project's governance mechanism: The project will be implemented following UNDP's national implementation modality (NIM), according to the Standard Basic Assistance Agreement (SBAA) between UNDP and the GoG through the MARN, and the respective Country Programme.

138. The **Implementing Partner** for this project is the MARN of Guatemala. The Implementing Partner is responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources. The Implementing Partner is responsible for: Approving and signing the multiyear plan; approving and signing the combined delivery report at the end of the year; and signing the financial report or the funding authorization and certificate of expenditures.

139. UNDP may act as a **Responsible Party** for the implementation of two PWS projects, the development of five management plans for MRPs, implementation and/or strengthening of at least 31 nurseries, the development of six SLM plans for the middle and upper sections of the six prioritized watersheds, development planning for 31 municipalities (i.e., municipal development plans, land use plans, and institutional strategic plans), the implementation of a municipal-level monitoring and enforcement system, production plans and protocols to support the implementation of certified and non-certified sustainable agricultural and NTFP production, development of a training program to increase local knowledge and skills (small producers and farmers), and the strengthening of up to 31 municipalities (basic equipment and skills).

140. The project organization structure is as follows:



141. The **Project Board** (also called the Project Steering Committee) is responsible for making by consensus, management decisions when guidance is required by the Project Manager, including recommendation for UNDP/Implementing Partner approval of project plans and revisions. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager. The terms of reference for the Project Board are contained in Annex E. The Project Board is comprised of representatives of the MARN, CONAP, INAB, MAGA and UNDP and shall meet once a year.

142. The composition of the Project Board must include the following roles:

143. **Executive:** The Executive is an individual who represents ownership of the project who will chair the Project Board. This role can be held by a representative from the Government Cooperating Agency or UNDP. The Executive is: MARN.

144. The Executive is ultimately responsible for the project, supported by the Senior Beneficiary and Senior Supplier. The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher-level outcomes. The executive has to ensure that the project gives value for money, ensuring cost-conscious approach to the project, balancing the demands of beneficiary and supplier.

145. Specific Responsibilities: (as part of the above responsibilities for the Project Board)

- Ensure that there is a coherent project organization structure and logical set of plans;
- Set tolerances in the AWP and other plans as required for the Project Manager;
- Monitor and control the progress of the project at a strategic level;
- Ensure that risks are being tracked and mitigated as effectively as possible;
- Brief relevant stakeholders about project progress;
- Organize and chair Project Board meetings.

146. **Senior Supplier:** The Senior Supplier is an individual or group representing the interests of the parties concerned which provide funding and/or technical expertise to the project (designing, developing, facilitating, procuring, implementing). The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project. The Senior Supplier role must have the authority to commit or acquire supplier resources required. If necessary, more than one person may be required for this role. Typically, the implementing partner, UNDP and/or donor(s) would be represented under this role. The Senior Supplier is: UNDP.

147. Specific Responsibilities (as part of the above responsibilities for the Project Board)

- Make sure that progress towards the outputs remains consistent from the supplier perspective;
- Promote and maintain focus on the expected project output(s) from the point of view of supplier management;
- Ensure that the supplier resources required for the project are made available;
- Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts.

148. **Senior Beneficiary:** The Senior Beneficiary is an individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries. The Senior Beneficiary role is held by a representative of the government or civil society. The Senior Beneficiaries are: MARN, CONAP, INAB, MAGA.

149. The Senior Beneficiary is responsible for validating the needs and for monitoring that the solution will meet those needs within the constraints of the project. The Senior Beneficiary role monitors progress against targets and quality criteria. This role may require more than one person to cover all the beneficiary interests. For the sake of effectiveness, the role should not be split between too many people.

150. Specific Responsibilities (as part of the above responsibilities for the Project Board):

- Prioritize and contribute beneficiaries' opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Specification of the Beneficiary's needs is accurate, complete and unambiguous;
- Implementation of activities at all stages is monitored to ensure that they will meet the beneficiary's needs and are progressing towards that target;
- Impact of potential changes is evaluated from the beneficiary point of view;
- Risks to the beneficiaries are frequently monitored.

151. A **Technical Advisory Committee** (TAC) will provide general oversight to the project and will also have roles for Project Assurance. The TAC will meet once every three months or when necessary. The TAC will be composed of: the Project Manager, MARN (Chair), CONAP, INAB, MAGA, INSIVUMEH, SEGEPLAN, ICC, ARNPG, AGEXPORT, and UNDP. However, representatives of other institutions may be invited to participate in the TAC as deemed necessary, such as the Indigenous Group for Climate Change in Guatemala.

152. The TAC will provide strategic guidance to the project and assess its added value. The responsibilities of the TAC include reviewing the achievement of outcomes according to the reports of the Project Manager and overseeing the timely implementation of project activities.

153. The TAC will also be responsible for approving work plans and quarterly disbursements, in accordance with the AWP approved by the Project Board. It will also monitor the achievement of the quarterly targets and the implementation of the quarterly disbursements. In addition, it will promote administrative efficiency and will assure that project activities and outputs follow the highest standards, it will provide guidance to the Project Manager or the Project Board to support decision-making, and will request that the project team implements corrective measures when necessary.

154. The TAC will be convened by the Project Manager in advance to give the members sufficient time to schedule the meeting and agree on the agenda. The Project Manager will prepare a minute of each meeting. Extraordinary meetings of the TAC will be convened when deemed necessary or by request of one of its members. The TAC will invite key stakeholders to support specific themes, when needed

155. The **Project Manager** will run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Manager is responsible for day-to-day management and decision-making for the project. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The Project Manager function will end when the final project terminal evaluation report, and other documentation required by the GEF and UNDP, has been completed and submitted to UNDP (including operational closure of the project). The Terms of Reference for the Project Manager are contained in Annex E.

156. **Project Assurance:** UNDP provides a three – tier supervision, oversight and quality assurance role – funded by the GEF agency fee – involving UNDP staff in Country Offices and at regional and headquarters levels. Project Assurance must be totally independent of the Project Management function. The quality assurance role supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. This project oversight and quality assurance role is covered by the GEF Agency. The **project assurance** role will be provided by the UNDP Country Office, specifically Flor Bolaños in Guatemala, Program Officer. Additional quality assurance will be provided by the UNDP RTA as needed.

157. Governance role for project target groups: The governance function will be led by the MARN. Effective governance will require inter-sectoral action and the participation of multiple stakeholders and sectors. The government institutions with mandates for compliance with the outcomes of the project will be strategic partners for its successful implementation. The stakeholders (government institutions and CSOs) who will be involved through the implementation of the Gender Mainstreaming Plan, as well as in actions that will lead to mainstreaming biodiversity conservation and SLM objectives into the production landscapes of the Central Volcanic Mountain Range in Guatemala will also play a role in the project's governance. The municipalities, local groups, and associations

identified in the prioritized landscapes in the Central Volcanic Mountain Range will serve as beneficiaries of the project. The project's strategic partners will have a role in the complementarity and association with the project in the established areas of intervention. The Project Board, UNDP, TAC, the municipalities, the Project Management Unit, and the project's beneficiaries will be coordinated through a mechanism that will be set up by the Project Management Unit to maintain coherence in implementing the project's activities, as well as follow-up to the indicators included in the PRF.

**158. Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information:** In order to accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy<sup>21</sup> and the GEF policy on public involvement<sup>22</sup>.

**159. Project management:** The project will be implemented in the Central Volcanic Mountain Range in Guatemala. The PCU will be located in the Headquarters of the MARN in Guatemala City and made up of the Project Manager, an M&E Specialist, a Gender Specialist, a Communications Specialist, Marketing Specialist, and three (3) Technical Field Coordinators. Their principal function is to support the Project Manager and provide strategic input for the correct implementation of the project. The team is charged with guiding the implementation of the Stakeholder Participation Plan, the Gender Mainstreaming Plan, and the knowledge management strategy, as well as providing strategic guidance for the implementation of project activities in the prioritized landscapes. The PCU will have the support of a Financial/Administrative Assistant whose role will be focused on providing administrative input for successful project management, and monitoring of financial performance and the budget. Specific project actions will be required in terms of generating outputs, for which the project will contract services from consultants or firms in accordance with the type of output and following the appropriate procedures of the Implementing Agency.

## VIII. FINANCIAL PLANNING AND MANAGEMENT

The total cost of the project is USD \$ 56,975,699. This is financed through a GEF grant of USD \$11,144,497 and USD \$45,831,202 in parallel co-financing. UNDP, as the GEF Implementing Agency, is responsible for the execution of the GEF resources and the cash co-financing transferred to UNDP bank account only.

**160. Parallel co-financing:** The actual realization of project co-financing will be monitored during the mid-term review and terminal evaluation process and will be reported to the GEF. The planned parallel co-financing will be used as follows:

Co-financing source	Co-financing type	Co-financing amount (USD)	Planned Activities/Outputs	Risks	Risk Mitigation Measures
MARN	Grant and In-kind	\$6,524,481	Monitoring system for biodiversity, SFM, SLM, watershed management plans, capacity-building, SFM incentives, knowledge management, and M&E	Low	The UNDP Country Office will monitor the co-financing contributions to the project
CONAP	Grant and In-kind	\$23,745,434	Management plans, categorization and recategorization of	Medium – Dependent on annual budgeting	The UNDP Country Office will monitor the

<sup>21</sup> See [http://www.undp.org/content/undp/en/home/operations/transparency/information\\_disclosurepolicy/](http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/).

<sup>22</sup> See [https://www.thegef.org/gef/policies\\_guidelines](https://www.thegef.org/gef/policies_guidelines).



			national-level PAs, monitoring of biodiversity, PWS, corridors and connectivity	and effective allocation of funds to the institution	co-financing contributions to the project
Asociación Sotz'il	Grant and In-kind	\$500,000	Component 2 – Activities in Chimaltenango and Sacatepéquez including LMT, certification and non-certification, corridors	Medium – Dependent on annual budgeting and effective allocation of funds to the institution	The UNDP Country Office will monitor the co-financing contributions to the project
FCA	In-kind	\$500,000	Certification and non-certification of sustainable production, capacity building, LMT	Low	The UNDP Country Office will monitor the co-financing contributions to the project
ICC	Grant and In-kind	\$414,996	Nurseries, PWS, support to municipalities, capacity building watersheds	Low	The UNDP Country Office will monitor the co-financing contributions to the project
ANACAFE	In-kind	\$2,630,118	Certification and non-certification of coffee, capacity-building, marketing of sustainable products	Low	The UNDP Country Office will monitor the co-financing contributions to the project
ARNPG	Grant and In-kind	\$8,681,607	LMT, sustainable production of coffee and NTFP, capacity building at the local level, marketing of sustainable products	Low	The UNDP Country Office will monitor the co-financing contributions to the project
UNDP	Grant	\$ 2,834,566	Monitoring system for biodiversity, SFM, SLM, watershed management plans, capacity-building, SFM incentives, knowledge management, and M&E	Low	The UNDP Country Office will monitor the co-financing contributions to the project

161. UNDP Direct Project Services as requested by the Government: costs incurred by UNDP to support project implementation by Operations units, may include services related to finance, procurement, human resources, administration, issuance of contracts, security, travel, assets, general services and information and communications technology (refer to Annex J).

162. Budget Revision and Tolerance: As per UNDP requirements outlined in the UNDP POPP, the project board will agree on a budget tolerance level for each plan under the overall AWP allowing the Project Manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from

the Project Board. Should the following deviations occur, the Project Manager and UNDP Country Office will seek the approval of the UNDP-GEF team as these are considered major amendments by the GEF:

- a) Budget re-allocations among components in the project with amounts involving 10% of the total project grant or more;
- b) Introduction of new budget items/or components that exceed 5% of original GEF allocation.

163. Any over-expenditure incurred beyond the available GEF grant amount will be absorbed by non-GEF resources (e.g. UNDP TRAC or cash co-financing).

164. Refund to Donor: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the UNDP-GEF Unit in New York.

165. Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. On an exceptional basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-GEF Executive Coordinator.

166. Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

167. Financial completion: The project will be financially closed when the following conditions have been met:

- a) The project is operationally completed or has been cancelled;
- b) The Implementing Partner has reported all financial transactions to UNDP;
- c) UNDP has closed the accounts for the project;
- d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

168. The project will be financially completed within 12 months of operational closure or after the date of cancellation. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the UNDP-GEF Unit for confirmation before the project will be financially closed in ATLAS by the UNDP Country Office.

## IX. TOTAL BUDGET AND WORK PLAN

Total Budget and Work Plan			
Atlas Proposal or Award ID:	00085085	Atlas Primary Output Project ID:	00092856
Atlas Proposal or Award Title:	Promoting sustainable and resilient landscapes in the Central Volcanic chain of Guatemala		
Atlas Business Unit	GTM10		
Atlas Primary Output Project Title	Promoting sustainable and resilient landscapes in the central volcanic chain of Guatemala		
UNDP-GEF PIMS No.	5581		
Implementing Partner	Ministry of the Environment and Natural Resources (MARN) of Guatemala		

GEF Component/Atlas Activity	Responsible Party (ATLAS Implementing Agent)	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4(USD)	Amount Year 5 (USD)	Amount Year 6 (USD)	Amount Year 7 (USD)	Total (USD)	Note
<b>OUTCOME 1:</b> Development of an enabling environment for the delivery of multiple global environmental benefits through models of sustainable agriculture/NTFP production and economic incentives derived from improved markets and ecosystem services	<b>MARN</b>	<b>62000</b>	<b>GEF</b>	71300	Local Consultants	235,250	219,750	69,000	36,500	36,000	36,000	24,500	657,000	1
				71400	Contractual Services – Individuals	30,660	30,660	30,660	30,660	30,660	30,660	30,660	214,620	2
				71600	Travel	8,000	8,000	8,000	8,000	8,000	8,000	8,000	56,000	3
				72100	Contractual Services-Companies	40,000	271,500	271,500	179,000	55,667	67,667	67,666	953,000	4
				74200	Audio Visual & Print Prod Costs		3,000						3,000	5
				74500	Miscellaneous Expenses	2,400	2,400	2,400	2,400	2,400	2,400	2,400	16,800	6
				75700	Training, Workshops and Confer		76,040	46,040	23,040	23,040	23,040		191,200	7
					<b>Total Outcome 1</b>	<b>316,310</b>	<b>611,350</b>	<b>427,600</b>	<b>279,600</b>	<b>155,767</b>	<b>167,767</b>	<b>133,226</b>	<b>2,091,620</b>	
<b>OUTCOME 2:</b> Delivering multiple environment benefits by connecting core	<b>MARN</b>	<b>62000</b>	<b>GEF</b>	71300	Local Consultants	125,000	134,250	94,250	106,750	86,750	15,000	15,000	577,000	8
				71400	Contractual Services – Individuals	86,040	86,040	86,040	86,040	86,040	86,040	86,040	602,280	9
				71600	Travel	93,000	13,000	13,000	13,000	13,000	13,000	13,000	171,000	10

protected areas within sustainably managed production landscapes in the central volcanic chain in Guatemala				72100	Contractual Services-Companies		730,000	909,500	834,500	465,000	448,000	318,000	3,705,000	11
				72200	Equipment and Furniture	1,200	124,000						125,200	12
				72300	Materials & Goods		697,500	697,500	697,500				2,092,500	13
				72500	Supplies	1,241	1,241	1,241	1,241	1,241	1,241	1,241	8,687	14
				72800	Information Technology Equipmt	3,900	93,000						96,900	15
				74200	Audio Visual & Print Prod Costs			1,400	24,800	1,400	1,400	1,400	30,400	16
				74500	Miscellaneous Expenses	4,500	4,500	4,500	4,500	4,500	4,500	4,500	31,500	17
				75700	Training, Workshops and Confer	104,400	159,400	44,400	69,150	44,400	37,400	10,000	469,150	18
					<b>Total Outcome 2</b>	<b>419,281</b>	<b>2,042,931</b>	<b>1,851,831</b>	<b>1,837,481</b>	<b>702,331</b>	<b>606,581</b>	<b>449,181</b>	<b>7,909,617</b>	
<b>OUTCOME 3:</b> Knowledge Management and M&E	<b>MARN</b>	<b>62000</b>	<b>GEF</b>	71200	International Consultants				13,475			21,000	34,475	19
				71300	Local Consultants				12,840			17,250	30,090	20
				71400	Contractual Services – Individuals	59,460	59,460	59,460	59,460	59,460	59,460	59,460	416,220	21
				71600	Travel	6,250	6,250	6,250	12,335	6,250	6,250	13,050	56,635	22
				74100	Professional Services	5,000	5,000	5,000	10,000	5,000	5,000	10,000	45,000	23
				74200	Audio Visual & Print Prod Costs		3,000	3,000	3,000	3,000	3,000	3,000	18,000	24
				75700	Training, Workshops and Confer	5,800	800	800	1,400	800	800	1,750	12,150	25
					<b>Total Outcome 3</b>	<b>76,510</b>	<b>74,510</b>	<b>74,510</b>	<b>112,510</b>	<b>74,510</b>	<b>74,510</b>	<b>125,510</b>	<b>612,570</b>	
<b>PROJECT MANAGEMENT UNIT</b>	<b>MARN</b>	<b>62000</b>	<b>GEF</b>	71400	Contractual Services – Individuals	42,900	42,900	42,900	42,900	42,900	42,900	42,900	300,300	26

				71600	Travel	4,700	4,700	4,700	4,700	4,700	4,700	4,700	32,900	27
				72200	Equipment and Furniture	2,100							2,100	28
				72500	Supplies	1,250	1,250	1,250	1,250	1,250	1,250	1,250	8,750	29
				72800	IT Equipment	4,640							4,640	30
				74500	Miscellaneous Expenses	1,000	1,000	1,000	1,000	1,000	1,000	1,000	7,000	31
				74598/64398	Direct Project Costs	25,000	25,000	25,000	25,000	25,000	25,000	25,000	175,000	32
					<b>Total Management</b>	<b>81,590</b>	<b>74,850</b>	<b>74,850</b>	<b>74,850</b>	<b>74,850</b>	<b>74,850</b>	<b>74,850</b>	<b>530,690</b>	
<b>PROJECT TOTAL</b>						<b>893,691</b>	<b>2,803,641</b>	<b>2,428,791</b>	<b>2,304,441</b>	<b>1,007,458</b>	<b>923,708</b>	<b>782,767</b>	<b>11,144,497</b>	

#### Summary of Funds:

	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Amount Year 5	Amount Year 6	Amount Year 7	Total
GEF	893,691	2,803,641	2,428,791	2,304,441	1,007,458	923,708	782,767	<b>11,144,497</b>
MARN	932,068	932,068	932,068	932,068	932,068	932,068	932,073	<b>6,524,481</b>
CONAP	3,392,204	3,392,204	3,392,204	3,392,204	3,392,204	3,392,204	3,392,210	<b>23,745,434</b>
Asociación Sotz'il	71,428	71,428	71,428	71,428	71,428	71,428	71,432	<b>500,000</b>
Fondo para la Conservación de Bosques Tropicales (FCA	71,428	71,428	71,428	71,428	71,428	71,428	71,432	<b>500,000</b>
Private Institute for Climate Change Research (ICC)	59,285	59,285	59,285	59,285	59,285	59,285	59,286	<b>414,996</b>
ANACAFE	375,731	375,731	375,731	375,731	375,731	375,731	375,732	<b>2,630,118</b>
ARNPG	1,240,230	1,240,230	1,240,230	1,240,230	1,240,230	1,240,230	1,240,227	<b>8,681,607</b>
UNDP	404,938	404,938	404,938	404,938	404,938	404,938	404,938	<b>2,834,566</b>
<b>TOTAL</b>	<b>7,441,003</b>	<b>9,350,953</b>	<b>8,976,103</b>	<b>8,851,753</b>	<b>7,554,770</b>	<b>7,471,020</b>	<b>7,330,097</b>	<b>56,975,699</b>

**Budget Notes:**

Note	Budget Notes
Outcome 1: Development of an enabling environment for the delivery of multiple global environmental benefits through models of sustainable agriculture/NTFP production and economic incentives derived from improved markets and ecosystem services	
1	<p>a) Marketing Expert to conduct national- and international-level market study for coffee, vegetables, honey, and pacaína. Total cost: \$60,000; \$15,000/product. (Output 1.1)</p> <p>b) Marketing/Partnership Expert to strengthen alliances and analyze current marketing strategies for each product considering their potential for certification or non-certification and assess the interest of group/Partnership of producers of participation in each scheme Total cost: \$60,000; \$15,000/product. (Output 1.2)</p> <p>c) Certification Expert to design the program for promoting the production of certified and non-certified products. Total cost: \$100,000. (Output 1.3)</p> <p>d) Marketing Expert to facilitate access to benefits of certification such as access to markets, premium prices, preferential purchases, technical assistance. Total cost: \$45,000. (Output 1.3)</p> <p>e) Economist for establishing the baseline (production costs and income) of coffee production units that will serve as control group for financial and profitability analysis. Total cost: \$45,000; 36 production units at \$1,250/production unit. (Output 1.4)</p> <p>f) Economist to compare the control production units with production units with certification. Total cost: 25,000; \$12,500/year for years 4 and 7. (Output 1.4)</p> <p>g) Carbon Expert for the development of a carbon compensation program (2 initiatives). Total cost: \$30,000; \$15,000/initiative. (Output 1.5)</p> <p>h) Carbon Expert for territorial analysis for 2 carbon sequestration initiatives. Total cost: \$19,000; \$9,500/initiative. (Output 1.5)</p> <p>i) Carbon Marketing Expert to promote carbon credits to be generated by the carbon sequestration certification and verification program. Total cost: \$36,000. (Output 1.5)</p> <p>j) SFM Expert to validate jointly with the MAGA, INAB, CONAP, and MARN, the prioritized areas for the implementation of SFM incentives. Total cost: \$15,000. (Output 1.6)</p> <p>k) SFM Expert for support to beneficiaries to develop management plans and paperwork to access the PINPEP and PROBOSQUE incentive programs. Total cost: \$48,000; 2,400/initiative for 20 initiatives. (Output 1.6)</p> <p>l) Capacity Development Expert for validation process of the training needs of small producers and farmers and designing a training program to enhanced their knowledge and skills: Certified and non-certified agriculture/non-timber forest production system, SFM incentives, and PWS. Total cost: \$52,500. (Output 1.11)</p> <p>m) Trainers (18) for training program to increase local knowledge and skills. Total cost: \$90,000; \$5,000/trainer. (Output 1.11)</p> <p>n) Capacity Development Expert to assess the impact of the training activities. Total cost: \$24,000. (Output 1.11)</p> <p>o) M&amp;E Expert to validate municipal and institutional training needs for monitoring of SFM, SLM, and biodiversity. Total cost: \$7,500. (Output 1.12)</p>
2.	Specialist in Marketing for developing marketing strategies and partnerships with buyers for sustainable agriculture products and NTFP. Total cost: \$214,620; 12 months @ \$2,555/month during seven years. (Component 1)
3.	<p>a) Travel related to developing marketing strategies and partnerships with buyers for sustainable agriculture/NTFP. Total cost: 21,000; \$3000/year during 7 years. (Component 1)</p> <p>b) Travel costs in support of Component 1 for the development of an enabling environment for the delivery of multiple global environmental benefits through models of sustainable agriculture/forestry production and economic incentives derived from improved markets and ecosystem services. Total cost; \$35,000; \$5,000/year during seven years.</p>
4.	<p>a) Design and implementation of business plans to promote business management strategies and certification for each product for 16 organizations of small farmers and producers. Total cost: \$160,000; \$10,000/business plan-organization. (Output 1.1)</p> <p>b) Marketing strategies and partnerships for project's prioritized products in international markets (fairs or forums for commercialization of environmentally</p>

	<p>sustainable products). Total cost: \$125,000. (Output 1.2)</p> <p>c) Certification of carbon removals/stocks (2 initiatives). Total cost: \$24,000; \$12,000/initiative. (Output 1.5):</p> <p>d) Strengthening and consolidation of the national carbon marketing mechanism. Total cost: \$125,000. (Output 1.5):</p> <p>e) Implementation of two PWS pilot projects. Total cost: \$334,000; \$167,000/pilot project. (Outputs 1.7, 1.8, 1.9, 1.10)</p> <p>f) Design and implementation of a participatory monitoring program to assess biodiversity conservation, SFM, and SLM. Total cost: \$185,000. (Output 1.12)</p>
5.	Inform project partners about the monitoring program to assess biodiversity conservation, SFM, and SLM. Total cost: \$3,000. (Output 1.12)
6.	Unforeseen events related to Component 1 for developing an enabling environment for the delivery of multiple global environmental benefits. Total cost: \$16,800; \$2,400/year during 7 years.
7.	<p>a) Workshops for strengthening partnerships and developing marketing capacities, differentiated by each group of organized agricultural and NTFP producers. Total cost: \$46,000. (Output 1.2)</p> <p>b) Training to increase local knowledge and skills: Certified and non-certified agriculture/non-timber forest production system, SFM incentives, and PWS. Total cost: \$115,200. (Output 1.11)</p> <p>c) Workshops and meetings to raise awareness among small farmers and producers about the compensation for carbon sequestration program. Total cost: \$10,000. (Output 1.5)</p> <p>d) Training of the staff of MARN, CONAP, and members of GIMBUT and other partners that will be part of the operation of the monitoring program to assess biodiversity conservation, SFM, and SLM. Total cost: \$20,000. (Output 1.12)</p>
Outcome 2: Delivering multiple environment benefits by connecting core protected areas within sustainably managed production landscapes in the central volcanic chain in Guatemala	
8.	<p>a) SFM Expert for assessment of the existing nurseries in the prioritized landscape will be carried out, which will determine the number, location, production capacity, an identification of stakeholders operating them. Total cost: \$25,000. (Output 2.1)</p> <p>b) SFM Expert for identification of stakeholders interested in implementing LMT, including women, and characterization of the potential participating farms. Total cost: \$25,000. (Output 2.2)</p> <p>c) SFM Expert for informing stakeholders during field visits and informational meetings about the importance of the LMT and contribution to build ecosystem connectivity. Total cost: \$20,000. (Output 2.2)</p> <p>d) Carbon Mitigation Expert for establishing the baseline of firewood used by the beneficiary households as well the firewood that they consume following the adoption of energy-efficient stoves. Total cost: \$15,000. (Output 2.4)</p> <p>e) Carbon Mitigation Expert for providing technical assistance to households benefiting from the energy-efficient stoves. Total cost: \$75,000; \$15,000/year during 5 years. (Output 2.4)</p> <p>f) Sustainable Production Expert for assessing and systematizing best agricultural and NTFP-related production practices in project sites. Total cost: \$15,000. (Output 2.5)</p> <p>g) Sustainable Production Expert to support development of sustainable production plans for cooperatives, associations, and organized groups of small farmers and producers. Total cost: \$80,000; \$5,000/group for 16 groups. (Output 2.5)</p> <p>h) Policy Expert for presentation and negotiation of the proposals for recategorization of 8 national-level protected areas before the National Congress. Total cost: \$25,000. (Output 2.7)</p> <p>i) Biodiversity Conservation Expert for designing the management and conservation program to protect amphibian species in three priority areas, including monitoring methodology. Total cost: \$50,000. (Output 2.9)</p> <p>j) Environmental Education Expert for designing a program for strengthening capacities of national and regional officials and field personnel to support the sustainable management and conservation of biodiversity in production landscapes. Total cost: \$30,000. (Output 2.10)</p> <p>k) Policy Expert (2) to support development planning for 31 municipalities to incorporate principles for biodiversity conservation, SFM, SLM, sustainable agriculture, and gender, and their implementing measures. Total cost: \$217,000; \$7,000/plan. (Output 2.11)</p>
9.	a) Project Manager: coordination support to Component 2 for delivering multiple environment benefits by connecting core protected areas within sustainably managed production landscapes. Total cost: \$73,080; \$3,045/month, 24 months over 7 years.

	b) Project Specialist/Field Coordinators (3): technical support to Component 2 in the field for delivering multiple environment benefits by connecting core protected areas within sustainably managed production landscapes. Total cost: \$529,200; \$2,100/month during 7 years.
10.	a) Vehicle (2). Total cost: \$80,000; \$40,000/unit. b) Gas, maintenance, and insurance vehicle (2). Total cost: \$42,000; \$3,000/year/vehicle during 7 years. c) Travel costs in support of Component 2 for delivering multiple environment benefits by connecting core PAs within sustainably managed production landscapes in the Central Volcanic Mountain Range. Total cost: \$49,000; \$7,000/year during 7 years.
11.	a) Signing of conservation agreements with prioritized groups of small farmers and producers, development of action plans, and implementation of LMT. Total cost: \$400,000 for 17 groups. (Output 2.2) b) Development of the participatory SLM plans for the middle and upper sections of six watersheds to reduce soil degradation and enhance ecosystem connectivity. Total cost: \$360,000; \$60,000/plan. (Output 2.3) c) Company for purchase and installation of 1,000 energy-efficient stoves. Total cost: \$275,000; \$275/stove. (Output 2.4) d) Establish energy woodlots or agroforestry systems (including live fences) in the land owned by the households benefiting from the energy-efficient stoves. Total cost: \$51,000; \$17,000/year during years 3, 4, and 5. (Output 2.4) e) Implementation of certified and non-certified sustainable agricultural and NTFP production practices in project sites. Total cost: \$1,728,000; \$18,000/year per group of small farmers or producers during 6 years. (Output 2.5) f) Participatory development of management plans for 5 MRPs. Total cost: \$150,000; \$30,000/plan. (Output 2.6) g) Development of proposals for the categorization and recategorization of 8 national-level PAs, including stakeholder identification and consultation, and technical studies. Total cost: \$336,000; \$42,000/proposal. (Output 2.7) h) Implementation of financing mechanisms for the management of five (5) MRPs. Total cost: \$150,000; \$30,000/MRP (Output 2.8) i) Field-level monitoring of the amphibian communities, including parameters to evaluate the conservation status of the three prioritized areas. Total cost: \$180,000; \$30,000/year during 6 years. (Output 2.9) j) Design of a municipal monitoring program including protocols to collect information and indicators related to SFM, SLM, and biodiversity conservation, and reporting procedures. Total cost: \$75,000. (Output 2.14)
12.	a) Office furniture for 3 Project Specialists/Field Coordinators. Total cost: \$1,200; \$400/person. b) Field equipment for 31 municipalities to support control, surveillance, and reduction of threats to biodiversity, soils, and forests. Total cost: \$124,000; \$4,000/municipality. (Output 2.12)
13.	Implementation of new nurseries or strengthening of existing ones to produce native germplasm for implementing LMT and for soil stabilization. Total cost: \$2,092,500; \$67,500/nursery during five years, 31 nurseries total. (Output 2.1)
14.	Office, IT, and field supplies in support Component 2 activities. Total cost: \$8,687; \$1,241/year during 7 years.
15.	a) Computers (3) for Project Specialists/Field Coordinators. Total cost: \$3,900; \$1,300/person. b) Computer equipment and software for 31 municipalities to support control, surveillance, and reduction of threats to biodiversity, soils, and forests. Total cost: \$93,000; \$3,000/municipality. (Output 2.12)
16.	a) Publication of management plans for 5 MRPs approved by the municipalities and CONAP. Total cost: \$9,000; \$1,800/plan. (Output 2.6) b) Publication the technical studies and the proposal for recategorization of 8 national-level protected areas. Total cost: \$14,400; \$1,800/study-proposal. (Output 2.7) c) Reports for communication of monitoring results among the project stakeholders, including COMUDES, local communities, and indigenous populations (COCODES). Total cost: \$7,000; \$350/report for 20 reports.
17.	Unforeseen events related to delivering multiple environment benefits by connecting core protected areas within sustainably managed production landscapes. Total cost: \$31,500; \$4,500/year during 7 years.
18.	a) Training of household members, including women, for the use and maintenance of energy-efficient stoves program reduces firewood consumption and GHG emissions. Total cost: 21,000; \$7,000/year during years 3, 4, and 5. (Output 2.4) b) Workshops for socialization of management plans for 5 MRPs approved by the municipalities and CONAP. Total cost: \$8,750; \$1,750/plan. (Output 2.6)



	<p>c) Workshops and meetings for socialization of technical studies and the proposal for recategorization of 8 national-level protected areas. Total cost: \$16,000; \$2,000/study-proposal. (Output 2.7)</p> <p>d) Environmental education to raise local awareness about the importance of conservation of amphibian species and their habitat in three prioritized areas. Total cost: \$12,000; \$4,000/prioritized area. (Output 2.9)</p> <p>e) Training program for strengthening capacities of national and regional officials and field personnel to support the sustainable management and conservation of biodiversity in production landscapes. Total cost: \$180,000; 12 training events/year at \$2,500/year during 6 years. (Output 2.10)</p> <p>f) Training activities (e.g., workshops, short courses) to municipal environment authorities for implementing biodiversity conservation, SFM, and SLM, and enforcement. Total cost: \$86,400; \$1,600/training event, 9 events/year during 6 years. (Output 2.13)</p> <p>g) Field visits for municipal staff to areas along the Central Volcanic Chain where the project will be implementing multiple activities. Total cost: \$60,000; \$10,000/year during 6 years. (Output 2.13)</p> <p>h) Exchange of experiences with other projects or municipalities in the region of the Central Volcanic Mountain Range to capitalize and improve municipal performance in SFM, SLM, and biodiversity conservation. Total cost: \$65,000; \$2,600/event, 5 events/year during 5 years. (Output 2.13)</p> <p>i) Training municipal staff OFM, DAPMAs, or UGAMs) in managing databases and issuing biodiversity, SFM, and SLM monitoring evaluation reports. Total cost: 20,000; \$1,000/event for 20 events. (Output 2.14)</p>
<b>Component 3. Knowledge Management and Monitoring &amp; Evaluation</b>	
19.	<p>a) Mid-term project review: Total cost: \$13,475</p> <p>b) Terminal project evaluation. Total cost: \$21,000.</p>
20.	<p>a) Mid-term GEF Tracking Tools update. Total cost: \$5,000.</p> <p>b) Terminal GEF Tracking Tools update. Total cost: \$5,000.</p> <p>c) Mid-term review: Total cost: \$7,840</p> <p>d) Terminal evaluation. Total cost: \$12,250.</p>
21.	<p>a) Expert: M&amp;E of project activities (including monitoring of indicators in the PRF). Total cost: \$214,620; \$2,555/month during 7 years.</p> <p>b) Gender Expert (part time). Support and monitoring of gender mainstreaming (Gender Mainstreaming Plan). Total cost: \$54,600; \$650/month during 7 years.</p> <p>c) Communications/Knowledge Management Expert. Communication activities and documentation and systematization of lessons learnt and best practices, including cost of documentation and systematization of lessons learned and best practices. Total cost: \$147,000; \$1,750/month during 7 years.</p>
22.	<p>a) Travel costs for mid-term review. Total cost: \$6,085.</p> <p>b) Travel costs for terminal evaluation: Total cost: \$6,800.</p> <p>c) Travel costs for M&amp;E of project activities: Total cost: \$17,500.</p> <p>d) Travel costs for gender mainstreaming activities: Total cost: \$8,750.</p> <p>e) Travel costs for knowledge management: Total cost: \$17,500.</p>
23.	<p>a) External audit (5). Total cost: \$35,000.</p> <p>b) Translations of MTR and TE Reports. Total cost: \$10,000.</p>
24.	Publications related to knowledge management and communication. Total cost: \$18,000
25.	<p>a) Project Inception Workshop. Total cost \$5,000.</p> <p>b) Mid-term review related workshops. Total cost: \$600.</p> <p>c) Terminal evaluation-related workshops. Total cost: \$950.</p> <p>d) Project board meetings. Total cost: \$5,600.</p>
<b>Project Management</b>	
26.	<p>a) Project Manager: project planning, day-to-day management of project activities, project reporting, maintaining key relationships among stakeholders. Total cost: \$182,700; \$3,045, 60 months over 7 years.</p>

	b) Financial/Administrative Assistant: financial management of the project, accounting, purchasing, and reporting. Total cost: \$117,600; \$1,400 month during 7 years.
27.	Travel costs related to project management. Total cost: \$32,900; \$4,700/year during 7 years.
28.	Office furniture. Total cost: \$2,100.
29.	Office and IT supplies. Total cost: \$8,750 @ \$1,250/year during 7 years.
30.	a) Computer Project Manager. Total cost: \$1,500 b) Computer Financial/Administrative Assistant Guatemala: Total cost: \$1,500 c) Printer (1). Total cost: \$520 d) Digital camera (2). Total cost: \$520; \$260/unit. e) Video beam (2). Total cost: \$600; \$300/unit.
31.	Incidental expenses related to project management. Total cost: \$7,000; \$1,000/year during 7 years.
32.	Direct Project Costs (DPC). Total cost: \$175,000; \$25,000/year during 7 years.

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## **X. LEGAL CONTEXT**

169. This document, together with the CPAP signed by the GoG and UNDP, which is incorporated herein by reference, constitute together a Project Document as referred to in the SBAA; as such all provisions of the CPAP apply to this document. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner,” as such term is defined and used in the CPAP and this document.

170. This project will be implemented by the Ministry of the Environment and Natural Resources (MARN) (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

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

172. Any designations on maps or other references employed in this project document do not imply the expression of any opinion whatsoever on the part of UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

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## **XI. RISK MANAGEMENT**

173. Consistent with the Article III of the SBAA [or the Supplemental Provisions to the Project Document], the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP’s property in the Implementing Partner’s custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the Implementing Partner’s security, and the full implementation of the security plan.

174. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner’s obligations under this Project Document.

175. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via [http://www.un.org/sc/committees/1267/aq\\_sanctions\\_list.shtml](http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml).

176. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).

177. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to

address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

178. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

179. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

180. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at [www.undp.org](http://www.undp.org).

181. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

182. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

183. Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

184. UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement.

185. Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

186. Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

187. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

188. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

189. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled “Risk Management” are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled “Risk Management Standard Clauses” are included, mutatis mutandis, in all sub-contracts or sub-agreements entered into further to this Project Document.

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## **XII. MANDATORY ANNEXES**

- A. Multiyear Workplan
- B. Monitoring Plan
- C. Evaluation Plan
- D. GEF Tracking Tool (s) at baseline
- E. Terms of Reference for Project Board, Project Manager, Chief Technical Advisor and other positions as appropriate
- F. UNDP Social and Environmental Screening Template (SESP)
- G. UNDP Project Quality Assurance Report
- H. UNDP Risk Log
- I. Results of the capacity assessment of the project implementing partner and HACT micro assessment
- J. Additional agreements
- K. Stakeholder Engagement and Communication Plan
- L. Summary of Consultants and Contractual Services Financed by the Project for the First Two Years
- M. Gender Analysis and Project Gender Mainstreaming Plan
- N. Legal/institutional assessment
- O. Target landscape profile including biophysical, socioeconomic and environmental information, biodiversity information and locally specific threats to biodiversity, maps etc. (for PA and landscape management projects).
- P. List of people consulted during project development

**ANNEX A: MULTI YEAR WORK PLAN**

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Outcome 1. Development of an enabling environment for the delivery of multiple global environmental benefits through models of sustainable agriculture/non-timber forest production and economic incentives derived from improved markets and ecosystem services																													
Output 1.1 – Certification systems for agriculture and non-timber forest products (NTFP)																													
1.1.1 National- and international-level market study for coffee, vegetables, honey, and pacaína	MARN																												
1.1.2 Design and implement business plans for the prioritized agricultural products and NTFP	MARN																												
Output 1.2 – Improved partnerships, alliances, marketing strategies, and protocols for certified and non-certified agricultural and forest-related products																													
1.2.1 Analysis of current partnerships, alliances and marketing strategies for each product considering their potential for certification or non-certification	MARN																												
1.2.2 Improve administrative and business capacity for marketing	MARN																												
1.2.3 Design and implement marketing strategies and protocols for certified and or non-certified products.	MARN																												
1.2.4 Establish partnerships and alliances with national and international buyers for certified and non-certified products	MARN																												
Output 1.3 – Competitiveness incentive program (e.g., preferential buying from project areas, price premiums, and extension services) promote production of certified and non-certified products and increase income opportunities for small farmers derived from the adoption of biodiversity-friendly production practices																													
1.3.1 Design of the competitiveness incentive	MARN																												

[illegible]



<i>Output 1.6 – Platform for facilitating access to incentives programs (e.g., PINPEP, PROBOSQUE, others) supporting farmers implementing reforestation actions and the mix of native trees and agricultural systems to enhance environmental services (hydrological regulation, biodiversity habitat, carbon storage, and soil protection)</i>																											
1.6.1 Validate the prioritized areas for restoration of degraded lands and strengthening of areas of connectivity	MARN																										
1.6.2 Identify the municipalities whose jurisdictions encompass the identified and validated prioritized areas	MARN																										
1.6.3 Promote of incentives among small landowners and farmers interested in implementing LMT	MARN																										
1.6.4 Strengthen the capacity of municipal environmental authorities to support access to SFM incentives	MARN																										
<i>Output 1.7 – Payment system (compensation/recognition) for watershed services in place that benefits users and providers</i>																											
PWS 1	UNDP																										
PWS 2	UNDP																										
<i>Output 1.8 – Technical guideline for watershed-related payments (compensation/recognition) designed</i>																											
PWS 1	UNDP																										
PWS 2	UNDP																										
<i>Output 1.9 – Protocols and enhanced capacity of environmental authorities for planning and monitoring PWS projects</i>																											
PWS 1	UNDP																										
PWS 2	UNDP																										
<i>Output 1.10 – Benefit-sharing mechanism for watershed-related payments (compensation/recognition)</i>																											
PWS 1	UNDP																										
PWS 2	UNDP																										
<i>Output 1.11 – Training program increases local knowledge and skills: a) Standards for certification of biodiversity- and forest-friendly production; forestry incentives; including carbon sequestration and compensation, and PWS-related methods, standards, and procedures; b) Business management (e.g., business plan development and basic accounting) of certified and non-certified production, forestry incentives, and PWS; and c) Monitoring of certified and non-certified production systems, forestry incentives, and PWS</i>																											

[illegible]



[illegible]

[illegible]

[illegible]

*Output 2.9 – Conservation and management program for three priority areas (4,655.3 ha) for the protection of species of amphibians (San Rafael Pie de la Cuesta MRP, San Marcos; San Pedro Sacatepéquez MRP, San Marcos; and Zunil MRP, Quetzaltenango).*

[illegible][illegible][illegible][illegible]

*Output 2.10 – Strengthened institutional capacity program for national and regional officials and field personnel (PA staff; environmental, forestry, and agricultural officials) to support the sustainable management and conservation of biodiversity in production landscapes, the use of SFM and SLM methodologies and tools, and the quantification and evaluation of reduced deforestation (598 people trained by project end).*

[illegible][illegible][illegible]

Output 2.11 – Development planning for 31 municipalities incorporates principles for biodiversity conservation, SFM, SLM, sustainable agriculture, and gender, and their implementing measures

[illegible][illegible][illegible]



[illegible]



## ANNEX B: MONITORING PLAN

The Project Manager will collect results data according to the following monitoring plan.

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
<b>Project Objective:</b> To mainstream biodiversity conservation and SLM objectives into the production landscapes of the Central Volcanic Mountain Range in Guatemala, contributing to the well-being of local populations and the delivery of multiple global environmental benefits.	<b>Indicator 1:</b> Number of people benefiting (direct and indirectly), and ensuring gender equality and ethnic origin (indigenous and non-indigenous) for solutions to managing natural resources and ecosystem services	<ul style="list-style-type: none"> <li>– Direct: 73,587 (Men: 37,619; Women: 35,968)</li> <li>– Indirect: 979,421 (Men: 492,192; Women: 487,229)</li> <li>– Direct: Indigenous: 30,804 (Men: 15,748; Women: 15,056)</li> <li>– Non-indigenous: 42,783 (Men: 21,871; Women: 20,912)</li> <li>– Indirect: Indigenous: 409,986 (Men: 206,032; Women: 203,954)</li> <li>– Non-indigenous: 569,435 (Men: 286,160; Women: 283,275)</li> </ul>	<ul style="list-style-type: none"> <li>– Periodic project monitoring and follow-up</li> <li>– Project follow-up meetings and surveys</li> </ul>	– Annually	– Project Manager	<ul style="list-style-type: none"> <li>– PIR</li> <li>– Reports of project follow-up meetings</li> </ul>	<ul style="list-style-type: none"> <li>– Willingness by decision makers to incorporate objectives of biodiversity conservation, SLM, and SFM in sustainable production landscapes and biological corridors of the Central Volcanic Mountain Range</li> <li>– There is willingness by the local land owners and farmers to incorporate environmental sustainability criteria as part of their production activities</li> <li>– Optimal sampling</li> </ul>
	<b>Project Indicator 2:</b> Reduction in deforestation in prioritized landscapes of the Central Volcanic Mountain Range	<ul style="list-style-type: none"> <li>– 19% (1,154 ha; 247,734.60 tCO<sub>2</sub>-eq at the end of the project)</li> </ul>	<ul style="list-style-type: none"> <li>– Periodic project monitoring and follow-up</li> </ul>	– Final point of the project	<ul style="list-style-type: none"> <li>– Project Manager</li> <li>– Project technical team</li> </ul>	<ul style="list-style-type: none"> <li>– PIR</li> <li>– Related project reports</li> </ul>	
	<b>Indicator 3:</b> Area (ha) of biological corridors that establish connectivity between agriculture/forest production systems and PAs	<ul style="list-style-type: none"> <li>– 52,045.5 ha</li> </ul>	<ul style="list-style-type: none"> <li>– Periodic project monitoring and follow-up</li> </ul>	Final point of the project	<ul style="list-style-type: none"> <li>– Project Manager</li> <li>– Project technical team</li> </ul>	<ul style="list-style-type: none"> <li>– Field/spatial sampling</li> <li>– Field notes verification reports</li> <li>– PIR</li> </ul>	

<b>Outcome 1:</b> Development of an enabling environment for the delivery of multiple global environmental benefits through models of sustainable agriculture/forestry production and economic incentives derived from improved markets and ecosystem services.	<b>Indicator 4:</b> Number of new voluntary agreements established with producers to establish landscape management tools for adopting sustainable production practices covering 78,679 ha	<ul style="list-style-type: none"> <li>– 3 conservation agreement with ANACAFE/ARNPG and coffee growers' groups: Coffee agroforestry system for 300 ha</li> <li>– 4 conservation agreements with ARNPG and Private Natural Reserves: Coffee agroforestry system for 400 ha</li> <li>– 5 conservation agreements with FEDECOCAGUA and coffee growers' groups: Coffee agroforestry system for 1,300 ha</li> <li>– 3 conservation agreement with Sotz'il and organized farmers' groups: Agricultural and vegetable-growing systems for 12,771.55 ha</li> <li>– 2 conservation agreement with CDRO organized farmers' groups: sustainable agriculture (vegetable gardens) for 10 ha</li> </ul>	<ul style="list-style-type: none"> <li>– Periodic project monitoring and follow-up</li> </ul>	<ul style="list-style-type: none"> <li>– Annually</li> </ul>	<ul style="list-style-type: none"> <li>– Project Manager</li> <li>– Project technical team</li> </ul>	<ul style="list-style-type: none"> <li>– PIR</li> <li>– Related project reports</li> </ul>	<ul style="list-style-type: none"> <li>– There is willingness for payment for environmental services by the key national sectors</li> <li>– There is willingness by the local land owners and farmers to incorporate sustainable environmental criteria as part of their production activities</li> <li>– National and international markets are available and stable for certified/non-certified sustainable forest products</li> </ul>
	<b>Indicator 5:</b> Number of initiatives for the payment for watershed services (PWS) generating equitable environmental benefits (biodiversity and forest conservation) at the local level that contribute to the well-being of	<ul style="list-style-type: none"> <li>– Two (2): PWS with the Concepción Chiquirichapa MRP, Quetzaltenango, developed, and PWS with the Esquipulas Palo Gordo MRP, San Marcos, in the process of being consolidated</li> </ul>	<ul style="list-style-type: none"> <li>– Periodic project monitoring and follow-up</li> <li>– Project follow-up meetings</li> </ul>	<ul style="list-style-type: none"> <li>– Mid and final point of the project</li> </ul>	<ul style="list-style-type: none"> <li>– Project Manager</li> <li>– Project team and consultants</li> </ul>	<ul style="list-style-type: none"> <li>– Project technical reports</li> <li>– PIR</li> <li>– Related project/meeting reports</li> </ul>	

	land/production unit owners being implemented as a result of the project						
	<u>Indicator 6:</u> Number of projects for compensating carbon sequestration and restoration of degraded forests that provide additional benefits to land/production unit owners implemented as a result of the project	– Two (2)	– Periodic project monitoring and follow-up	Mid and final point of the project	– Project Manager – Project team and consultants	– Project technical reports – PIR – Related project/meeting reports	
	<u>Indicator 7:</u> Benefits to land/production unit owners (differentiated by gender and ethnic origin) as a result of economic incentives and sustainable production	<b>PWS Projects 1 and 2</b> Fee for municipal potable water service: USD \$2.75/user/month  <b>Carbon sequestration</b> – LMT I. Protection and restoration of natural vegetation: USD \$20.42/ha/year. – LMT II. Agroforestry systems with coffee: USD \$34.62/ha/year – LMT III. Agroforestry systems with annual crops: USD \$11.66/ha/year  <b>Certified/non-certified</b> – Coffee: USD \$1,292.40/ha/year – Onions: USD \$1,705.15/ha/year – Chinese peas: USD \$5,729.29/ha/year – Honey: USD \$525.64/ha/year	– Periodic project monitoring and follow-up –	– Mid and final point of the project	– Project Manager – Project team and consultants	– Household surveys – Project technical reports – PIR	

	<p><u>Indicator 8:</u> Change in the capacity of organized male and female producers and farmers for implementing best practices in production systems that are friendly to biodiversity, SFM, SLM, and PWS schemes, as measured through the UNDP Capacity Development Scorecard</p>	<p><b>Capacity in organized male and female producers and farmers</b></p> <ul style="list-style-type: none"> <li>– Cooperativa El Socorro, R. L.: 33%</li> <li>– Cooperativa Integral de Comercialización Nueva Victoria, R. L.: 33%</li> <li>– Asociación de Ecoturismo de Chicua - ASAEDICH-: 40%</li> <li>– Asociación Integral de Desarrollo Ambiental - ASINDA-: 44%</li> <li>– Asociación de Desarrollo de Loma Linda -ASODIL-: 40%</li> <li>– Importadora y Exportadora Agrícola e Industrial Nueva Alianza, S. A.: 48%</li> <li>– Cooperativa Santiaguito R.L.: 81%</li> <li>– Asociación de Apicultores Las Brisas, - ASABRICAP-: 44%</li> <li>– Asociación de Desarrollo Integral Tierra Fértil – ADIFERT-: 25%</li> <li>– Cooperativa Integral Agrícola 21 de octubre R.L.: 89%</li> <li>– Cooperativa Integral de Comercialización Chanchimiel, R. L.: 48%</li> </ul> <p><b>Capacity in PWS</b></p> <ul style="list-style-type: none"> <li>– Municipalidad de Esquipulas Palo Gordo, San Marcos: 44%</li> </ul>	– Completed UNDP Capacity Development Scorecard	– Mid and final point of the project	<ul style="list-style-type: none"> <li>– Project Manager</li> <li>– Project technical team</li> </ul>	– Updated UNDP Capacity Development Scorecard	Beneficiaries (men and women) apply additional knowledge acquired
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		– Municipalidad de Concepción Chiquirichapa, Quetzaltenango: 39%					
<b>Outcome 2:</b> Delivering multiple environment benefits by connecting core protected areas within sustainably managed production landscapes in the central volcanic chain in Guatemala for implementation.	<b>Indicator 9:</b> Sequestered carbon (tCO <sub>2</sub> -eq) through the restoration of 4,500 ha of degraded forest using native species, natural regeneration, and LMT (biological corridors, forest enrichment, live fences, windbreaks, etc.)	– 73,076 tCO <sub>2</sub> -eq	– Periodic project monitoring and follow-up	– Mid and final point of the project	– Project Manager – Project team and consultants	– Project technical reports – PIR – Related project/meeting reports	– There are no substantial changes in land use/cover – Sampling efforts are optima – Environmental variability within normal range – Interest is maintained by the municipal and central governments, the local communities, and the production sectors to improve the management of PAs – Sampling efforts are optimal – Beneficiaries (men and women) apply additional knowledge acquired
	<b>Indicator 10:</b> Area (ha) of sustainable agriculture/forest production systems (certified and non-certified), including agroforestry systems	– 78,679 ha	– Periodic project monitoring and follow-up	– Mid and final point of the project	– Project Manager – Project team and consultants	– Project technical reports – PIR – Related project/meeting reports	
	<b>Indicator 11:</b> Presence of key species in production landscapes, conservation forests, and PAs by the end of the project	<b>Birds:</b> – <i>Cardellina versicolor</i> – <i>Oreophasis derbianus</i> – <i>Pharomachrus mocinno</i> – <i>Penelopina nigra</i> – <i>Tangara cabanisi</i> – <i>Setophaga chrysoparia</i> – <i>Aulacorhynchus prasinus</i> – <i>Pteroglossus torquatus</i> <b>Amphibians:</b> – <i>Plectrohyla guatemalensis</i> – <i>Agalychnis moreletii</i> <b>Mammals:</b> – <i>Microtus guatemalensis</i> – <i>Sturnira hondurensis</i>	– Periodic project monitoring and follow-up	Mid and final point of the project	– Project Manager – Project team and consultants	– Project technical reports – PIR – Related project/meeting reports	

	<p><b>Indicator 12:</b> Change in the management effectiveness (as measured through the METT) of five (5) prioritized MRPs present in prioritized zones for ecosystem connectivity</p>	<ul style="list-style-type: none"> <li>– Tecpán Municipal Forest: 37</li> <li>– Quetzaltenango Regional Park: 49</li> <li>– Zunil: 41</li> <li>– Esquipulas Palo Gordo Municipal Forest: 47</li> <li>San Cristóbal Cucho Municipal Forest: 45</li> </ul>	<ul style="list-style-type: none"> <li>– Completed GEF Tracking Tool: Biodiversity Baseline GEF Tracking Tools included in Annex D</li> </ul>	<ul style="list-style-type: none"> <li>– After final PIR submitted to GEF</li> </ul>	<ul style="list-style-type: none"> <li>– Project consultant</li> </ul>	<ul style="list-style-type: none"> <li>– Completed GEF Tracking Tool</li> </ul>	
	<p><b>Indicator 13:</b> Change in the financial gap for covering basic management costs and investments in five (5) MRPs as a result of new financing mechanisms for PAs</p>	<ul style="list-style-type: none"> <li>– USD \$178,413 (approx. 28.12% reduction)</li> </ul>	<ul style="list-style-type: none"> <li>– Completed GEF Tracking Tool: Biodiversity</li> <li>– Baseline GEF Tracking Tools included in Annex D</li> </ul>	<ul style="list-style-type: none"> <li>– After final PIR submitted to GEF</li> </ul>	<ul style="list-style-type: none"> <li>– Project consultant</li> </ul>	<ul style="list-style-type: none"> <li>– Completed GEF Tracking Tool</li> </ul>	
	<p><b>Indicator 14:</b> Change in management and technical capacity of 200 officials of PAs, municipal officials, and members of the private sector as measured through the UNDP Capacity Development Scorecard</p>	<p><b>Protected areas</b></p> <ul style="list-style-type: none"> <li>– Municipality of Tecpán: 45%</li> <li>– Municipality of Quetzaltenango: 59%</li> <li>– Municipality of Zunil: 56%</li> <li>– Municipality of San Cristóbal Cucho: 36%</li> <li>– Municipality of Esquipulas Palo Gordo: 64%</li> </ul> <p><b>Central government</b></p> <ul style="list-style-type: none"> <li>– CONAP (Headquarters): 78%</li> <li>– CONAP, Western Highlands Division: 83%</li> <li>– CONAP, Central Highlands Division: 67%</li> </ul> <p><b>Private sector</b></p> <ul style="list-style-type: none"> <li>– ANACAFE: 91%</li> <li>– ARNPG: 93%</li> </ul> <p><b>Municipalities</b></p> <ul style="list-style-type: none"> <li>– Municipality of Acatenango: 36%</li> </ul>	<ul style="list-style-type: none"> <li>– Completed UNDP Capacity Development Scorecard</li> </ul>	<ul style="list-style-type: none"> <li>– Mid and final point of the project</li> </ul>	<ul style="list-style-type: none"> <li>– Project Manager</li> <li>– Project technical team</li> </ul>	<ul style="list-style-type: none"> <li>– Updated UNDP Capacity Development Scorecard</li> </ul>	

		<ul style="list-style-type: none"> <li>– Municipality of San Pedro Yepocapa: 45%</li> <li>– Municipality of San Juan Ostuncalco: 42%</li> <li>– Municipality of San Marcos: 71%</li> <li>Municipality of San Pablo: 47%</li> </ul>					
<b>Outcome 3:</b> Knowledge Management and M&E	<b>Indicator 15:</b> Number of media produced that document successful experiences about the mainstreaming of objectives of biodiversity conservation, SFM, and SLM in sustainable production landscapes and biological corridors in the Central Volcanic Mountain Chain.	– 10	– Periodic project monitoring and follow-up	– Annually	<ul style="list-style-type: none"> <li>– Project Manager</li> <li>– Project technical team</li> </ul>	<ul style="list-style-type: none"> <li>– PIR</li> <li>– Related project reports</li> <li>– Web pages with project information</li> </ul>	<ul style="list-style-type: none"> <li>– Optimal documentation</li> <li>– Expansive and timely dissemination</li> </ul>
	<b>Indicator 16:</b> Website serves as a virtual knowledge platform for disseminating information about the project.	– Website operating	– Periodic project monitoring and follow-up	<ul style="list-style-type: none"> <li>– Annually</li> <li>–</li> </ul>	<ul style="list-style-type: none"> <li>– Project Manager</li> <li>Project technical team</li> </ul>	<ul style="list-style-type: none"> <li>– PIR</li> <li>– Web pages with project information</li> </ul>	
<b>Mid-term GEF Tracking Tool</b>	N/A	N/A	<ul style="list-style-type: none"> <li>– Completed GEF Tracking Tools: Biodiversity, SLM, SFM</li> <li>– Baseline GEF Tracking Tools included in Annex D</li> </ul>	– After 2nd PIR submitted to GEF	– Project consultant but not evaluator	– Completed GEF Tracking Tools	– None
<b>Terminal GEF Tracking Tool</b>	N/A	N/A	<ul style="list-style-type: none"> <li>– Completed GEF Tracking Tools: Biodiversity, SLM, SFM</li> </ul>	– After 2nd PIR submitted to GEF	– Project consultant but not evaluator	– Completed GEF Tracking Tools	– None

			– Baseline GEF Tracking Tools included in Annex D				
<b>Mid-term Review</b>	N/A	N/A	– To be outlined in MTR inception report	– Submitted to GEF same year as 3rd PIR	– Independent evaluators	– Completed MTR	– None
<b>Environmental and Social risks and management plans, as relevant.</b>	N/A	N/A	– Updated SESP and management plans	– Annually	– Project Manager – UNDP CO	– Updated SESP	– None



**ANNEX C: EVALUATION PLAN:**

Evaluation Title	Planned start date Month/year	Planned end date Month/year	Included in the Country Office Evaluation Plan	Budget for consultants	Other budget (i.e. travel, site visits, workshops)	Budget for translation
Mid-term Review	06/2022	07/2022	No	USD \$21,315	USD \$6,685	USD \$5,000
Terminal Evaluation	09/2024	10/2024	No	USD \$33,250	USD \$7,750	USD \$5,000
Total evaluation budget				USD \$ \$79,000		

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**ANNEX D: GEF TRACKING TOOL (S) AT BASELINE**

The GEF Tracking Tools (BD1, BD-4, LD-2; SFM-1; SFM-2; see separate attachment) will be used to track project-level results. These will be based on results tracked at the level of the three prioritized landscapes individual. As noted in the Monitoring Plan (see Annex B above), these will be updated by project consultants (but not evaluators) during the mid-point and end of the project.

### **E.1. Terms of Reference of Project Board**

#### **Responsibilities**

The Project Board will provide overall strategic policy and management direction for the project and play a critical role in reviewing and approving the project planning and execution conducted by the PCU and the Implementing Partner. In line with the adoption of an adaptive management approach, the Project Board will review project progress, make recommendations and adopt the (biennial) project work plans and budget.

Whenever feasible, approval by the Project Board members of interim revisions (as applicable) of the biennial project work plans and budgets will be sought by electronic means, in order to optimize cost-efficiency of the project management arrangements.

#### **Specific Duties**

Specific functions of the Project Board will include:

- Review and approve the Initiation Plan (if such plan was required and submitted to the Local Project Appraisal Committee [LPAC] in Guatemala).
- Agree on Project Manager’s responsibilities, as well as the responsibilities of the other members of the PCU;
- Delegate any Project Assurance function as appropriate;
- Review the Progress Report for the Initiation Stage (if an Initiation Plan was required);
- Review and appraise detailed Project Plan and Annual Work Plan (AWP), including Atlas reports covering activity definition, quality criteria, issue log, updated risk log and the monitoring and communication plan.
- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- Address project issues as raised by the Project Manager;
- Provide guidance and agree on possible countermeasures/management actions to address specific risks;
- Agree on Project Manager tolerances in the AWP and quarterly plans when required;
- Conduct regular meetings to review the Project Quarterly Progress Report and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans.
- Review Combined Delivery Reports (CDR) prior to certification by the Implementing Partner.
- Appraise the Project Annual Review Report, make recommendations for the next AWP, and inform the Outcome Board about the results of the review.
- Review and approve end project report, make recommendations for follow-on actions;
- Provide ad-hoc direction and advice for exception situations when Project Manager’s tolerances are exceeded;
- Assess and decide on project changes through revisions;
- Assure that all Project deliverables have been produced satisfactorily;
- Review and approve the Final Project Review Report, including lessons-learned;
- Make recommendations for follow-on actions to be submitted to the Outcome Board;
- Commission project evaluation (only when required by partnership agreement);
- Notify operational completion of the project to the Outcome Board.

As the Project Board will provide overall guidance to the Project; it will not be expected to deal with day-to-day management and administration of the Project. This will be handled by the Project Manager, in coordination with the Executing Agencies, and under guidance from the Country Office of the Implementing Agency (to ensure conformity with UN's requirements).

The Project Board is especially responsible for evaluation and monitoring of Project outputs and achievements. In its formal meetings, the Project Board will be expected to review the Project work plan and budget expenditure,

based on the Project Manager's report. The Project Board should be consulted for supporting any changes to the work plan or budget, and is responsible for ensuring that the Project remains on target with respect to its outputs. Where necessary, the Project Board will support definition of new targets in coordination with, and approval from, the Implementing/Executing Agencies.

### **Membership**

The Project Board is expected to be composed of:

- Representative of the GEF Implementing Agency: UNDP Country Office in Guatemala
- Representative of the Implementing Partner:
- Representatives of CONAP, INAB, and MAGA.

Other parties can be invited as observers to the Project Board Meetings, as deemed relevant and beneficial for the implementation of the Project.

### **Frequency and Conduct of Meetings**

It is anticipated that there will be at least three full meetings of the Project Board to take place at the following times during the duration of the Project:

- Project Inception
- Project Midterm
- Project End

Other options such as meetings of representative groupings of the Project Board, teleconferencing and e-mail will be explored to allow for discussion and review of project matters during the years when no formal Project Board are planned. Formal meetings will be scheduled and arranged by the PCU in consultation with, and at the request of, the other Project Board members.

## **E.2. Terms of Reference for Key Project Staff**

A Project Manager, a Monitoring and Evaluation (M&E) Specialist, a Gender Specialist, Communications/ Knowledge Management Specialist, and Marketing Specialist will staff the PCU. Three (3) Technical Field Coordinators will provide technical support to all project activities in the prioritized landscape Guatemala. A Financial and Administrative Assistant and will provide administrative input for successful project implementation, and management and monitoring of all financial project aspects. Terms of Reference (ToR) for these positions will be further discussed and will be fine-tuned during the Inception Workshop so that roles and responsibilities and UNDP GEF reporting procedures are clearly defined and understood. Also, during the Inception Workshop the ToRs for specific consultants and sub-contractors will be fully discussed and, for those consultancies to be undertaken during the first year of the project, full ToRs will be drafted and selection and hiring procedures will be defined.

### **Project Manager**

A Project Manager will be hired using project funds to carry out the duties specified below, and to provide further technical assistance as required by the project team to fulfill the objectives of the project. He/she will be responsible for ensuring that the project meets its obligations to the GEF and the UNDP, with particular regard to the management aspects of the project, including supervision of staff, serving as stakeholder liaison, implementation of activities, and reporting. The Project Manager will lead the PCU and will be responsible for the day-to-day management of project activities and the delivery of its outputs. The Project Manager will support and coordinate the activities of all partners, staff, and consultants as they relate to the implementation of the project. The Project Manager will be responsible for the following tasks:

### **Specific Duties**

- Prepare detailed work plan and budget under the guidance of the Project Board and UNDP;
- Make recommendations for modifications to the project budget and, where relevant, submit proposals for budget revisions to the Project Board, and UNDP;

- Facilitate project planning and decision-making sessions;
- Organize the contracting of consultants and experts for the project, including preparing ToRs for all technical assistance required, preparation of an action plan for each consultant and expert, supervising their work, and reporting to the UNDP Project Officer;
- Provide technical guidance and oversight for all project activities;
- Oversee the progress of the project components conducted by local and international experts, consultants, and cooperating partners;
- Coordinate and oversee the preparation of all outputs of the project;
- Foster, establish, and maintain links with other related national and international programs and national projects, including information dissemination through media such as web page actualization, etc.;
- Organize Project Board meetings at least once every semester as well as annual and final review meetings as required by UNDP, and act as the secretary of the Project Board;
- Coordinate and report the work of all stakeholders under the guidance of UNDP;
- Prepare PIRs/APRs in the language required by the GEF and the UNDP's Country Offices and attend annual review meetings;
- Ensure that all relevant information is made available in a timely fashion to UNDP regarding activities carried out nationally, including private and public sector activities, which impact the project;
- Prepare and submit quarterly progress and financial reports to UNDP as required, following all UNDP quality management system and internal administrative process;
- Coordinate and participate in M&E exercises to appraise project success and make recommendations for modifications to the project;
- Prepare and submit technical concepts and requirements about the project requested by UNDP, the Government of Guatemala, or other external entities;
- Perform other duties related to the project in order to achieve its strategic objectives;
- Ensure the project utilizes best practices and experiences from similar projects;
- Ensure the project utilizes the available financial resources in an efficient and transparent manner;
- Ensure that all project activities are carried out on schedule and within budget to achieve the project outputs;
- Solve all scientific and administrative issues that might arise during the project.

### **Outputs**

- Detailed work plans indicating dates for deliverables and budget;
- Documents required by the control management system of UNDP;
- ToRs and action plan of the staff and monitoring reports;
- List of names of potential advisors and collaborators and potential institutional links with other related national and international programs and national projects;
- Quarterly reports and financial reports on the consultant's activities, all stakeholders' work, and progress of the project to be presented to UNDP (in the format specified by UNDP);
- A final report that summarizes the work carried out by consultants and stakeholders during the period of the project, as well as the status of the project outputs at the end of the project;
- Minutes of meetings and/or consultation processes;
- Yearly PIRs/APRs;
- Adaptive management of project.

All documents are to be submitted to the UNDP Project Officer and in MS Word and in hard copy.

### **Qualifications (indicative)**

- A graduate academic degree in areas relevant to the project (e.g., conservation of biodiversity, SFM or SLM);
- Minimum 10 years of experience in project management with at least 3 years of experience in at least one area relevant to the project (e.g., conservation of biodiversity, SFM or SLM);

- Experience facilitating consultative processes, preferably in the fields of conservation of biodiversity, SFM or SLM;
- Proven ability to promote cooperation between and negotiate with a range of stakeholders, and to organize and coordinate multi-disciplinary teams;
- Strong leadership and team-building skills;
- Self-motivated and ability to work under the pressure;
- Demonstrable ability to organize, facilitate, and mediate technical teams to achieve stated project objectives;
- Familiarity with logical frameworks and strategic planning;
- Strong computer skills;
- Flexible and willing to travel as required;
- Excellent communication and writing skills in Spanish and English;
- Previous experience working with a GEF-supported project is considered an asset.

### **Technical Field Coordinators**

The project Technical Field Coordinators will be responsible for ensuring the technical implementation of the Project's activities in the field. They will work full time and be paid with Project funds under the supervision of the Project Manager.

#### **Specific Duties**

- Assist the Project Manager in the preparation of an Operational Work Plan for the duration of the project and corresponding Annual Work Plans based on the Project Document and Inception Report;
- Directly supervise the implementation of technical activities in the departments of Chimaltenango, San Marcos, and Quetzaltenango in the Central Volcanic Mountain Range;
- Assist the Project Manager in the contracting of consultants and experts for the project, including preparing ToRs for all technical assistance required, and supervising their work;
- Coordinate and monitor the activities in the field as described in the Operational Work Plan;
- Assist the Communications/Knowledge Management Specialist in collecting and analyzing lessons learned and best practices, and design replication strategies within other production landscapes and biological corridors;
- Assist the Project Manager in organizing all technical reporting activities to the GEF, UNDP, and Executing Agencies, ensuring adherence to the Agencies' technical reporting requirements;
- Promote the Project and seek opportunities to leverage additional co-funding at the local level; and
- Represent the Project at meetings and other project-related fora at the local and subnational levels, as required.

#### **Qualifications (indicative)**

- An academic degree in areas relevant to the project (conservation of biodiversity, SFM or SLM);
- At least 5 years of working experience in the fields related to the project (conservation of biodiversity, SFM or SLM) or a directly related field;
- Experience facilitating consultative processes, planning and monitoring at the local level (preferably in the fields related to the project);
- Ability to work both independently and as a member of a team;
- Demonstrable ability to organize, facilitate, and mediate technical teams to achieve stated project objectives at the local level;
- Familiarity with logical frameworks and strategic planning;
- Strong computer skills;
- Flexible and willing to travel as required;
- Excellent communication and writing skills in Spanish, and working knowledge of English; and
- Previous experience working with a GEF-supported project is considered an asset.

### **Communications/Knowledge Management Specialist**

The Communications/Knowledge Management Specialist will be responsible for advising on and issuing communications, as well as awareness-raising, and visibility activities related to the project. This position will be part of the PCU under the supervision of the Project Manager

#### **Specific Duties:**

- Coordinate and conduct the communication, awareness-raising, and visibility campaigns of the project at the local, subnational and national levels;
- Collect and analyze lessons learned and best practices, and design replication strategies within other production landscapes and biological corridors
- Coordinate the design, production, and dissemination of diverse reports, publications, and knowledge products through different media, including print, websites, and social networks;
- Link the project into the Green Commodities community.
- Promote visibility of the project results and activities through placement and distribution of information material and creative partnerships;
- Advise and assist project teams at the national developing awareness campaigns, communication strategies, visibility actions, and media initiatives;
- Establish synergies with other GEF and non-GEF initiatives, government agencies, private sector entities, donor agencies, among other stakeholders to promote cooperation and coordination of implementation of related efforts at the national level; and
- Draft and ensure that key results, reports, lessons learned, BMPs, and relevant success stories (e.g., PWS and other incentives, and management of PAs) are disseminated through different communication vehicles.

#### **Qualifications (indicative):**

- Degree in Communications, or other related field;
- At least 3-5 years of experience in the field of communications or knowledge management, preferably focused on conservation of biodiversity, SFM or SLM;
- Previous experience working with a GEF project is considered an asset;
- Ability to synthesize, systematize, edit, and publish information to produce communications materials and products;
- Strong interpersonal and communication skills; commitment to team work and to working across disciplines; and
- Fluency in Spanish is essential, both spoken and written. Working knowledge of English is an asset.

### **M&E Specialist**

The M&E Specialist will be responsible for the advisory and conduction of all M&E activities related to the project. This position will be part of the PCU under the supervision of the Project Manager

#### **Specific Duties:**

- Responsible for the proper functioning of the Project's M&E, including the Project impact indicators contained in the PRF, GEF Tracking Tools for Biodiversity, Land Degradation, and SFM in accordance with the GEF requirements, facilitate the construction of the monitoring platforms from project Outputs 1.12 and 2.14;
- Coordinate with the Project Manager and the different technical and administrative units of MARN to program all M&E activities;
- Establish in the AWP the necessary time and resources to comply with the UNDP and GEF M&E requirements for the project;
- Coordinate the preparation of forms, questionnaires, and other tools for collecting information in the field within the framework of M&E and the PRF;

- Provide support to the Project Manager in preparing M&E reports required by UNDP and the GEF, indicating, among other things, the progress in complying with the indicators included in the PRF; and
- Prepare the ToRs for the MTR and TE of the Project.

**Qualifications (indicative):**

- Degree in environmental sciences, waters resources management, engineering, or other similar areas with a focus on project monitoring and evaluating;
- At least 5-10 years of experience in the fields of environmental sciences, waters resources management, engineering, or other similar areas, 3 years of which shall be in project monitoring and evaluation;
- Experience in data analysis, publications and/or reporting based on field data is required;
- Previous experience working with a GEF project is considered an asset;
- Strong interpersonal and communication skills; commitment to teamwork and to working across disciplines; and
- Fluency in Spanish is essential, both spoken and written. Working knowledge of English is an asset.

**Gender Specialist**

The Gender Specialist will be responsible for ensuring that gender is mainstreamed during project execution and the for the implementation of the project Gender Mainstreaming Plan. This position will be part of the PCU under the supervision of the Project Manager.

**Specific Duties:**

- Coordinate with the Project Manager and the different technical and administrative units of MARN and municipalities for gender mainstreaming;
- Establish in the AWP the necessary time and resources to implement the project Gender Mainstreaming Plan;
- Collect sex-disaggregated data in line with the PRF and Gender Mainstreaming Plan;
- Provide support to the Project Manager in preparing gender-based reports required by UNDP and the GEF, indicating, among other things, the progress in complying with the indicators included in the PRF and the Gender Mainstreaming Plan;
- Participate and coordinate in project training activities for gender mainstreaming; and
- Coordinate actions with government agencies, NGOs, CSOs, and women's organization or groups whose work focuses on gender in the Central Volcanic Mountain Range.

**Qualifications (indicative):**

- Degree in social or natural sciences or other relevant discipline, preferably with a specialization in gender and project cycle management;
- At least 5 years of experience in the field of gender equality and gender mainstreaming;
- Demonstrated expertise in mainstreaming gender in UNDP and/or GEF projects and programs in Guatemala;
- Experience working with government institutions and international organizations that support gender and development work in environmental projects and programs;
- Knowledge of with gender analysis tools and methodologies for gender mainstreaming;
- Previous experience working with a GEF project is considered an asset;
- Strong interpersonal and communication skills; commitment to team work and to working across disciplines; and
- Fluency in Spanish is essential, both spoken and written. Working knowledge of English is an asset.

**Financial and Administrative Assistant**



The Project Finance Assistant is responsible for the financial and administrative management of the project activities and assists in the preparation of quarterly and annual work plans and progress reports for review and monitoring by UNDP.

### **Specific Duties**

- Responsible for providing general financial and administrative support to the project;
- Take own initiative and perform daily work in compliance with annual work schedules;
- Assist project management in performing budget cycle: planning, preparation, revisions, and budget execution;
- Provide assistance to partner agencies involved in project activities, performing and monitoring financial aspects to ensure compliance with budgeted costs in line with UNDP policies and procedures;
- Monitor project expenditures, ensuring that no expenditure is incurred before it has been authorized;
- Assist project team in drafting quarterly and yearly project progress reports concerning financial issues.
- Drafting the contracts of national/local consultants and all project staff, in accordance with the instructions of the UNDP Contract Office in Guatemala;
- Ensure that UNDP procurement rules are followed during procurement activities that are carried out by the project and maintain responsibility for the inventory of the project assets;
- Perform preparatory work for mandatory and general budget revisions, annual physical inventory and auditing, and assist external evaluators in fulfilling their mission;
- Prepare all outputs in accordance with the UNDP administrative and financial office guidance;
- Ensure the project utilizes the available financial resources in an efficient and transparent manner;
- Ensure that all project financial activities are carried out on schedule and within budget to achieve the project outputs;
- Perform all other financial related duties, upon request;
- Make logistical arrangements for the organization of meetings, consultation processes, and media;
- Draft correspondence related to assigned project areas; provide clarification, follow up, and responses to requests for information;
- Assume overall responsibility for administrative matters of a more general nature, such as registry and maintenance of project files;
- Provide support to the Project Manager and project staff in the coordination and organization of planned activities and their timely implementation;
- Assist the Project Manager in liaising with key stakeholders from the Government of Guatemala counterpart, co-financing agencies, municipalities, civil society, and NGOs, as required;
- Ensure the proper use and care of the instruments and equipment used on the project
- Resolve all administrative and support issues that might arise during the project.
- Provide assistance in all logistical arrangements concerning project implementation;

### **Qualifications (indicative)**

- Undergraduate Degree in finance, business sciences, or related fields;
- A demonstrated ability in the financial management of development projects and in liaising and cooperating with government officials, donors, and civil society;
- Self-motivated and ability to work under the pressure;
- Team-oriented, possesses a positive attitude, and works well with others;
- Flexible and willing to travel as required;
- Excellent interpersonal skills;
- Excellent verbal and writing communication skills in Spanish and English;
- Good knowledge of Word, Outlook, Excel, and Internet browsers;
- Previous experience working with a GEF and/or UNDP-supported project is considered an asset.

### **Marketing specialist**

The Project Marketing Specialist will be responsible for ensuring the technical implementation of the Project's marketing activities for agricultural and NTFP products. This position will be part of the PCU under the supervision of the Project Manager.

#### **Specific Duties**

- Research and analyze a variety of marketing information, including market trends, pricing schedules, competitor offerings, and product specifications.
- Communicate marketing assessment findings to project's team and TAC to guide the direction and activities of the project;
- Develop new marketing strategies and campaigns based on detailed analysis of market forces;
- Work with groups of farmers to come up with branding ideas, advertising strategies, and promotional materials;
- Track marketing strategy results closely and create detailed reports with data analysis and other feedback;
- Adjust marketing plans as needed in response to data tracking efforts;
- Keep the buyers database updated;
- Facilitate long-term partnerships between groups of farmers and buyers;
- Represent the Project at meetings and other project-related fora at the local and subnational levels, as required.

#### **Qualifications (indicative)**

- An academic degree in marketing or similar field;
- At least 5 years of working experience in marketing of sustainable product and/or green commodities (e.g., coffee, NTFP, and vegetables);
- Experience facilitating marketing strategies and buyers' engagement with environmental friendly products;
- Ability to work both independently and as a member of a team;
- Demonstrable ability to organize, facilitate, and mediate technical teams to achieve strategic alliances with potential buyers;
- Self-motivated and ability to work under the pressure;
- Strong computer skills;
- Flexible and willing to travel as required;
- Excellent communication and writing skills in Spanish, and working knowledge of English; and
- Previous experience working with a GEF-supported project is considered an asset.

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## ANNEX F: UNDP SOCIAL AND ENVIRONMENTAL SCREENING TEMPLATE (SESP)

The completed template, which constitutes the Social and Environmental Screening Report, must be included as an annex to the Project Document. Please refer to the [Social and Environmental Screening Procedure](#) and [Toolkit](#) for guidance on how to answer the 6 questions.

### Project Information

Project Information	
1. Project Title	Promoting sustainable and resilient landscapes in the central volcanic chain of Guatemala
2. Project Number	PIMS 5581
3. Location (Global/Region/Country)	Guatemala

### Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

#### QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?

##### **Briefly describe in the space below how the Project mainstreams the human-rights based approach**

The project will mainstream biodiversity conservation and sustainable land management objectives into production landscapes of the Central Volcanic Mountain Range in Guatemala, contributing to the welfare of local populations and the delivery of multiple global environmental benefits. The project will adopt a human-rights-based approach in its implementation of field activities necessary for protecting human life and the environment; in doing so the project will assist the government of Guatemala to realize civil, economic, social and cultural rights of all project participants and beneficiaries. In addition, the project will promote nondiscrimination and equality, including women, indigenous people, economically disadvantaged communities, and other vulnerable groups. The project will support meaningful participation and the inclusion of all stakeholders of the prioritized landscape within Central Volcanic Mountain Range; to this end the final project design includes a Stakeholder Engagement and Communication Plan with the objectives of: a) clearly identifying the basic roles and responsibilities of the main participants in the project; b) ensuring full knowledge of those involved concerning the progress and obstacles of project development and taking advantage of the experience and skills of the participants to enhance project activities; and c) identifying key instances in the project cycle where stakeholder involvement will occur. The project also promotes accountability and the rule of law and identifies mechanisms to address grievances through the Access to Information and Complaints Offices in Guatemala and through UNDP's mechanism for addressing complaints, grievances, and suggestions. The project will respect the human rights of all project participants regardless of their race, color, sex, language, religion, political or other opinion, national or social origin, property, birth, or other status.

##### **Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment**

The project improves gender equality and women's empowerment by promoting their equal representation and by making them active participants in decision-making processes and in the implementation of actions to address threats to biodiversity and forests in the Central Volcanic Mountain Range, as well as to reduce land degradation, while providing opportunities for women to improve their well-being and the well-being of their families. The project will make available incentives to promote the adoption of environmentally-friendly production systems, which will offer opportunities for women's participation in constructing sustainable landscapes and providing solutions to the loss of biodiversity, deforestation, and land degradation. In addition, women and their families will also benefit from improved access to markets for sustainable agricultural products and non-timber forest products, and capacity building. The project will incorporate gender considerations into all phases of its life cycle, and includes a Project Gender Mainstreaming Plan designed specifically to ensure that the concerns and experiences of women (as well as men) are an integral part of the development, implementation, and M&E of the project. The Project Gender Mainstreaming Plan outlines activities and specific indicators to ensure gender participation and gender equality. In addition, the project's Stakeholder Engagement and Communication Plan identifies women and women's groups in the prioritized landscape within Central Volcanic Mountain Range that will be directly involved in project

implementation. Women will be regularly informed about the progress of the project and how it impacts them. The project is classified as Gender Responsive: the results address the different needs of men and women, there is equitable distribution of benefits, resources, status, and rights; however, the project does not address the root causes of inequality in their lives.

**Briefly describe in the space below how the Project mainstreams environmental sustainability**

The project's objective is to mainstream biodiversity conservation and sustainable land management objectives into production landscapes of the Central Volcanic Mountain Range in Guatemala, contributing to the welfare of local populations and the delivery of multiple global environmental benefits. The project will integrate environmental sustainability by developing an enabling environment for the delivery of multiple global environmental benefits through models of sustainable agriculture/forestry production and economic incentives derived from improved markets and ecosystem services. In addition, the project will improve connectivity of core protected areas within sustainably managed production landscapes including: a) strengthening ecosystem structure and functionality of forests in the Central Volcanic Mountain Range; b) maintaining stable populations of indicator species (mammals, birds, amphibians, and plants) as a result of enhanced connectivity facilitated by biological corridors; c) improving the management effectiveness of target protected areas; and d) increasing in the management and technical capacity of protected area officials, municipal officials, and local communities for the conservation of biodiversity, and sustainable forest and land management.

## Part B. Identifying and Managing Social and Environmental Risks

<b>QUESTION 2: What are the Potential Social and Environmental Risks?</b> <i>Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any “Yes” responses). If no risks have been identified in Attachment 1 then note “No Risks Identified” and skip to Question 4 and Select “Low Risk”. Questions 5 and 6 not required for Low Risk Projects.</i>	<b>QUESTION 3: What is the level of significance of the potential social and environmental risks?</b> <i>Note: Respond to Questions 4 and 5 below before proceeding to Question 6</i>			<b>QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?</b>
<b>Risk Description</b>	<b>Impact and Probability (1-5)</b>	<b>Significance (Low, Moderate, High)</b>	<b>Comments</b>	<b>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</b>
Risk 1: Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	I = 3 P = 1	Low	The project will include the active participation of women and will address their different needs related to the conservation of natural resources and sustainable	
Risk 2: Would the Project potentially reproduce discriminations against women				

based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?			production in a prioritized landscape of the Central Volcanic Mountain Range. In addition, the project will promote the equitable distribution of project benefits for women as for men (e.g., access to markets, incentives, capacity building, and technical assistance). The project design includes a Gender Mainstreaming Plan in which activities and specific indicators are outlined to ensure gender participation and gender equality.	
Risk 3: Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?				
Risk 4: Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	I = 1 P = 5	Low	The project will specifically work in protect areas and other areas of important ecological value. Activities will include: a) development of participatory management plans for protected areas; b) conservation and management program for three priority areas for the protection of amphibians; c) improved connectivity of biological corridors; and d) conservation of water resources, among other activities.	
Risk 5: Does the Project involve harvesting of natural forests, plantation development, or reforestation?	I = 1 P = 5	Low	The project will support farmers implementing reforestation actions with native species as part of sustainable forest management incentives. In addition, the project will support environmental/forestry municipal offices in reforestation efforts with native	

			species within their jurisdictions.	
Risk 6: Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	I = 3 P = 1	Low	The occurrence and intensity of climate change may affect project efforts to improve ecosystem connectivity and reduce deforestation. Guatemala and is prone to the impact of tropical storms and torrential rains that may affect project outcomes.	
Risk 7: Are indigenous peoples present in the Project area (including Project area of influence)?	I = 1 P = 5	Low	38.4% of the population in the prioritized landscape is indigenous, which eight ethnolinguistic groups: 1) Kaqchikel, 2) K'iche', 3) Q'anjob'al, 4) Mam, 5) Tz'utujil, 6) Achi', 7) Ixil, and 8) Poqomam.	
	<b>QUESTION 4: What is the overall Project risk categorization?</b>			
	Select one (see <a href="#">SESP</a> for guidance)			Comments
	Low Risk	<input checked="" type="checkbox"/>	Projects activities will have minimal or no risks of adverse social or environmental impacts.	
	Moderate Risk	<input type="checkbox"/>		
	High Risk	<input type="checkbox"/>		
	<b>QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?</b>			
	Check all that apply			Comments
	Principle 1: Human Rights	<input type="checkbox"/>		
	Principle 2: Gender Equality and Women's Empowerment	<input type="checkbox"/>		
	1. Biodiversity Conservation and Natural Resource Management	<input type="checkbox"/>		
	2. Climate Change Mitigation and Adaptation	<input type="checkbox"/>		

	<b>3. Community Health, Safety and Working Conditions</b>	<input type="checkbox"/>	
	<b>4. Cultural Heritage</b>	<input type="checkbox"/>	
	<b>5. Displacement and Resettlement</b>	<input type="checkbox"/>	
	<b>6. Indigenous Peoples</b>	<input type="checkbox"/>	
	<b>7. Pollution Prevention and Resource Efficiency</b>	<input type="checkbox"/>	

### Final Sign Off

<b>Signature</b>	<b>Date</b>	<b>Description</b>
QA Assessor		UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have “checked” to ensure that the SESP is adequately conducted.
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have “cleared” the SESP prior to submittal to the PAC.
PAC Chair		UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

## SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental <u>Risks</u>	
<b>Principles 1: Human Rights</b>	<b>Answer (Yes/No)</b>
1. Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	NO
2. Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? <sup>23</sup>	NO
3. Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	NO
4. Is there likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	NO
5. Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	NO
6. Is there a risk that rights-holders do not have the capacity to claim their rights?	NO
7. Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	NO
8. Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	NO
<b>Principle 2: Gender Equality and Women's Empowerment</b>	
1. Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	YES
2. Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	YES
3. Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	NO
4. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?  <i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being</i>	YES
<b>Principle 3: Environmental Sustainability:</b> Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below	
<b>Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management</b>	

<sup>23</sup> Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.



1.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? <i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i>	NO
1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	YES
1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	NO
1.4	Would Project activities pose risks to endangered species?	NO
1.5	Would the Project pose a risk of introducing invasive alien species?	NO
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	YES
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	NO
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water? <i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i>	NO
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	NO
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	NO
1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area? <i>For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.</i>	NO
<b>Standard 2: Climate Change Mitigation and Adaptation</b>		
2.1	Will the proposed Project result in significant <sup>24</sup> greenhouse gas emissions or may exacerbate climate change?	NO
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	YES
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)? <i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i>	NO

<sup>24</sup> In regards to CO<sub>2</sub>, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

<b>Standard 3: Community Health, Safety and Working Conditions</b>		
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	NO
3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	NO
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	NO
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	NO
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	NO
3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	NO
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	NO
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	NO
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	NO
<b>Standard 4: Cultural Heritage</b>		
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	NO
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	NO
<b>Standard 5: Displacement and Resettlement</b>		
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	NO
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	NO
5.3	Is there a risk that the Project would lead to forced evictions? <sup>25</sup>	NO
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	NO
<b>Standard 6: Indigenous Peoples</b>		

<sup>25</sup> Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	YES
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	NO
6.3	<p>Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?</p> <p><i>If the answer to the screening question 6.3 is "yes" the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.</i></p>	NO
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	NO
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	NO
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	NO
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	NO
6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	NO
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	NO
<b>Standard 7: Pollution Prevention and Resource Efficiency</b>		
7.1	Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	NO
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	NO
7.3	<p>Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?</p> <p><i>For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol</i></p>	NO
7.4	Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	NO
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	NO

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## ANNEX G: UNDP PROJECT QUALITY ASSURANCE REPORT

### Design & Appraisal Stage Quality Assurance Report

#### Overall Project Rating: Decision:

Project Number: XX

Project Title: Promoting sustainable and resilient landscapes in the central volcanic chain of Guatemala

Project Date: XX

**1. Does the project's Theory of Change specify how it will contribute to higher-level change? (Select the option from 1-3 that best reflects the project)**

3: The project has a theory of change with explicit assumptions and clear change pathway describing how the project will contribute to outcome level change as specified in the programme/CPD, backed by credible evidence of what works effectively in this context. The project document clearly describes why the project's strategy is the best approach at this point in time.

*2: The project has a theory of change. It has an explicit change pathway that explains how the project intends to contribute to outcome-level change and why the project strategy is the best approach at this point in time, but is backed by limited evidence.*

1: The project does not have a theory of change, but the project document may describe in generic terms how the project will contribute to development results, without specifying the key assumptions. It does not make an explicit link to the programme/CPD's theory of change.

#### Evidence Management Response

Please refer to Project Document: Section II - Strategy

**2. Is the project aligned with the thematic focus of the UNDP Strategic Plan? (select the option from 1-3 that best reflects the project)**

3: The project responds to one of the three areas of development [work](#) as specified in the Strategic Plan; it addresses at least one of the proposed new and emerging [areas](#); an issues-based analysis has been incorporated into the project design; and the project's RRF includes all the relevant SP output indicators. (all must be true to select this option)

*2: The project responds to one of the three areas of development [work](#) as specified in the Strategic Plan. The project's RRF includes at least one SP output indicator, if relevant. (both must be true to select this option)*

1: While the project may respond to one of the three areas of development [work](#) as specified in the Strategic Plan, it is based on a sectoral approach without addressing the complexity of the development issue. None of the relevant SP indicators are included in the RRF. This answer is also selected if the project does not respond to any of the three areas of development work in the Strategic Plan.

#### Evidence

Please refer to Project Document: Cover page

**3. Does the project have strategies to effectively identify, engage and ensure the meaningful participation of targeted groups/geographic areas with a priority focus on the excluded and marginalized? (select the option from 1-3 that best reflects this project)**

3: The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. Beneficiaries will be identified through a rigorous process based on evidence (if applicable.)The project has an explicit strategy to identify, engage and ensure the meaningful participation of specified target groups/geographic areas throughout the project, including through monitoring and decision-making (such as representation on the project board) (all must be true to select this option)

*2: The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. The project document states how beneficiaries will be identified, engaged and how meaningful participation will be ensured throughout the project. (both must be true to select this option)*

1: The target groups/geographic areas are not specified, or do not prioritize excluded and/or marginalised populations. The project does not have a written strategy to identify or engage or ensure the meaningful participation of the target groups/geographic areas throughout the project.

Not Applicable

#### Evidence Management Response

Please refer to Project Document: Section II – Results and Partnerships (iii. Stakeholder engagement); Annex K: Stakeholder Engagement and Communication Plan

**4. Have knowledge, good practices, and past lessons learned of UNDP and others informed the project design? (select the option from 1-3 that best reflects this project)**

3: Knowledge and lessons learned (gained e.g. through peer assist sessions) backed by credible evidence from evaluation, corporate policies/strategies, and monitoring have been explicitly used, with appropriate referencing, to develop the project's theory of change and justify the approach used by the project over alternatives.

*2: The project design mentions knowledge and lessons learned backed by evidence/sources, which inform the project's theory of change but have not been used/are not sufficient to justify the approach selected over alternatives.*

1: There is only scant or no mention of knowledge and lessons learned informing the project design. Any references that are made are not backed by evidence.

**Evidence      Management Response**

Please refer to Project Document: Section II – Results and Partnerships (ii. Partnerships)

**5. Does the project use gender analysis in the project design and does the project respond to this gender analysis with concrete measures to address gender inequities and empower women? (select the option from 1-3 that best reflects this project)**

*3: A participatory gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men, and it is fully integrated into the project document. The project establishes concrete priorities to address gender inequalities in its strategy. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. (all must be true to select this option)*

2: A gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men. Gender concerns are integrated in the development challenge and strategy sections of the project document. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. (all must be true to select this option)

1: The project design may or may not mention information and/or data on the differential impact of the project's development situation on gender relations, women and men, but the constraints have not been clearly identified and interventions have not been considered.

**Evidence      Management Response**

Please refer to Project Document: Section II – Results and Partnerships (iv. Mainstreaming gender); Annex M: Gender Analysis and Project Gender Mainstreaming Plan

**6. Does UNDP have a clear advantage to engage in the role envisioned by the project vis-à-vis national partners, other development partners, and other actors? (select the option from 1-3 that best reflects this project)**

*3: An analysis has been conducted on the role of other partners in the area where the project intends to work, and credible evidence supports the proposed engagement of UNDP and partners through the project. It is clear how results achieved by relevant partners will contribute to outcome level change complementing the project's intended results. If relevant, options for south-south and triangular cooperation have been considered, as appropriate. (all must be true to select this option)*

2: Some analysis has been conducted on the role of other partners where the project intends to work, and relatively limited evidence supports the proposed engagement of and division of labour between UNDP and partners through the project. Options for south-south and triangular cooperation may not have not been fully developed during project design, even if relevant opportunities have been identified.

1: No clear analysis has been conducted on the role of other partners in the area that the project intends to work, and relatively limited evidence supports the proposed engagement of UNDP and partners through the project. There is risk that the project overlaps and/or does not coordinate with partners' interventions in this area. Options for south-south and triangular cooperation have not been considered, despite its potential relevance.

**Evidence      Management Response**

Please refer to Project Document: Section II – Results and Partnerships (iii. Stakeholder engagement, v. South-South and Triangular Cooperation); Annex K: Stakeholder Engagement and Communication Plan

**7. Does the project seek to further the realization of human rights using a human rights based approach? (select from options 1-3 that best reflects this project)**

3: Credible evidence that the project aims to further the realization of human rights, upholding the relevant international and national laws and standards in the area of the project. Any potential adverse impacts on enjoyment of human rights were rigorously identified and assessed as relevant, with appropriate mitigation and management measures incorporated into project design and budget. (all must be true to select this option)

*2: Some evidence that the project aims to further the realization of human rights. Potential adverse impacts on enjoyment of human rights were identified and assessed as relevant, and appropriate mitigation and management measures incorporated into the project design and budget.*

1: No evidence that the project aims to further the realization of human rights. Limited or no evidence that potential adverse impacts on enjoyment of human rights were considered.

**Evidence      Management Response**

Please refer to Project Document: Annex F – UNDP Social and Environmental Screening Template (SESP)

**8. Did the project consider potential environmental opportunities and adverse impacts, applying a precautionary approach? (select from options 1-3 that best reflects this project)**

*3: Credible evidence that opportunities to enhance environmental sustainability and integrate poverty-environment linkages were fully considered as relevant, and integrated in project strategy and design. Credible evidence that potential adverse environmental impacts have been identified and rigorously assessed with appropriate management and mitigation measures incorporated into project design and budget. (all must be true to select this option).*

2: No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Credible evidence that potential adverse environmental impacts have been identified and assessed, if relevant, and appropriate management and mitigation measures incorporated into project design and budget.

1: No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Limited or no evidence that potential adverse environmental impacts were adequately considered.

**Evidence      Management Response**

Please refer to Project Document: Annex F – UNDP Social and Environmental Screening Template (SESP)

**9. Has the Social and Environmental Screening Procedure (SESP) been conducted to identify potential social and environmental impacts and risks? [If yes, upload the completed checklist as evidence. If SESP is not required, provide the reason(s) for the exemption in the evidence section. Exemptions include the following:**

Preparation and dissemination of reports, documents and communication materials Organization of an event, workshop, training

Strengthening capacities of partners to participate in international negotiations and conferences Partnership coordination (including UN coordination) and management of networks

Global/regional projects with no country level activities (e.g. knowledge management, inter-governmental processes) UNDP acting as Administrative Agent

*Yes*

No

SESP not required

**Evidence**

Please refer to Annex F: UNDP Social and Environmental Screening Template (SESP)

**10. Does the project have a strong results framework? (select from options 1-3 that best reflects this project)**

*3: The project's selection of outputs and activities are at an appropriate level and relate in a clear way to the project's theory of change. Outputs are accompanied by SMART, results-oriented indicators that measure all of the key expected changes identified in the theory of change, each with credible data sources, and populated baselines and targets, including gender sensitive, sex-disaggregated indicators where appropriate. (all must be true to select this option)*

2: The project's selection of outputs and activities are at an appropriate level, but may not cover all aspects of the project's theory of change. Outputs are accompanied by SMART, results-oriented indicators, but baselines, targets and data sources may not yet be fully specified. Some use of gender sensitive, sex-disaggregated indicators, as appropriate. (all must be true to select this option)

1: The results framework does not meet all of the conditions specified in selection "2" above. This includes: the project's selection of outputs and activities are not at an appropriate level and do not relate in a clear way to the project's theory of change; outputs are not accompanied by SMART, results-oriented indicators that measure the expected change, and have not been populated with baselines and targets; data sources are not specified, and/or no gender sensitive, sex-disaggregation of indicators.

**Evidence      Management Response**

Please refer to Project Document: Section V – Project Results Framework

**11. Is there a comprehensive and costed M&E plan with specified data collection sources and methods to support evidence-based management, monitoring and evaluation of the project?**

Yes

No

**Evidence**

Please refer to Project Document: Section VI - Monitoring and Evaluation (M&E) Plan

**12. Is the project's governance mechanism clearly defined in the project document, including planned composition of the project board? (select from options 1-3 that best reflects this project)**

*3: The project's governance mechanism is fully defined in the project document. Individuals have been specified for each position in the governance mechanism (especially all members of the project board.) Project Board members have agreed on their roles and responsibilities as specified in the terms of reference. The ToR of the project board has been attached to the project document. (all must be true to select this option).*

2: The project's governance mechanism is defined in the project document; specific institutions are noted as holding key governance roles, but individuals may not have been specified yet. The prodoc lists the most important responsibilities of the project board, project director/manager and quality assurance roles. (all must be true to select this option)

1: The project's governance mechanism is loosely defined in the project document, only mentioning key roles that will need to be filled at a later date. No information on the responsibilities of key positions in the governance mechanism is provided.

**Evidence      Management Response**

Please refer to Project Document: Section VII – Governance and Management Arrangements

**13. Have the project risks been identified with clear plans stated to manage and mitigate each risks? (select from options 1-3 that best reflects this project)**

*3: Project risks related to the achievement of results are fully described in the project risk log, based on comprehensive analysis drawing on the theory of change, Social and Environmental Standards and screening, situation analysis, capacity assessments and other analysis. Clear and complete plan in place to manage and mitigate each risk. (both must be true to select this option)*

2: Project risks related to the achievement of results identified in the initial project risk log with mitigation measures identified for each risk.

1: Some risks may be identified in the initial project risk log, but no evidence of analysis and no clear risk mitigation measures identified. This option is also selected if risks are not clearly identified and no initial risk log is included with the project document.

**Evidence      Management Response**

Please refer to Project Document: Annex H - UNDP Risk Log

**14. Have specific measures for ensuring cost-efficient use of resources been explicitly mentioned as part of the project design? This can include: i) using the theory of change analysis to explore different options of achieving the maximum results with the resources available; ii) using a portfolio management approach to improve cost effectiveness through synergies with other interventions; iii) through joint operations (e.g., monitoring or procurement) with other partners.**

Yes

No

**Evidence**

Please refer to Project Document: Section III – Results and Partnerships (ii. Partnerships)

**15. Are explicit plans in place to ensure the project links up with other relevant on-going projects and initiatives, whether led by UNDP, national or other partners, to achieve more efficient results (including, for example, through sharing resources or coordinating delivery?)**

Yes

No

**Evidence**

Please refer to Project Document: Section III – Results and Partnerships (ii. Partnerships)

**16. Is the budget justified and supported with valid estimates?**

*3: The project's budget is at the activity level with funding sources, and is specified for the duration of the project period in a multi-year budget. Costs are supported with valid estimates using benchmarks from similar projects or activities. Cost implications from inflation and foreign exchange exposure have been estimated and incorporated in the budget.*

2: The project's budget is at the activity level with funding sources, when possible, and is specified for the duration of the project in a multi-year budget. Costs are supported with valid estimates based on prevailing rates.

1: The project's budget is not specified at the activity level, and/or may not be captured in a multi-year budget.

**Evidence**

Please refer to Project Document: Section IX - Total Budget and Work Plan

**17. Is the Country Office fully recovering the costs involved with project implementation?**

3: The budget fully covers all direct project costs that are directly attributable to the project, including programme management and development effectiveness services related to strategic country programme planning, quality assurance, pipeline development, policy advocacy services, finance, procurement, human resources, administration, issuance of contracts, security, travel, assets, general services, information and communications based on full costing in accordance with prevailing UNDP policies (i.e., UPL, LPL.)

*2: The budget covers significant direct project costs that are directly attributable to the project based on prevailing UNDP policies (i.e., UPL, LPL) as relevant.*

1: The budget does not reimburse UNDP for direct project costs. UNDP is cross-subsidizing the project and the office should advocate for the inclusion of DPC in any project budget revisions.

**Evidence      Management Response**

Please refer to Project Document: Section IX - Total Budget and Work Plan

**18. Is the chosen implementation modality most appropriate? (select from options 1-3 that best reflects this project)**

*3: The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted, and there is evidence that options for implementation modalities have been thoroughly considered. There is a strong justification for choosing the selected modality, based on the development context. (both must be true to select this option)*

2: The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted and the implementation modality chosen is consistent with the results of the assessments.

1: The required assessments have not been conducted, but there may be evidence that options for implementation modalities have been considered.

**Evidence      Management Response**

Please refer to Project Document: Section VII – Governance and Management Arrangements

**19. Have targeted groups, prioritizing marginalized and excluded populations that will be affected by the project, been engaged in the design of the project in a way that addresses any underlying causes of exclusion and discrimination?**

3: Credible evidence that all targeted groups, prioritising marginalized and excluded populations that will be involved in or affected by the project, have been actively engaged in the design of the project. Their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change which seeks to address any underlying causes of exclusion and discrimination and the selection of project interventions.

*2: Some evidence that key targeted groups, prioritising marginalized and excluded populations that will be involved in the project, have been engaged in the design of the project. Some evidence that their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change and the selection of project interventions.*

1: No evidence of engagement with marginalized and excluded populations that will be involved in the project during project design. No evidence that the views, rights and constraints of populations have been incorporated into the project.

Not Applicable



## Evidence

Please refer to Project Document: Annex J - Additional Agreements; Annex K - Stakeholder Engagement and Communication Plan; Annex M - Gender Analysis and Project Gender Mainstreaming Plan; Annex P - List of People Consulted During Project Development

**20. Does the project conduct regular monitoring activities, have explicit plans for evaluation, and include other lesson learning (e.g. through After Action Reviews or Lessons Learned Workshops), timed to inform course corrections if needed during project implementation?**

Yes

No

## Evidence

Please refer to Project Document: Section VI - Monitoring and Evaluation (M&E) Plan

**21. The gender marker for all project outputs are scored at GEN2 or GEN3, indicating that gender has been fully mainstreamed into all project outputs at a minimum.**

Yes

No

## Evidence Management Response

Refer to Project Document: Cover Page; Section III – Results and Partnerships (iv. Mainstreaming gender)

**22. Is there a realistic multi-year work plan and budget to ensure outputs are delivered on time and within allotted resources? (select from options 1-3 that best reflects this project)**

3: The project has a realistic work plan & budget covering the duration of the project at the activity level to ensure outputs are delivered on time and within the allotted resources.

*2: The project has a work plan & budget covering the duration of the project at the output level.*

1: The project does not yet have a work plan & budget covering the duration of the project.

## Evidence

Please refer to Project Document: Section IX - Total Budget and Work Plan

**23. Have national partners led, or proactively engaged in, the design of the project?**

*3: National partners have full ownership of the project and led the process of the development of the project jointly with UNDP.*

2: The project has been developed by UNDP in close consultation with national partners.

1: The project has been developed by UNDP with limited or no engagement with national partners.

Not Applicable

## Evidence

Please refer to Project Document: Annex J - Additional Agreements; Annex K - Stakeholder Engagement and Communication Plan; Annex P - List of People Consulted During Project Development

**24. Are key institutions and systems identified, and is there a strategy for strengthening specific/ comprehensive capacities based on capacity assessments conducted? (select from options 0-4 that best reflects this project):**

3: The project has a comprehensive strategy for strengthening specific capacities of national institutions based on a systematic and detailed capacity assessment that has been completed. This strategy includes an approach to regularly monitor national capacities using clear indicators and rigorous methods of data collection, and adjust the strategy to strengthen national capacities accordingly.

*2.5: A capacity assessment has been completed. The project document has identified activities that will be undertaken to strengthen capacity of national institutions, but these activities are not part of a comprehensive strategy to monitor and strengthen national capacities.*

2: A capacity assessment is planned after the start of the project. There are plans to develop a strategy to strengthen specific capacities of national institutions based on the results of the capacity assessment.

1.5: There is mention in the project document of capacities of national institutions to be strengthened through the project, but no capacity assessments or specific strategy development are planned.

1: Capacity assessments have not been carried out and are not foreseen. There is no strategy for strengthening specific capacities of national institutions.

Not Applicable

#### **Evidence**

Please refer to Project Document: Annex I - Results of the Capacity Assessment of the Project Implementing Partner and HACT Micro Assessment

**25. Is there is a clear strategy embedded in the project specifying how the project will use national systems (i.e., procurement, monitoring, evaluations, etc.,) to the extent possible?**

Yes

No

*Not Applicable*

#### **Evidence**

The Ministry of the Environment and Natural Resources will be the implementation partner, under the National Implementation Modality (NIM), where UNDP is responsible of direct payments.

**26. Is there a clear transition arrangement/ phase-out plan developed with key stakeholders in order to sustain or scale up results (including resource mobilisation strategy)?**

Yes

No

#### **Evidence**

Please refer to Project Document: Section IV – Feasibility (iv. Sustainability and Scaling-Up)

#### **Quality Assurance Summary/PAC Comments**

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**ANNEX H: UNDP Risk Log**

Project risks					
Description	Type	Impact & Probability	Mitigation Measures	Owner	Status
Lack of cooperation among the numerous institutions/entities charged with conservation of the environment and the productive sector	Institutional	I = 2 P = 2	The project will involve the relevant institutional stakeholders in the PPG and during project implementation, including the MARN, INAB, CONAP, MAGA, the municipalities, COMUDES, COCODES, agricultural cooperatives, and producers' associations to ensure their support and participation in the project.	MARN	No change
Lack of compliance in the certification of biodiversity- and environmentally friendly products	Structural	I = 2 P = 2	The project will develop and test protocols to verify and monitor compliance with certification standards on the farms that use the biodiversity- and environmentally friendly production models.	MARN	No change
Economic benefits do not materialize because of market limitations (low prices, limited demand, etc.)	Economic	I = 2 P = 2	The project will mitigate this risk through the promotion of multiple economic incentives, subsidies, and in some cases, direct payments through cofinancing for ecosystem services (production of clean water, erosion control, improved carbon stocks, conservation of biodiversity habitat) and the diversification of agricultural production to include other biodiversity-friendly products.	MARN	No change
Incentive schemes setup by the project may not be sustainable in the long-term	Economic	I = 3 P = 2	The project will mitigate this risk by creating a national carbon market using a CDM methodology following on a successful model implemented in Colombia under a recently completed GEF project. In addition, the project will work closely with INAB (PINPEP and PROBOSQUE) and the FCA (small grants program) to ensure that incentives will be available to local farmers beyond project completion. Also, the PWS pilot projects will continue operating as part of long-term contracts to be established between sellers and buyers. Finally, the project will invest in developing capacities at the national, municipal, and local levels in order to ensure that skills and tool are in place for the long-term sustainability of project results.	MARN	No change
Climate change affects the forest	Environmental	I = 3	Guatemala has developed two climate change scenarios; the first	MARN	No change

ecosystems that are vital for the stability of sustainable production landscapes		P = 1	<p>was developed by the National Institute of Seismology, Volcanology, Meteorology and Hydrology, and the second was prepared by the University of Nebraska at Lincoln. Both were developed using the year 2000 as the baseline, and include projections to the year 2050. These projections indicate that the average temperature will continue to increase, with expected increases of between 2.5 degrees Celsius (°C) and 4.1°C. With respect to total annual precipitation, it is expected that beginning in the 2030s there will be a tendency for reduction, and by the 2050s these reductions will be on the order of 9.5% to 12.4% over the baseline. The region of the Central Volcanic Mountain Range is among the regions in the country where these changes will be smaller.</p> <p>Projected climate changes suggest a shift in life zones that will affect their associated ecosystems and biodiversity. By 2050, climate conditions are expected to favor the expansion of dry and very dry forests, which currently cover about 20% of the country; by the 2050s and 2080s, the expansion of these conditions could rise to 40% and 65%, respectively. In contrast, there will be a decrease in humid, very humid and rainy forests, which currently cover almost 80% of the country, including the Central Volcanic Mountain Range. It is projected that by the 2050s and 2080s this coverage would be reduced to 60% and less than 35%, respectively. Shifts could also be observed along altitudinal gradients affecting the associations of pine and oaks forests in the region, including those within PAs.</p> <p>The changes mentioned above may result in less water availability for local communities who depend on these forests for a stable supply of water for human consumption and for crop irrigation. Small farmers and producers may be among the most highly impacted by these changes. For example, assessments</p>		
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			<p>conducted in the driest regions of the country indicate that some farmers may lose up to 55% of their production of basic grains in times of drought. Although the small farmers and producers in the prioritized landscape of the project may not be affected as severely, they may face a more erratic and unpredictable precipitation distribution, with drought episodes and high precipitation in the same year.</p> <p>The integration between biodiversity conservation, sustainable forest SFM, and SLM will reduce the vulnerability of ecosystems, biodiversity, and local communities to climate change. The implementation of complementary activities in the prioritized areas will promote connectivity between core protected PAs within sustainably managed production landscapes, thereby improving the resilience of biodiversity to climate change through enhanced habitats that provide more stable resources to species, increase their mobility, and provide refuge against temperature changes and shifts in forest distribution. The implementation of SFM and SLM will result in more stable and resilient forests (for example, diversity of age groups and improved resilience for regeneration), which will result in the protection of soils and regulation of water cycles. This in turn will create more stable micro-climatic conditions and a steadier flow of ecosystem services, benefiting the associated forest species and leading to reduced vulnerability of small farmers and producers and urban populations to climate variability.</p>		
Adverse impacts on gender equality and limited access to opportunities and benefits by women	Socioeconomic	I = 3 P = 1	The project will include the active participation of women and will address their different needs related to the conservation of natural resources and sustainable production in a prioritized landscape of the Central Volcanic Mountain Range. In addition, the project will promote the equitable distribution of project benefits for	MARN	No change

			women as for men (e.g., access to markets, incentives, capacity building, and technical assistance). The project design includes a Gender Mainstreaming Plan in which activities and specific indicators are outlined to ensure gender participation and gender equality.		
Project activities will be implemented within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas	Environmental	I = 1 P = 5	The project will specifically work in protect areas and other areas of important ecological value. Activities will include: a) development of participatory management plans for protected areas; b) conservation and management program for three priority areas for the protection of amphibians; c) improved connectivity of biological corridors; and d) conservation of water resources, among other activities.	MARN	No change
The Project involves reforestation	Environmental	I = 1 P = 5	The project will support farmers implementing reforestation actions with native species as part of sustainable forest management incentives. In addition, the project will support environmental/forestry municipal offices in reforestation efforts with native species within their jurisdictions.	MARN	No change
Indigenous peoples are present in the Project area	Socioeconomic	I = 1 P = 5	38.4% of the population in the prioritized landscape is indigenous, which eight ethnolinguistic groups: 1) Kaqchikel, 2) K'iche', 3) Q'anjob'al, 4) Mam, 5) Tz'utujil, 6) Achi', 7) Ixil, and 8) Poqomam.	MARN	No change

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## ANNEX I: RESULTS OF THE CAPACITY ASSESSMENT OF THE PROJECT IMPLEMENTING PARTNER AND HACT MICRO ASSESSMENT

Pursuant to the UN General Assembly Resolution 56/201 on the triennial policy review of operational activities for development of the United Nations system, UNDP adopted an operational framework for transferring cash to government and non-government Implementing Partners (IP). Its implementation will significantly reduce transaction costs and lessen the burden that the multiplicity of UN procedures and rules creates for its partners.

Financial regulation.27.02 (Definitions) of the UNDP Financial Regulations and Rules (FRR) defines National Implementation Modality (NIM) as: "The overall management of UNDP programme activities in a specific programme country carried out by an eligible national entity of that country." National implementation is used when there is adequate capacity in the national authorities to undertake the functions and activities of the programme or project.

National implementation is considered to be the norm since it is expected to contribute most effectively to:

- Greater national self-reliance by effective use and strengthening of the management capabilities, and technical expertise of national institutions and individuals, through learning by doing;
- Enhanced sustainability of development programmes and projects by increasing national ownership of, and commitment to development activities;
- Reduced workload and integration with national programmes through greater use of appropriate national systems and procedures.

The Agencies will assess the risks associated with transactions to an IP, before initiating cash transfers under the harmonized procedures.

- Micro Assessment: This assesses the risks related to cash transfers to the partner and is done once every programme cycle, or whenever a significant change in the Implementing Partner's organizational management is noticed. Assessments should be done for partners (government or NGO) that receive or are expected to receive cash transfers above an annual amount (usually US\$ 100,000 combined from all Agencies. The micro assessment reviews the Implementing Partner's system of accounting, reporting, auditing, and internal controls.

The Micro Assessments serve two objectives:

- Development objective: The assessments help Agencies and the Government to identify strengths and weaknesses in the PFM system and the financial management practices of individual Implementing Partners, and identify areas for capacity development.
- Financial management objective: The assessments help Agencies identify the most suitable resource *transfer* modality and procedures, and scale of assurance activities to be used with each Implementing Partner.

After assessing the national procurement and financial systems and the capacity of implementing partners, UNDP will adopt a risk management approach and select the most suitable funds transfer modality. In addition, UNDP will define steps to ensure the proper use of the funds provided. This will approach will ensure greater convergence between the assistance provided and the priorities and needs of the country.

### *Micro Assessment: MARN*

Based on the operating guidelines provided above, a micro assessment was performed from December 2014 to January 2015 to evaluate MARN's financial management capacity. The evaluation included: a) review of laws and regulations applicable to, as well as related financial, accounting, and administrative information; b) interviews at IP offices, and verification of information; c) review of documents, processes, and accounting records; d) weighting of results and final assessment of IP capacity using a microassessment questionnaire.

It was concluded in the micro-assessment that MARN has a combined **low risk** level for management processes for fund management, staffing, accounting policies and procedures, internal auditing, external auditing, monitoring, information management, and recruitment and procurement. The complete microassessment is available through the UNDP Country Office.

**STANDARD LETTER OF AGREEMENT BETWEEN UNDP AND THE GOVERNMENT (MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES) FOR THE PROVISION OF SUPPORT SERVICES**

Estimado Sr. Ministro Sydney Samuels,

1. Se hace referencia a las consultas realizadas entre los funcionarios del Gobierno de Guatemala (aquí en adelante referidos como “el Gobierno”) y los oficiales del PNUD respecto a la provisión de servicios de apoyo de la oficina de país del PNUD para los programas y proyectos bajo gestión nacional. El PNUD y el Gobierno acuerdan que la oficina de país del PNUD puede prestar tales servicios de apoyo ante la solicitud del Gobierno a través de la institución designada en el documento de programa o proyecto, tal como se describe a continuación.
2. La oficina de país de PNUD puede proveer servicios de apoyo para asistencia en cuanto a requisitos para elaborar informes y pagos directos. En la prestación de tales servicios de apoyo, la oficina de país del PNUD velará porque se fortalezca la capacidad de la institución designada por el Gobierno para que ésta pueda llevar a cabo tales actividades directamente. Los costos incurridos por la oficina de país del PNUD en la prestación de dichos servicios de apoyo serán recuperados del presupuesto administrativo de la oficina.
3. La oficina de país del PNUD puede ofrecer, a petición de la institución designada, los siguientes servicios de apoyo a las actividades del programa/proyecto:
  - a) Los pagos, desembolsos y otras transacciones financieras
  - b) La contratación de personal, del personal de proyecto, y consultores
  - c) La adquisición de bienes y servicios, y la disposición/venta del equipo
  - d) El embarque, despacho de aduana, registro de vehículos y su acreditación
  - e) Delegación de subvenciones (grants), ventajas colaborativas (partes responsables), modalidad bajo la política denominada “Vinculando Organizaciones de la Sociedad Civil/NGO como partes responsables.
4. La adquisición de bienes y servicios y la contratación del personal del proyecto llevado a cabo por la oficina de país del PNUD serán conformes con las regulaciones, reglas, políticas y procedimientos del PNUD. Los servicios de apoyo que se describen en el párrafo 3 se deben detallar en un anexo en el documento de proyecto, en la forma prevista en el presente Apéndice. Si los requerimientos para los servicios de apoyo de la oficina de país cambian durante la vigencia de un programa o proyecto, el anexo del documento de proyecto debe ser revisado bajo el mutuo acuerdo entre el representante residente del PNUD y la institución designada.
5. Serán de aplicación las disposiciones pertinentes del “Acuerdo Básico Modelo de Asistencia entre el Gobierno de Guatemala y el Programa de las Naciones Unidas para el Desarrollo en Guatemala”, firmado en la Ciudad de Guatemala, el 20 de julio de 1998<sup>26</sup> (el “Acuerdo Básico” o “SSA” por sus siglas en inglés<sup>27</sup>), incluidas las disposiciones relativas a la responsabilidad y los privilegios e inmunidades, para la prestación de tales servicios de apoyo. El Gobierno retendrá la responsabilidad general del proyecto gestionado a nivel nacional a través de su institución designada. La responsabilidad de la oficina de país del PNUD para la prestación de servicios de apoyo que se describen en este documento se limita a la prestación de tales servicios como se detallan en el anexo del documento de apoyo documento de proyecto.
6. Cualquier reclamo o disputa que surja de o en relación con la prestación de servicios de apoyo de la oficina de país del PNUD en relación a éste acuerdo se tramitarán de conformidad con las disposiciones pertinentes del “Acuerdo Básico” o “SSA”, referido en el párrafo anterior.

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<sup>26</sup> Aprobado por el Congreso de la República de Guatemala mediante Decreto número 17-2000, del 29 de marzo 2000.

<sup>27</sup> Special Standard Agreement



7. La manera y el método de recuperación de costos por la oficina del PNUD en la prestación de los servicios de apoyo que se describen en el párrafo 3 se especifican en el anexo del documento de proyecto.
8. La oficina de país del PNUD deberá presentar informes de avance respecto a los servicios de apoyo prestados y un informe de los gastos reembolsados en la prestación de dichos servicios, según sea requerido.
9. Cualquier modificación de las presentes disposiciones se efectuará por mutuo acuerdo escrito entre las partes del mismo.
10. Si Usted está de acuerdo con las disposiciones establecidas anteriormente, por favor, firmar y devolver a esta oficina dos copias firmadas de esta carta. Tras su firma, esta carta constituye un acuerdo entre el Gobierno y el PNUD en los términos y condiciones para la prestación de servicios de apoyo de la oficina de país del PNUD para proyectos y programas de gestión nacional.

Atentamente,

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Firmado en nombre del PNUD  
Rebeca Arias  
Coordinadora Residente

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Firmado por el Gobierno  
Sydney Alexander Samuels  
Ministerio de Ambiente y Recursos Naturales de Guatemala

[Fecha]

## ANEXO

### **DESCRIPCION DE SERVICIOS DE APOYO DE LA OFICINA DE PAIS DEL PNUD**

1. Se hace referencia a las consultas entre el Ministerio de Ambiente y Recursos Naturales, la institución designada por el Gobierno de Guatemala, y los funcionarios del PNUD respecto a la provisión de servicios de apoyo de la oficina del PNUD para el proyecto bajo ejecución nacional: **“Promoviendo territorios sostenibles y resilientes en paisajes de la cadena volcánica central en Guatemala”** (PNUD PIMS 9059; ID Atlas – Propuesta 85085, Proyecto XXXXXX), “el Proyecto”.
2. De acuerdo a las provisiones de la carta de acuerdo firmada el xxxx, 2017 y el documento de proyecto, la oficina de país del PNUD proveerá servicios de apoyo al Proyecto según se describe abajo.
3. Los servicios de apoyo que se proporcionarán:

<b>(Servicios de apoyo*</b>	<b>Programación para la prestación de los servicios de apoyo</b>	<b>Costo de la prestación de tales servicios de apoyo para el PNUD</b>	<b>Cantidad y forma de reembolso de PNUD (cuando aplique)</b>
1. Pagos, desembolsos y otras transacciones financieras	Durante la implementación del Proyecto	US\$ 35,0000	Servicios de apoyo
2. Contratación de personal, del personal de proyecto, y consultores	Durante la implementación del Proyecto	US\$ 30,0000	Servicios de apoyo
3. Adquisición de bienes y servicios, y la disposición/venta del equipo	Durante la implementación del Proyecto	US\$ 70,0000	Servicios de apoyo
4. Delegación de subvenciones (grants), ventajas colaborativas (partes responsables), modalidad bajo la política denominada Vinculando Organizaciones de la Sociedad Civil/NGO como partes responsables.	Durante la implementación del Proyecto	US\$ 40,0000	Por Medio de GL al presupuesto de la Oficina

\* Los servicios de apoyo directo del PNUD son definidos anualmente, y los costos directos de los servicios anuales son cargados al final de cada año en base a la Lista Universal de Precios (UPL, por sus siglas en inglés<sup>28</sup>) o el costo actual del servicio correspondiente.

#### 4. Descripción de las partes involucradas:

Como se indica en el Reglamento Financiero 17.01 de los Estatutos y Reglamentos Financieros del PNUD, un asociado en la implementación (Ministerio de Ambiente y Recursos Naturales) podrá celebrar acuerdos con otras organizaciones, conocidas como partes responsables, que puedan proporcionar bienes y servicios al proyecto, llevar a cabo las actividades del proyecto y producir productos del proyecto.

Los asociados en la implementación (Ministerio de Ambiente y Recursos Naturales) utilizan partes responsables con el fin de aprovechar sus conocimientos especializados, para mitigar riesgo y aliviar cargas administrativas.

La oficina de país actuará como parte responsable en la prestación de servicios de apoyo al Ministerio de Ambiente y Recursos Naturales, como asociado en la implementación nacional. Estos servicios se han descrito en la sección anterior

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<sup>28</sup> Universal Price List

según las regulaciones, reglas, políticas y procedimientos del PNUD y se aplicarán en la prestación de los servicios de apoyo del PNUD.

Agreement for the recategorization of eight (8) protected areas.



Guatemala, 17 de abril de 2017  
Oficio DDSIGAP 198-2017/JFCE/srpv

**Ingeniero**

**Ernesto Moscoso**

Coordinador Comité Técnico Asesor (CTA)

Plan de Inicio del Proyecto Volcanes

Ministerio de Ambiente y Recursos Naturales –MARN–

Estimado Ingeniero Moscoso:

Esperando que sus actividades se desarrollen con éxito, me permito hacer de su conocimiento que la Dirección de Desarrollo del SIGAP –DDSIGAP– de la Secretaría Ejecutiva del Consejo Nacional de Áreas Protegidas (CONAP) en seguimiento al Taller del Marco Lógico realizado el pasado 23 y 24 de marzo confirma que dentro del componente 2 del proyecto volcanes, las áreas que componen el producto denominado “Ocho (8) propuestas para la recategorización de áreas protegidas elaborados en forma participativa (2 Parques Nacionales y 6 Zonas de Veda Definitiva [ZVD]), incluyen estudios técnicos de viabilidad considerando las categorías existentes del Sistema Guatemalteco de Áreas Protegidas contribuyendo a la conservación y sostenibilidad de las áreas”, son las siguientes:

No.	Nombre de las Áreas	Región Administrativa	Hectáreas
1	Parque Nacional Cerro El Baúl	Altiplano Occidental	240.00
2	Parque Nacional Iximché	Altiplano Central	50.21
3	Zona de Veda Definitiva Volcán de Fuego	Metropolitana-Costa Sur- Altiplano Central	6,698.44
4	Zona de Veda Definitiva Volcán Acatenango	Metropolitana-Altiplano Central	5,265.92
5	Zona de Veda Definitiva Volcán Santo Tomás	Altiplano Occidental-Costa Sur	5,702.13
6	Zona de Veda Definitiva Volcán de Agua	Metropolitana-Costa Sur	5,436.93
7	Zona de Veda Definitiva Volcán Zunil	Altiplano Occidental	5,201.31
8	Zona de Veda Definitiva Volcán de Pacaya	Metropolitana	1,172.1

Valga la presente para reiterar nuestro apoyo en la implementación del referido Proyecto.

Agradeciendo de antemano su colaboración, me suscribo,


Cordialmente,

  
**Julio Fernando Castro**  
Director de Desarrollo del SIGAP –DDSIGAP–  
Consejo Nacional de Áreas Protegidas –CONAP–

C.c. Archivo



Vo.Bo.

  
**Ing. Elder Manrique Figueroa Rodríguez**  
Secretaría Ejecutiva  
Consejo Nacional de Áreas Protegidas  
–CONAP–



5ta. Avenida 6-06 zona 1, Edificio IPM. PBX: (502) 2422-6700 / FAX: (502) 2253-4141 / www.conap.gob.gt



Guatemala, 06 de Junio de 2017  
Oficio. DDSIGAP 316/2017/JFCE/srpv

**Ingeniero**

**Ernesto Moscoso**

Coordinador Comité Técnico Asesor (CTA)

Plan de Inicio del Proyecto Volcanes

Ministerio de Ambiente y Recursos Naturales –MARN-

Respetable Ingeniero Moscoso:

Por este medio nos es grato saludarle, esperando que sus actividades se desarrollen con éxito.

En seguimiento al tema de **Priorización de Parques Regionales Municipales**, del proyecto “Promoviendo territorios sostenibles y resilientes en paisajes de la cadena volcánica central en Guatemala”, la Dirección de Desarrollo del SIGAP –DDSIGAP-, del Consejo Nacional de Áreas Protegidas -CONAP-; luego del taller de elaboración del Marco Lógico de dicho proyecto en las fechas 23 y 24 de marzo recién pasado, concluimos que los 5 Parques Regionales Municipales Priorizados por el Proyecto, son los siguientes:

**Cuadro 1.** PRM priorizados por la DDSIGAP, a partir de la propuesta del proyecto.



Código	Nombre	Municipio	Departamento	Extensión (ha)
SIGAP-091	Parque Regional Municipal Zunil	Zunil	Quetzaltenango	4,325.00
SIGAP-104	Astillero Municipal de Tecpán	Tecpán Guatemala	Chimaltenango	1,706.25
SIGAP-099	Quetzaltenango-Saqbe	Quetzaltenango	Quetzaltenango	5,615.43
SIGAP-285	Astillero Municipal San Cristóbal Cucho	San Cristóbal Cucho	San Marcos	218.50
SIGAP-287	Astillero Municipal Esquipulas Palo Gordo	Esquipulas Palo Gordo	San Marcos	1,797.39
Extensión global de los 5 Parques Regionales Municipales				13,662.57

Sin otro particular, nos suscribimos

Atentamente,

  
**Julio Fernando Castro**  
Director de Desarrollo del SIGAP –DDSIGAP-  
Consejo Nacional de Áreas Protegidas –CONAP-  
C.c. archivo  
5a. Av. 5-06 Zona 1 Edificio IPM 5to, 6to y 7mo nivel. PBX. (502) 2422 - 6700 / Fax. (502) 2253 - 4141

Vo. Bo.

  
Ing. Eider Manrique Figueroa Rodríguez  
Secretario Ejecutivo  
Consejo Nacional de Áreas Protegidas –CONAP-  




www.conap.gob.gt



## Municipalidad de Tecpán Guatemala Departamento de Chimaltenango

1a. Calle 1-13, Zona 4  
Tels.: 7840-4431 \* 7840-4432 / Telefax: 7840-3030

Ciudad de Guatemala, 14 de Marzo de 2017

Señores  
Consejo Nacional de Áreas Protegidas  
CONAP  
Presentes


Estimados representantes del CONAP:

Reciban un cordial y atento saludo, deseándoles éxitos en todas sus actividades. El motivo de la presente es para manifestar el interés de la Municipalidad de Tecpán Guatemala, ubicado en el Departamento de Chimaltenango, por participar del proyecto "Promoviendo territorios sostenibles y resilientes en paisajes de la cadena volcánica central en Guatemala". Estamos en plena disposición de facilitar nuestra participación para poder fortalecer nuestra gestión municipal en nuestra área protegida denominada Parque Regional Astillero Municipal. Deseamos que este apoyo sea estrechamente coordinado, participativo e incluyente con la municipalidad y las comunidades involucradas en nuestro Parque Regional Astillero Tecpán.

En este sentido, sirva la presente para reiterar nuestro interés por participar en la implementación del referido proyecto.

Sin otro particular, me suscribo de ustedes.

Atentamente,



Sr. Serapio Ordoñez  
Alcalde Municipal



*Tecpán Quauhtemallan cuna de la cultura Maya Kaqchikel y primera capital de Guatemala*





Ciudad de Guatemala, 17 de enero de 2017

Señores  
Consejo Nacional de Areas Protegidas  
CONAP  
Presentes

Estimados representantes del CONAP:

Reciban un cordial y atento saludo, deseándoles éxitos en todas sus actividades. El motivo de la presente es para manifestar el interés del Municipio de Quetzaltenango, ubicado en el Departamento de Quetzaltenango, por participar del proyecto "Promoviendo territorios sostenibles y resilientes en paisajes de la cadena volcánica central en Guatemala".

Entre los resultados del proyecto, hemos sido informados que se busca disminuir la brecha financiera para cubrir los costos básicos de gestión y las inversiones del Parque Regional Municipal Quetzaltenango, administrado por nuestro municipio, como resultado de nuevos mecanismos de financiación para áreas protegidas.

Así mismo, hemos sido informados que entre los productos del proyecto se busca fortalecer a nuestro Parque Regional por medio de un Plan Maestro elaborado de forma participativa, para fortalecer la gestión y administración local, y la vigilancia y control; así como mediante mecanismos de financiamiento de la gestión del Parque Regional Municipal, incluyendo Pagos por Servicios Ambientales y Turismo Sostenible.

En vista de los beneficios que el proyecto "Promoviendo territorios sostenibles y resilientes en paisajes de la cadena volcánica central en Guatemala" ha priorizado para nuestro Parque Regional Municipal, sirva la presente nota para manifestar nuestro interés por participar del proyecto durante su fase de ejecución.

Sin otro particular, me suscribo de ustedes.

Atentamente,

  
Luis Fernando Grijalva Minera  
Alcalde Municipal de Quetzaltenango





# Municipalidad de Esquipulas Palo Gordo

Departamento de San Marcos, Guatemala C.A.

Tel: (502) 59676564

E-mail: muniepg@hotmail.com, dapmaepg\_27@hotmail.com



Esquipulas Palo Gordo, 16 de febrero de 2017

Señores

Consejo Nacional de Áreas Protegidas

CONAP

Presentes

Estimados representantes del CONAP:

Reciban un cordial y atento saludo, deseándoles éxitos en todas sus actividades. El motivo de la presente es para manifestar el interés de la Municipalidad de Esquipulas Palo Gordo ubicado en el Departamento de San Marcos, por participar del proyecto "Promoviendo territorios sostenibles y resilientes en paisajes de la cadena volcánica central en Guatemala". Estamos en plena disposición de facilitar nuestra participación para poder fortalecer nuestra gestión municipal en nuestra área protegida denominada Parque Regional Municipal Astillero Municipal Esquipulas Palo Gordo. -

En este sentido, sirva la presente para reiterar nuestro interés por participar en la implementación del referido proyecto. -

Sin otro particular, me suscribo de ustedes. -

Atentamente. -

f.

TAE. Juan Carlos Ochoa Arresis  
Alcalde Municipal, Esquipulas Palo Gordo



ADMINISTRACIÓN MUNICIPAL 2016 - 2020

"MI PRIORIDAD ES SEGUIR CON EL DESARROLLO DEL PUEBLO"

D  
A  
P  
M  
A





## MUNICIPALIDAD DE SAN CRISTOBAL CUCHO.

*San Marcos, Guatemala, C.A.*

Web: [www.munisancristobalcucho.gob.gt](http://www.munisancristobalcucho.gob.gt) / [www.municipalidadcucho@gmail.com](mailto:www.municipalidadcucho@gmail.com)

San Cristóbal Cucho, San Marcos 17 de febrero de 2017

Señores  
Consejo Nacional de Áreas Protegidas  
CONAP  
Presentes

Estimados representantes del CONAP:

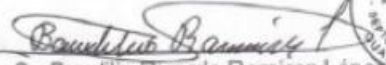
Reciban un cordial y atento saludo, deseándoles éxitos en todas sus actividades. El motivo de la presente es para manifestar el interés del Municipio de San Cristóbal Cucho ubicado en el Departamento de San Marcos, por participar del proyecto *"Promoviendo territorios sostenibles y resilientes en paisajes de la cadena volcánica central en Guatemala"*.

Hemos sido informados que entre los productos del proyecto se busca fortalecer a nuestro Parque Regional Astillero Municipal San Cristóbal Cucho por medio de un Plan Maestro elaborado de forma participativa, para fortalecer la gestión y administración local, y la vigilancia y control; así como mediante mecanismos de financiamiento de la gestión del Parque Regional Municipal, incluyendo Pagos por Servicios Ambientales y Turismo Sostenible.

En vista de los beneficios que el proyecto *"Promoviendo territorios sostenibles y resilientes en paisajes de la cadena volcánica central en Guatemala"* ha priorizado para nuestro Parque Regional Municipal, sirva la presente nota para manifestar nuestro interés por participar del proyecto durante su fase de ejecución.

Sin otro particular, me suscribo de ustedes.

Atentamente,



Sr. Baudilio Ricardo Ramírez López  
Alcalde Municipal





# MUNICIPALIDAD DE ZUNIL

DEPARTAMENTO DE QUETZALTENANGO, GUATEMALA, C.A.

4a. Av. 1-83, Zona 1 Zunil Tel.: 7768-4786, 7768-4790, Telefax: 7768-4791

Correo Electrónico: munizunilxela2014@hotmail.com



Zunil, Quetzaltenango, Marzo 2017.

Señores  
Concejo Nacional de Áreas Protegidas  
CONAP  
Presentes

Reciban un cordial saludo de parte de la municipalidad de Zunil, deseándoles éxitos en sus labores diarias.

El motivo de la presente es para manifestar el interés del municipio de Zunil, Quetzaltenango, por participar en el proyecto "promoviendo territorios sostenibles y resilientes en paisajes de la cadena volcánica central de Guatemala".

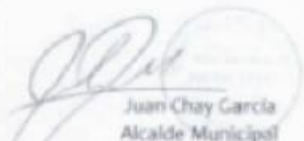
Entre los resultados del proyecto, hemos sido informados que se busca disminuir la brecha financiera para cubrir los costos básicos de gestión y las inversiones del Parque Regional Municipal Zunil, como resultado de nuevos mecanismos de financiación para áreas protegidas.

Así mismo, hemos sido informados que entre los productos del proyecto se busca fortalecer al Parque Regional por medio de un Plan Maestro, para fortalecer la gestión administrativa local, vigilancia y control; así como mediante mecanismos de financiamiento de la gestión del Parque Regional Municipal, incluyendo Pagos de Servicios Ambientales y Turismo Sostenible.

En vista de los beneficios que el Proyecto "promoviendo territorios sostenibles y Resilientes en paisajes de la cadena Volcánica Central de Guatemala" ha priorizado para el Parque Regional Municipal, sirva la presente nota para manifestar nuestro interés por participar en el proyecto durante su fase de ejecución.

Sin otro particular me suscribo de ustedes

Cordialmente

  
Juan Chay García  
Alcalde Municipal  
Municipalidad de Zunil, Quetzgo.



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## ANNEX K: STAKEHOLDER ENGAGEMENT AND COMMUNICATION PLAN

The formulation of the stakeholder participation plan has the following objectives: a) to clearly identify the basic roles and responsibilities of the main participants in this Project; b) to ensure full knowledge of those involved concerning the progress and obstacles in project development and to take advantage of the experience and skills of the participants to enhance project activities; and c) to identify key instances in the project cycle where stakeholder involvement will occur. The ultimate purpose of the stakeholder participation plan will be the long-term sustainability of the project achievements, based on transparency and the effective participation of the key stakeholders.

During the PPG phase, visits were conducted by the project team and MARN staff to the prioritized municipalities to consult and involve the local stakeholders early-on in the project design process and to identify potential partnerships with local groups for effective participatory planning and management. The stakeholders consulted included local authorities of the prioritized municipalities, MRP staff, COCODES, organizations of small farmers and producers and members of local communities, including indigenous groups and women. In addition, multiple government officials in Guatemala (e.g., MARN, MAGA, CONAP, and INAB) and the private sector (e.g., ANACAFE, FEDECOCAGUA, and ICC), and the civil sector (e.g., ARNPG) were consulted.

### Participation mechanisms:

#### *Information dissemination, consultation, and similar activities that took place during the PPG*

During the PPG phase of the project, key stakeholders participated in planning and project design workshops and multiple smaller focus group sessions and meetings. These participatory forums include: a) PPG phase inception workshop; b) project Results Framework Workshop; and c) multiple individual meetings and consultations with key national and local stakeholders held by the project team, UNDP Country Offices in Guatemala, and staff from the MARN (over 200 people participated in these meetings or were consulted about the project).

The Inception Workshop was held on November 4, 2017 in Guatemala City, Guatemala. The objectives of this workshop were to: a) help the PPG project team and other stakeholders to understand and take ownership of the project goals and objectives, b) ensure that the project team and other stakeholders have a clear understanding of what the PPG phase seeks to achieve as well as their own roles in successfully carrying out the PPG activities, c) re-build commitment and momentum among key stakeholders (including potential project co-financers) for the PPG phase, and d) validate the PPG Work Plan.

The Results Framework Workshop was held on March 23-24, 2017 in in Guatemala City, Guatemala. The objectives of this workshop were to: a) define the Results Framework, including the revised project outputs, indicators, baseline information, goals, verification mechanisms, and assumptions; b) preliminary definition of the project's activities for each outcome/output; c) define a preliminary budget for the project, including the co-financing; and d) update the PPG phase Work Plan.

Throughout project development, close contact was maintained with the national and local stakeholders. National institutions and key donor agencies were directly involved in the development of the project. Numerous consultations occurred with multiple stakeholders to discuss the various aspects of project design, and consultations with co-financing institutions were conducted to ensure a complete package of signed cofinancing letters that will contribute to promoting sustainable and resilient landscapes in the Central Volcanic Mountain Range of Guatemala.

The consultation process conducted during the PPG used existing participation and consultation mechanisms (e.g., Boards of Directors and Municipal Councils) in specific areas where the project will implement activities (i.e., MRPs) and with direct beneficiaries (organized farmers' groups). For the prioritization of the MRPs, and after having the official confirmation from the Government of Guatemala (i.e., CONAP) regarding the five areas selected (Annex J), a consultation process was conducted at the local level, which included the Municipal Councils and staff from the environmental offices of the municipalities in which the MRPs are located. This also provided the opportunity to present and discuss the project and its objectives. As a result

of the consultation process, letters of interest were obtained from each Municipal Mayor in which they express their consent to be beneficiaries and co-responsible in fulfilling the project's objectives (Annex J). It is important to mention that the Municipal Councils are composed of democratically elected local representatives, which include indigenous representatives.

In one of the MRPs (Los Altos de San Miguel Totonicapán) initially prioritized by the Government of Guatemala (i.e., CONAP), which is administered communally and represented by a Board of Natural Resources of 48 Cantons, consultations were carried out both with members of the Municipal Council and representatives of the Board of Natural Resources of the 48 Cantons. Because there was no consensus between the municipal authorities and the Board of Directors of Natural Resources of the 48 Cantons, the MRP was not included in the project and was replaced with another MRP (Zunil MRP, department of Quetzaltenango).

In the case of the organized groups of small farmers and producers of agricultural products and NTFPs, consultations were conducted through second-tier organizations (ANACAFE, FEDECOCAGUA, ARNPG, and CDRO) that represent them. In particular, the project was discussed with members of the Boards of Directors and representatives of these organizations to obtain their consent to participate in and benefit from the project. These consultations also identified baseline information regarding capacity development needs and gender aspects.

For those project outputs for which broad processes of consultation, participation, social inclusion, and a gender approach are required, the project used the institutional mechanisms from the central government (offices of social and gender participation) and local governments (Municipal Women's Offices) to consult and design the project's Gender Mainstreaming Plan (Annex M). This plan defines the guidelines for gender mainstreaming and social participation that the project will use during its implementation. A list of the principal persons consulted during project formulation is included in Annex P. More than 200 people participated in this process.

#### *Approach to stakeholder participation*

The project's approach for stakeholder involvement and participation is based on the principles outlined in the following table.

<b>Principle</b>	<b>Stakeholder participation will:</b>
Adding Value	Be an essential means of adding value to the project.
Inclusivity	Include all relevant stakeholders.
Accessibility and Access	Be accessible and promote access to the process.
Transparency	Be based on transparency and fair access to information.
Fairness	Ensure that all stakeholders are treated in a fair and unbiased way.
Accountability	Be based on a commitment to accountability by all stakeholders.
Constructive	Seek to manage conflict and promote the public interest.
Redressing	Seek to redress inequity and injustice.
Capacitating	Seek to develop the capacity of all stakeholders.
Needs-Based	Be based on the needs of all stakeholders.
Flexible	Be designed and implemented in a flexible manner.
Rational and Coordinated	Be rationally planned and coordinated, rather than ad hoc.
Excellence	Be subject to ongoing reflection and improvement.

#### *Stakeholder involvement plan*

The project's design incorporates several features to ensure ongoing and effective stakeholder participation in its implementation. The mechanisms to facilitate the involvement and active participation of different stakeholders in project implementation will comprise a number of different elements:

##### a) Project inception workshop to enable stakeholder awareness of the start of project implementation

The project will be launched by a multi-stakeholder workshop. This workshop will provide an opportunity to provide all stakeholders with the most updated information on the project and the project work plan.

It will also establish a basis for further consultation as the project's implementation begins.

b) Formation of Project Steering Committee to ensure representation of stakeholder interests in project

A Project Board will be formed to ensure broad representation of all key interests throughout the project's implementation. The representation and broad terms of reference of the Project Board are further described in Section VII (Governance and Management Arrangements) of this Project Document.

c) Establishment of a Project Coordination Unit (PCU) to oversee stakeholder engagement processes during project

The PCU will take direct operational and administrative responsibility for facilitating stakeholder involvement and ensuring increased local ownership of the project and its results. The PCU will be located in the Headquarters of the MARN in Guatemala City, Guatemala and led by a Project Manager who will ensure stakeholder engagement at the local level, including the participation of community, rural, indigenous, and women's organizations and individuals.

d) Project communications to facilitate ongoing awareness of the project

The PCU will include a Communications Specialist that will ensure that all stakeholders are aware of the project and its management. This will include dialogue and communication at the local and municipal levels to promote the reduction of land-based sources of pollution and the sound management of domestic solid waste, and building awareness about transparency in project management.

Component 3 will allow the gathering and sharing of lessons learned in a systematic and efficient manner, with special emphasis on the development and dissemination of knowledge, facilitating communication for ongoing awareness of the project.

e) Direct involvement of stakeholders in project implementation

The direct involvement of the national, subnational, and local stakeholders in project implementation, including capacity-building is described below.

### STAKEHOLDER PARTICIPATION PLAN

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component	Duration
Government institution, focal point of the project, and responsible for project outputs	Ministry of the Environment and Natural Resources (MARN)	The MARN, as the GEF focal point, will lead the project's Board of Directors, will lead the project implementation, and will be responsible for facilitating the appropriate coordination with project partners at the national, regional, and local levels, mainly with the beneficiary groups of the project.	<ul style="list-style-type: none"> <li>- Will lead the implementation of the project, facilitating communication and coordination with the GEF and UNDP.</li> <li>- Will contribute, through its technical staff, to strengthening and supporting the themes of the project: biodiversity conservation, SLM, SFM, management planning of the protected areas, payment for water services (PWS), and incorporating a gender focus, among others.</li> <li>- Will guide the proposed actions for the project through its technical staff to achieve the objectives and goals proposed for the actions.</li> <li>- Will promote the exchange of lessons learned from other GEF projects implemented by the MARN in Guatemala.</li> <li>- Will oversee that the project is framed within the national policies and norms related to environmental and biodiversity conservation, SLM, and SFM.</li> <li>- Will ensure that the project complies with GEF guidelines, including considerations of gender, in the GEF-6 framework through the participation of the MARN's Gender Unit.</li> <li>- Will promote the inclusion, participation, and consultation of local stakeholders to comply with the project outputs through its Social Participation Division, Indigenous Populations, and Gender Unit, to ensure equal access to the benefits derived from the project.</li> </ul>	<ul style="list-style-type: none"> <li>- Appropriate communication with the GEF and UNDP to guide the project actions.</li> <li>- Project is appropriately implemented and executed in all its aspects: planning, operational, technical, administrative, and related to gender.</li> <li>- Appropriate coordination with the project stakeholders to successfully achieve the project outcomes and outputs.</li> <li>- Gender units of CONAP, MAGA, INAB, SEGEPLAN, and the MARN coordinate to facilitate implementation of the Project Gender Mainstreaming Plan.</li> </ul>	1 and 2	7 years
Government institutions that contribute to the results, but that do not have a direct responsibility	Ministry of Agriculture, Livestock, and Food (MAGA)	The MAGA, through the Vice-Ministry of Rural Economic Development, the Divisions of Productive Reconversion, Agricultural Development, and Strengthening for Productive Organization and Commercialization, through its network of agricultural extension officers, will coordinate, support, and facilitate actions to support groups of farmers to mainstream biodiversity conservation, SFM, and SLM into their production practices.	<ul style="list-style-type: none"> <li>- Will support training activities for groups of agricultural producers for the implementation of best agricultural practices.</li> <li>- Will provide support and guidance in coordination with the MARN, CONAP, INAB, and related local stakeholders for the planning and sustainable land management of six (6) prioritized watersheds.</li> <li>- Will support the MARN, through its Office of Gender Equality and its institutional policy on gender, to foster the equal participation and empowerment of both men and women.</li> <li>- Will support, through the National Rural Extension System (SNER), households that participate in the energy-efficient stoves program by providing technical assistance and follow-up.</li> </ul>	<ul style="list-style-type: none"> <li>- Guidance provided to the PCU for the development of participatory SLM plans for the middle and upper sections of six (6) watersheds.</li> <li>- Farmers trained in best agricultural practices.</li> <li>- MAGA technical staff with increased knowledge and skills in SLM, SFM, and biodiversity conservation.</li> <li>- Energy-efficient stoves program implemented.</li> </ul>	1 and 2	7 years
	Presidential Secretariat for Planning and	SEGEPLAN is responsible for the design and formulation of public policies for the Government of Guatemala, as well as the monitoring	<ul style="list-style-type: none"> <li>- Will perform oversight to ensure the project is implemented in line with national land use and development plans.</li> </ul>	<ul style="list-style-type: none"> <li>- Participatory SLM plans in line with public policies related to the environment (SFM, SLM, and biodiversity conservation), indigenous peoples, and gender equality.</li> </ul>	1	7 years

	Programs (SEGEPLAN)	and evaluation (M&E) of these policies.	<ul style="list-style-type: none"> <li>- Will serve as the link with the Municipal Development Council System to facilitate municipal development planning, the categorization and recategorization of protected areas (PAs), and the development of participatory SLM plans for the middle and upper sections of the six (6) prioritized watersheds.</li> <li>- Will promote the participation of indigenous peoples' and women's organizations in the project.</li> <li>- Will provide guidance on project M&amp;E.</li> </ul>	<ul style="list-style-type: none"> <li>- Prioritized municipalities (31) supported in the incorporation of SFM, SLM, and conservation of biodiversity objectives in the municipal development planning process.</li> </ul>		
	National Council for Protected Areas (CONAP)	<p>The CONAP is the focal point of the Convention on Biological Diversity (CBD) and is the administrator for managing the PAs. The agency will facilitate coordination between the local stakeholders where the PAs are located, such as the municipalities, owners of private natural reserves, and civil society organizations (CSOs). The CONAP will play a central role in project implementation, facilitating and guiding activities related to SFM, SLM, and forest and biodiversity conservation.</p>	<ul style="list-style-type: none"> <li>- Will facilitate and guide actions related to PAs to consolidate the connectivity of the Central Volcanic Mountain Range.</li> <li>- Through its Gender Office, will support the mainstreaming of gender into the management of the PAs prioritized by the project.</li> <li>- Will support the coordination, facilitation, implementation, and execution of the project activities within the five (5) MRPs, guiding the planning processes (Master Plans), studies, and biodiversity monitoring, including amphibian species that are in danger of extinction.</li> <li>- Will coordinate the participatory and inclusive process to recategorize the eight (8) PAs that are prioritized for this action.</li> <li>- Will support training staff from the municipalities and COCODES in management of the five (5) MRPs.</li> <li>- Will coordinate with other institutions, such as INAB (in forestry and PWS issues), the ARNPG, nongovernmental organizations (NGOs) and municipalities, and DMMs to strengthen biodiversity conservation within the PAs and biological corridors.</li> <li>- In conjunction with the INAB, will support male and female small farmers, indigenous, and non-indigenous, who are located within and around the PAs, to access forestry incentives (PINPEP and PROBOSQUES) and in the implementation of forest production management plans.</li> <li>- Will support the INAB and the municipalities of Concepción Chiquirichapa (Quetzaltenango) and Esquipulas Palo Gordo (San Marcos) in implementing PWSs, including M&amp;E indicators.</li> <li>- Will accompany and oversee the field activities for implementing the voluntary conservation agreements.</li> </ul>	<ul style="list-style-type: none"> <li>- Connectivity is strengthened for biodiversity in the biological corridors between PAs within the Central Volcanic Mountain Range through participatory and inclusive actions with women and indigenous peoples.</li> <li>- Actions developed in five (5) MRPs<sup>29</sup> around planning (master plans) and inclusion that facilitate their effective management.</li> <li>- Adequate coordination for the consultation and participation process to recategorize the eight (8) PAs.</li> <li>- Technical staff of the CONAP, the municipalities, and COCODES with improved capacities related to biodiversity conservation, SLM, SFM, PAs management, and gender equality and social inclusion.</li> <li>- Adequate coordination and communication with national, regional, and local stakeholders to achieve the project results.</li> </ul>	1 and 2	7 years
	National Forestry Institute (INAB)	<p>The INAB is the entity charged with the execution and promotion of forest policy in Guatemala. The agency will facilitate contact and coordination and will provide</p>	<ul style="list-style-type: none"> <li>- Will support and facilitate all actions implemented by the project related to SFM, including reforestation, restoration, and agroforestry, that contribute to the conservation and ecosystem connectivity of biodiversity.</li> </ul>	<ul style="list-style-type: none"> <li>- 4,500 ha of areas of connectivity consolidated through the PROBOSQUES and PINPEP forestry incentives programs.</li> </ul>	1 and 2	7 years

<sup>29</sup> Zunil MRP, Quetzaltenango-Saqbé MRP, San Cristóbal Cucho MRP, Esquipulas Palo Gordo MRP, and Tecpán MRP.

		<p>technical guidelines for the project actions that are aligned with forest policy, their institutional program, and will harmonize the ongoing initiatives related to SFM and SLM.</p>	<ul style="list-style-type: none"> <li>- Through the Municipal and Communal Forestry Promotion Project and regional and sub-regional offices, will support access to the PROBOSQUES and PINPEP forestry incentives programs equally for men and women, indigenous and non-indigenous.</li> <li>- Will provide support for the implementation of PWS schemes in the municipalities of Concepción Chiquirichapa and Esquipulas Palo Gordo, including designing M&amp;E indicators and lessons learned that result from implementation.</li> <li>- Will support the process to evaluate the status of the Municipal Forestry Offices (MFOs) or equivalent offices, as well as in the definition of a plan to strengthen them.</li> <li>- Will support with experience in establishing forest plantations to be used for fuelwood and energy-efficient wood-burning stoves, through close coordination with the MFOs or equivalent offices (UGAMs, etc.) and the DMM, to promote the participation of women and indigenous groups in the initiative.</li> <li>- Will coordinate, support, and facilitate actions to implement 31 forest nurseries, whether they are municipal, private, or communal.</li> <li>- Jointly with CONAP and the MARN, and in coordination with the project, will identify the strategic buffer zones around the PAs of the Central Volcanic Mountain Range for implementing forestry incentives through PROBOSQUES and PINPEP.</li> <li>- Will facilitate compliance with guidelines for SFM, SLM, biodiversity conservation, and PES stipulated in the Gender Mainstreaming Plan.</li> <li>- Will promote the full participation of indigenous communities in the consultation process and in the identification of male and female beneficiaries.</li> </ul>	<ul style="list-style-type: none"> <li>- Interinstitutional and private sector coordination strengthened at the local and regional levels to achieve strengthened SFM.</li> <li>- 31 municipal, communal, or private forest reserves established with plant production for implementing landscape management tools (LMT).</li> <li>- Two (2) PWS initiatives established and operating.</li> </ul>		
	National Institute of Seismology, Volcanology, Meteorology, and Hydrology (INSIVUMEH)	<p>INSIVUMEH is the institution that studies and monitors events related to climate, geophysics, and hydrology, and their associated risks. The institution will provide information related to climate and volcanic conditions of the project area, which will be used to implement mitigation measures.</p>	<ul style="list-style-type: none"> <li>- Will provide recommendations to the government and the project team in the eventual case of a natural disaster and the effects of climate change and their implications for the project prioritized area.</li> <li>- Will inform the population residing in the region of the project about the possibility of natural events that cause catastrophes, as well as the effects of climate change, to reduce the impact on the population and their ways of life.</li> </ul>	<ul style="list-style-type: none"> <li>- Mitigation measures implemented in the agricultural and forestry production areas, contributing to reducing vulnerability.</li> <li>- Improved resiliency of ecosystems and biodiversity to climate variability.</li> </ul>	1 and 2	7 years
Institutions supporting local governments	Municipalities	<p>The municipalities will facilitate coordination of the project actions at the local level, mainly among the municipalities and their MRPs, as well as other PAs within their jurisdictions.</p>	<ul style="list-style-type: none"> <li>- Will coordinate and facilitate the activities the project implements in their jurisdictions.</li> <li>- Will encourage the participation of the DMM in the project's processes and actions to ensure the participation of indigenous and non-indigenous women.</li> </ul>	<ul style="list-style-type: none"> <li>- Appropriate coordination at the municipal level facilitates training of staff from the Municipal Councils, technical staff from the municipality, COCODES, COMUDES, and Water User Commissions/Committees.</li> </ul>	1 and 2	7 years



		<p>They will support communication with the COCODES and COMUDES in the consultation processes that will be necessary for the SLM, SFM, BD, and PWS themes. The municipalities will benefit from having improved capacity for monitoring and evaluation of SLM, SFM, biodiversity conservation, and gender considerations through their responsible offices (OFM, UGAMS, DAPMAs, and DMM).</p>	<ul style="list-style-type: none"> <li>- Will coordinate the strengthening of the management of 5 municipal PAs with the project and CONAP.</li> <li>- Will contribute, jointly with CONAP, to establishing the Management and Conservation Program in three prioritized areas to protect amphibian species that are in danger of extinction.</li> <li>- Will participate in the training of technical staff, municipal authorities, the general public (members of the Municipal Councils, COCODES, COMUDES, and Water User Commissions/Committees) in the themes of SLM, SFM, biodiversity conservation, protected areas, PWS, etc.</li> <li>- Will coordinate with the project and the MARN the development of 31 municipal development plans (MDPs) that incorporate and adopt strategic lines and actions related to biodiversity conservation, SLM, SFM, and gender focus.</li> <li>- Will support the coordination and establishment and management of reforestation strategies through municipal nurseries.</li> <li>- Will coordinate, with the project, support for the development of two PWS projects, including the approval of the framework for municipal ordinances that facilitate the implementation of the PWS scheme in the MRPs.</li> <li>- Will promote the active participation of the Municipal Divisions of Women and women's groups, and the Municipal Development Councils' Commissions on Women in the training and consultation processes for SLM, SFM, biodiversity conservation, PWS, best production practices, etc.</li> <li>- Will promote and facilitate, in coordination with the MARN, the participation, consultation, and inclusion of indigenous populations (when applicable) in municipal planning processes.</li> <li>- Will participate in and coordinate actions around the implementation of the municipal monitoring platform articulated with the national monitoring systems.</li> </ul>	<ul style="list-style-type: none"> <li>- Municipal nurseries implemented to consolidate and strengthen the connectivity of the central volcanic mountain chain.</li> <li>- Two PWS projects established and operating in two MRPs (e.g., Concepción Chiquirichapa, Quetzaltenango, and Esquipulas Palo Gordo, San Marcos)</li> <li>- 31 MDPs developed that contain actions for biodiversity conservation, SLM, and SFM, articulating women's participation with support from the DMM and/or OFM, to create equal opportunities for men and women.</li> <li>- Technical staff of the municipalities and COCODES with greater capacities related to biodiversity conservation, SLM, SFM, gender equality, and social inclusion.</li> <li>- Municipal monitoring platform established that is articulated with national monitoring systems that facilitates decision making, designing strategies, and evaluating benefits of SFM, SLM, and biodiversity conservation.</li> </ul>		
	National Association of Municipalities ANAM	<p>The municipalities are organized through the ANAM, which develops actions to benefit the municipalities, including defending the municipal budget, reviewing laws, creating proposals, and achieving an adequate and permanent representation in initiatives and fora.</p>	<ul style="list-style-type: none"> <li>- Will facilitate implementation of the project, mainly with those municipalities that are developing actions to strengthen efforts to manage the PAs, forest nurseries (when applicable), energy-efficient stoves projects, PWS projects, and reforestation and municipal planning projects.</li> <li>- Will facilitate support for the project through socialization, participation, and implementation during the 7 years of execution, in coordination with the COMUDES and COCODES as instruments of governance.</li> <li>- Will contribute to disseminating the actions and results of the projects among its associates, the municipalities.</li> </ul>	<ul style="list-style-type: none"> <li>- Project actions executed and implemented with support from the municipalities.</li> <li>- COMUDES and COCODES participate appropriately in the project, as a result of support from ANAM at the western highlands volcanic chain level.</li> <li>- Project actions adequately disseminated at the national level.</li> </ul>	1 and 2	7 years

Civil Society and Private Sector	Guatemala Association of Private Natural Reserves (ARNPG)	<p>The ARNPG has as its objective to contribute towards conservation of natural resources through adequate management under the concept of sustainable development in voluntary individual and community natural reserves.</p>	<ul style="list-style-type: none"> <li>- Will actively participate in activities focused on improving biological connectivity between PAs, private natural reserves, and forest patches of the volcanic chain.</li> <li>- Will support the creation of voluntary conservation agreements.</li> <li>- Will facilitate the exchange of lessons learned, knowledge, studies or biological investigations, and conservation practices and sustainable uses of biodiversity generated in the private reserves or associated farms.</li> <li>- Will contribute with an exchange of experiences to improve the knowledge of those responsible for the reserve and the protection of the PAs.</li> <li>- Will contribute, through its partners, to biodiversity conservation and the reduction of negative impacts on it.</li> <li>- Will facilitate the participation of its members in actions related to certified coffee production, production chains for honey, strengthening of the connectivity between forest patches and PAs, and contributing to biodiversity monitoring.</li> <li>- Will support unaffiliated men and women producers in the creation of a mechanism for the voluntary declaration of reserves and biodiversity protection areas within their farms/lots, in supporting the certification and non-certification processes of best agricultural and forestry practices.</li> </ul>	<ul style="list-style-type: none"> <li>- Private natural reserves strengthened through training in PAs management, biodiversity conservation, SLM, SFM, gender equality and social inclusion, contributing to connectivity of the central volcanic chain biological corridor.</li> <li>- Effective interinstitutional coordination contributes to the conservation of ecosystems and the establishment of biodiversity-friendly production processes.</li> <li>- Voluntary conservation agreements identified, designed, and implemented that contribute to improved management of private natural reserves and consolidation of the connectivity of the central volcanic chain.</li> <li>- Certification and non-certification systems associated with the private natural reserves established and strengthened.</li> </ul>	1 and 2	7 years
	National Coffee Association (ANACAFE)	<p>ANACAFE is a private and autonomous entity whose main objective is strengthening the national economy through the production and exportation of coffee. ANACAFE promotes the production of gourmet, organic, and certified coffees.</p>	<ul style="list-style-type: none"> <li>- Will contribute to improving the biological connectivity of the volcanic mountain chain through best production practices in agroforestry systems associated with coffee.</li> <li>- Will support the creation of voluntary conservation agreements to consolidate the connectivity of the central volcanic chain.</li> <li>- Will support the training program in best agricultural and forestry practices for the conservation of natural resources and biodiversity for small-scale producers of coffee and honey.</li> <li>- Will contribute to the implementation of agroforestry systems associated with coffee and carbon sequestration programs.</li> <li>- Will contribute to strengthen marketing strategies when best agricultural practices and certified coffee plantation are being developed</li> <li>- Will contribute to the project actions directed towards strengthening production chains and certification that contributes to improved yields and greater income for the coffee producers.</li> <li>- Will facilitate the exchange of lessons learned, knowledge about conservation practices and the sustainable use of agroforestry systems created with its partners.</li> </ul>	<ul style="list-style-type: none"> <li>- Coffee producers' groups strengthened through training in biodiversity conservation, SLM, SFM, gender equality, and social inclusion.</li> <li>- Certification for environmentally friendly coffee production and business practices.</li> <li>- Voluntary conservation agreements contribute to the improved management of biodiversity through coffee producers' organizations.</li> </ul>	1 and 2	7 years

	Guatemalan Federation of Coffee Producers' Agricultural Cooperatives (FEDECOCAGUA)	FEDECOCAGUA is a private and autonomous entity whose principal objective is to strengthen the national economy through the production and exportation of coffee. FEDECOCAGUA focuses its efforts on supporting cooperatives for the certification of environmentally friendly and fair-trade coffee.	<ul style="list-style-type: none"> <li>- Will contribute to improving the biological connectivity of the volcanic chain through best production practices in agroforestry systems associated with coffee.</li> <li>- Will support the creation of voluntary conservation agreements to consolidate the connectivity in the central volcanic chain.</li> <li>- Will support the training program in best agricultural and forestry practices for the conservation of natural resources and biodiversity for small-scale men and women coffee producers.</li> <li>- Will contribute to strengthen marketing strategies when best agricultural practices and certified coffee plantation are being developed</li> <li>- Will contribute to the implementation of agroforestry systems associated with coffee and carbon sequestration programs.</li> <li>- Will contribute to the project actions directed towards strengthening production chains and certification that contribute to improved yields and greater income for the coffee producers.</li> <li>- Will facilitate the exchange of lessons learned, knowledge about conservation practices and the sustainable use of agroforestry systems under certification schemes.</li> </ul>	<ul style="list-style-type: none"> <li>- Coffee producers' groups strengthened through training in the management of PAs, biodiversity conservation, SLM, agroforestry systems, SFM, gender equality, and social inclusion contribute to the connectivity of the biological corridor of the central volcanic chain.</li> <li>- Establishment of actions for certification of coffee production, organic coffee, and fair business practices contribute to an agricultural activity that reduces contamination of the ecosystems.</li> <li>- Voluntary conservation agreements improve biodiversity management through coffee producers' organizations.</li> </ul>	1 and 2	7 years
	Climate Change Institute (ICC)	Created by the Guatemalan Sugar Producers' Association (AZASGUA) in 2010 with the objective of developing and promoting actions that contribute to the reduction of vulnerability, mitigation, and adaptation to climate changes in communities, production systems, and infrastructure of the region, ICC will provide climate information, technical assistance, and coordination for the project themes.	<ul style="list-style-type: none"> <li>- Will provide information about their experiences and the actions developed for environmental management, in support of the implementation of the project's actions around SLM, SFM, and biodiversity conservation.</li> <li>- Will provide climate and hydrological information at the regional and local levels, to allow the adaptation of the project's actions in accordance with the needs of the farmers' and forest producers' groups, local communities, indigenous peoples, women, and vulnerable groups.</li> <li>- Will facilitate synergies with local stakeholders (municipalities, associations, NGOs) to expand capacities related to reforestation and restoration of degraded forested areas within the central volcanic chain.</li> </ul>	<ul style="list-style-type: none"> <li>- Climate information guides the project activities around biodiversity conservation, SLM, and SFM.</li> <li>- MDPs and Watershed Plans (6) consider updated regional and local information that helps in decision making.</li> </ul>	1 and 2	7 years
	Urban and Rural Development Community Councils (COCODES) and Water Users' Committees	<p>The COCODES will represent the community interests during project implementation.</p> <p>The Water Users' Committees are organizations recognized for overseeing the integrated management of water sources in their communities.</p>	<ul style="list-style-type: none"> <li>- Will be, jointly with the COMUDES and COCODES, the instruments of governance that will allow the expansive, adequate, and appropriate participation and inclusion of men and women, indigenous populations, and local communities in the consultation and planning processes for project implementation.</li> <li>- Will participate in the project activities for developing the MDPs, recategorization of the PAs, creation of the MRPs master plans, biodiversity monitoring, as well as other interventions associated with biodiversity conservation, SLM, and SFM.</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate and equitable participation of men and women in decision making by the COCODES and the Water Users' Committees/Commissions in actions related to environmental management in their municipalities and local communities.</li> <li>- Population trained and made aware of the importance of conservation in the PAs, biodiversity, SLM, SFM, gender equality, and social inclusion.</li> </ul>	1 and 2	7 years

			<ul style="list-style-type: none"> <li>- Will actively participate in defining agreements and commitments for implementing and M&amp;E of the PWS.</li> <li>- Will be the beneficiaries of training in biodiversity conservation, SLM, SFM, gender equality and social inclusion.</li> <li>- Will participate in reforestation campaigns in coordination with the municipal environmental offices and the DMM, wherein the active participation of women, local communities, and indigenous groups will be an important part of the appropriation and empowerment of this process.</li> </ul>	<ul style="list-style-type: none"> <li>- The population (men, women, youth) participates in reforestation and environmental protection campaigns.</li> </ul>		
	Local communities and indigenous populations	<p>The principal indigenous populations of the central volcanic chain are composed of the ethnolinguistic groups Kaqchikel, K'iche', Tz'utujil, and Mam, among others. Local communities and these indigenous groups within the central volcanic chain will be consulted and involved in the processes for biodiversity conservation, SLM, and SFM. They will add their knowledge and traditional practices associated with environmental management to the project.</p>	<ul style="list-style-type: none"> <li>- Will contribute to the implementation of the project to facilitate strategic alliances within the central volcanic chain, promoting a participatory and inclusive process in the interventions in the field related to SLM, SFM, biodiversity conservation, PWS, best production practices, PAs planning and management, watershed development plans, among others.</li> <li>- Will coordinate with CONAP's Indigenous Groups Division and the MARN's Social Participation and Indigenous Groups Division in actions related to the project outputs.</li> <li>- Will support the identification and selection of the Coordinating Entity of the carbon sequestration programs to be established, as well as the determination of rules of participation, social inclusion, and use of traditional knowledge.</li> <li>- Will promote processes for organizing their men and women producers, so that the conditions can be created for jointly managing actions to improve capacities, equal access to incentives, etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Local communities and indigenous groups have been consulted, informed, trained, and are contributing to the project in the implementation of actions related to SLM, SFM, and biodiversity conservation.</li> <li>- Adequate participation and inclusion for the formation and consolidation of carbon sequestration and PWS projects, voluntary conservation agreements, energy-efficient stoves program, and best agricultural and forestry practices, among others.</li> </ul>	1 and 2	7 years
	Women's Organizations	<p>These are key stakeholders who will participate in the project and whose opinions and needs will be considered in the processes of biodiversity conservation, SLM, and SFM of the central volcanic chain.</p>	<ul style="list-style-type: none"> <li>- Will actively participate in decision-making opportunities and activities related to biodiversity conservation, SLM, and SFM of the project.</li> <li>- Will provide support in the participatory processes for consultation and the calls for opportunities to create capacities that will be implemented by the project.</li> <li>- Will facilitate, jointly with the project and the Gender Units of the INAB, CONAP, MAGA, and MARN, the incorporation of gender focus and social inclusion into the project actions and the empowerment processes for women derived from the trainings for the beneficiaries.</li> <li>- Will participate in the implementation of the Project Gender Mainstreaming Plan (Annex M) to encourage gender equality in the project and women's participation.</li> <li>- Will coordinate actions with the Interinstitutional Roundtable on Gender and the Environment, led by the MARN, to facilitate the implementation of the Project Gender Mainstreaming Plan.</li> </ul>	<ul style="list-style-type: none"> <li>- Active participation of women's organizations in the interventions associated with SLM, SFM, biodiversity conservation, PWS, best production practices, PAs planning and management, and MDPs.</li> <li>- Appropriate empowerment of women with respect to SLM, SFM, and biodiversity conservation encourages their participation in leadership positions and opportunities for decision making.</li> </ul>	1 and 2	7 years

	Farmers' Cooperatives, Associations, and Groups	Will participate in supporting the implementation of processes for biodiversity conservation, SLM, and SFM within the central volcanic chain, especially in the PAs' buffer zones and prioritized sites for connectivity.	<ul style="list-style-type: none"> <li>- Will support and strengthen those agricultural practices with little impact on the environment and that promote the conservation of natural resources and biodiversity, facilitating the consolidation and strengthening of the landscape management tools for biological connectivity within the prioritized area of the project.</li> <li>- Will implement project actions that are directed towards strengthening production chains and certification of production processes that enable greater yield and increased income for the farmers and their families.</li> <li>- Will facilitate the exchange of lessons learned, knowledge about conservation practices, and the sustainable use of agroforestry and farming systems, which will be valuable for complementing and replicating the project's actions in the prioritized area.</li> <li>- Will support the participation and inclusion of women in the decision-making processes, as well as their contributions of knowledge about the adoption and implementation of best production practices within their organizations and production systems.</li> <li>- Will support and facilitate the participation of small-scale producers in the carbon sequestration program.</li> </ul>	<ul style="list-style-type: none"> <li>- Best production practices incorporated into the production systems for vegetable gardens, coffee, honey, pacaína, and others contribute to biodiversity conservation, SLM, SFM, gender equality, and social inclusion.</li> <li>- Certifications established for coffee production and other environmentally friendly crops which increase yields and income.</li> <li>- Increased awareness by organized groups of farmers about the importance of incorporating SLM, SFM, and biodiversity conservation into production processes to strengthen connectivity of the central volcanic chain.</li> <li>- Voluntary conservation agreements identified, designed, and implemented for improved land management through sustainable production systems.</li> </ul>	1 and 2	7 years
Institutions of international cooperation that are strategic partners of project	UNDP	Implementing agency of the GEF that will provide guidance, institutional support, and technical and administrative assistance, as well as theoretical knowledge and practices at the national level for the effective execution of the project.	<ul style="list-style-type: none"> <li>- Will facilitate communication, relationships, and coordination between the GEF and the MARN for the adequate implementation of the project.</li> <li>- Will oversee compliance with the procedures, norms, and other actions necessary for the adequate technical and administrative management of the project, considering the gender focus and social inclusion, in accordance with the guidelines for the GEF-6 investment cycle.</li> <li>- Will help the project to comply with its objectives, outcomes, outputs, and goals, as well as their progress during the length of the project in accordance with the project schedule.</li> <li>- Will facilitate and support the planning and M&amp;E processes for the project on behalf of the GEF.</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate communication, relationships, and coordination between the GEF and the MARN during project implementation.</li> <li>- Adequate technical and administrative management of the project.</li> <li>- Compliance with the objectives, outcomes, outputs, and goals of the project.</li> <li>- Adequate execution of the planning and M&amp;E process of the project.</li> </ul>	1 and 2	7 years

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**ANNEX L: SUMMARY OF CONSULTANTS AND CONTRACTUAL SERVICES FINANCED BY THE PROJECT FOR THE FIRST TWO YEARS**

Type of Consultant	Position / Titles	\$/Person month	Estimated Person months	Tasks, Deliverables and Qualifications
National Consultant	Marketing Expert	\$5,000/month	12 months (years 1 and 2)	<p><b>Tasks:</b> Conduct national- and international-level market study for coffee, vegetables, honey, and pacaína.</p> <p><b>Key Deliverables:</b> Document with market assessment for each prioritized product</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in marketing or related fields; at least 5 years of experience in marketing of sustainable products and green markets</p>
National Consultant	Marketing Expert	\$5,000/month	12 months (years 1 and 2)	<p><b>Tasks:</b> analyze current marketing strategies for each product considering their potential for certification or non-certification and assess the interest of group of producers of participation in each scheme.</p> <p><b>Key Deliverables:</b> Document with market strategy for each prioritized product; stakeholder analysis</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in marketing or related fields; at least 5 years of experience in marketing of sustainable products and green markets</p>
National Consultant	Certification Expert	\$5,556/month	18 months (years 1 and 2)	<p><b>Tasks:</b> design the program for promoting the production of certified and non-certified products.</p> <p><b>Key Deliverables:</b> Document with program strategy and databases with potential buyers.</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in environmental economics or related fields; at least 5 years of experience with certified and non-certified products</p>
National Consultant	Economist	\$3,750/month	12 months (years 1 and 2)	<p><b>Tasks:</b> establishing the baseline (production costs and income) of coffee production units that will serve as control group for financial and profitability analysis.</p> <p><b>Key Deliverables:</b> Document with economic baseline analysis for participating coffee farms.</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in environmental economics or related fields; at least 3 years of experience with sustainable production of green commodities (e.g., coffee)</p>
National Consultant	Carbon Expert	\$5,000/month	6 months (year 2)	<p><b>Tasks:</b> development of a carbon compensation program.</p> <p><b>Key Deliverables:</b> Document outlining the carbon compensation program including site selection, beneficiaries, verification mechanism, LMTs to be implemented, and monitoring among, others.</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in forestry or related fields; at least 5 years of experience with mitigation of climate change (carbon sequestration)</p>
National Consultant	Carbon Expert	\$4,750/month	4 months (year 2)	<p><b>Tasks:</b> territorial analysis for 2 carbon sequestration initiatives.</p> <p><b>Key Deliverables:</b> Document with characterization of land use/land cover of the specific areas of intervention and database with information on the owner of each farm where the LMT are implemented (including land tenure and legal aspects), identification number, coordinates of the farm,</p>

				<p>type of LMT implemented, year of implementation, and dimensions and number of trees.</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in forestry or related fields; at least 5 years of experience with mitigation of climate change (carbon sequestration)</p>
National Consultant	SFM Expert	\$3,750/month	4 months (year 1)	<p><b>Tasks:</b> validate jointly with the MAGA, INAB, CONAP, and MARN, the prioritized areas for the implementation of SFM incentives.</p> <p><b>Key Deliverables:</b> Databases and maps of the prioritized production units for the implementation of SFM incentives.</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in forestry or related fields; at least 3 years of experience with SFM</p>
National Consultant	Capacity Development Expert	\$3,750/month	14 months (years 1 and 2)	<p><b>Tasks:</b> validate training needs of small producers and farmers and design a training program to enhanced their knowledge and skills: Certified and non-certified agriculture/non-timber forest production system, SFM incentives, and PWS.</p> <p><b>Key Deliverables:</b> Document of training needs and training program (methodology, beneficiaries, and M&amp;E, etc.)</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in environment education or related fields; at least 3 years of experience working with small producers and farmers</p>
National Consultant	Trainers for training program	\$18,000 (\$1,000/event )	12 months (year 2)	<p><b>Tasks:</b> training program to increase local knowledge and skills: Certified and non-certified agriculture/non-timber forest production system, SFM incentives, and PWS.</p> <p><b>Key Deliverables:</b> Training reports and memoirs</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in areas related to the project (biodiversity conservation, SFM, PES, etc.); at least 3 years of experience working with small producers and farmers</p>
National Consultant	M&E Expert	\$3,500/month	2 months (year 1)	<p><b>Tasks:</b> validate municipal and institutional training needs for monitoring of SFM, SLM, and biodiversity.</p> <p><b>Key Deliverables:</b> Training reports and memoirs</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in areas relevant to the project (e.g., SFM, SLM, and biodiversity conservation); At least three years of working experience in project M&amp;E and database design and management</p>
National Consultant	SFM Expert	\$3,125/month	8 months (year 1)	<p><b>Tasks:</b> assessment of the existing nurseries in the prioritized landscape will be carried out, which will determine the number, location, production capacity, an identification of stakeholders operating them.</p> <p><b>Key Deliverables:</b> Report and databases with characterization of existing nurseries in the prioritized landscape</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in forestry or related fields; at least 3 years of experience with SFM</p>
National Consultant	SFM Expert	\$3,125/month	8 months (year 1)	<p><b>Tasks:</b> identification of stakeholders interested in implementing LMTs, including women, and characterization of the potential participating farms.</p> <p><b>Key Deliverables:</b> Report with stakeholder analysis and databases with characterization of the potential participating farms.</p>

				<b>Expertise &amp; Qualifications:</b> An academic degree in forestry or related fields; at least 3 years of experience with SFM
National Consultant	SFM Expert	\$2,500/month	8 months (year 2)	<b>Tasks:</b> informing stakeholders during field visits and informational meetings about the importance of the LMTs and their contribution to building ecosystem connectivity. <b>Key Deliverables:</b> Report with results of field visits <b>Expertise &amp; Qualifications:</b> An academic degree in forestry or related fields; at least 3 years of experience with SFM
National Consultant	Sustainable Production Expert	\$3,000/month	5 months (year 1)	<b>Tasks:</b> assess and systematize best agricultural and NTFP related production practices in project sites. <b>Key Deliverables:</b> Report and databases with best agricultural and NTFP related production practices <b>Expertise &amp; Qualifications:</b> An academic degree in agricultural sciences or related fields; at least 3 years of experience working with small producers and farmers
National Consultant	Sustainable Production Expert	\$2,500/month	8 months (years 1 and 2)	<b>Tasks:</b> support development of sustainable production plans for cooperatives, associations, and organized groups of small farmers and producers. <b>Key Deliverables:</b> Field reports and drafts of sustainable production <b>Expertise &amp; Qualifications:</b> An academic degree in agricultural sciences or related fields; at least 3 years of experience working with small producers and farmers
National Consultant	Biodiversity Conservation Expert	\$3,125/month	16 months (years 1 and 2)	<b>Tasks:</b> design a management and conservation program to protect amphibian species in three priority areas, including monitoring methodology. <b>Key Deliverables:</b> Report outlining the management and conservation program and monitoring systems <b>Expertise &amp; Qualifications:</b> An academic degree in biodiversity conservation or related fields; at least 3 years of experience in amphibian conservation and monitoring
National Consultant	Environmental Education Expert	\$2,500/month	12 months (years 1 and 2)	<b>Tasks:</b> design a program for strengthening capacities of national and regional officials and field personnel to support the sustainable management and conservation of biodiversity in production landscapes. <b>Key Deliverables:</b> Report outlining the training program (methodology, beneficiaries, and M&E, etc.) <b>Expertise &amp; Qualifications:</b> An academic degree in environment education or related fields; at least 3 years of experience in environment education and biodiversity conservation
National Consultant	Policy Expert (2)	\$2,713/month per expert	10 months (year 2)	<b>Tasks:</b> support development planning for 31 municipalities to incorporate principles for biodiversity conservation, SFM, SLM, sustainable agriculture, and gender, and their implementing measures. <b>Key Deliverables:</b> Draft of municipal plans: municipal development plans, land use plans, and/or institutional strategic plans <b>Expertise &amp; Qualifications:</b> An academic degree in environmental policy or related fields; at least 3 years of experience working in municipal development planning
Contractual Services	Project Coordinator	\$3,045/month	24 months	<b>Tasks:</b> Lead the PCU and will be responsible for the day-to-day management of project activities and the delivery of its



				<p>outputs. Support the Project Board and coordinate the activities of all partners, staff, and consultants as they relate to the implementation of the project.</p> <p><b>Key Deliverables:</b> Prepare detailed work plan and budget; ToR and action plan of the staff and monitoring reports; quarterly reports and financial reports on the consultant's activities, all stakeholders' work, and progress; Prepare yearly PIRs/APRs; Adaptive management of project</p> <p><b>Expertise &amp; Qualifications:</b> A graduate academic degree in areas relevant to the project (e.g., SFM, SLM, climate change mitigation, and biodiversity conservation); Minimum 5 years of experience in environmental project management</p>
Contractual Services	Monitoring and evaluation specialist	\$2,555/month	24 months	<p><b>Tasks:</b> Project M&amp;E</p> <p><b>Key Deliverables:</b> Periodic documents with Project M&amp;E results</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in areas relevant to the project (e.g., SFM, SLM, and biodiversity conservation); At least 3 years of working experience in project M&amp;E including assessing indicators of project impact</p>
Contractual Services	Communications/knowledge management specialist	\$1,750/year	24 months	<p><b>Tasks:</b> Document, systematize, and disseminate lessons learned and project best practices</p> <p><b>Key Deliverables:</b> Periodic documents with lessons learned and project best practices</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in communications or related fields; At least 3 years of working experience in environmental issues</p>
Contractual Services	Gender Expert (part time)	\$650/month	24 months	<p><b>Tasks:</b> Support and monitoring of gender mainstreaming (Gender Mainstreaming Plan)</p> <p><b>Key Deliverables:</b> Periodic documents with gender mainstreaming and assessment of indicators as established in the Gender Mainstreaming Plan</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in social or environmental studies with emphasis in gender issues; At least 3 years of working experience in environmental issues</p>
Contractual Services	Administrator/Finance Assistant	\$1,400/month	24 months	<p><b>Tasks:</b> Responsible for the financial and administrative management of the project activities and assists in the preparation of quarterly and annual work plans and progress reports for review and monitoring by UNDP</p> <p><b>Key Deliverables:</b> Planning, preparation, revisions, and budget execution documents; Contracts of national / local consultants and all project staff, in accordance with the instructions of the UNDP Contract Office; Quarterly and yearly project progress reports concerning financial issues</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in finance, business sciences, or related fields; at least 3 years of working experience in the financial management of development projects</p>
Contractual Services	Project Specialist/Field Coordinators (3)	\$2,100/month per specialist	24 months	<p><b>Tasks:</b> technical support to Component 2 in the field for delivering multiple environment benefits by connecting core protected areas within sustainably managed production landscapes</p> <p><b>Key Deliverables:</b> Field Operational Work Plan for the duration of the project and corresponding Annual Work Plans; Reports outlining coordination and monitoring of</p>

				<p>activities in the field as described in the Operational Work Plan, including lessons learned and best practices.</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in areas relevant to the project (e.g., SFM, SLM, and biodiversity conservation); At least 3 years of working experience in the field.</p>
Contractual Services	Marketing Specialist	\$2,555/month	24 months	<p><b>Tasks:</b> Ensure the technical implementation of the Project's marketing activities for agricultural and NTFP products</p> <p><b>Key Deliverables:</b> Marketing assessment findings; establish long-term partnerships between groups of farmers and buyers</p> <p><b>Expertise &amp; Qualifications:</b> An academic degree in marketing or similar field; at least 5 years of working experience in marketing of sustainable product and/or green commodities (e.g., coffee, NTFP, and vegetables);</p>

## **Gender Analysis**

As in other countries, the situation, condition, and position of women in Guatemala is determined by social, political, and economic relationships and cultural models that reproduce inequalities, inequities, and hierarchies that are products of an historical process that maintains roles assigned socially to men and women, which result in a situation of systematic disadvantage for women (SEGEPLAN, 2010:6)<sup>30</sup>. Per the 2014 Social Institutions and Gender Index (SIGI), Guatemala scored 0.1318, which places the country in a mid-level category for achieving gender equality. Of the variables analyzed in the SIGI, political representation and civic rights are those that most affect the future of women in the country, given that decision making usually is directly linked to men, especially among the Mayan communities<sup>31</sup>.

In Guatemala, there is recognized injustice in the distribution of economic resources and women's access to them, as well as other inequalities women face in the country. Their participation in all spheres of life is limited by these injustices (MAGA, 2014:9)<sup>32</sup>. Generally in Guatemala women have different barriers to participating in environmental project, such as the following: limited access to land, lack of support in organizing, lack of information, language barriers, machismo, violence, and lack of representation in public spheres (including spaces for making decisions that affect their lives). The following are the main barriers that are linked to the project:

- Land barrier: Access to land is key for this project since this barrier is associated with land ownership. At the national level, the percentage of women landowners is only 15%<sup>33</sup>. While individual male producers have the majority of land ownership and leasing, individual female producers possess land only through its usufruct. Various projects require that women demonstrate their ownership of the land to be able to benefit from them. According to statistical data from 2013, 65% of the beneficiaries of the PINFOR program were men and 35% were women. For the PINPEP program, 53% of the beneficiaries were men and 47% were women (INE, 2008).<sup>34</sup>
- Organizational and representational barrier: It is estimated that only 8% of organized women's groups have legal status. As such, access to decision making is one of the main barriers for rural women due to their exclusion from the election and appointing processes of COCODES. In addition, their participation in management is very weak (there are very few women in administrative roles).
  - o Female-headed households are an important statistic that reflects the person who makes decisions in the home, mainly around management of resources. It is important to note that in the departments targeted by the project, the percentage of female-headed households is fewer than 20%. This phenomenon reflects the economic dependence that has been identified as one of the main barriers that women face in the project region.
  - o Women's participation is lower compared with men's participation in the Departmental Development Councils, the Municipal Councils, and the Community Development Councils. The reason for this is that there is a gender gap in terms of decision-making opportunities for women.
- Employment barrier: The reality of female employment is not reflected in the economic activities. For example, in agriculture, 14% of the workers are women; nevertheless, this percentage could in reality be greater as the work of women in this sector is viewed as a complementary activity and many times is not even paid. Although in recent years the salary level of women has improved, there are still salary gaps in all

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<sup>30</sup> SEGEPLAN. 2010. "Igualdad de Género y Empoderamiento de las Mujeres en el Marco del Cumplimiento de los Objetivos del Desarrollo del Milenio." Guatemala.

<sup>31</sup> SIGI. 2014. Guatemala. Disponible en: <http://www.genderindex.org/country/guatemala>. Discriminatory institutions are defined as having formal or informal by-laws, attitudes, and practices that restrict access to women and girls to their rights, justice, and opportunities for empowerment. The variables used in SIGI include quantitative and qualitative data, considering implicit and explicit discrimination by the institutions through information about their by-laws, attitudes, and practices. These variables are represented in all phases of women's lives to demonstrate how discriminatory institutions interrelate and combine in cycles of poverty and powerlessness.

<sup>32</sup> MAGA. 2014. Política Institucional para la Igualdad de Género y Marco Estratégico de Implementación 2014-2023. Guatemala, Guatemala.

<sup>33</sup> INE. 2008. "Encuesta Nacional Agropecuaria." Guatemala.

<sup>34</sup> INE. 2008. "Encuesta Nacional Agropecuaria." Guatemala.

sectors. Indigenous women earn 54.5% of that which men earn, while non-indigenous women earn 62.9% of a man's salary (SEGEPLAN, 2010)<sup>35</sup>. Among the causes as to why women 15 years or older are part of the economically inactive population are the following: the lack of childcare options, family responsibilities, housework, and lack of permission from parents to work outside of the home. These reasons constitute the main barriers for women to have economic independence and earn income for themselves and their families, which would allow them to leave the cycle of poverty (SEGEPLAN, 2010: 158)<sup>36</sup>.

- Cultural barriers: These barriers apply specifically to indigenous women in the country, primarily in terms of language barriers. In Guatemala, women constitute the largest part of the population who speaks a single ethnic language.
- Barrier to access to education: Illiteracy is linked to lack of access to education. In 2012, the level of literacy in women older than 15 years was 72%, while the percentage for literate men was 85% of the population (Wikigender, 2015)<sup>37</sup>. The statistics about literacy in the project region demonstrate that the departments of San Marcos, Sololá, and Suchitepéquez have the lowest levels of literacy, as well as an important gender gap—for example, in Suchitepéquez, there is a literacy gap of greater than 20% between men and women. With regard to schooling, the departments of the project region demonstrate an important difference between men and women of an average 1 year of schooling, with the men studying longer than the women.
- Machismo and violence barrier: Machismo is defined as the “attitude of dominance by men with regard to women. It constitutes a combination of practices, behaviors, and language that are offensive to the feminine gender.”<sup>38</sup> This is the paradigm that constantly closes different doors of opportunity for women. With regard to access to projects, the machismo is manifested through the control over time management that husbands exercise over their wives—usually the wives must request permission to attend meetings and trainings. In addition, the predominating gender roles circumscribe them to the domestic sphere and rarely to public life or politics. As a result, their voices are usually silenced and the men speak for them.
- Information barriers: The work that women perform with regard to the environmental sphere has not been documented; women have been systematically made invisible. As such, there is no background records of the support that women provide in this sphere. The institutions and governments have not employed a gender focus oriented towards making women visible. Generally in the country one of the main weaknesses faced by different gender units is the lack of data, given that it is a situation that limits action and advocacy. Gender equality in the environmental sphere is paramount (López, 2017: Personal communication). The municipal-level data are scarce, and the data that are recorded are not disaggregated by gender<sup>39</sup>. At the department level, in which the project will be implemented (Suchitepéquez, Escuintla, Sololá, Quetzaltenango, San Marcos, Chimaltenango, and Sacatepéquez), official information is very scarce and has been compiled in a descriptive manner. The gender statistics constitute a very useful tool for promoting gender equality, as these statistics will give higher visibility to the situation that men and women face in the different spheres of their social, economic, and cultural lives.

The situation of the country is not unlike the majority of countries in the world; as such, on September 25, 2015, world leaders adopted a suite of global objectives to eradicate poverty, protect the planet, and ensure the prosperity of all as part of a new sustainable development agenda, which they named the Sustainable Development Goals (SDGs). The project proposed herein is framed within the SDGs, and primarily supports Goal No. 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss. The project will also support Goal No 5: Achieve gender equality and empower all women and girls (UNDP, 2015)<sup>40</sup>. Since the

<sup>35</sup> SEGEPLAN. 2010. “Igualdad de Género y Empoderamiento de las Mujeres en el Marco del Cumplimiento de los Objetivos del Desarrollo del Milenio”. Guatemala.

<sup>36</sup> SEGEPLAN. 2010. “Informe Final del Cumplimiento de los Objetivos del Desarrollo del Milenio”. Guatemala.

<sup>37</sup> Wikigender. 2015. Guatemala. Disponible en <http://www.wikigender.org/countries/latin-america-and-the-caribbean/gender-equality-in-guatemala/>

<sup>38</sup> Real Academia Española. 2017. Machismo. Disponible en: <http://dle.rae.es/?id=NnO8B9D>

<sup>39</sup> Yoc, Verónica (febrero, 2017). Personal Communication. Gender Expert, Division of Gender and Ethnic Equality, SEGEPLAN.

<sup>40</sup> United Nations. 2015. Sustainable Development Goals. Available online: <http://www.un.org/sustainabledevelopment/es/objetivos-de-desarrollo-sostenible/>

1990s, the CEDAW has influenced the way in which gender focus is understood and applied. This convention is characterized by (1) demonstrating the inequalities between genders and (2) using this evidence to prioritize actions that lead to equality.

In the environmental sector, the Convention on Biological Diversity (CBD) recognizes the importance of women's roles in achieving objectives of the conservation and sustainable use of biodiversity. In the Conference of the Parties of the CBD, it is suggested to ensure the participation of women in biodiversity conservation and its sustainable use, particularly in agricultural diversity. In addition, the Nagoya Protocol recognizes the "vital role that women have in sharing access and benefits" and makes a special call to its importance with regard to traditional knowledge, capacities, mechanisms, and financial resources. Specifically, the parties emphasize the "importance of having a cross-cutting gender focus in all of the programs under the Convention, as important as meeting the objectives of the Convention itself in its Strategic Diversity Plan 2011-2020" (GEF, 2015:19)<sup>41</sup>.

In Guatemala, the Katún National Development Plan 2032 is framed within human rights, gender equality, the rights of indigenous peoples, and the internationally recognized principles. This plan recognizes that the full participation of women in all spheres of action (including environmental) will ensure the development of the country (SEGEPLAN, 2014:182)<sup>42</sup>. In general, these social movements and the claiming of women's rights have greatly influenced the forestry sector; in fact, the institutional and national policies provided a doorway for promoting gender equality in the forestry sector. With the creation of the Presidential Secretariat for Women (SEPREM), policies began to be developed that laid the foundations for the open participation of women; among these are the PNDIPM-PEO 2008-2023, which tasks the Executive and Legislative institutions, and establishes the strategy to mandate that the state institutions create the respective gender units so that the audits reflect the institutional efforts leading to compliance with this policy. With regard to the environment, the Natural Resources, Land, and Housing component was consolidated. This component seeks, among other things, to ensure access for Mayan, Garífuna, Xinka, and Mestiza women to property, land ownership, use of natural resources, and usufruct of land and rural development.

The national institutional context for the project is derived from the principal documents and plans contained in the respective institutional strategies and policies on gender of the MARN, MAGA, CONAP, SEGEPLAN, and INAB. The contributions of the institutions involved in the country that are directed towards reducing the gender gaps have been many and the efforts have been articulated on some occasions. It is anticipated that this project will strengthen interinstitutional coordination in order to position women as possessing rights, being active stakeholders, and making visible their contributions to the conservation of biodiversity, SFM, and SLM, and all that which is related to the environmental sphere in the country.

The baseline analysis of the gender approach performed with the municipalities charged with managing the five prioritized MRPs demonstrates that women are not participating in the spaces where decisions are made related to each MRP. The spaces that women usually occupy at the municipal level are consolidated in the Municipal Divisions of Women, and these are not normally tied to protected areas beyond sporadic collaborations for reforestation activities (mainly in the case of the Tecpán, San Cristóbal Cucho, and Esquipulas Palo Gordo MRPs), environmental education talks, and to a lesser degree, trainings on pruning and thinning fruit and coffee trees, depending on the case (mainly in the case of the Esquipulas Palo Gordo MRP).

With respect to organized groups (OGs) or producers (coffee, honey, vegetables, and pacaína) the principal findings are related to: a) decision making, on one hand there are OGs for which there is evidence that the decision making of the women is autonomous. On the other hand, there are OGs with mixed participation in which the women participate in management positions; b) the lack of self-esteem (linked to shyness and self-value), which is a constant limiting factor that does not allow the active participation of all women members of the group; and c) equal participation linked to the lack of knowledge about the internal organization, management processes, and lack of practical knowledge, which leads women to think of themselves as not capable of having leadership positions or giving opinions openly about administrative processes.

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<sup>41</sup> GEF (2015). GEF-6. Programming Directions. Global Environment Facility. Digital media. Consulted in May 2017. Document available online: <https://www.thegef.org/sites/default/files/documents/GEF-6%20Programming%20Directions.pdf>.

<sup>42</sup> SEGEPLAN. 2014. "Plan de Desarrollo K'atun: Nuestra Guatemala 2032". Guatemala, Guatemala.

In summary, in the case of the honey OGs, the board of directors does have women participating. The vegetable garden OGs show their participation to a lesser degree, but the groups do have women in the board of directors. The coffee OGs are the most diverse—in some cases there are no women on the board of directors and it is mentioned that there are tasks that the women cannot perform. Only one OG of exclusively women coffee-growers was identified of the eight groups provided by the 2<sup>nd</sup> and 3<sup>rd</sup> level organizations. At the national level, the lack of identification of women-only groups can be explained by the estimation that only 8% of all women's OG in the country have legal status.

Finally, it is expected that the Project will contribute to the efforts to meet the country's commitments towards sustainability, but also to encouraging women's participation in this process. In addition, support will be provided through the PNPDIM 2008-2023 policy, in its specific component of Land and Housing, which seek to ensure equitable development. The project will also contribute to the gender objectives understood in the investment cycle of GEF-6 through the mainstreaming gender approach primarily in the focal areas of biodiversity, land degradation, and sustainable forest management. The mainstreaming gender approach is a strategic priority for GEF-6, given that it is a means and not an end in itself to ensuring environmental sustainability and gender equality in the process in which the women will be active, recognized, and valued participants in its development.

## Project gender mainstreaming plan

Project component	Project output	Gender focus in the project output	Activities necessary for incorporating the gender focus into the project output and the responsible parties	Indicator	Baseline	Goal
1. Development of an enabling environment for the delivery of multiple global environmental benefits through models of sustainable agriculture/forestry production and economic incentives derived from improved markets and ecosystem services	Output 1.1 - Certification systems for agriculture and forest related products	The differentiated certification systems for agricultural and forestry products represent production systems that favor gender equity, facilitating women's access to new markets and increasing their productivity to improve income earnings for their families.	1. Certification processes were identified in which the participation of women is considered. 2. Situational gender analysis in the production process to identify actions for promoting equitable production and links to the processes with equitable gender access to markets for certified products.	No. of certifications that value women's participation.	0	4 certifications in which women's participation in production chains is valued.
				The existence of gender analysis in the production process.	Does not exist	Business strategies for the 4 products include a situational gender analysis in the production process.
				Presence/absence of markets identified for certified products that value gender equity in the production process.	Absent	Present
	Output 1.2 – Improved partnerships, alliances, marketing strategies and protocols for certified and non-certified agricultural and forest related products	The marketing strategies that allow access to new markets for certified and non-certified products will include the visibility of women in the production processes and value chains.	1. Gender analysis in the production processes and value chains and the specific roles of women in the processes. 2. Strengthen the capacities of the OGs and promote the empowerment and active participation of women in directorial and leadership positions within the OGs. 3. Implement the gender focus, promoting the participation of women in the process to strengthen administrative and business capacities with a market-based focus among the OGs. 4. Participatory and inclusive design of basic strategies to commercialize sustainable products, promoting women's participation.	% of women occupying directorial positions in the OGs	26% women holding positions on board of directors	40% women occupy directorial positions in the OGs
				Level of women's empowerment regarding the production, administrative, and business processes of the OGs <sup>43</sup>	Level of empowerment: 0	Level of empowerment: 3

<sup>43</sup> Level of empowerment scale: 0= is not familiar with the processes, 1= is somewhat familiar with the processes, 2= knows the processes, 3= puts the processes into practice, 4= contributes to building the processes. The level of empowerment will be measured through a survey-type instrument to measure scale (Likert-type with affirmations); the survey will be applied at beginning and end of the intervention with the women beneficiaries.

Output 1.3 – Competitiveness incentive program (e.g., preferential buying from project areas, price premiums, and extension services) promote production of certified and non-certified products and increase income opportunities for small farmers derived from the adoption of biodiversity-friendly production practices	The incentives for competitiveness program includes indigenous and non-indigenous women. The economic and non-economic benefits derived from the adoption of environmentally friendly practices are distributed equitably among men and women.	1. Define the selection criteria for the beneficiary groups: vulnerable groups, women's participation, experience in managing funds, etc.	% of women benefiting directly from the incentives for competitiveness program	0%	30%
			% women occupying directorial positions in the OGs	On average, the boards of directors of the OGs identified during the project design phase have 26% of their directorial positions occupied by women (established in 2017)	40% women occupying directorial positions in the OGs
			Level of women's empowerment with respect to organizational and production processes <sup>44</sup>	Level of empowerment: 0	Level of empowerment: 3
	The platform for facilitating equitable access to incentives programs (e.g., PINPEP, PROBOSQUE, others) supporting farmers implementing reforestation actions and the mix of native trees and agricultural systems to enhance environmental services (hydrological regulation, biodiversity habitat, carbon storage, and soil protection).	1. Support for developing the ToRs for building the platform. Call for applications, awarding of the contract. 2. Socialization of the platform through community radio programs: a) opportunity for women's participation and empowerment, b) inform about the Forestry Incentives Law for PINPEP with the equitable participation of men and women, as well as enjoyment of the benefits. 3. Consultation with the Network of Organized Communities and Beneficiaries of PINPEP so that their experience supports the construction of the platform. 4. Use of inclusive language, illustrative material that reflects the participation of men and women and pilot projects with future users (men and women). 5. Obtain statistics disaggregated by gender and	% women directly benefiting from the platform (beneficiaries of the incentives)	48.16%	40% of direct beneficiaries of the platform are women
			Existence of data disaggregated by gender in the platform	There is no platform	Platform contains data disaggregated by gender
			Level of empowerment of women and men regarding the processes for benefiting from the incentives <sup>45</sup>	0	Level of empowerment: 3

<sup>44</sup> Level of empowerment scale: 0= is not familiar with the processes, 1= is somewhat familiar with the processes, 2= knows the processes, 3= puts the processes into practice, 4= contributes to building the processes. The level of empowerment will be measured through a survey-type instrument to measure scale (Likert-type with affirmations); the survey will be applied at beginning and end of the intervention with the women beneficiaries.

<sup>45</sup> Level empowerment regarding the incentives: 0= is not familiar with the processes to qualify for an incentive and needs support to obtain benefit, 1= is somewhat familiar with the processes to qualify for an incentive but needs support to obtain benefit, 2= knows the processes but does not feel secure without support to obtain benefit, 3= puts the processes into practice, does not need support to benefit from the incentives, 4= knows the processes to quality and provides support to people who are not familiar with how to benefit from the incentives. The level of empowerment will be measured through a survey-type instrument to measure scale (Likert-type



		ethnic group at the municipal level (data on gender, municipality of residence, and ethnicity.	Presence of inclusive language (visual and written) in the platform.	There is no platform	Platform uses inclusive language (visual and written)
Output 1.7 – Payment system for watershed services in place that benefits users and providers	The payment mechanisms (compensation/recognition) for environmental services promotes women's participation in the compensation scheme designed.	<ol style="list-style-type: none"> <li>1. Encourage the participation of the DMM and women in general (through female community leaders) in the workshops and awareness-raising campaigns held for the municipalities and users of municipal water systems about the importance of reciprocating for the service obtained from the MRPs and the importance of the participatory and inclusive conservation management of the water sources.</li> <li>2. Creation of a users' committee in which the women participate in leadership and training roles for the design and implementation of the PWS, as well as their roles in the scheme.</li> </ol>	% women participating in the workshops and awareness-raising campaigns	0	30%
			% women forming the users' committee and in directorial positions	0	40%
Output 1.8 – Technical guideline for watershed-related payments (compensation).	The necessary technical, administrative, and coordination guidelines for the design and implementation of the payment scheme are defined with the participation of women.	1. Promote the participation of women (mainly represented through the DMM) in defining the technical, administrative, and coordination guidelines for the PWS in each municipality.	% women participating in the process to determine the technical, administrative, and coordination guidelines for the PWS in each municipality.	0	20%
Output 1.9 – Protocols and enhanced capacity of environmental authorities for planning and monitoring PWS projects.	The guides and protocols designed incorporate inclusive visual and written language (for women as well as the indigenous). The improved capacities of the PWS administrators include capacities to promote gender equality and social inclusion in the processes to monitor planning and execution	<ol style="list-style-type: none"> <li>1. Incorporate the gender perspective during the process to develop the protocols for management, monitoring, and follow-up of the PWS mechanisms and the Management Plan for the water sources, defining and creating guides with inclusive language for the management, monitoring, and follow-up portions of the PWS scheme.</li> <li>2. Design and implement training modules for administrators of the PWS through a continuous process, including training in issues of gender equity and social inclusion.</li> </ol>	% women participating in PWS designed	0	20%
			% women occupying decision-making positions during the execution of the PWS <sup>47</sup>	0	30%
			Level of empowerment of women with regard to the PWS <sup>48</sup>	0	Level of empowerment: 3

with affirmations); the survey will be applied at the beginning and the end of the intervention with the women beneficiaries.

<sup>47</sup> The decision-making positions include women in directorial roles in the committees that participation in the execution process for the PWS designed.

<sup>48</sup> Scale of level of empowerment regarding the water PWSs: 0= is not familiar with the PWSs, 1= is somewhat familiar with the PWSs, 2= knows about the PWSs and participates in their execution, but does not contribute, 3= knows about the PWSs, participates actively in their execution and decision-making processes, 4= knows about the PWSs, actively participates in the decision making related to the PWSs and benefits from them. The level of empowerment will be measured through a survey-type instrument to measure scale (Likert-type with affirmations); the survey will be applied at the beginning and the end of the intervention with the women beneficiaries.

	linked to PWS designed <sup>46</sup> .	3. Incorporate gender indicators (women's participation) for the monitoring and evaluation system.	Trainings directed towards officials include themes around gender equality and social inclusion.	0	Themes of gender equality and social inclusion considered in the design and implementation of the trainings for officials.
Output 1.10 – Benefit-sharing mechanism for watershed-related payments (compensation).	The process of creating the equitable distribution mechanism for multiple benefits derived from the designed PWS mechanisms incorporates the active participation of women.	1. Make a call for the participation and representation of women in the process to define the equitable distribution mechanism, through the inclusion of the DMM in the entire process.	% women participating in the process to define the equitable distribution mechanisms	0%	30%
Output 1.11 – Training program increases local knowledge and skills (up to 2,000 farms/community forests, beneficiaries differentiated by gender trained by project end)	Women's participation is included in all issues covered by the training and capacitation program for small-scale farmers and producers, generating information disaggregated by gender.	1. Design the training and capacitation program with a gender focus. 2. Socialize the training program with OGs; create awareness about the importance of women's participation. 3. Keep a record of women's participation in the trainings.	% women benefiting from the training	0	30%
			Trainings incorporate focus on gender	0	Trainings do indeed incorporate gender focus
			Level of empowerment of women regarding training themes <sup>49</sup>	0	Level of empowerment of women regarding training themes: 3
Output 1.12 – Participatory monitoring program to assess biodiversity conservation, SFM, and SLM, harmonized with national and local monitoring programs.	The monitoring program contains variables that consider information about gender and the environment.	1. Consult with gender experts to identify variables that consider information about gender, biodiversity, SFM, and SLM. 2. Define qualitative and quantitative indicators to measure women's participation and level of empowerment regarding biodiversity conservation, SFM, and SLM. 3. Establish baseline for the defined gender indicators. 4. Establish in a participatory manner the goals for the defined gender indicators and the strategies for achieving them.	Gender indicators present in the monitoring program	0	Monitoring program incorporates gender indicators that measure women's participation and empowerment in the themes of biodiversity, SFM, and SLM
			% women participating in the consultation processes to establish goals and strategies	0%	30%

<sup>46</sup> Includes the planning phase, which is specific to authorities; the execution phase is where more influence can be had. Water committees (or user committees) made up of women that issue active opinions. Support to the DMM for women's involvement.

<sup>49</sup> Scale of level of empowerment regarding training themes: 0= is not familiar with the training themes, 1= is somewhat familiar with the training themes, 2= knows the training themes, 3= puts the training themes into practice, 4= puts the training themes into practice and participates in the related decision-making processes related to their practice. The level of empowerment will be measured through a survey-type instrument to measure scale (Likert-type with affirmations); the survey will be applied at the beginning and the end of the intervention with the women beneficiaries.

2. Delivering multiple environment benefits by connecting core protected areas within sustainably managed production landscapes in the central volcanic chain in Guatemala	Output 2.1. Land use planning strategy supports the implementation and/or strengthening of 31 diversified nurseries, improves production and access to native germplasm for agroforestry and silvopastoral systems, soil stabilization; and contributes to the connectivity of biological corridors in Component 2	The strategy considers the equitable distribution of support for the implementation/strengthening of diversified nurseries. Indigenous groups and women's organizations are considered and valued as potential direct beneficiaries of the strategy. Equal access to native germplasm for agroforestry and silvopastoral systems is promoted for men, women, and indigenous groups.	1. Socialize the strategy within the prioritized landscape, and raise awareness about the importance of the participation of women's groups in the strategy. 2. Define the criteria for selection and consider within them aspects related to the presence and active participation of women in the OGs. 3. Maintain a record of the number of direct beneficiaries (men and women) of the strategy, disaggregated by gender. 4. Annual monitoring that incorporates gender focus.	Number of organizations composed by a majority of women in directorial positions benefiting from the strategy	X The baseline will be established during the first year of project implementation	X The goal will be established during the first year of project implementation
				% women who integrate the groups benefiting from the strategy	0	30%
	Output 2.2. Voluntary agreements through different participatory models for conservation (e.g., privately owned farms, landowners, communal lands, etc.) used for establishing landscape management tools, strengthening ecosystem connectivity and reducing deforestation in productive and natural landscapes.	The voluntary agreements include women. As part of the agreement, activities and commitments will be defined among the parties to promote the active participation by women and the benefits derived.	1. Participatory consultation process with identified stakeholders (representatives of communities, municipalities—including the DMMS and the UGAM—local officials—COCODES—and other groups to be determined in which women are included) in which the definition of the gender situation/context under which the conservation agreement will be carried out is included. 2. Define in a participatory manner the conservation agreement terms. The responsibilities, activities, and communication methods that are delivered to the men and women in an inclusive language and that promote the active participation of women are defined within the agreement. 3. The goals and qualitative and quantitative indicators to measure women's participation and level of empowerment regarding biodiversity, SFM, and SLM are defined in the context of the conservation agreement.	% women participating in voluntary agreements through the different participatory models for conservation	0%	30%
	Output 2.3. SLM participatory plans for the middle and upper sections of at least six (6) watersheds (229,831.87 ha) include measures to reduce soil degradation and contribute to enhancing ecosystem connectivity	Contribute to the active participation of indigenous and non-indigenous women in the development of the SLM participatory plans. The SLM participatory plans will enable to mainstream gender and incorporate strategies to promote the participation of women in	1. Socialize the objective of the SLM participatory plans for the middle and upper parts of at least six watersheds, including raising awareness about the importance of women's participation in the development of participatory plans. 2. Women will be encouraged to participate in processes to develop the plans, primarily through women leaders and OGs. 3. Participatory workshops will be held with men and women to carry out an analysis of the gender situation and define activities for the	% women participants in the consultation workshops to develop the plans	0	30%
				Participatory plans incorporate strategies for the participation of women in OGs	0	Strategies for participation of women's groups are incorporated into the participatory plans

		OGs.	<p>mainstreaming of gender in the plans.</p> <p>4. Participatory strategies will be defined jointly in the workshops to encourage women's participation in the SLM themes defined in the plans.</p> <p>5. The experience of developing the participatory plans will be systematized.</p>			
				Number of women's groups identified to participate in the execution of the participatory plans	X The baseline will be established during the first year of project implementation	X The goal will be established during the first year of project implementation
	Output 2.4. Participatory energy-efficient stoves program reduces firewood consumption and greenhouse gas (GHG) emissions	The beneficiary families' vision of the energy-efficient stove program is incorporated into its design. The families are trained in the benefits (environmental and health) and there will be annual monitoring of the stoves' use.	<p>1. The initiative is socialized in a participatory manner (men and women).</p> <p>2. Beneficiary families are selected through criteria that incorporate a gender focus.</p> <p>3. Families are trained in the advantages of using the stoves; women's participation will be encouraged in the trainings.</p> <p>4. The annual monitoring mechanism for the use of the stoves, in which the families provide feedback as to the design and the perceived benefits, is defined.</p> <p>5. The experience is systematized in a participatory manner.</p>	% female-headed households benefiting	0	20%
				% beneficiary households receive training in the use of the stoves	0	100%
				% women directly benefiting from the stoves	0	100%
				Level of empowerment of the beneficiaries of the stove in terms of environmental themes to be imparted in the trainings <sup>50</sup>	0	Level of empowerment: 3
	Output 2.5 – Production plans and protocols support the implementation of	The tools and guides developed for the organizations in each link of the production chain	1. Identify and apply best agricultural practices in an inclusive and participatory manner with the female members of the beneficiary OGs, as well as related training activities that consider the	% women participating in the training activities	0 %	30%

<sup>50</sup> Scale of level of empowerment regarding training themes: 0= is not familiar with the training themes, 1= is somewhat familiar with the training themes, 2= knows the training themes, 3= puts the training themes into practice, 4= puts the training themes into practice and participates in the related decision-making processes related to their practice. The level of empowerment will be measured through a survey-type instrument to measure scale (Likert-type with affirmations); the survey will be applied at the beginning and the end of the intervention with the women beneficiaries.

	certified and non-certified sustainable agricultural and forestry production practices in project sites (private farms, community forests, etc.), while contributing to enhance ecosystem connectivity	uses gender-inclusive language, and is also directed to indigenous and non-indigenous people (written and visual). The training and implementation processes for the best business management, agricultural, and manufacturing practices incorporate gender focus, encouraging the active participation of women and strengthen capacities related to gender equality and social inclusion.	needs of women regarding participation (for example, more favorable schedules, the need for babysitters, translators, etc.). 2. Incorporate inclusive visual and written language in the guides and tools developed, as well as the evaluation guides directed towards the OGs.	Presence/absence of inclusive language in the document derived from the AC	Does not exist	All of the guides and tools developed incorporate inclusive language (visual and written)
	Output 2.6. Five (5) participatory management plans for Municipal Regional Parks (MRPs) strengthen local management, conservation, monitoring and control, and integration of the protected areas into the biocultural landscape	The participation of indigenous and non-indigenous women in the participatory development of the management plans for the 5 prioritized MRPs is promoted, their situation made visible in the Technical Study (analysis) and in the different components that make up the management plan.	1. Generate, in the technical study, information about the participation of indigenous and non-indigenous women, linked to the MRP, their situation, and about their interests with respect to the natural resources of the AP. 2. Inform the men and women about the Management Plan, socialize the objective in a participatory manner through local media such as community and/or municipal radio. 3. Design a strategy to call for the participation of indigenous and non-indigenous women. 4. Consult women's organizations, associations, and groups during all phases of designing the Management Plan, and promote their active participation in informational workshops (the workshops are carried out with a focus on gender). 5. Systematize the experience and socialization among all work groups charged with developing the management plans.	Technical studies include a chapter about women's participation with respect to the natural resources of the MRPs.  % women participating in workshops for the consultation and validation of the management plans.  Management plans incorporate a gender focus and strategies to encourage women's participation in the MRPs.	0  0  Consult the management plan of each MRP (if it exists).	Technical studies incorporate a section about the participation of women with respect to the natural resources of the MRPs.  30%  Strategies to promote women's participation in the MRPs within the different components of the management plans.
	Output 2.7. Six (6) proposals for the categorization of national-level PAs (Permanent Closure Zones) and two (2) proposal for the	The participation of indigenous and non-indigenous women in the proposal for the recategorization of protected areas at the	1. Identify stakeholders linked to protected areas, with consideration given to women's OGs. 2. Consult, in a participatory manner, with the stakeholders identified to develop a proposal to recategorize protected areas, which includes designing a call /advertisement to encourage the	Number of stakeholders identified who represent women's OGs.	X  The baseline will be established during the first year of project implementation.	X  The goal will be established during the first year of project implementation.

	recategorization of National, developed in a participatory manner, include technical feasibility studies considering current national-level categories of the National Park System – SIGAP), thus contributing to the conservation and sustainability of the areas.	national level is promoted. The technical studies incorporate a gender approach and generate data disaggregated by gender, mainly in socioeconomic and cultural aspects.	<p>participation of women in the process.</p> <p>3. Develop technical, socioeconomic, and cultural studies to recategorize the protected area, which are carried out in a participatory manner, incorporating gender focus and generating data disaggregated by gender and information about the participation of women in the processes related to the protected area.</p> <p>4. Incorporate women's participation into the campaigns to raise awareness and socialize the recategorization process.</p> <p>5. Systematize the experience.</p>	% women participating in consultation and validation workshops for proposals to recategorize protected areas.	0	30%
				Technical, socioeconomic, and cultural studies have a section on women's participation with respect to the protected areas	0	Technical, socioeconomic, and cultural studies incorporate a section on women's participation with respect to the protected areas
				% women participating in the campaigns to raise awareness and socialize the process to recategorize the protected areas	0	30%
	Output 2.8. Financing mechanisms for the management of five (5) MRPs covering 13,662.57 ha implemented, including payment for ecosystem services (PES) and sustainable tourism	The suite of mechanisms that will contribute towards reducing the financial gap for each MRP is identified, designed, and implemented in an inclusive manner, with women's participation (through the DMM).	<p>1. Socialize the initiative in which the DMM are openly called to participate. This process includes raising awareness about the importance of women's participation in issues related to the MRPs.</p> <p>2. Consult for the participatory identification of the economic/financing mechanisms that will contribute to reducing the financial gap of each MRP, involving the DMM and women's representatives in the municipality (leaders).</p> <p>3. Design the mechanisms considering a gender focus and that promote the participation of women as important stakeholders within the MRP and the management of the mechanisms (principally in the case of defining activities for sustainable tourism in the park).</p> <p>4. Implement the prioritized mechanisms for each MRP in a participatory manner, including a process to socialize and raise awareness among the municipal population with the active participation of women.</p>	% women participating in consultation workshops to identify mechanisms to reduce the financial gap of each MRP	0	30%
				% women participating in the socialization and awareness-raising campaigns	0	30%
	Output 2.9. Conservation and management program for three priority areas (4,655.30 ha) for the protection of species of amphibians (San Rafael	The conservation management program for the prioritized areas is developed in a participatory manner. The program enables the	<p>1. Inform men and women about the conservation management program for the prioritized areas, the objective will be socialized through community and/or municipality radio.</p> <p>2. Define a strategy for the call/advertisement that encourage the participation of indigenous and</p>	% women participating in consultation and validation workshops for the conservation and management	0	30%

	Pie de la Cuesta MRP, San Marcos; San Pedro Sacatepéquez MRP, San Marcos; and Zunil MRP, Quetzaltenango).	mainstreaming of gender and defines strategies that encourage the participation of indigenous and non-indigenous women in OGs.	<p>non-indigenous women.</p> <p>3. Consult women's organizations, associations, and OGs during all phases of the development of the conservation and management program for the prioritized areas, their active participation in the workshops will be encouraged (the workshops will be carried out with a focus on gender).</p> <p>4. Systematization of the experiences.</p>	program		
				The conservation and management program of the prioritized areas enables the mainstreaming of gender, encourages the participation of women, and the derived documents use an inclusive language.	0	Program incorporates a gender focus, strategies to promote women's participation, and the derived documents use inclusive visual and written language.
				Level of empowerment of men and women with respect to the conservation theme <sup>51</sup>	0	Level of empowerment of women and men with respect to conservation themes: 3
	Output 2.10 – Strengthened institutional capacity program for national and regional officials and field personnel (PA staff; environmental, forestry, and agricultural officials) to support the sustainable management and conservation of biodiversity in production landscapes, the use of SFM and SLM methodologies and tools, and the quantification and evaluation of reduced deforestation (598 people trained by project end).	The program to strengthen the institutional capacity of the project's partners, national and regional officials, and field staff, incorporates a gender focus and considers training in gender equality and social inclusion themes.	<p>1. Design training programs on gender equality and social inclusion.</p> <p>2. Specific trainings will be provided on gender equality and social inclusion, encouraging women's participation and incorporating a focus on gender.</p> <p>3. Information about the workshop participants (male and female), disaggregated by gender (lists of participants) will be gathered.</p> <p>4. The experience will be systematized.</p>	% women directly benefiting from the program	0	30%
				Change in the score of the institutional capacity development scorecards derived from the incorporation of a focus on gender.	Consult the capacity development scorecards of the different institutions in Component 2 of the FSP	Baseline + 2
				Proportion of capacities about gender equality and social inclusion	0	1 of 4 capacities offered is about gender equality and social inclusion

<sup>51</sup> Scale of the level of empowerment with respect to conservation themes will be measured by a scale from 0 to 4, where 0= has no knowledge of the conservation themes, 1= has some knowledge of the conservation themes, 2= knows the conservation themes, 3= puts into practice the conservation themes, 4= puts into practice the conservation themes and participates in the decision-making processes linked to the conservation of the protected areas. The level of empowerment will be measured through a survey to measure scales (Likert-type with affirmations); the survey will be applied at the beginning and the intervention with the beneficiary women.

	Output 2.11 – Development planning for 31 municipalities incorporates principles for biodiversity conservation, SFM, SLM, sustainable agriculture, and gender, and their implementing measures	The development of the municipal development plans (MDPs) is preceded by a participatory gender analysis that reflects the situation of women at the municipal level in terms of education, participation, access to resources (land and housing), and opportunities to earn income. The analysis generates information about women's participation in issues of conservation, SFM, SLM, and sustainable production. The municipal development plans are developed in a participatory manner and enable the mainstreaming of gender.	<ol style="list-style-type: none"> <li>1. Perform a participatory analysis on gender at the municipal level, with information about women's participation and socioeconomic aspects.</li> <li>2. Inform men and women about the objective of updating the MDPs through community radio and/or municipalities.</li> <li>3. Define a strategy for calling/advertising for the participation of indigenous and non-indigenous women.</li> <li>4. Consult with women's organizations, associations, and groups during all phases of development of the MDPs and encourage their participation in the related workshops (the workshops are carried out with a gender focus).</li> <li>5. Define participatory strategies that achieve a higher level of gender equality in the municipalities.</li> <li>6. Socialize the current version of the MDPs.</li> <li>7. Systematize the experience.</li> </ol>	Number of MDPs that incorporate gender into biodiversity, SFM, and SLM themes	0	31
				% women participating in participatory workshops to develop the MDPs	0	30%
				Number of MDPs that incorporate strategies to achieve gender equality	0	31
				% women attending workshops to socialize the MDPs	0	30%
				Language of the final version of the MDPs, written and visual, is inclusive	0	Use of inclusive language in the final versions of the MDPs
				Level of empowerment of the DMM with respect to gender in the municipality <sup>52</sup>	0	Level of empowerment: 4
	Output 2.12 – Thirty-one (31) environmental/forestry municipal offices with basic equipment and skilled staff for control, surveillance, and reduction of threats to biodiversity, soils, and forests, and gender equality and social inclusion	The process for training staff assigned to each DAPMA and other similar offices incorporates a focus on gender, encourages women's participation, and strengthens capacities related to gender equality and social inclusion.	<ol style="list-style-type: none"> <li>1. Encourage the participation of women linked to municipal forestry/environmental offices through an advertisement for training.</li> <li>2. Design and implement the training process incorporating gender equality and social inclusion themes.</li> </ol>	% women directly benefiting from the training program	0	20%
				Presence/absence of modules incorporating gender equality and social inclusion themes	Absent	Present

<sup>52</sup> Scale of level of empowerment according to the municipal-level gender situation will be measured from 0 to 4, where 0= has no information about the gender situation at the municipal level, 1= has some information but it is not systematized, 2= has systematized information, 3= uses information about the gender situation in the internal DMM processes, 4= utilizes the information and participates in the decision-making processes at the municipal level to reduce the gender gaps that are identified. The level of empowerment will be measured through a survey-type instrument to measure scale (Likert-type with affirmations); the survey will be applied at the beginning and the end of the intervention with the women beneficiaries.



	Output 2.13 – Training and logistical support provided to municipal environment authorities for implementing biodiversity conservation, SFM, and SLM, as well as their enforcement capabilities	The training process for municipal environmental officials incorporates a focus on gender, encourages women's participation, and strengthens capacities linked to gender equality and social inclusion	<ol style="list-style-type: none"> <li>1. Encourage women's participation linked to municipal forestry/environmental offices through advertisements for training.</li> <li>2. Design and implementation of the training process incorporates themes of gender equality and social inclusion, and practical approaches to a focus on gender for biodiversity conservation, SLM, and SFM.</li> </ol>	% women directly benefiting from the training program	0	20%
				Presence/absence of modules that incorporate gender equality and social inclusion themes	Absent	Present
	Output 2.14 – Municipal-level monitoring and enforcement system facilitates decision-making and the assessment of SFM, SLM, and biodiversity benefits in the prioritized landscapes in the central volcanic range, and articulated with the national monitoring systems	Municipal monitoring platform incorporates information about women's participation in themes related to SFM, SLM, and biodiversity conservation	<ol style="list-style-type: none"> <li>1. Consult with gender experts to identify variables that consider information about gender, biodiversity, SFM, and SLM.</li> <li>2. Define qualitative and quantitative indicators to measure women's participation and level of empowerment regarding biodiversity conservation, SFM, and SLM.</li> <li>3. Establish the baseline of indicators defined for gender.</li> <li>4. Establish goals for the gender indicators identified and the strategies to achieve them in a participatory manner.</li> </ol>	Presence of gender indicators in the monitoring program that measure women's participation and empowerment in issues of biodiversity conservation, SFM, and SLM	Absent	Present
				% women participating in the consultation processes to establish goals and strategies	0	30%
3. Knowledge management and monitoring and evaluation	Output 3.1 – The experiences and lessons learned from mainstreaming biodiversity conservation and sustainable land management objectives into production landscapes of the Central Volcanic Mountain Range in Guatemala systematized	Promote that the systematization of the experiences and lessons learned reflect the participation of women and indigenous groups and their contributions in these experiences.	<ol style="list-style-type: none"> <li>1. Incentivize the systematization of groups of beneficiaries' (men and women) experiences within the project.</li> <li>2. Consolidate the successful experiences in mainstreaming of gender and support the systematization of these experiences.</li> </ol>	Number of systematized experiences reflect the lessons learned in incorporating a gender focus	0	All of the systematized experiences reflect the lessons learned in incorporating the gender focus
				Number of successful experiences including a gender focus	0	All successful experiences include a gender focus

	Output 3.2 – Thematic studies and other knowledge are documented, and communication and public awareness-raising materials with a gender perspective produced and available for dissemination	The materials produced use an inclusive and understandable language and use illustrations that depict men and women impartially and make visible the participation and feedback of indigenous and non-indigenous women in project implementation.	<ol style="list-style-type: none"> <li>1. Ensure that the materials produced encourage the use of inclusive and understandable language and that illustrations depict men and women impartially.</li> <li>2. Encourage that the participation and feedback of indigenous and non-indigenous women during project implementation is reflected in the materials and studies that are produced.</li> </ol>	Materials produced use inclusive visual and written language	0	All of the materials produced use inclusive visual and written language
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## ANNEX N: LEGAL/INSTITUTIONAL ASSESSMENT

### *Legal Framework*

The Guatemalan legal and policy framework as it relates to the project is composed of at least 25 policies supported by different laws associated with biodiversity conservation, sustainable land use (SLM), and sustainable forest management (SFM). Many of these policies and regulations cut across the themes of biodiversity, SLM, and SLM, and are related to the GEF focal areas.

Biodiversity conservation in Guatemala is based on two legally binding instruments: the Convention on Biological Diversity (CBD) and the Central American Convention on Biodiversity (1992). Guatemala is a country member of the CBD, which was ratified on July 10, 1995. The policy that promotes and facilitates the implementation of both conventions, and which is supported by the project, is the National Policy for Biological Diversity and Action Plan 2011-2020. Support from the project will be towards the restoration and reforestation of degraded areas and the conservation and sustainable use of biodiversity in natural forests, including measures to strengthen the management of protected areas and their buffer zones in the Central Volcanic Mountain Range of Guatemala, as well as the consolidation of the biological corridor within the volcanic chain through improved connectivity between existing protected areas and forest patches in an agricultural/production landscape.

The project will also support the implementation of the National Policy and Strategies for the Development of the Guatemalan System of Protected Areas (SIGAP; 1999), specifically in the following objectives:

- a) Contribute to the bioregional management and restoration of the productive base in forest industry lands through promoting agroforestry systems and improving the productivity of the forestry sector, particularly in biological corridors and buffer zones. To achieve this the project will facilitate access to forms of forest incentives in prioritized areas of connectivity, as well as the promotion and training of organized groups of farmers in the adoption and implementation of best practices in agroforestry systems (e.g., coffee); and
- b) Promote public and private investment in the activity of protected areas and biological corridors for creating new rural, non-agricultural jobs, and increased competitiveness among the countries of the region. The project will concentrate its efforts with farmers' organizations through putting into place landscape management tools (LMT; e.g., reforestation, recuperation of riparian forests, live fences, windbreaks, etc.), will promote investment in compliance with certification standards for sustainable agriculture, and will facilitate payment for ecosystem services (PES) in two municipalities (Esquipulas Palo Gordo and Concepción Chiquirichapa). As such, the project will also contribute to implementing the following lines within this policy: 1) Achieving the full development of each protected area according to its management category; 4) Ecological restoration in degraded natural spaces, including corridors between the protected areas; and 7) Consolidation of financing systems and instruments for the SIGAP and each protected area based on the principle of revenue generation, and complementary support of external mechanisms.

In addition, the project responds to the Protected Areas Law, Decree 4-89 and its amendments, which sets forth that biodiversity is an integral part of the patrimony of the Guatemalan people, and as such should be conserved through the effective management of the SIGAP. The project will help to strengthen SIGAP through developing five Management Plans for Municipal Regional Parks (MRPs) and implementing the financing mechanisms for an area covering 13,662.57 hectares (ha); the development of six proposals for categorizing Permanent Closure Zones; and two proposals to recategorize National Parks; and, in parallel with this, the project will facilitate voluntary conservation agreements with ARNPG, local NGOs, municipalities, organized farmers' groups, ANACAFE, FEDECOCAGUA, among others, to consolidate the areas of connectivity within the central volcanic mountain range.

The project is aligned with the Guatemalan Policy for Conservation, Protection, and Improvement of the Environment and Natural Resources (2007), specifically in the development of standards for the conservation, sustainable use, and inclusion of forests and areas prioritized for reforestation as key elements in the country's land use plans. This policy is linked to the legal framework of Decree 68-86 (Law for Environmental Protection and Improvement), whose objectives to be achieved for the purposes of the project are the following: A) The protection, conservation, and improvement of the country's natural resources, as well as the prevention of their deterioration and misuse, and the general restoration of the environment. In this case, the project will promote processes for

training small farmers, central and municipal government officials, and the private sector in SLM, SFM, and biodiversity conservation, including a focus on gender and social inclusion. The project will create a platform for access to forestry incentives in the prioritized areas for connectivity, promoting the reforestation, restoration, and recuperation of areas of degraded land and forest. B) The creation of incentives and stimuli for promoting programs and initiatives centered on the protection, improvement, and restoration of the environment. The incentives to be promoted by the project are payment for watershed and forest carbon services, and adoption of certifications to improve sale prices of agricultural and non-timber forest products derived from the application of best practices. C) The integrated use and wise management of the watersheds and water systems. Finally, the project will also comply with Chapter IV (Conservation and protection of biotic systems), in that it will develop through a participatory process SLM plans in each of the six prioritized watersheds and will design planning tools for development in the 31 prioritized municipalities.

Guatemala has joined global efforts through the ratification of the United Nations Convention to Combat Desertification and Drought (March 25, 1998; through Decree 13-98). However, the country lacks a policy and regulatory framework specifically for land use. Included among the regulations that oversee and guide land use in Guatemala are the Agriculture Policy (2011-2015) of the MAGA, which outlines within its specific objectives related to the development of the project, to develop more competitive rural producers using economies of scale, organization, and technical support and training to improve capacities for negotiating in national, regional, and international markets. These aspects are vital for achieving food sovereignty in the country, strengthening public-private partnerships, and inter-sectoral and inter-institutional articulation. All the above is geared toward achieving institutional innovation, establishing new regulations that guide the implementation of the agricultural policy, highlighting decentralized management, and participatory and transparent decision making to achieve a common vision for the country's development. The project is also vital in its mainstreaming components and strategic objectives, principally the Ecological/Environmental Component, which refers to the conservation of the natural basis of the production processes, which when linked with the activity determine their sustainability. The project's strategic objectives are associated with driving the development of sustainable agriculture, institutionalizing positive environmental management in the production and agroindustrial processes, and driving compliance with the forestry, water, agro environmental, biodiversity, and climate change laws, policies, and strategies in a coordinated manner so that the national and international institutions can adequately address these issues. The MARN has consolidated the National Program to Combat Desertification and Drought in Guatemala (PRONADYS), which outlines the aspects related to land management. As such, Decree 68-86 (Law of Environmental Protection and Improvement) establishes the need to issue regulations related to the conservation, salinization, desertification, and aridity of the landscape, among other aspects.

The project is in line with the National Forestry Policy (MAGA/PAFG/INAB/CONAP, 1999). This policy also establishes that the municipalities shall collaborate with the INAB to comply with the law, and that the municipalities shall develop, approve, and put into practice development plans for local use of forest resources. The instruments of this policy are: a) The Forestry Law of Guatemala (1996); b) Regulation of the Forestry Law (Resolution 4.23.1997); and c) Specific regulations of INAB (Regulation for Change in Land Use, Regulation for Protection of Water Resources, among the most important). In addition, the project is centered around two points of actions of the National Forestry Agenda (ANF) that were approved by the INAB in the framework of the National Forestry Program: 1) conservation of the forests, including the forests associated with the protected areas that comprise SIGAP. For this purpose, the project will make use of the PINPEP mechanism and the recently approved PROBOSQUE Law (Decree 2-2005) to provide economic incentives to the small farmers (men and women) and landowners to practice activities related to SLM and SFM in the areas prioritized for ecosystem connectivity in the central volcanic mountain range. The project will also strengthen the capacities of 31 municipalities by providing basic equipment for forestry management and capacities that will allow them to adopt integrated approaches to SLM, SFM, and biodiversity conservation, incorporating the focus on gender and social inclusion; and 2) promotion of economic compensation mechanisms for carbon sequestration. For this purpose, the project will develop a program for carbon sequestration and certification following the methodological framework of the Clean Development Mechanism to establish at least two carbon sequestration projects that will cover a 4,500-ha landscape in the areas of ecosystem connectivity.

Natural resources are also recognized in the framework of the National Policy for the Promotion and Integral Development of Women (PNPDIM) and the Equal Opportunity Plan (PEO; 2008-2023). This is a commitment by the

Government of Guatemala to seek the development of women, which directly impacts national progress. The integral development and full participation of Guatemalan women in developing equal conditions is an important challenge for the government that involves many different ministries, secretariats, and institutions of the central government. The primary objective of the policy is to develop and promote women in different spheres, ranging from education and health to environmental. The project will contribute to the objective of the Natural Resources, Land, and Housing Component of this policy, which seeks to ensure that Mayan, Garífuna, Xinka, and Mestiza women have access to property, landownership, usufruct, and the adequate and sustainable use of natural resources and land with the inclusion of a focus on gender and cultural ethnicity. The policy will also seek to promote women's participation in decision-making related to the lands on which they live and the associated natural resources. As a complementary measure, this policy is supported by the Law for Dignification and Integral Promotion of Women (Decree 7-99), which in its Article 16 ensures better quality of life for families through promoting policies for development and a truly harmonious relationship with nature, oriented towards the sustainable use of natural resources. The project will promote the right to consult about any action that affects natural resources on the lands occupied by indigenous peoples, based on Convention 169 (Indigenous and Tribal Peoples). In addition, Article 8(j) of the CBD recognizes the role played by indigenous peoples in biodiversity conservation and management through the application of indigenous knowledge. The project will promote the value of this traditional knowledge during its implementation through strengthening institutional and organized groups' capacities to incorporate this knowledge into the decision-making processes. Based on the legal and policy framework, the project will promote the participation of indigenous and non-indigenous women through empowerment processes and creating capacities related to the gender and social inclusion focus regarding SLM, SFM, and biodiversity conservation, as part of the Gender Mainstreaming Action Plan, as well as the equitable distribution of benefits derived from implementation of the project.

Public administration in Guatemala is currently under a decentralization scheme through municipalities based on the legal framework of the Municipal Code (Decree 12-2002). Implementation of this scheme falls to the Municipal Council, which has among its other functions the protection and promotion of renewable and non-renewable resources. In order to implement the directives related to this function, some municipalities have institutionalized this process by creating municipal forest offices, environmental and protected areas management units, municipal environmental management units, or similar. These offices are charged with management of forests, forest nurseries, and MRPs. Forestry legislation, together with the Municipal Code of Guatemala, favor the decentralization of forest management and the definition of the roles of the municipalities, including: a) the development of forest policies at the local level and management plans; b) activities for licensing, control, and inspection; and c) establishing monitoring mechanisms, including the establishment of the Municipal Forest Offices. The project addresses these directives and promotes collaborative relationships between INAB and the municipal forestry officials. The functions of these offices are highly relevant given that they support the development and implementation of programs and projects related to forestry and environmental activities which are geared towards compliance with policies, strategies, laws and programs of the INAB, CONAP, MARN, and MAGA.

Under the framework of the Vienna Convention for the Protection of the Ozone Layer (March 22, 1985), the United Nations Framework Convention on Climate Change (June 13, 1992), and the Kyoto Protocol (July 10, 1998), the project will contribute to initiating actions to mitigate GHG emissions as established in the framework of the National Policy on Climate Change (Government Accord 329-2009) through its specific objectives related to the development of national capacities on climate change, reduced vulnerability, and improved adaptation to climate change. This policy provides the bases for initiating a legal and institutional agreement, through the MARN, that results in the approval of the Framework law to Regulate Reduction of Vulnerability, Mandatory Adaptation to the Effects of Climate Change, and the Mitigation of Greenhouse Gas Effects (Decree 7-2013), which later establishes a national planning platform through the National Climate Change Action Plan (PANCC), which is derived in compliance with Article 11 of Decree 7-2013. The project will contribute to that which is stipulated in this law through Forest Management, with the goal of maintaining the flow of ecosystem services and improving the capacity for resiliency to climate change through sustainable management. The project will contribute to mitigating climate change in the following ways: a) initiating a program for carbon sequestration and certification and a participatory initiative for energy-efficient stoves that will reduce fuelwood consumption and GHG emissions; and b) reducing forest fires and the efficient management of biological corridors and forest ecosystems to increase their resiliency to climate variability and climate change, through the creation of capacities and application of best agricultural practices in

organized groups of men and women farmers. These aspects are inserted within the PANCC specifically in the area of adaptation (Chapter V) to climate change through its action plan: Forest resources, ecosystems, and protected areas, and in the area of mitigation (Chapter VI) through its action plan: Land use, land use change, and silviculture.

### *Institutional Framework*

The principal framework of key government institutions comprises the application and regulation of legal regulations as regards environmental themes, land use and planning, conservation and management of biodiversity, and forest management. In the case of the project, among the principal institutions is the MARN, which leads all project interventions related to the conservation and sustainable management of the country's natural resources within the central volcanic mountain range and will facilitate the conditions necessary for consolidating the national carbon market.

MAGA will provide support in the field through its agricultural extension agents and by putting into place best agricultural practices and developing the SLM plans. INAB will facilitate access to forest incentives programs to promote the restoration, recuperation, protection, and management of the region's forest resources, and will promote the participatory initiative for energy-efficient stoves to reduce fuelwood consumption.

CONAP will direct the development of management plans and classification and re-classification of protected areas, will guide the implementation of voluntary conservation agreements, and will put into place the financing mechanisms for MRPs.

SEGEPLAN will support the project through the development of a planning framework for municipal development within the prioritized area. At the local level the administrative responsibility falls to the Municipal Councils, whose function is to promote protection of the environment (Municipal Code, Decree 12-2002) through their Municipal Forest Offices or similar. Through these offices the project will include the principles of SLM, SFM, and biodiversity conservation within the municipal plans, including access to forest incentives within their respective jurisdictions, and promoting the inclusion of a focus on gender and social inclusion within the different processes.

The private sector is composed of the following institutions involved in the project: ANACAFE, which promotes the coffee industry as a profitable, sustainable, and globally competitive agroindustry, in addition to being a leading enterprise that promotes economic growth and social sustainability in the country; FEDECOCAGUA, which seeks to build business, competition, and exportation of coffee through small Guatemala producers. This organization provides technical, financial, and marketing support, as well as oversight of the coffee production and exportation processes at the international level.

The ARNPG, Natural Private Reserves, are a management category within the SIGAP, which is administered by the CONAP. Through this modality the government promotes the declaration of natural areas property of individuals or communities as protected areas. This designation provides technical and legal support to those who are interested in protecting and conserving an area to enjoy the environmental services in a sustainable manner. The statutes of these entities provide an institutional framework that is aligned with the project's objective and the country's legal framework regarding SLM, SFM, and biodiversity conservation, thereby promoting the contribution of the project in strengthening public-private efforts geared towards the sustainable development of the central volcanic mountain chain and its inhabitants.

Municipalities are autonomous local forms of government electing their own officials, obtaining and disposing of their own resources, and responsible for providing to local public services (water, electricity, solid waste management, and transport). According to the Municipal Code, municipalities are responsible for administering and sustainably managing natural resources in their jurisdiction. Municipalities rely on advisory support from the Municipal Development Institute (INFOM), which promotes municipal progress by providing technical, financial, and administrative assistance to municipalities. In addition, Urban and Rural Development Councils have been created with the objective of organizing public administration. At the municipal level, Municipal Urban and Rural Development Councils (COMUDES), presided over by the Municipal Mayor, have the responsibility to promote, facilitate, and support the functioning of Community Councils (COCODES), which are presided over by a coordination body comprised of community members according to the Council's own principles, values, norms, and internal procedures. The COMUDES and COCODES will be participative actively in decision-making for the development of

MRP management plans and in mainstreaming biodiversity conservation, SFM, and SFM objectives into municipal planning.

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## ANNEX O: TARGET LANDSCAPE PROFILE

### *Environmental context*

The landscape of the Central Volcanic Mountain Range of Guatemala prioritized by the project covers an area of 274,593.17 hectares (ha) and includes 31 municipalities (one in the Department of Sololá, six in the Department of Quetzaltenango, five in the department of Sacatepéquez, four in the department of Escuintla, 10 in the department of San Marcos, two in the department of Chimaltenango, and three in the department of Suchitepéquez)<sup>53</sup>.

Precipitation varies from 900 mm per year to 5,000 mm per year; the highest recorded rainfall levels are reported in the southern portion of the prioritized landscape (known as *boca costa*) and the lowest recorded rainfall levels are in the northern portion. The average annual temperature varies between 5°C in the Western Highlands and 26°C on the Southern Coast. Annual evapotranspiration levels vary between 0 and 2,000 mm, the water balance varies between -600 mm (moisture deficit) in the Western Highlands and 4,300 mm in the southern portion. The five life zones existing in the region are the following: 1) Subtropical lower montane moist forest, 2) Subtropical wet forest (temperate), 3) Subtropical montane moist forest, 4) Subtropical lower montane rain forest, and 5) Subtropical wet forest (warm). The life zones with the greatest amount of cover in the region are Subtropical wet forest (warm) covering 44.76% of the prioritized landscape, and the Subtropical lower montane rain forest, which covers 34.19% of the prioritized landscape. The important physiographic regions in the watersheds per amount of land cover in the prioritized landscape are the following: the Achiguate River watershed with 14.99%; the Coyolate River watershed with 10.65%; the María Linda watershed with 8.39%; the Naranjo River watershed with 16.35%; the Samalá River watershed with 9.98%; and the Suchiate River watershed with 14.95%. The soils that have the highest percentage of cover are andisols at 73.90% and entisols with 21.87% of the prioritized landscape. 98.53% of this territory presents a compound geological structure mainly composed of igneous and metamorphic rock that originated in the Tertiary age and is composed of undivided plutonic rocks, including granites and diorites of the pre-Permian, Cretaceous, and Tertiary ages.

The Central Volcanic Mountain Range is home to an outstanding diversity of animal and plant species of global, national, and local importance. These species include emblematic and threatened birds such as the quetzal (*Pharomacrus moccino*), the horned guan (*Oreophasis derbianus*), the highland guan (*Penelopina nigra*), the golden-cheeked warbler (*Setophaga chrysoparia*), and a great diversity of mammals, reptiles, and amphibians. In addition, these forests serve as habitat for many species of lungless salamander (Plethodontidae), which is a group of amphibians in Guatemala that have the greatest diversity of species in the world. To protect this biological richness, the country has consolidated a network of protected areas in the region that covers 102,760 ha, 92% of which are regional and national protected areas (56 protected areas) and 8% are private natural reserves (34 PNRs). In addition, there are lands that are owned as collective property, which are managed as natural resource preserves. This is the case for 514 areas (115,275 ha) that are classified as communal lands, which traditionally are under the ownership, possession, or management of indigenous or peasant communities.

### *Socioeconomic context*

The 2017 population projection for the prioritized landscape is 2,065,371 inhabitants (49.68% men and 50.35% women), 38.40% of whom are indigenous. The cultural diversity of the landscape comprises eight ethnolinguistic groups: 1) Kaqchikel, 2) K'iche', 3) Q'anjob'al, 4) Mam, 5) Tz'utujil, 6) Achi', 7) Ixil, and 8) Poqomam. The population growth rate is 2.12 (lower than the national average of 2.34), and the population density is 321.64 inhabitants/km<sup>2</sup>. The urban population represents 45.86% and the rural population is 54.14%. 24.16% of the population is illiterate, and 59.62% of the population lives in poverty (18.86% of whom live in extreme conditions of poverty). According to the Municipal Management Ranking, three of the 31 municipalities are ranked "Low": Colomba Costa Cuca in

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<sup>53</sup> Municipality of Nahualá (Department of Sololá); Municipalities of San Marcos, Sibinal, Tajumulco, Nuevo Progreso, El Tumbador, San Pablo, El Quetzal, La Reforma, San Cristóbal Cucho, and Esquipulas Palo Gordo (Department of San Marcos); Municipalities of Quetzaltenango, San Juan Ostuncalco, San Martín Sacatepéquez, Zunil, Colomba, and El Palmar (Department of Quetzaltenango); Municipalities of Antigua Guatemala, Santa María de Jesús, Ciudad Vieja, San Miguel Dueñas, and Alotenango (Department of Sacatepéquez); Municipalities of Escuintla, Siquinalá, Palín, and San Vicente Pacaya (Department of Escuintla); Municipalities of San Francisco Zapotitlán, Zunilto, and Pueblo Nuevo (Department of Suchitepéquez); and Municipalities of Acatenango and Yepocapa (Department of Chimaltenango).



Quetzaltenango and Nuevo Progreso and El Quetzal in San Marcos. Twenty (20) municipalities are ranked as “Medium-Low” and eight are ranked as “Medium;” this indicates that in all of the 31 prioritized municipalities there are serious deficiencies in municipal management capacity, including: a) administrative management, b) financial management, c) management of public services, d) strategic management, e) citizen participation, and f) information to the public.

The main economic activity for the 31 prioritized municipalities is agriculture, which is practiced in 29 municipalities. The second most important economic activity is wholesale and retail businesses, which are developed in 11 municipalities. Agricultural economic activity is based mainly on coffee cultivation, which covers 33.31% of the landscape; other crops including annual crops (e.g., beans, corn, and home gardens) occupy 24.67% of the landscape, while forests cover 36.8% of the landscape (Table 1). Other activities include silviculture, hunting, and fishing.

Table 1 – Land use and forest cover (2012) in the prioritized landscape.

Land use categories	Area (ha)	Percentage
Forest	100,877.68	36.761
Coffee	91,402.37	33.308
Annual crops	24,434.49	8.904
Scattered Trees	266.95	0.097
Banana plantations	234.16	0.085
Sugar cane	2,938.70	1.071
Water bodies	727.61	0.265
Permanent tree crops	487.83	0.178
Herbaceous permanent crops	277.64	0.101
Open areas or areas with limited vegetation cover	4,532.22	1.652
Rubber plantations	3,366.92	1.227
African oil palm plantations	10.58	0.004
Grasslands	9,484.19	3.46
Urban areas	8,905.73	3.245
Low shrub vegetation	26,355.65	9.604
Heterogeneous agricultural areas	103.23	0.038
Wetlands	5.82	0.002
Total	274,411.75	100

Agricultural activity has been a main driver of soil degradation mainly because of non-sustainable practices used with annual agriculture crops (e.g., pastureland, vegetable gardens, corn, beans). Coffee production also causes high levels of soil degradation where non-sustainable production systems are implemented. Land degradation correlates directly with levels of use. 45.37% of the prioritized landscape is overused, and 28.69% of the land is underused; 28.69% of the land is at the correct level of use. 50% of the population lives in highly degraded land areas and 26% live in extremely high-degraded land areas. On areas with lower levels of degradation, such as forests, the number of people living there is reduced to 10% of the total population. At the watershed level, 1.61% of the land in the Achiguate River watershed suffers from high levels of overuse, while other watersheds such as the Coyolate River has 1.06% of its land suffering from high levels of overuse, the Naranjo River with 2.5% overuse, the María Linda River with 1.07% overuse, the Samalá River with 1.72% overuse, and the Suchiate River with 1.17% of its land highly overused (Figure 1). 75% of the prioritized landscape area is affected by soil erosion reaching a loss of around 13,000 tons of soil per year. The watersheds that have the highest erosion levels in the regions are: Naranjo with 21%, Suchiate with 15%, Achiguate with 14%, and Samalá with 14%.

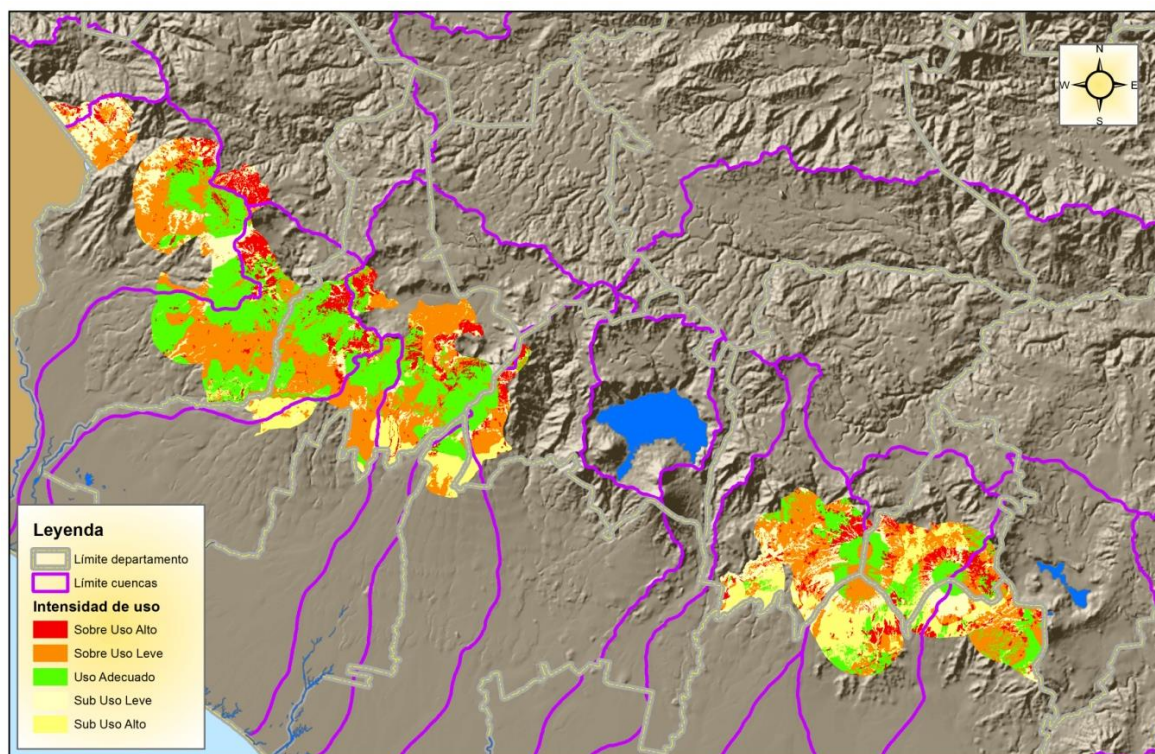


Figure 1. Land use intensity in the prioritized landscape of the Central Volcanic Mountain Range.

Human activities have resulted in reduction of forest cover and the loss of critical habitat in the prioritized landscape. Loss of forest cover is driven by the expansion of agriculture, urban growth (which is related to population increase), forest fires, forest pests and diseases, and the growing demand for timber and fuelwood. This has created a social-environmental dynamic that has reduced forest cover caused by changes in land use. The net deforestation for the period of 1991-2010 was 46,587 ha, which is equivalent to annual deforestation of 2,451.95 ha. This has led to the reduction in forest cover in some protected areas within the prioritized landscape with rates between -1.0% to -4.0%; the areas most affected are Volcán Tacaná PBZ, Zunil MRP, Volcán Santo Tomás PBZ, Quetzaltenango-Saqbé MRP, and Volcán Chicabal PBZ. With regard to forest fires, some departments such as Chimaltenango and Totonicapán have the highest number of forest fires per year on a recurring basis. In 2005, Chimaltenango was the second department most affected by forest fires nationally, with a total of 2,749 ha affected. Other departments of the Central Volcanic Mountain Range regularly affected by forest fires are Sololá and Quetzaltenango. Finally, with regard to forest pests, the bark beetle (*Dendroctonus*) affected approximately 100,000 ha of the national territory during 1980<sup>54</sup>. More recently, the bark beetle affected 757 ha in 2006 and 3,369 ha in 2010<sup>55</sup>. Other pests<sup>56</sup> that may affect pine forests are mistletoe (*Phoradendron treleaseanum*) and the larvae of some lepidoptera (Lasiocampidae family and *Synanthedon*). With regard to oak forests, the main pests are longhorn beetle larvae (Cerambycidae), while cypress forests (*Cupressus*) are mostly affected by beetles from the *Pityophthorus* group.

<sup>54</sup> Melgar, W. 2003. Estado de la diversidad biológica de los árboles y bosques de Guatemala. Documentos de Trabajo: Recursos Genéticos Forestales. FGR/53S Servicio de Desarrollo de Recursos Forestales, Dirección de Recursos Forestales, FAO, Roma.

<sup>55</sup> INAB y IARNA-URL (Instituto Nacional de Bosques e Instituto de Agricultura, Recursos Naturales y Ambiente de la Universidad Rafael Landívar). 2012. Primer Informe Nacional sobre el Estado de los Recursos Genéticos Forestales en Guatemala. 186p

<sup>56</sup> Idem

**ANNEX P: LIST OF PEOPLE CONSULTED DURING PROJECT DEVELOPMENT**

No.	Institution	Name	Phone	e-mail
1	AGEXPORT	Ivan Buitron	54663655	ivan.buitron@agexport.org.gt
2	ANACAFE	Ligia Mariela Melendez Perez	24213700	lmariela.mp@anacafe.org
3	ANACAFE	Carlos Humberto Lima Rivera	59665835	carlos.hlr@anacafe.org
4	ARNPG	Claudia Stella García Bonilla	5195-5863	csgb65@gmail.com
5	ARNPG	Juan Zelada	54543137	cvc@reservasdeguatemala.org
6	ASAEDICH	María Florinda González	42310661	florindagonzalez@hotmail.com
7	ASAEDICH	Víctor Félix González Jorge	40709450	
8	Asociación de Apicultores Las Brisas, -ASABRICAP-	Cristina Isabel Hernandez Pérez	4233-1002	
9	Asociación de Apicultores Las Brisas, -ASABRICAP-	Jaime Antonio Chang Rodas	47686343	
10	Asociación de Desarrollo de Loma Linda -ASODIL-/Grupo de Miel	Pascual Rafael Escobar	5562-4668	pascualrfl@gmail.com
11	Asociación de Desarrollo Integral Tierra Fértil - ADIFERT-	Augusto Johel García	56555816	asocadifert@gmail.com
12	Asociación de Desarrollo Integral Tierra Fértil - ADIFERT-	Zulema Karina López	32339293	
13	Asociación de Ecoturismo de Chicua -ASAEDICH-	Tomás Melchor Gonzales Oxla	5066-5623	
14	Asociación Integral de Desarrollo Ambiental - ASINDA-	Agustín López Rojas	3168-7617	aguloro1965@gmail.com
15	Asociación Integral de Desarrollo Ambiental - ASINDA-	Ameguida Judith Sarat Tum	3227-9644	
16	CDRO	Marvin Vásquez Puac	45774489	regionalizacion@cercapcdro.org
17	CONAP	Samy Palacios Villatoro	54141772	samyvillatoro@gmail.com
18	CONAP, Altiplano central, Sololá	Ing Edgar Rolando Sosa Dionisio. Ing. Enrique Merida Castillo,	77624048	esosa@conap.gob.gt
19	CONAP, DIRECCION ALTIPLANO OCCIDENTAL	Ing. David Samuel Estacuy Cojulun	41518361	proyectos_samuel@yahoo.com
20	CONAP/DRAO	Cristina Vásquez	77671812	amarvo@gmail.com
21	CONAP/DRAO	Rafael Barrios	55859800	rafabl@yahoo.com
26	CONAP/Unidad de Género	Marina Leticia López	55791539	marina.lopez@conap.gob.gt
29	Cooperativa Acatenango	José Manuel Siguil Choy	53115481	josemanuel151@gmail.com
30	Cooperativa Acatenango	Cornelio Estrafda M	42287102	cor45ma17@gmail.com
31	Cooperativa Aroma del Buen Café	Ernesto Cuc Tzorin		
32	Cooperativa Aroma del Buen Café	Francisco Vicente		

33	Cooperativa de Mujeres con Escencia de Café R.L.	María Gabriela Yoc Pérez	45701973	magabyoc@gmail.com
34	Cooperativa de Mujeres con Escencia de Café R.L.	Gregoria Martina Ramos Mazariegos	31453866	
35	Cooperativa El Socorro, R. L.	Marco Antonio Az Alonzo	5924-9051	daratoni@gmail.com,
36	Cooperativa El Socorro, R. L.	Guadalupe Arana Argueta	46309370	
37	Cooperativa Fe y Desarrollo Agrario Empresarial	Ruben Coc Yal	31500762	
38	Cooperativa Fe y Desarrollo Agrario Empresarial	Fausto Ixcoy Pastor	51764367	
39	Cooperativa Integral Agrícola 21 de octubre R.L.	Edgar Darío Pérez,	4037-6717	Edgardarioperezc12@gmail.com
40	Cooperativa Integral Agrícola 21 de octubre R.L.	Leonel Carmelo,	4084-2766	leonelcarmelo@yahoo.es ,
41	Cooperativa Integral de Comercialización Chanchimiel, R. L	Lucio Antonio Mazariegos y Mazariegos	4023-8108	luciomazariegos8@gmail.com, cooperativachanchimiel@gmail.com,
42	Cooperativa Integral de Comercialización Chanchimiel, R. L	Yenida Sabrina Mazariegos Pérez	33502327	
43	Cooperativa Integral de Comercialización Nueva Victoria, R. L.	Carlos Pérez	5249-5675	carloshumberto.perezramirez@yahoo.com
44	Cooperativa Integral de Comercialización Nueva Victoria, R. L.	María Cecilia Ortiz	48103117	
45	Cooperativa Santiaguito R.L.	Omar Ixcoy Barrios	4917-7887	varnerixcoy@gmail.com
46	Cooperativa Santiaguito R.L.	Rosa María Elías M.	58848608	rosaeliasmende@gmail.com
47	FEDECOCAGUA	Edgar López	31213801	edlopezca@hotmail.com
48	FEDECOCAGUA	Juan Carlos Toledo	51503857	jctsulmeron@gmail.com
49	Helvetas Guatemala	Martha Julia Tax	57106156	martha.tax@helvetas.org
50	ICC	Oscar G. González	52085985	ogonzalez@icc.org.gt
51	ICC	Luis Reyes	57300858	lreyes@icc.org.gt
52	Importadora y Exportadora Agrícola e Industrial Nueva Alianza, S. A.	Duly Aracely Recinos A.	40525967	
53	Importadora y Exportadora Agrícola e Industrial Nueva Alianza, S. A.	Javier Amado Jiménez Recinos,	5348-5290	amadorecinos@gmail.com
54	INAB	Silvia López	59493761	silvia.lopez@inab.gob.gt
55	INAB	Francisco Visoni	5617-0430	francisco.visoni@inab.gob.gt
56	INSIVUMEH	Rosario del Carmen Gómez Jordán	2310-5027	rosariobike@gmail.com
57	INSIVUMEH	Leonel de Jesús Campos		leonelcampos55@hotmail.com
58	JDRN - Totonicapán	Edy Caniz	49477957	
59	MAGA	Midia Escobar	54120986	midiaescobar@gmail.com
60	MAGA/Unidad de Género	Floralalma López	52040564	ixqanil.2016@gmail.com
61	MARN	Ing. Ernesto Moscoso	5922-0108	femoscoso@marn.gob.gt

62	MARN	Otto José Fernández Gamarro	5373-3306.	ojfernandez@marn.gob.gt
63	MARN	Mario Díaz	24230500	mdiazcbm@marn.gob.gt
64	MARN	Ericka Lucero	55104360	elucero@marn.gob.gt
65	MARN	Kenset Rosales	57224407	
66	MARN Quetzaltenango	Fernando Augusto Castillo Sandoval	54134413	fercastillosandoval@hotmail.com
67	MARN Sacatepéquez	Omar Pedro Samayoa	30371889	opsamayoa@marn.gob.gt
68	MARN Suchitepéquez	Rodrigo Chay Saquila	42037240	chaybaj@yahoo.com
69	MARN V	David Carías	30371521	dcarias@marn.gob.gt
70	MARN/Delegación Sololá	Henry Estuardo Pérez	30371901	hepjuarez85@gmail.com
71	MARN/DTDESEQ	Gabriela Castellanos	30374158	sgcastellanos@marn.gob.gt
72	MARN/Unidad de Género	Marleny Oliva	24230500	moliva@marn.gob.gt
73	MARN/VI	Oscar A. Velásquez V.	30371528	oavelasquez@marn.gob.gt
74	Municipalidad de Acatenango-UGAM	Adolfo Simón Costop	5015-5879	simon_adolfo@yahoo.com
75	Municipalidad de San Marcos/Departamento de Recursos Naturales	Sergio Eduardo Pisquiy Xicara	4023-0480	serpisforest7@gmail.com, T
76	Municipalidad de San Pablo/Oficina Forestal Municipal	Jairon Otoniel Recinos López	4690-4357	jaironre@hotmail.com
77	Municipalidad de San Pedro Yepocapa/UGAM	Francisco Charuc, Cargo	4995-6497	fcharuc0665@gmail.com
78	Municipalidad de San Pedro Yepocapa/UGAM	Elvis Serech	4719-8534	elserechgom@gmail.com
79	Municipalidad de Totonicapán/OFM	Roberto Antonio Alvarado Alvarado	5918-6129	alvaroberto52@gmail.com
80	Municipalidad Esquipulas Palo Gordo/DAPMA	Héctor Uliser Escobar López	5334-2200	ulicerescobar@hotmail.com
81	Municipalidad Esquipulas Palo Gordo/DMM	Yasmin Mérida	55703919	yasminita1993@hotmail.com
82	Municipalidad Quetzaltenango	Edgar Bayron López	78885266	edbayron@gmail.com
83	Municipalidad Quetzaltenango/Coordinadora de Áreas Protegidas	Inga. Crhis Aquino	5378-4705	crisma_aquino@yahoo.com
84	Municipalidad Quetzaltenango/DMM	Lidid Racancoj		
85	Municipalidad San Cristóbal Cucho/DMM	Hercilia Claraluz González Miranda	58840565	claritagonzalez20@yahoo.com
86	Municipalidad San Cristóbal Cucho/técnico forestal	Ever Dionias López Aguilar	4568-1637.	lopezaguilar.everdionias@gmail.com
87	Municipalidad San Juan Ostuncalco/Departamento de Áreas Protegidas	Leidy Yohana Romero López,	4080-4946	leidyromer@outlook.es
88	Municipalidad Tecpán/DMM	Herlinda Cumes	30302866	lindaguajan29@gmail.com
89	Municipalidad Tecpán/UGAM	Jonathan Ventura Calua	4775-6939	junyventura_193@hotmail.com

90	Municipalidad Totonicapán/DMM	Francisca Hermalinda Batz	30670413	hermelindabatz2016@gmail.com
91	Municipalidad Zunil/DAPMA	René Candelario Domingo Sanchez	5927-0532.	sanchezforest@hotmail.com
92	PNUD	Nely Herrera		
93	PNUD	Flor de María Bolaños		flor.bolanos@undp.org
95	RIC	Marvin Alexander Otzin	42568960	marvinotzin@gmail.com
96	SEGEPLAN	Lourdes M. Monzón	59181045	lourdes.monzon@segeplan.gob.gt
97	Sotzil	Juan Cusanero		jucl.7@gmail.com
98	Unión de Productores Esquipulences - UNIPRODE-	Santiago López	51979640	
99	Unión de Productores Esquipulences - UNIPRODE-	Odilia Bonilla	33031749	

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**ANNEX Q: CONSERVATION STATUS AND THREATS TO AMPHIBIAN SPECIES OF GLOBAL, NATIONAL, AND LOCAL IMPORTANCE**


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No.	Species	IUCN Conservation Status	Distribution	Protected Areas Where Species are Present	Threats
1	<i>Incilius bocourti</i>	Least Concern (LC)	Regionally endemic (Guatemala and Chiapas)	Zunil and San Pedro Sacatepéquez	Considered a common species. Lives between 1,000 and 3,200 meters above sea level (masl). Could be affected by water contamination.
2	<i>Incilius tacanensis</i>	Endangered (EN)	Regionally endemic (Guatemala and Chiapas)	San Rafael Pie de la Cuesta	Considered a rare species. There are no recent recordings in Guatemala or Mexico. Lives between 1,500 and 1,700 masl. Could be affected by chytridiomycosis.
3	<i>Hyalinobatrachium fleischmanni</i>	Least Concern (LC)	Regional (Guatemala, México, Belize, Honduras, Nicaragua, Costa Rica, Panamá, Colombia, Guyana, and Surinam)	San Rafael Pie de la Cuesta	Populations appear to be declining in the mountains of southern Mexico, which could also be the case in Guatemala. Lives below 1,680 masl.
4	<i>Craugastor lineatus</i>	Critically Endangered (CR)	Regionally endemic (Guatemala, México)	San Pedro Sacatepéquez and San Rafael Pie de la Cuesta	Rare species that lives between 300 and 2,000 masl. In 2004 it was estimated that in the next 10 years populations of this species would decline more than 80%, primarily because of chytridiomycosis.
5	<i>Craugastor pygmaeus</i>	Vulnerable (VU)	Regionally endemic (Guatemala y México)	Zunil, San Pedro Sacatepéquez, and San Rafael Pie de la Cuesta	Considered a common species, although its populations are declining because of deforestation. In Guatemala they are found above 2,000 masl.
6	<i>Craugastor stuarti</i>	Endangered (EN)	Regionally endemic (Guatemala and Chiapas)	Zunil, San Pedro Sacatepéquez, and San Rafael Pie de la Cuesta	Considered a rare species that lives between 1,300 and 2,200 masl. Their population rate is declining. The principal threat is deforestation and is considered an urgent situation regarding the forest patches where it lives.
7	<i>Agalychnis moreletii</i>	Critically Endangered (CR)	Regionally endemic (Guatemala, México, Belice, El Salvador, and Honduras)	Zunil, San Pedro Sacatepéquez, and San Rafael Pie de la Cuesta	This species was thought to be common in Guatemala; however, currently its population is diminishing. This species depends on water for its reproduction and lives between 300 and 1,500 masl. Its principal threats are habitat loss and chytridiomycosis.

8	<i>Plectrohyla avia</i>	Critically Endangered (CR)	Regionally endemic (Guatemala and Chiapas)	San Pedro Sacatepéquez and San Rafael Pie de la Cuesta	This is a rare species, which lives between 1,700 and 2,200 masl in cloud forests. Its principal threats are deforestation, habitat transformation, and chytridiomycosis.
9	<i>Plectrohyla guatemalensis</i>	Critically Endangered (CR)	Regionally endemic (Guatemala, Chiapas, El Salvador, and Honduras)	Zunil, San Pedro Sacatepéquez, and San Rafael Pie de la Cuesta	This species is usually considered to be common in Guatemala, but currently is considered rare. The species has not been reported in Mexico since 1944. It lives between 950 and 2,600 masl. Its principal threat is loss of forest cover. Chytridiomycosis also appears to be a threat to this species.
10	<i>Plectrohyla hartwegi</i>	Critically Endangered (CR)	Regionally endemic (Guatemala y México)	San Rafael Pie de la Cuesta and San Pedro Sacatepéquez	Cloud forest species that lives between 1,000 and 2,400 masl. Its population is declining, possibly due to chytridiomycosis. Deforestation and habitat transformation are also threats to this species.
11	<i>Plectrohyla sagorum</i>	Endangered (EN)	Regionally endemic (Guatemala, Chiapas, and El Salvador)	Zunil, San Pedro Sacatepéquez, and San Rafael Pie de la Cuesta	Cloud forest species that lives between 1,000 and 2,050 masl. The population trend is not known. It depends on water for reproduction and its principal threat is habitat loss. Chytridiomycosis could also threaten this species.
12	<i>Plectrohyla matudai</i>	Least Concern (LC)	Regionally endemic (Guatemala, México, and Honduras)	Zunil, San Rafael Pie de la Cuesta, and San Pedro Sacatepéquez	A relatively common species in Guatemala that lives between 900 and 2,000 masl. Its population appears to be stable. It depends on water for reproduction and has been found in highly contaminated rivers and coffee farms. Its principal threat is habitat loss. Chytridiomycosis could also threaten this species.
13	<i>Ptychohyla euthysanota</i>	Near Threatened (NT)	Regionally endemic (Guatemala, México, and El Salvador)	Zunil and San Rafael Pie de la Cuesta	This is a species that lives in cloud forests, pine-oak forests, and broadleaf forests. Considered common in Guatemala. Lives between 500 and 2,200 masl. Its principal threat is habitat loss and transformation, although chytridiomycosis is also a potential threat to this species.



14	<i>Hypopachus variolosus</i>	Least Concern (LC)	Regional (Guatemala, Belize, El Salvador, Honduras, Nicaragua, Costa Rica, México, and Texas)	San Rafael Pie de la Cuesta	This species is widely distributed and lives below 2,100 masl. It is found in rainforests, although it also tolerates open and disturbed areas. Currently there are no threats identified for this species.
15	<i>Bolitoglossa engelhardti</i>	Endangered (EN)	Regionally endemic (Guatemala and Chiapas)	Central portion of the municipality of Zuni, southern part of San Pedro Sacatepéquez, and the northern portion of the municipality of San Rafael Pie de la Cuesta	This species was considered common; however, currently it is considered rare, with low population trends. It lives between 1,500 and 2,100 masl. It is a tree-dwelling species and is found in bromeliads. Its principal threat is the loss of cloud forest.
16	<i>Bolitoglossa flavimembris</i>	Endangered (EN)	Regionally endemic (Guatemala and Chiapas)	Zunil, San Rafael Pie de la Cuesta, and San Pedro Sacatepéquez	Considered a rare species. Lives between 1,800 and 2,200 masl. The population rate is declining. It lives in cloud and pine-oak forests. Its principal threat is habitat loss.
17	<i>Bolitoglossa franklini</i>	Endangered (EN)	Regionally endemic (Guatemala and Chiapas)	Zunil, San Pedro Sacatepéquez, and San Rafael Pie de la Cuesta	Considered a common species; however, its population is in decline. It is found between 1,800 and 2,500 masl. It lives in cloud and pine-oak forests but requires pristine habitat. It is a semi-tree-dwelling species and is threatened by habitat loss.
18	<i>Bolitoglossa morio</i>	Least Concern (LC)	Nationally endemic	Zunil, San Pedro Sacatepéquez, and San Rafael Pie de la Cuesta	Considered a common species, its population is stable. It is found between 1,300 and 3,000 masl. It lives in pine-oak and secondary forests. It is considered an adaptable species.
19	<i>Bolitoglossa occidentalis</i>	Least Concern (LC)	Regionally endemic (Guatemala, México, and Honduras)	San Rafael Pie de la Cuesta, Zunil	Considered a common species with a stable population. It is found below 1,600 masl. It lives in pine-oak forest and rainforest. It is also found on shaded coffee plantations. Its principal threat is habitat transformation.