



Strengthening the integral and sustainable management of biodiversity and forests by indigenous peoples and local communities in fragile ecosystems of the dry forests of the Bolivia Chaco

Part I: Project Information

GEF ID

10393

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

CBIT No

NGI No

Project Title

Strengthening the integral and sustainable management of biodiversity and forests by indigenous peoples and local communities in fragile ecosystems of the dry forests of the Bolivia Chaco

Countries

Bolivia

Agency(ies)

FAO

Other Executing Partner(s)

Vice Ministry of Environment (VMA)

Executing Partner Type

Government

GEF Focal Area

Multi Focal Area

Taxonomy

Community Based Natural Resource Mngt, Protected Areas and Landscapes, Biodiversity, Focal Areas, Land Degradation Neutrality, Land Degradation, Sustainable Land Management, Strengthen institutional capacity and decision-making, Influencing models, Individuals/Entrepreneurs, Private Sector, Stakeholders, Partnership, Type of Engagement, Local Communities, Indigenous Peoples, Community Based Organization, Civil Society, Non-Governmental Organization, Participation and leadership, Gender results areas, Gender Equality, Capacity Development, Gender Mainstreaming, Knowledge Generation, Capacity, Knowledge and Research, Knowledge Exchange, Learning

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 1

Climate Change Adaptation

Climate Change Adaptation 1

Submission Date

10/11/2019

Expected Implementation Start

1/1/2022

Expected Completion Date

12/31/2026

Duration

60In Months

Agency Fee(\$)

332,782.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-1-1	Mainstream biodiversity across sectors, as well as landscapes and seascapes by mainstreaming biodiversity into priority sectors	GET	1,580,320.00	5,210,535.00
BD-2-7	Address direct drivers to protect habitats and species and improve financial sustainability, effective management and ecosystem coverage of the world heritage of protected areas	GET	609,035.00	917,998.00
LD-1-1	Maintain or enhance the flow of agroecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM)	GET	1,313,613.00	16,442,513.00
Total Project Cost(\$)			3,502,968.00	22,571,046.00

B. Project description summary

Project Objective

Expand and internalize the Integrated and Sustainable Management of Biodiversity and Forests (ISMBF) in integral territorial planning, through the strengthening of governance for its implementation and monitoring, and thus increase the resilience of life systems (livelihoods) in fragile ecosystems of dry forests in the Bolivian Chaco region and advance towards Land Degradation Neutrality (LDN).

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
1. Governance for integrated territorial management implemented by indigenous peoples and local communities through the Integrated and Sustainable Management of Biodiversity and Forests (ISMBF)	Technical Assistance	<p>1.1. Strengthened governance to implement the national policy and the institutional framework of the ISMBF to achieve SFM, SLM and LDN through territorial planning, including the relevant stakeholders in the process.</p> <p><u>Core indicator- 1.2.</u></p> <p><i>250,000 ha of protected areas managed within the framework of integrated territorial planning, strengthening their contribution to avoid degradation and/or restore degraded ecosystems</i></p> <p><u>Core Indicator - 11:</u></p> <p><i>At least 15,000 direct beneficiaries have their capacities strengthened through territorial planning processes, the implementation</i></p>	<p>1.1.1. Capacity building programme developed and implemented for the integrated planning and participatory governance of the ISMBF at the central, sub-national and local government levels, autonomous indigenous peoples and social organizations, with a gender and generational equity approach.</p> <p>1.1.2. Public and academic institutions strengthened in ISMBF and LDN, to support the implementation of local processes in ISMBF with a gender perspective</p> <p>1.1.3. Territorial plans have been prepared at the municipal and GAIOC level for the implementation of SFM and SLM and to facilitate the</p>	GET	914,557.00	4,676,382.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
2. Implementation of SFM and SLM practices under the ISMBF approach at the landscape level in the Chaco region, to advance towards LDN	Investment	<p>2.1. SLM and SFM practices implemented within the framework of the ISMBF improve the environmental functions of biodiversity and forests, reduce and / or reverse land degradation and improve life systems in the El Chaco region.</p> <p><i>Core Indicator - 3.1: 1,200 ha of degraded agricultural land in the process of being restored</i></p> <p><i>Core Indicator - 4.1: 60,000 hectares of landscapes under improved management (SFM) for the benefit of biodiversity (area 1: sub-Andean fringe and plains of the Chaco)</i></p> <p><i>Core Indicator - 4.3: 40,000 ha under silvopastoral</i></p>	<p>2.1.1. Training programme and technical exchange with local actors (with a gender and intergenerational approach) developed for the design, implementation and management of sustainable production systems under the ISMBF approach</p> <p>2.1.2. SFM and SLM practices within the ISMBF framework have been prioritized and implemented at the local level, in line with the action plans as formulated under 1.1.4, with the aim of restoring degraded lands, supporting the reestablishment of the environmental functions of biodiversity and forests, and strengthening local life systems, with participation of at least 30% women and 10% young people</p>	GET	1,879,403.00	12,746,052.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
3. Knowledge management, M&E and COVID-19 prevention	Technical Assistance	<p>3.1. Strengthened partnerships and decision-making procedures at different government levels for long term adoption of ISMBF practices and LDN monitoring</p> <p><i>Agreements established with institutions for the follow-up of national commitments under the UNCCD, CBD and UNFCCC.</i></p> <p>3.2. Knowledge management and Communication strategy developed and implemented with a gender perspective allows the dissemination and scaling up of the ISMBF and LDN</p> <p><i>Communication strategy with a gender perspective implemented</i></p>	<p>3.1.1 Exit strategy including (i) knowledge sharing mechanisms (ii) strategic partnerships (iii) consolidated institutional technical teams, and (iv) streamlined decision-making procedures, prepared and adopted by the institutions involved in the project and approved by the Project Steering Committee</p> <p>3.2.1. Knowledge management and Communication strategy formulated and implemented</p> <p>3.3.1. COVID-19 prevention plan implemented with the different project stakeholders.</p> <p>3.3.2. Project Evaluations (mid-term and final) completed in a timely manner to inform and guide the implementation of the project</p>	GET	545,008.00	4,020,060.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
				Sub Total (\$)	3,338,968.00	21,442,494.00
Project Management Cost (PMC)						
		GET	164,000.00		1,128,552.00	
		Sub Total(\$)	164,000.00		1,128,552.00	
		Total Project Cost(\$)	3,502,968.00		22,571,046.00	

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Ministry of Environment and Water	Public Investment	Investment mobilized	22,264,439.00
Recipient Country Government	Municipal Autonomous Government of Monteagudo	In-kind	Recurrent expenditures	71,839.00
Recipient Country Government	Peasant Native Indigenous Autonomous Government (GAIOC)	In-kind	Recurrent expenditures	14,367.00
Recipient Country Government	Autonomous Municipal Government of Machareti	In-kind	Recurrent expenditures	20,115.00
Recipient Country Government	Autonomous Municipal Government of Huacareta	In-kind	Recurrent expenditures	25,143.00
Recipient Country Government	Autonomous Municipal Government of Villa Vaca Guzman	In-kind	Recurrent expenditures	25,143.00
GEF Agency	FAO	Grant	Investment mobilized	150,000.00
Total Co-Financing(\$)				22,571,046.00

Describe how any "Investment Mobilized" was identified

Cofinancing from FAO corresponds to funds mobilized under the technical cooperation project titled "Strengthening Community Indigenous Territorial Management as a productive reactivation mechanism in a context of COVID-19 and adaptation to Climate Change", which seeks to support the development of life plans, which contribute to improving territorial governance in the target area. The Government of the Plurinational State of Bolivia will mobilize resources to complement the GEF grant through the following activities: The government is executing Integrated Water Resources Management and Integrated Watershed Management Projects (GIRH/MIC by their Spanish acronym), contributing to participation and governance and other themes related to the conservation of water sources and their use, which incorporate SLM while contributing to the achievement of productive systems under sustainable irrigation. In this regard, the irrigation works that are developed in the area of the Captaincies (authorities representing

territorial and political jurisdictions), will improve food production, livestock management and livelihoods. These projects are framed in the context of MMAyA programmes that are part of the Ministry's Institutional Executive Plan and in long-term sector planning, which are implemented by the Vice Ministry of Environment, Biodiversity, Climate Change and Forest Management and Development, and the Vice Ministry of Water Resources and Irrigation. The project activities to be supported by the government include investment related to afforestation and reforestation at the basin and micro-basin level. At the sub-national government level, resource mobilization is planned in each of the eight municipalities included in the project in order to support the implementation and/or strengthening of the ISMBF in their jurisdictions. Other effects of Component 1 of the project include: (ii) annual purchases by at least three municipalities of ISMBF products produced by indigenous peoples and local communities, which are marketed through the OECOMs, and are included in the municipal public school feeding programmes (?School breakfasts?); and (iii) direct purchases by retailers of ISMBF products produced by indigenous peoples and local communities, according to Supreme Decree No. 3639, which establishes that 10 percent of their merchandise must come from OECOMs.

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
FAO	GET	Bolivia	Biodiversity	BD STAR Allocation	2,189,355	207,989	2,397,344.00
FAO	GET	Bolivia	Land Degradation	LD STAR Allocation	1,313,613	124,793	1,438,406.00
Total Grant Resources(\$)					3,502,968.00	332,782.00	3,835,750.00

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **false**

PPG Amount (\$)

150,000

PPG Agency Fee (\$)

14,250

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
FAO	GET	Bolivia	Biodiversity	BD STAR Allocation	93,750	8,906	
FAO	GET	Bolivia	Land Degradation	LD STAR Allocation	56,250	5,344	
Total Project Costs(\$)					150,000.0	14,250.0	164,250.0

Core Indicators

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
250,000.00	250,000.00	0.00	0.00

Indicator 1.1 Terrestrial Protected Areas Newly created

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

Name of the Protected Area	WDP A ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
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Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
250,000.00	250,000.00	0.00	0.00

Name of the Protected Area	WDP A ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Akula National Park	125689342468	SelectNational Park	80,000.00	80,000.00	0.00	0.00	28.00		

Name of the Protected Area	WDA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Akula National Park Kaalayadel Gran Chaco	125689303884	SelectNational Park	150,000.00	150,000.00			39.00		
Akula National Park Otuquis	125689303883	SelectNational Park	20,000.00	20,000.00			38.00		

Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1200.00	1200.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1,200.00	1,200.00		

Indicator 3.2 Area of Forest and Forest Land restored

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

Indicator 3.3 Area of natural grass and shrublands restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
108000.00	108000.00	0.00	0.00

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
100,000.00	60,000.00		

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Type/Name of Third Party Certification

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
8,000.00	48,000.00		

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Documents (Please upload document(s) that justifies the HCVF)

Title

Submitted

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)	0	2535071	0	0
Expected metric tons of CO₂e (indirect)	0	0	0	0

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)		2,535,071		
Expected metric tons of CO₂e (indirect)				
Anticipated start year of accounting		2022		
Duration of accounting		20		

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)				
Expected metric tons of CO₂e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

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

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

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

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)
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Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	5,225	7,500		
Male	5,225	7,500		
Total	10450	15000	0	0

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

Part II. Project Justification

1a. Project Description

- 1) Global environmental and/or adaptation problems, main causes and barriers to be considered
(description of the systems)

The national context of loss of biodiversity and land degradation

1. The Plurinational State of Bolivia is among the 15 countries with the greatest biodiversity in the world, home to around 4 percent of the world's biological diversity. It has a great biogeographical variety related to its location and topography, together with a complex evolutionary history. Thus, Bolivia is one of the countries with the greatest diversity of ecoregions (12 ecoregions subdivided into 23 sub-regions) (Ibisch and M?rida, 2003). As a result of the permanent interaction of complex sociocultural systems with the diversity of natural systems, Bolivia has a complex and multidiverse mosaic of Life Systems, which are understood as territorial management systems (MMAyA, 2018a). It is one of the 11 countries in the world with the greatest richness of plant species and among the ten countries with the greatest diversity of birds and mammals. It ranks fourth in butterfly richness, is one of the 13 countries with the greatest richness of amphibian species and is among the 11 countries with the greatest diversity of freshwater fish (UNDP, 2008; Ribera, 2008). Along with 15 other countries, Bolivia is part of a group of States that are home to 70 percent of global biodiversity (MMAyA, 2014).

2. Bolivian forests constitute one of the most diverse biomes in the country, with Bolivia being the country with the sixth largest amount of tropical natural forests in the world, with an area that occupies 40 percent of the national territory, and one of the ten richest in fresh water per inhabitant (MMAyA, 2015). There are forests within the national territory that have a high value as "centres of biological diversity and endemisms," which represent priority areas for the development of sustainable use activities (MMAyA, 2018a).

3. Agrobiodiversity (biodiversity associated with agriculture), which in Bolivia coincides with biogeographic areas that have a high diversity of species, is strongly linked to family subsistence and is sustained by cultural processes rooted in traditional societies. It contributes significantly to food security in the country, although historically it has not been properly valued. There are at least 152 species of crop wild relatives facing some degree of threat, all of them a priority due to their value as a source of genetic resources for food and other priority uses (VMABCC-Biodiversity, 2009; MMAyA, 2014 and Bellon *et al.*, 2015). Bolivia is one of the three countries in the world with the greatest wealth of local varieties of corn, which are produced in all regions of the territory, from the lowlands (from

150 meters above sea level) to the highlands (over 3,800 meters above sea level). For this reason, it is important to ensure the maintenance of germplasm banks of crops with high nutritional value, such as potatoes and corn, which have seen their genetic diversity drastically diminished (CIPCA, 2012).

4. The scenario in Bolivia is one of increasing land degradation and loss of biodiversity. Around 35 percent of agricultural soils are degraded, and more than 60 percent of its population lives and produces in this environment with great vulnerability to food insecurity. The main causes that give rise to both processes are associated with the expansion of the agricultural frontier, overexploitation of natural resources (for example, mining and hydrocarbons production), deforestation, inappropriate use of land, urban growth without planning, fires and the effects of climate change (MMAyA, 2014 and 2018b). In this regard, at the national level it is estimated that deforestation generates 95 percent of the reduction in biodiversity, while climate change is responsible for the remaining 5 percent (Valencia and Andersen, 2009). In addition, 80 percent of the country's carbon dioxide emissions are associated with the advance of the agricultural frontier (Hoffman and Torres-Heuchel, 2014).

5. Although Bolivia has a National System of Protected Areas (SNAP), which covers more than 23 percent of the national territory (SERNAP, 2018), their natural and cultural resources are threatened by hydrocarbon production, mining, hydroelectric and geothermal projects, forestry and agriculture, the development of road and rail infrastructure, seasonal wildfires, hunting and poaching, the advance of deforestation and the effects of climate change. In addition, national protected areas overlap with more than 1,161,000 ha of hydrocarbon blocks, including production and exploration, and with mining concessions that cover more than 281,564 ha (SERNAP, 2007).

6. Bolivia is highly vulnerable to different impacts of climate change, despite having limited liability for its underlying causes. In the last ten years, the effects of climate change have been expressed in periods of shorter and more intense rains, high evapotranspiration and a marked water deficit (UNEP-REGATTA, 2017). In the western part of the country, the glaciers of the Cordillera Real retreated during the period between 1963 and 2006, showing an even more marked reduction from 1975, with a loss of 48 percent of its glaciers (Soruco *et al.*, 2009). According to Hoffmann and Torres (2014), by 2010 between 30 and 50 percent of the country's glacial surface had already been lost. Also, higher temperatures and stronger precipitation events are expected during the rainy season, which expose the different regions of the country to prolonged dry seasons and an increase in the frequency and magnitude of floods, hailstorms, river overflows, landslides and frosts (European Commission, 2008).

Land degradation and loss of biodiversity in the context of climate change in the Bolivian Chaco

7. The Gran Chaco Americano is an ecoregion shared by four countries: Argentina, Bolivia, Paraguay and Brazil (a small portion). Covering an area of 1 million km², it is home to numerous indigenous

peoples and local communities, and offers a habitat of abundant biodiversity: more than 3,400 species of plants, approximately 500 species of birds, 150 species of mammals, 120 species of reptiles and more than 100 species of amphibians (MMAyA, 2014).

8. The Plurinational State of Bolivia is home to approximately 12 percent of the Gran Chaco Americano in the departments of Santa Cruz, Chuquisaca and Tarija, with a total of 2,952,219 inhabitants and a density of 1.62 inhabitants / km² (INE, 2012). The great variety of environmental conditions gives rise to an important diversity of forest ecosystems. Specifically, the Bolivian Chaco is a semi-arid to dry sub-humid region that covers an area of 127,755 km², with 83,150 km² of forests, inter-Andean dry forests and Bolivian Tucuman (FAN and SERNAP, 2006). Rainfall varies from 200 to 1,200 mm (Redford *et al.*, 1990), with a marked seasonal rainy regime and 80 percent of the rains concentrated in summer (October to April). The variation in temperature in the region is extreme, from -10 °C to 49 °C. With respect to potential evapotranspiration, an increasing trend is observed in the southwest to northeast direction with values that reach 1,985 mm per year in the department of Santa Cruz, with the maximums being registered in the region of the Sierras del Ito and in the eastern sector, corresponding to the Otuquis National Park and Natural Area of Integrated Management (ANMI). It is a groundwater recharge zone that feeds the Pilcomayo (98,000 km²) and Parapetí (10,580 km²) basins, in the southeast of the country. These particular ecological conditions result in a mosaic of forests, savannas and grasslands, and biogeographic factors that result in the adaptation of numerous species (Bucher, 1980; 1982). It is considered that the Guaraní Nation, in interaction with the Chaco ecosystem, generates the biocultural/life systems of indigenous peoples. These peoples, together with local communities, benefit from multiple environmental functions, such as food and forage provision, regulation of climatic and hydrological cycles, pollination, supply of soil nutrients, sediment retention, biological regulation, soil formation, capture and carbon storage, habitat preservation for biodiversity, scenic beauty, among many others. The Bolivian Chaco is home to the 60,000 inhabitants that make up the Assembly of the Guaraní Nation (APG), which are organized into 24 captaincies and 271 communities. In these territories, land tenure is communal.

9. Within the Bolivian Chaco, the project intervention area encompasses three ecological zones: the Sub-Andean Belt, the Piedemonte and the Chaco Plain. It should be clarified that, although the project focuses on the ISMBF in the dry forests of the Bolivian Chaco ecoregion, considering its connectivity and the importance of promoting the development of complete ecological gradients at the basin scale, it also includes ecosystems under higher humidity regimes. It is made up of eight municipalities: five from Chuquisaca (Monteagudo, Huacareta, Muyupampa, Huacaya and Machareti), and three from Santa Cruz (Cuevo, Boyuibe and Charagua/Autonomous Government of the Indigenous Peoples, GAIOC Charagua Iyambae). The surface of the project area is 9,868,207 ha, and is home to 94,652 inhabitants, of which 49,219 are men and 45,433 women (INE, 2012). The population is heterogeneous, made up mainly of Guaraní indigenous peoples, small farmers, Mennonites, and ranchers (many of them immigrants from the Bolivian highlands). There are ten Indigenous Peasant Territories (TIOC) of the Guaraní Indigenous Nation and 15 zonal captaincies (see annex Indigenous Peoples Plan, 2021). For these groups, the main economic activities are agriculture, livestock and the

collection of non-timber forest products. Despite the wealth of the area, it faces important social challenges, such as poverty, which affects 75 percent of the population and is characterized by a high percentage of households with unsatisfied basic needs (INE, 2012). The prioritized areas for the implementation of the project will be addressed in point 1.b.

10. In the Chaco region, and in Bolivia in general, there is great inequality in terms of land tenure, which represents the main reason for social and political conflict. At the national level, 70% of the land belongs to only 7% of the population, which means that indigenous peoples and smallholders do not have enough land to fulfill their livelihoods. For example, in the Guaraní territory of Alto Parapetí in Santa Cruz, non-indigenous third parties hold most of the lands. According to INRA estimates, out of 98,875 hectares in Alto Parapetí, 14 properties cover 52% of the land; 28 medium-sized properties cover 34.6% of the land, and 40 small properties account for 7.8% of the total land (OEA, 2009). The Bolivian Chaco is a region with unequal access to land and with unfinished titling processes. There are conflicts of interest between different user groups such as ranchers, indigenous communities, immigrants and medium-sized agricultural producers. The legal uncertainty as a consequence of this situation creates an uncertain environment for planning agricultural production and the sustainable management of natural resources, both for communities and for private producers.

11. It is important to highlight that three Key Biodiversity Areas (KBA) are located within the project's intervention area, namely the PN-ANMI Kaa Iya del Gran Chaco, the PN-ANMI Otuquis and the Ramsar site Palmar de the Saline Islands of San José. These KBAs constitute the habitat of critical populations of threatened species, and seek to protect the high values of biodiversity that they harbour. Among the main plant species of PN-IMNA Kaa-Iya, those that surround the permanently flooded lagoons include the *Eleocharis fistulosa* (Cyperaceae), *Desmodium cajanifolium* (Leguminosae) and *Leersia hexandra* (Gramineae). The fauna present in the area is representative of the Chaco plain with 350 registered species, including the Tropero del Chaco (*Catagonus wagneri*) endemic species of the Chaco, the armadillos *Tolypeutes matacus* and *Chlamyphorus retusus* endemic to the region, the hare (*Dolichotis salinicola*) and Tucoma (*Ctenomys conoveri*). In addition, the presence of the Guanaco (*Lama guanicoe*) has been confirmed in the grasslands of the southwest of the area. There are also other species such as the Tropero (*Tayassu pecari*), the endemic armadillo (*Cabassous chacoensis*), the Pejechi (*Priodontes maximus*), the Titi Monkey (*Callithrix argentata*), the Manechi (*Alouatta caraya*), *Panthera onca* and *Myrmecophaga tridactyla*. The KBAs seek to protect the key biodiversity of the region from the consequences of the expansion of livestock properties, agro-industrial activities, logging, poaching for commercial purposes, the drastic and mechanized modification (diversion) of the waters of the Parapetí River for agro-industrial purposes, the gas pipeline to Brazil, overgrazing and uncontrolled burning (<http://www.keybiodiversityareas.org/> and SERNAP, 2000).

12. The three main drivers of deforestation in the Bolivian lowlands (including the Gran Chaco forests, the Chiquitano forest and the Bolivian Amazon) are mechanized agriculture, cattle ranching and small-scale agriculture (Müller *et al.*, 2014). The project intervention area, which in 2018 had forests covering an area of 77,814,070 ha, is seriously affected by the intense rates of deforestation. Between 2016 and 2018, 103,789 ha were lost. Considering, in addition, the total loss of forests due to other factors not strictly linked to deforestation, such as forest fires, the losses are even more alarming. Between 2000 and 2019, a loss of 602,543 ha was recorded in the intervention area, of which 98 percent was lost in the GAIOC Charagua Iyambae, constituting a threat to the conservation of biodiversity and livelihoods, with repercussions especially in buffering and connectivity of protected areas.

13. At the local level, the main threats to biodiversity and agrobiodiversity are: (i) wind and water erosion that leads to soil degradation and low fertility, (ii) extensive livestock farming over large areas that affects the recovery of wild species in the Chaco forest of the plain, (iii) the expansion of the agricultural frontier and the practices of *chaqueo* and (iv) the loss of quality and diversity of local genetic resources due to the lack of adequate seed management. On the other hand, oil activities cause negative impacts especially on the environment. The main causes of degradation in the Guaraní agricultural system are unfavorable policies, limited access to land: smallholdings and marginal lands with little agricultural potential; limited access to water for human consumption and irrigation; and inadequate technological proposals for the intensification of the productive system.

14. Frequent fires affect the area's important biodiversity, spreading over vast areas of forest, crops and pastures of high cultural value. The intentional burns carried out to expand the cultivated area, which are associated with winds and repeated droughts, cause the fire to spread, transforming them into forest fires. Between 2000 and 2019, in the project intervention area, 671,182 ha were burned. Specifically, between August and September 2019, large-scale fires affected the eastern sector of the GAIOC Charagua Iyambae burned approximately 30,820 ha of the total 706,551 ha lost in Santa Cruz, reaching the Otuquis National Park and the Embi Guazu Conservation Area.

15. Recurrent droughts, combined with strong and accelerated changes in land use and cover, intensifying demand for irrigation, groundwater salinity problems and the consequences of climate change in the region, lead to degradation in the quality of water resources, as well as the decrease and even disappearance of water sources traditionally used by indigenous communities and local producers (MMAyA, 2017). Therefore, it is essential to promote the integrated management of watersheds and micro-watersheds and increase the efficiency of water use through the strengthening of water management (Saavedra, 2018) and technical advice aimed at the development of sustainable productive systems under irrigation.

16. According to the land degradation assessment in drylands (LDAD), in 2017 5,045,392 ha (55 percent of the intervention area) presented high, very high and extreme degrees of degradation (MMAyA, 2017). The most degraded sectors are found in the GAIOC Charagua Iyambae, covering a large part of the surface of the Kaa Iya del Gran Chaco protected area. The LDN evaluation reveals that, between 2001 and 2015, 8.82 percent of the area suffered land degradation, while between 2001 and 2020, the Dynamics of Land Productivity decreased by 1,151,451 ha (11.66 percent of the project area). Bolivia's National Strategy for Land Degradation Neutrality (LDN) by 2030 identifies three major environmental areas at the national level: the Andean zone (28 percent of the country's area), the Sub-Andean zone (13 percent of the national area) and the eastern Llanos and Chaco area (59 percent of the national area). The project intervention area comprises part of the latter two. The Sub-Andean zone is the intermediate and transitional region between the highlands and the eastern plains and the Chaco. In its internal valleys, sloping soils with little vegetation cover and with constant erosive processes that cause loss of the arable layer predominate. Conversely, on the open slopes to the East, when affected by the humid ascending currents from the East, highly vegetated ecosystems are observed, with less risk of natural degradation, although strongly affected by anthropic degradation. The Llanos and Chaco area is a land of plains and low plateaus, covered by extensive jungles. It is an area strongly affected by deforestation (for the use of wood and agricultural areas), opening up lands that are later abandoned when their fertility conditions have diminished. It also presents a high risk of fires due to its high temperatures and prolonged droughts. It is the area with the largest area of soils degraded by anthropic action (MMAyA, 2018).

17. Regarding the impact of climate change in the project area, climate projections indicate an increase in temperature and irregularities in the temporal and spatial distribution of rainfall, which would lead to the occurrence of extreme events such as fires, floods and prolonged droughts. (UNEP-REGATTA, 2017). In the 2021-2030 period, an increase of between 3 and 6 percent in average temperature is estimated for the intervention area, while for the period 2031-2040 an increase in temperature between 1°C and 2°C is estimated. Regarding rainfall, for the periods 2021-2030 and 2031-2040, an increase is expected between 9 and 18 percent. Between 2071 and 2100, rainfall is expected to increase by 30 percent (Andrade, 2014) in summer, which will increase the probability of floods with the warmer climate increasing the occurrence of extreme events (IPCC, 2007). In this context, the processes of land degradation will be accentuated by the loss of soil, loss of biodiversity, possible material damage, the impact on the livelihoods of local populations, mainly in their agricultural activities, among other factors.

18. In this context, where the richness of biodiversity and the habitat of indigenous communities are threatened by numerous degradation processes, conservation strategies at the national and sub-national level are key tools that allow the incorporation of the ISMBF approach. It should be noted that the Guaraní people have played a leading role in the processes of creating protected areas. For example, in the case of the creation of the Kaa Iya Protected Area of the Gran Chaco, they supported and promoted the creation of the area in defence of their territory and as a strategy to stop the expansion of the agricultural frontier.

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Remaining barriers

19. Despite the efforts by the Government of Bolivia to address problems related to biodiversity, land degradation and deforestation in the Chaco, it is still necessary to resolve different challenges related to the barriers detailed below:

Barrier 1: Limited institutionalization of the ISMBF and lack of internalization of Land Degradation

Neutrality at the central and sub-national level

20. Although Bolivia has a comprehensive national regulatory framework related to ISMBF, the territorial planning processes at the sub-national level (departmental governments and municipalities) are only just beginning to include it in their planning and decision-making mechanisms. Also, these processes often have little consideration for the spatialization of actions and projects and of the technical basis for land use designations. This is related to the lack of institutional capacities (including normative and executive competencies) in the different levels of local government, which constitutes an obstacle in the definition of policies, programmes and concrete local actions to promote ISMBF and, consequently, of policies leading to SFM, SLM and LDN. The frequent instability of the technical personnel means that even with training and financing efforts, results are not achieved or no solid and sustainable development actions are observed.

21. Also, the administrative structure on which the LDN process is based at the institutional level presents a certain level of overlapping of technical and administrative attributions, which generates uncertainties regarding the roles and competencies of the actors involved in the implementation process and monitoring at different levels. According to national regulations, the focal point of the UNCCD is in the Ministry of the Environment and Water, specifically in the Vice Ministry of Water Resources and Irrigation. For its part, the land issue is addressed by the General Directorate of Watersheds and Water Resources, which has incorporated the issue of land degradation in its integral concept of watershed management. Despite the assignment and definition of functions for compliance with the international agreement related to the LDN, the responsibility for land management is diffuse within the structure of the Bolivian State, since other Directorates in both the MDRyT and MMAyA simultaneously address issues related to land degradation, sustainable land management and biodiversity. Bolivia lacks a clear and efficient institutional framework that eliminates confusion and gaps in terms of the regulation, operation, execution and control of the use, management, conservation and recovery of soil and the Earth. As a result, there are moments in which no institution takes the lead on the issue or, conversely, two or more public institutions with overlapping jurisdictions consider it to be their responsibility (MMAyA, 2018).

22. In terms of forest fires, although Bolivia has an institutional and regulatory framework that addresses this problem, there are still gaps, deficiencies and overlapping powers, which further aggravate this problem with important environmental and socioeconomic consequences. The lack of technical and economic resources at different levels for the monitoring, prevention and management of

fires generates great difficulties in the face of the important events that occur in the project's intervention area, which is an area with a high occurrence of fires mainly associated with practices of enabling forest land for agricultural uses (MMAyA, 2015). Faced with these institutional weaknesses, local people resort to fighting fires with their limited means, even without sufficient sources of water supply, personal protection materials or training.

23. In addition, there is little knowledge about the instruments of integral territorial planning and sectoral projects related to the ISMBF, as well as the guidelines related to the triangle of life systems, which includes environmental functions, poverty and systems of sustainable production. Consequently, the complexity of landscape-scale processes and the interactions between social and environmental aspects that characterize drylands are not adequately addressed in sub-national territorial planning and natural resource management processes. These obstacles negatively impact the process of achieving food security with sovereignty, gender and generational equity for the inclusion of less represented sectors, such as women, children and the elderly.

24. The adoption of the ISMBF and LDN in the current sub-national decision-making mechanisms presents weaknesses that are evident in the absence of these approaches in the territorial management plans at the sub-national level. The lack of institutional capacities and participation mechanisms aimed at achieving the governance of the ISMBF prevents the internalization and mainstreaming of the approach to integral territorial planning and sustainable production systems.

Barrier 2: Limited knowledge and institutional capacities for the implementation of ISMBF at the central and sub-national level and limited market access opportunities

25. The sub-national sectoral policies related to ISMBF in the Bolivian Chaco partially incorporate the socio-ecological and economic potential of the Chaco ecosystems, the conservation of biodiversity and forests and the sustainable use of the soil based on agroecological approaches with a focus on the reduction of poverty, the strengthening of the rights of indigenous peoples, the maintenance of environmental functions, and building resilience to climate change, among others. The lack of institutional and local capacity to incorporate and implement ISMBF practices, especially those aimed at SFM and SLM, is reflected in an inadequate interpretation of this concept, understood mainly as the simple application of a series of techniques aimed at improving soil fertility, erosion control, and increasing productivity through the use of synthetic inputs focused on obtaining short-term productivity, all without considering the integral development of sustainable life systems, and the restoration of degraded lands and ecosystems.

26. In addition, sub-national policies often lack coordination, or are even incompatible with each other, generating the implementation of policies that are not beneficial to ecosystems and their environmental

functions. On the other hand, there are still large gaps to achieve compatibility between municipal management instruments and the Charagua Iyambae Indigenous Autonomous Government (GAIOC) with those of protected areas, which has repercussions for social and institutional participation in the management and governance of the protected areas located in the project intervention area. It is necessary to emphasize that there are different levels of governance in the area: one is related to the development of agreements of all the actors involved in the management of the Bolivian Chaco, such as private actors, indigenous communities, local populations, and the autonomous territorial entity (ETA), among others; another, at the community level, is led by the APG and the captaincies, reaching up to the level of community leadership, which make decisions based on their priorities and interests related to the management of the community's territory.

27. Also, the development of sectoral policies includes little participation of indigenous peoples, women, youth, the elderly and other community actors. The result is the exclusion of their roles as agents of conservation and sustainable use, despite their importance in reducing vulnerability in the context of land degradation and climate change. At the same time, this leads to the loss of traditional knowledge and practices, which facilitates the incorporation of technologies, values and modes of production not adapted to local contexts and responding only to a market economy. This has led to the existence of few sustainable management experiences in highly vulnerable ecosystems, such as those in the project's intervention area, as well as little institutional and financial support for their implementation and dissemination. At the same time, the real contributions of the implementation of the ISMBF approach at the landscape level in the achievement of the national LDN goals are not addressed in an integrated manner.

28. Indigenous and local communities in the project area have significant limitations accessing markets and commercializing their products. There is a lack of mechanisms that allow the insertion of local production in local, regional and national commerce. The lack of access to markets accentuates the conditions of poverty, and leads to a series of negative environmental impacts when producers try to intensify production. Hence, it is necessary to improve technological innovation and the access of agricultural products from Chaco to markets within a framework of social, cultural and gender equity.

Barrier 3: Lack of coordination between information and monitoring systems make it impossible to generate, evaluate, monitor and disseminate knowledge, as well as to share lessons learned to promote ISMBF and the monitoring of LDN

The Plurinational State of Bolivia has a set of initiatives to monitor biodiversity, conservation and degradation of forests and lands, such as land cover and use, active degradation processes such as forest fires, loss of biodiversity, and deforestation, among others. However, the Information and Monitoring Systems are scattered and uncoordinated, with data, particularly at the sub-national level, that is often

incomplete, fragmented, out-dated or unavailable to local actors and the different sectors involved in the implementation and mainstreaming of ISMBF. This limitation responds to a large extent to the overlapping of institutional functions described in the previous barrier, and to the lack of technical capacity for the implementation of a sustainable integral monitoring system, transcending the management periods of the different governments.

29. The existence of information gaps between the sectors that implement ISMBF in the field and those responsible for the design of policies and incentives limit the possibilities of development and replicability of the approach, since the impacts on environmental functions, livelihoods and the restoration practices and measures to achieve LDN are not recorded or monitored. In this regard, there is no LDN monitoring system within the framework of the ISMBF that integrates the information under standardized protocols at the national and sub-national level or that incorporates the systematization of ISMBF practices to facilitate their dissemination. Currently, there is no clear mechanism for monitoring LDN and environmental functions at the sub-national level, in addition to the lack of information necessary for monitoring LDN indicators, mainly related to soil organic carbon, land cover and uses, and net primary productivity, and their evaluation at the landscape level.

30. The integration of ISMBF in integral territorial planning implies the need to have up-to-date and operational information systems to facilitate decision-making based on profound knowledge of the state of socio-ecosystems and how they are impacted by SFM and SLM actions. For this reason, the existing weaknesses in this area constitute a real obstacle for adaptive management within the framework of the ISMBF and sustainable management. They also have an impact at the national and international level where Bolivia must report its contributions under international commitments, such as the LDN-2030 Strategy, within the framework of the UNCCD, the Aichi Targets^[1] of the CBD and the NDCs in the framework of the UNFCCC. These reports require the systematic collection and presentation of information, a process that is usually approached in a sector-specific manner with little intersectoral coordination, thereby generating data overlap and duplication of efforts. In this regard, an integrated monitoring system for LDN, ISMBF and environmental functions would facilitate efforts and the fulfilment of the country's institutional responsibilities.

31. There is no strategy for the dissemination of initiatives within the framework of the ISMBF, which would facilitate the incorporation of results and lessons learned from different experiences related to SFM and SLM and integral territorial planning. This makes it difficult to include ISMBF in decision-making and in the replicability of practices.

2) Baseline scenario and associated projects

Synergy between LDN and ISMBF as a strategy against the processes of land degradation and loss of biodiversity

32. Land degradation is defined as "the reduction or loss of the biological or economic productivity and complexity of rainfed agricultural lands, irrigated croplands, grasslands, forests and wooded lands, caused by land use systems or by a process or combination of processes, including those resulting from human activities," such as soil erosion caused by wind or water, deterioration of physical and chemical properties and biological or economic properties of the soil, and the lasting loss of natural vegetation (Article 1, UNCCD, 1992). It is also defined as the long-term loss of ecosystem functions and productivity caused by disturbances from which the land cannot recover unaided (Bai *et al.*, 2008).

33. The origin of this problem is multifactorial (human activities, climatic variations, change/evolution of nature) and at the same time multifaceted (environmental, productive, social, etc.), based on a combination of policies (governance), the culture of use, management and protection of natural resources, the environment, biophysical characteristics of the territory and climate variability (Grainger, 2015; Gnacadja, 2015; UNCCD, 2015). Land degradation is a global process that extends to more than 150 countries around the world, covering 23 percent of the planet's surface (Stavi and Lal, 2015). It is estimated that it currently affects more than 1.5 billion people (Gnacadja, 2012), mainly those in the most impoverished sectors (UNDP-UNCCD, 2011; Middleton *et al.*, 2011).

34. The drivers of land degradation are classified as direct or underlying (Geist and Lambin, 2002). The former include anthropic impacts, such as unsustainable agricultural and livestock management practices, deforestation and forest degradation, changes in land use and extension, among others, which are usually combined with underlying drivers associated mainly with political-institutional, economic and sociocultural factors (UNCCD/UNEP, 1995; Cowie *et al.* 2018; Olsson *et al.*, 2019). Its consequences include the loss of biodiversity, the reduction of ecosystem functions, and the increase in vulnerability to climate change, among others.

35. Within the framework of the 2030 Agenda for Sustainable Development (UN, 2015), under Decision 7/COP.13, the Conference of the Parties (COP) adopted the UNCCD Strategic Framework 2018-2030. Regarding Sustainable Development Goal (SDG) 15, "Life of terrestrial ecosystems", target 15.3 states: "by 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world." In this way, Land Degradation Neutrality (LDN) appears as an integral approach that transcends the conservation of the edaphic resource and expresses a global objective and a goal for national governments to counteract the advance of land degradation by 2030. Its main purpose is to stop or

reverse the trend of decline in physical-biotic quality that sustains the functioning of ecosystems, in order to achieve a state of balance sufficient to maintain a level of ecosystem health and guarantee food security for future generations (UNCCD, 2014). For their part, Cowie *et al.* (2018) highlight the importance of achieving this objective, since it would positively impact the future well-being of humanity by maintaining and improving the provision of the associated flows of ecosystem services.

36.LDN focuses on striking a balance between land degradation and the measures that can be implemented to improve degraded land. In this regard, actions must be carried out to achieve LDN, avoiding land degradation, improving SLM and SFM practices, and integral planning of the territory, and adopting restoration and rehabilitation measures, in order to achieve healthy and productive land that is necessary for sustainable development with equality. LDN provides numerous environmental and social benefits, which contribute to the achievement of food security, well-being, the availability of resources (including water resources), as well as contributing to mitigation and adaptation to climate change (UNCCD, 2016). The objective of LDN is to balance losses with gains in terms of ecosystem services and functions provided by land resources, such as soil, water and biodiversity, and to strengthen the resilience of the land and the populations that depend on it (UNCCD, 2016).

37.In this context, the **Integrated and Sustainable Management of Biodiversity (GISB)** proposed by the Plurinational State of Bolivia contributes directly to the aims of LDN, since the GISB is conceived as a *set of actions that develop, encourage, promote and strengthen conservation, sustainable use, the development of inter-scientific knowledge of biological diversity, food security with sovereignty, based on multiculturalism and traditional knowledge, as a key factor to achieve Life Systems^[2] in harmony with Mother Earth*. Bolivia, as a signatory to the Convention on Biological Biodiversity (CBD), prepared in 2018 the Plurinational Policy and Strategy for the Comprehensive and Sustainable Management of Biodiversity (2019-2030), under the framework of Law No. 777 of the **Integral State Planning System (SPIE)** and Law No. 300, in line with the sectoral planning defined through the PSDI led by the MMAyA. The objective of the strategy is to *Promote Integrated and Sustainable Management of Biodiversity, prioritizing strategic ecosystems that contribute to maintaining the integrity of Life Systems, overcoming poverty and Integral Development to Live Well, within a territorial framework and respect for the rights of Mother Earth.*

38.As part of this approach, and in response to the intense processes of deforestation and change in land use that occur in Bolivia, the **Integrated and Sustainable Management of Forests^[3]** is integrated into the regulatory framework of the GISB, and is defined as the integral and sustainable management of timber and non-timber resources, afforestation and reforestation for the restoration of fragile ecosystems and strategic watersheds, as well as the management of permanent forest production

lands, in order to minimize the change of land use for subsistence crops and the conservation of the diversity of environmental functions within the framework of ancestral and technified practices, with a focus on mitigation and adaptation to climate change (MMAyA, 2018a). In this context, the policy for the Integrated and Sustainable Management of Forests includes six key aspects: the principles of integral development in harmony with Mother Earth; sustainable use and exploitation; conservation of environmental functions for ecological resilience; the diversification of sustainable production systems and generation of added value; territorial governance and democratization of rights in the forest; and inter-scientific dialogue and knowledge.

39. Under these principles, the definition of **Integrated and Sustainable Management of Forests and Biodiversity (ISMBF)**, which is adopted by this project, is related to the Plurinational Policy and Strategy for the Integrated and Sustainable Management of Biodiversity 2019-2030 established by the Ministry of Environment and Water in 2019.

40. By involving the implementation of SLM and SFM practices, the adoption of the ISMBF approach promotes the strengthening of sustainable and compatible production systems, thereby maintaining environmental functions while recognizing the economic-social development of the actors, their know-how and traditional knowledge. Through integral territorial planning, the approach seeks to organize and harmonize production processes that promote SFM and SLM in places where access rights and the benefits of production are mainly received by those social groups that live off the forests, thereby reducing poverty levels and promoting food sovereignty and security (MMAyA, 2018a).

41. It is important to clarify that the concept of integral territorial planning, as addressed in the project, has been incorporated based on the definition in Law No. 777 of Integral Territorial Development Planning. Article 10 establishes that the aim of the Integral State Planning System is the promotion of Living Well through integral development in harmony with Mother Earth, which includes integrating social, cultural, political, economic and ecological dimensions in the harmonious relationship between all living beings, systems and resources of Mother Earth in order to Live Well with oneself, others and nature. Within the framework of integral territorial development planning, the project seeks to promote the management of life systems, to achieve sustainable productive systems, the eradication of extreme poverty and the protection and conservation of environmental functions and components of Mother Earth in different territorial and jurisdictional areas. The SPIE incorporates risk, climate change and life systems management in an integrated manner, strengthening the resilience capacities of society and nature. In this context, Article 5 of the aforementioned Law establishes that Integral Territorial Development Planning should strengthen development planning in the territories in the short, medium and long-term by promoting human and integral development, the plural economy and territorial planning through the institutional structures of the State. This includes investment programming, financing and multi-year budgets, and territorial planning should be carried out in coordination with national and sectoral planning. It is important to note that this project uses the concept of **integrated territorial planning** as a synonym for Integral Territorial Development Planning.

42. Faced with the environmental problems previously mentioned, the Plurinational State of Bolivia has a solid political-institutional and regulatory framework that addresses the sustainable management of the territory and its natural resources. In this regard, both biodiversity and forests are defined in the Political Constitution of the State (CPE) as natural heritage of public and strategic interest for sustainable development. Bolivia's development framework (Economic and Social Development Plan 2016-2020, PDES) includes a comprehensive national vision of well-being and supports the conservation of natural resources, the sustainable use of biodiversity and forests, value-added activities and the strengthening of environmental functions, among others. For its part, the Integral State Planning System (SPIE) prioritizes activities by macro-regions and regions, with the Chaco being a key area to implement agroecological approaches, agroforestry and silvopastoral systems as part of the ISMBF, in addition to contributing to socio-ecological resilience to climate change and the plural economy.

43. The Plurinational Policy and Strategy for the Integrated and Sustainable Management of Biodiversity ? Action Plan 2019-2030, includes five strategic components: political-regulatory; institutionality and territorial governance; conservation and the sustainable use of biodiversity; integrated environmental management for the conservation of biodiversity; and knowledge management and mobilization. In this framework, the implementation of the ISMBF is proposed in a multisectoral and multiscale manner, with a broad and adaptive approach that contributes to integral development, the strengthening of cultural diversity, gender and generational equity and the reduction of poverty. Through its insertion in **integrated territorial planning** and its mainstreaming in productive systems, it can contribute to the fulfilment of the country's international commitments under the framework of the UNCCD, CBD and UNFCCC, and from a broader perspective, to the achievement of the Sustainable Development Goals.

44. Bolivia's National Strategy for LDN 2030, established through the MMAyA (2018b), defines land degradation as the result of a series of processes (erosion, contamination, compaction, exposure, production, change of land use and salinization) that cause the deterioration of its productive capacity, affect socioeconomic conditions and environmental functions (nutrient cycle, water storage and purification, carbon sink, biodiversity habitat, supply of fibers, fuels and food, among others). These processes, caused by anthropic and natural factors, jeopardize food sovereignty, the quality of life of inhabitants and affect the rights of Mother Earth. The Strategy consists of seven lines of action: 1) prevention of the deterioration of lands of natural ecosystems and agro-ecosystems in a good state of conservation; 2) reversal of degradation trends and recovery of already degraded lands of natural ecosystems and agricultural and forestry systems; 3) training of qualified human resources; 4) standardized regulations, protocols and methodologies; 5) promotion of basic and applied research; 6) management, systematization and distribution of knowledge; and 7) awareness and dissemination of knowledge and action needed to prevent further degradation of soils and lands at all levels. It is based on five main indicators: land use change, primary productivity, soil carbon stocks, soil erosion on slopes, and salinization. In this framework, the project is designed to contribute to the achievement of the LDN national goals in line with the seven areas of action described above.

Institutional framework:

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45. The importance of biodiversity and forests for the Plurinational State of Bolivia is reflected in the Political Constitution of the State (CPE), a high-level instrument that defines them as natural heritage of public and strategic interest for sustainable development. The importance of both concepts at the political and institutional level in Bolivia is reflected in Law No. 300/2012 "Framework Law of Mother Earth and Integral Development for Living Well", which highlights the value of complementarity, harmony and balance between Mother Earth and societies in promoting equity and solidarity, in order to achieve the well-being of all the country's inhabitants. In this regard, it promotes the concept of ?Living Well? not only at the individual level, but also collectively and in deep harmony with everything that surrounds us (Article 5.2). In addition, it highlights the importance of the culture of community life in opposition to the individualism on which the irrational exploitation of nature is based. In this regard, the concept of Living Well is fully compatible with the main objectives defined for this project, since these, in accordance with the provisions of the Framework Law of Mother Earth, are aimed at promoting a harmonious relationship between the communities that inhabit the Bolivian Chaco region and its ecosystems through the strengthening of the governance of ISMBF, with the goal of achieving balance and complementarity, while respecting individual and collective rights, and the rights of Mother Earth.

46. It is important to highlight that the project seeks to strengthen ISMBF in order to achieve LDN, through the strengthening of life systems, which are established within the framework of the complementarity of the rights of Mother Earth, the fundamental civil, political, social, economic and cultural rights, the rights of indigenous peoples and peasants, and the rights of the population to live without material, social and spiritual poverty. Life systems are defined as *?Organized and dynamic communities of plants, animals, microorganisms and other beings and their environment, where human communities and the rest of nature interact as a functional unit, under the influence of climatic, physiographic and geological factors, as well as the productive practices and cultural diversity of Bolivians, including the worldviews of the indigenous peoples, and intercultural and Afro-Bolivian communities?* (Art.4, No. 12, Law No. 300).

47. For its part, this Law defines environmental functions as *"The result of the interactions between the species of flora and fauna of the ecosystems, of their own dynamics, of the physical (or abiotic) space or environment and of solar energy. Examples of environmental functions include the hydrological cycle, nutrient cycles, sediment retention, pollination (provision of pollinators for plant population reproduction and seed dispersal), filtration, purification and detoxification (air, water and soil), biological control (regulation of population dynamics, pest and disease control), nutrient recycling (nitrogen, phosphorus, potassium fixation), soil formation (rock weathering and organic matter*

accumulation), the regulation of greenhouse gases (reduction of carbon emissions, capture or fixation of carbon), and the provision of scenic or landscape beauty?(Art.5, No. 8). Defined in this way, the concept of environmental functions is equivalent to that of ecosystem functions, which the project aims to improve and strengthen. It should be noted that Bolivia, through its NDC, is committed to restoring and conserving environmental functions in at least 29 million hectares of its territory, and the implementation of the project will contribute towards achieving this goal.

48. It should be noted that Bolivia's so-called Patriotic Agenda 2025 acts as a guiding document based on a set of pillars comprising various dimensions aimed at achieving the basic objectives for the harmonious development of the country. This agenda has been incorporated in the General Plan for Economic and Social Development (PGDES), under the Ministry of Development Planning (MPD). This, in turn, led to the creation of the Economic and Social Development Plan (PDES) 2016-2020, which establishes general actions at the country level. It is important to mention that each of the pillars in the agenda is linked to one of the SDGs (UN, 2015). Within the framework of the project, SDG 2, aimed at ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture, is linked to Pillars 6 and 8, which are focused on *Food sovereignty* and *Productive sovereignty with diversification*, respectively. As for SDG 15, which aims to promote the sustainable use of terrestrial ecosystems, combat desertification, stop and reverse land degradation and halt the loss of biodiversity, this goal is linked to Pillars 9 and 10, which are focused on the achievement of *Environmental sovereignty with integral development* and on the *Harmonious integration of peoples with sovereignty*, respectively.

49. Specifically, with regard to ISMBF, the guiding instrument at the national level is the *Environment and Water Sectoral Plan for Integral Development to Live Well?* (PSDI), which is led by the MMAyA. This plan has an operational focus to achieve the territorialization of the proposed actions, and it includes medium-term guidelines for the actions of the public and private sectors. The goals and objectives of the PSDI are aimed at responding to actions, commitments and agreements within the framework of the CBD, the UNCCD and the UNFCCC. Also, it is important to highlight that the evaluation of the PSDI considers the activities carried out by departmental governments, indigenous regional governments and municipal governments.

50. The Integral Territorial Development Plan (PTDI) is the instrument for the medium-term integral territorial development planning of the departmental, regional and municipal autonomous governments in charge of the MPD. The actions and initiatives of the PSDI for the Environment and the PTDI are harmonized according to the competencies established by the CPE regarding the environment, land use and others. The development of the PTDI involves a process of local consultations, coordinated by technical teams from the municipalities, departmental governments and/or indigenous regional governments, in order to include socioeconomic and environmental demands. For this project, the environmental actions and initiatives established in the PTDI of the Municipal Autonomous

Governments of Monteagudo, Machare?, Huacaya, Huacareta, Boyuibe, Villa Vaca Guzm?n (Muyupampa), Cuevo and the Community Territorial Management Plan (PGTC) of the GAIIOC Charagua Iyambae were considered. These initiatives were complemented with requests made by different social organizations involved in integral territorial planning, such as the Assembly of the Guaran? People (APG) and the Guaran? Productive Intercultural Community Indigenous Bolivian University and Pueblos de Tierras Bajas "Apiaguaiki T?pa", along with others Initiatives arising from the consultation workshops.

51. In 2009, the CPE defined protected areas as a common good that are part of the natural and cultural heritage of the country, since they perform environmental, cultural, social and economic functions for sustainable development. In addition, the Framework Law of Mother Earth defines them as one of the main instruments of Mother Earth. The entity in charge of safeguarding the country's national protected areas is the National Protected Areas Service (SERNAP), within the framework of the National Protected Areas System (SNAP), which includes the national, departmental and municipal protected areas. National protected areas not only have the greatest biodiversity in the country, but they are also representative samples of its cultural, historical and archaeological heritage. More than 200,000 people live in these areas, which comprise around 100 municipalities and 14 TIOCs (SERNAP, 2008).

International scenario: The country's progress in international commitments related to ISMBF for SFM, SLM and LDN

52. The Plurinational State of Bolivia is a signatory to different multilateral environmental agreements related to the conservation and sustainable use of biodiversity, forest restoration and the restoration of degraded lands. In regards to the focal areas of this project, that is, land degradation (LD) and biodiversity (BD), the country has committed to advancing LDN through the achievement of voluntary goals in accordance with the provisions of the UNCCD. It has also adopted the Aichi Targets of the CBD and is committed to establishing measures for the implementation of NDCs related to forests, agriculture, water and irrigation for food production, under the UNFCCC.

53. The country has various technical and normative instruments related to ISMBF, which aim to promote the Aichi Targets, as well as the achievement of LDN and NDC. Within the framework of these international commitments, two instruments are of great importance at the national level: the Plurinational Policy and Strategy for the Comprehensive and Sustainable Management of Biodiversity (2019-2030) and the National Strategy for the Neutrality of Land Degradation by 2030.

54. Bolivia, as a signatory party to the CBD, in 2018 prepared the Plurinational Policy and Strategy for the Integrated and Sustainable Management of Biodiversity (2019-2030), in the framework of Law No. 777 of the SPIE and Law No. 300, in line with the sectoral plans defined through the PSDI and led by the MMAyA. The objective of the strategy is to *Promote Integrated and Sustainable Management of Biodiversity, prioritizing strategic ecosystems that contribute to maintaining the integrity of Life*

Systems, overcoming poverty and Integral Development to Live Well, within a territorial framework and respect for the rights of Mother Earth?. For the fulfilment of this objective, the strategy proposes five areas of work: 1) political-regulatory; 2) institutionality and territorial governance; 3) use, conservation and sustainable use of biodiversity; 4) integral environmental management for the conservation of biodiversity, and 5) knowledge management and mobilization. These are related to the Aichi goals as follows: (1) is related to goal 1; (2) to goals 11 and 14; (3) to goals 4, 7, 9,13, 15 and 16; (4) to goals 4, 7 and 9, and finally (5) with goals 18 and 19.

55. For its part, the National Strategy for Land Degradation Neutrality by 2030 aims to *identify and motivate necessary actions at the national, departmental and local levels so that the Plurinational State of Bolivia establishes by the year 2030 a situation in which the Net Land Degradation (degraded area-recovered area) has a zero rate or is negative, which can be quantified both in area and in non-tangible products?*. In this regard, in order to achieve the objective, the strategy proposes actions for the prevention of land degradation in protected ecosystems, and recovery actions for areas in process of degradation and/or degraded. In this context, it prioritizes the training of human resources, promotion of research, development of protocols and the systematization of knowledge. The strategy is under the framework of Pillar 6 (*Productive sovereignty with diversification*) and Pillar 9 (*Environmental sovereignty with integral development*) of the Patriotic Agenda 2025. In terms of the SDGs, it is linked with SDG 15: Protect, restore and promote the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt the loss of biodiversity, and specifically target 15.3: By 2030, combat desertification, rehabilitate degraded lands and soils, including lands affected by desertification, drought, and floods, and strive to achieve a land degradation-neutral world. In relation to the Aichi goals, the strategy contributes to goals 7 and 15 related to promoting sustainable agriculture and restoring and strengthening the resilience of ecosystems.

56. This strategy has seven lines of action and includes five main indicators (change in soil cover, primary productivity, soil carbon stock, soil erosion on sloping terrain and salinization). At the national level, Bolivia has established a series of goals to achieve LDN by 2028, which include the following: *i) strengthening of sustainable management of at least 400,000 ha in flat arid zones or with a reduced slope; ii) reduction of the laminar erosion problem in sloping areas that includes the management of 200,000 ha (2,000 km²); iii) 300,000 ha of new agricultural lands in the south-eastern area of the country based on principles of agroecological management, sustainable irrigation and promotion and support of agro-silvo-pastoral systems; iv) achievement of adequate regulation on the management of forest soils, which could prevent the degradation of more than 800,000 ha of forest lands, among others*. The goals set are aimed at reducing soil erosion, contamination, compaction, and runoff, among others. It is important to highlight that, at the national level, it is intended that 200 basins and micro-basins apply integrated water management for LDN through the implementation of integrated water resources management plans.

57. In this regard, the GIRH-MIC includes the 2014-2020 multi-year programme of the National Watershed Plan (PNCH), under the strategic guidelines established by the Political Constitution of the State. This includes Integral Watershed Management (MIC) focused on reducing degraded areas and increasing plant cover. The MIC prioritizes 14 strategic watersheds for conservation and management actions, in order to facilitate the availability of water for the watersheds located downstream. It also includes the identification and action in all types of active degradation processes. Additionally, the GIRH-MIC has established comprehensive management plans in at least 225 micro-watersheds that present different types of degradation (PEDES 2016-2020).

58. According to the Sixth National Report to the Convention on Biological Diversity (2019), specifically with regard to the integral management of forests and areas under management, the progress made by Bolivia was as follows:

- The areas under forest management, as of 2018, cover an area of 10,169,809 hectares, which represent 78.23% of the result established in the PDES 2016-2020

- In the period 2016-2018, the area under integral forest management covered 646,832 hectares, representing 20% of the goal for the five-year period 2016-2020

- In 2018, 91% of the authorized General Forest Management Plans were concentrated in community organizations: indigenous peoples with 69,649 ha (56%) and farmers with 43,498 ha (35%); private actors cover 10,756 ha (9%)

- Of the areas under forest management in 2018, the Integrated Forest and Land Management Plans (PGIBT), which were implemented in 2014, covered an area of 466,408 hectares, including 15,336 ha approved in 2018 under PGIBT.

59. At the operational level, the different national strategies are implemented through management instruments, which are related to various programmes, and these in turn are promoted by specific projects. Within the PSDI-MMAyA for the management of forests and biodiversity, there are six programmes directly aimed at developing actions and initiatives on this subject: Integrated Forest Management Programme (PGIB); National Afforestation and Reforestation Programme (PNFR); National Programme to Fight Illegal Deforestation (PRONADEF-0); Plurinational System of Protected Areas and Strategic Ecosystems Programme (SPAP-ECOS); National Programme for Integrated Biodiversity Management and the Programme for the Development of the Joint Mitigation and Adaptation Mechanism for the Integrated and Sustainable Management of the Forests and Life Systems of Mother Earth.

60. In line with the commitments assumed before the CBD, the UNCCD and the UNFCCC, the "Our Forests" Programme for the Integrated and Sustainable Management of Forests aims to "*Contribute through the Integrated and Sustainable Management of Forests to making life systems resilient, with forests as integral scenarios for the production and transformation of food and biodiversity resources,*

within the framework of respect and complementarity with the rights of Mother Earth and the development of sustainable productive systems through territorial governance.? The implementation of the programme considers the following aspects: i) Integrated and sustainable forest management, which seeks to reach an additional 500,000 ha under integral and sustainable forest management with a community focus; ii) Recovery of forested areas through afforestation and reforestation, which seeks to afforest and reforest at least 15,000 ha; iii) Control of deforestation and forest degradation; and iv) Generation of information for the analysis and monitoring of forests.

61. In terms of the recovery of degraded agricultural areas, it is important to note that the National Soil Recovery Programme (PRORESU) was created by Supreme Decree No. 2453, under the authority of the Vice Ministry of Lands in the MDRyT, which must be implemented in coordination with the LDN Strategy.

62. Within the framework of the NDCs of the Plurinational State of Bolivia, under the UNFCCC, the country is committed to achieving a series of goals by 2030, which include the following: *zero illegal deforestation by 2020; increase in the area of forested and reforested areas to 4.5 million hectares by 2030; increase in forest areas with integral and sustainable management with a community focus to 16.9 million hectares by 2030, compared to 3.1 million hectares in 2010; strengthening of environmental functions (carbon capture and storage, organic matter and soil fertility, biodiversity conservation and water availability) in approximately 29 million hectares by 2030*, among others.

Governance framework for integral territorial management implemented by indigenous peoples and local communities through the Integrated and Sustainable Management of Biodiversity and Forests (ISMBF)

63. The local management and governance component of the project is based on the PTDI of the municipalities in the project intervention area and on the PGTC of the GAIOC Charagua Iyambae. These instruments, within the scope of their different areas, incorporate the management of life systems, the management of risks and climate change and the territorialization of actions such as land use planning. However, it is still necessary to incorporate technical information in relation to issues such as land use, forest management, salinity, organic carbon, forests, land aptitude and others in order to clearly establish the management of life systems and their relationship with environmental functions. Given that the GAIOC and municipal management instruments are valid until 2020, two institutions (Fundaci?n Cordillera and CIPCA) worked on improving the participatory processes for preparing the PTDI and providing technical support for grassroots members of indigenous organizations to exercise greater social control over the interests, agenda, rights and proposals of their sector. In this regard, there are guidelines and material for planning processes, however, these are not adapted to the ISMBF and/or related to soil management. On the part of the municipalities, although there is no systematization of

the participatory development processes of the PTDI and PGTC, the Cordillera Foundation has made progress in this area.

64. It is important to highlight that the Guaran? Charagua Iyambae Autonomy is located in the project's intervention area, which is managed by the Charagua Norte, Parapitiguasu, Alto Isoso and Bajo Isoso captaincies in the department of Santa Cruz. These captaincies established an alliance to face the transition to a new form of local government that recovers their vision of the Guaran? people and nation. This initiative constitutes a historical milestone in governance process of indigenous peoples (Garc?a and Galean, 2014).

65. It is important to mention that there are various governance spaces in the project intervention area, including the Protected Areas Management Committees, the APG that generates spaces for consultation and agreements on the management of natural resources and the territory, and the GAIOC Chragua Iyambae together with the captaincies and local communities. In turn, there are also territorial consultative platforms linked to the joint forest mechanism (Supreme Decree 1696).

66. Indigenous territorial management: promotes the recovery and strengthening of ethnic-cultural identity as part of a process of appropriation and belonging to the territory; strengthens governance systems to ensure collective rights and the exercise of democratic participation in decision-making, and regulates the use of land and natural resources through the compatibility analysis of communal uses and territorial zoning; regulates the access and use of natural resources through traditional norms and regulations that respond to current needs; contributes to improving the quality of life of indigenous communities by promoting economic activities based on the conservation of natural resources; promotes the establishment of monitoring systems that measure the health status of the territory and the impact that is achieved through territorial management; and establishes the conditions for the development of autonomy and self-government of the territories, within the framework of the regulations and the exercise of their rights (CIPTA, CICLA and WCS, 2018).

67. Within the framework of the participatory processes carried out in the field with the representatives of the captaincies, the need is identified for the management instruments of integral territorial planning to incorporate the life plans of the captaincies, considering the regulations and organic statutes of indigenous peoples. In the scope of the APG, life plans constitute a fundamental tool for the management of the territory, which is defined as the will and capacity of the Captaincy to decide, in a participatory manner among all its members, on the changes needed to improve the living conditions of the whole population, in accordance with their cultural values and development vision (APG, 2008).

68. Life Plans are a collective and integral strategic planning instrument of an indigenous community, people or organization, which starts from a reflection on their worldview and history to determine the vision of the future they wish to achieve, their conception of living well, and the strategies and actions needed to achieve it (Kuiru, 2014). It presents an integral vision of the indigenous people, linking

environmental, territorial, social, economic, political and cultural aspects in its decision-making system.

ISMBF implementation framework for SFM and SLM at the landscape level in the Chaco region, in order to advance towards LDN

Socioeconomic context on the project Intervention Area

The rural population of the Chaco is composed of indigenous peoples such as the Guaran?, Weenhayeks and Tapietes, the Chapaco, Quechua or Aymara immigrants, and the Chaco mestizos. This heterogeneous composition is related to the way of managing natural resources.

Agricultural production in the Chaco presents a great variety of systems due to diverse climatic and ecological conditions and different production systems differentiated by population groups. While the plain has greater potential for cattle ranching, the sub-Andean and foothills regions are better for other agricultural systems. The use of the forest as a productive base for livestock was introduced by creoles who arrived in the area. In contrast, indigenous populations are related to farming, hunting, fishing and gathering activities.

The main population groups that will participate in the project are the following:

•**Guaran? Indigenous Communities:** Approximately, one third of the population on the project region has an indigenous origin (Fundaci?n AGRECOL Andes, 2006). They inhabit on Native Indigenous Territories (TIOC), with a collective titles, and their productive activities are agriculture, small-scale cattle ranching and the use of timber and non-timber forest products, as well as hunting and fishing.

•**Farmers:** Groups of immigrants, mainly Chapacos and Quechuas from the Andean zone (Tarija, Potos?, Chuquisaca, and others) who have arrived in the Chaco seeking better agricultural production conditions. They are mostly found in the sub-Andean and foothill areas, dedicating themselves to agricultural production in small properties for individual or collective use, or on rented lands. These families develop combined productive activities such as cattle ranching and small-scale agriculture (ADEMAF, 2016).

•**Agricultural entrepreneurs:** Farmers dedicated to agricultural and livestock production with an extensive and continuous approach.

•**Cattle ranchers:** This group is considered natural from the region and is not identified as indigenous (Fundaci?n AGRECOL Andes, 2006). Their ancestors arrived after the XVII century with missionaries and the army from Santa Cruz and Tarija, initiating extensive cattle ranching near the missions for

commercial and self-consumption purposes in most of the Chaco. Most live with their families in towns or urban centers, while their land is worked by other farmers.

•**Mennoonites:** They arrived from the beginning of the nineties and they continue to arrive today to the Bolivian Chaco from Paraguay and other countries to settle in colonies. Its main activity is agriculture.

The main production systems carried out in the Bolivian Chaco are described below (Fundación AGROECOL ANDES, 2006):

The Guaraní and farmer systems oriented towards self-consumption are more diversified in production, while the market oriented farming system, like the intensive agricultural system, tend towards greater specialization. The Guaraní agricultural system is part of a highly diversified family economy that also includes hunting, fishing, and the sale of labor outside the Chaco and outside the community. The traditional agricultural system is migratory, also based on the practice of cutting and burning the forest, long periods of rest of the soil, use of agrobiodiversity, and closely related to the cultivation of corn that represents approximately 90% of communal production. These practices are being lost with the introduction of improved seeds with higher yields, which generally leads to changes in traditional production towards monoculture. The modernization and intensification of production in Guaraní communities in the region, has developed mostly with difficulties and tends to lead in many cases or to economic failures, or problems in soil productivity or lack of technological adoption by the population.

. Farming agriculture system oriented to self-consumption is managed by immigrants from the Andean areas with principles of diversified peasant production for self-consumption and to a lesser extent for the market. The sale of products as surpluses is an opportunity to generate income to cover family needs. For their own consumption, families also raise small livestock, such as chickens, ducks, sheep, goats and pigs. It has many similarities with the Guaraní system, in terms of productive factors. But there are differences in the management of natural resources, their social and work organization, and land tenure. They are currently the least served segment with technical assistance, financial services, infrastructure, etc. through development projects, despite living in situations of comparable poverty with the Guaraní communities.

The market-oriented farming system evolves from the farming system with more intensified and less diversified production. It has a lot of potential to be integrated into markets with products such as peanuts, chili peppers, corn, and with added value under the Chaco designation of origin. This system generates opportunities to promote local economic development processes with alliances between the public and private sectors. On the other hand, the generation of rural employment in the three links of production, transformation and marketing, also for women, is seen as an opportunity for generating sources of income for the farmer (and indigenous) families involved. The prioritized products for its development with a focus on productive complexes to date were: corn, peanuts, chili peppers, fruit trees, cattle, pigs and beekeeping.

The Chaco mestizo system of extensive cattle ranching takes advantage of the forest for the continuous grazing of native forages, using little technology, productive infrastructure and investment, resulting in a low animal load per unit area and low productivity. It also has negative impacts on natural resources such as forage and soil degradation, loss of biodiversity including forest species.

Agro-silvopastoral use occupies most of the territory (75.3%), and mainly comprises the Chaco plain, characterized by the presence of low hills and slopes between 5% and 10% (ADEMAF, 2016). Annual (rainfed) and forage crops are practiced on a small scale combined with extensive cattle, goat and sheep farming. According to the Agricultural Census of 2013, it considers the sum of areas of natural pastures and cultivated pastures, there are around 268,922 ha, of which private properties cover 45% and farmer communities 37%.

In the Bolivian Chacho, large *chaqueos* (burnings) are carried out to develop annual crops and extensive livestock activities, without much capital investment or qualified labor. This type of use predominates in the foothills towards the Chaco plain, with low hills and heights between 400 - 1200 meters above sea level. The slopes vary from 10% to 60%. Intensive agricultural use is also appreciated in the area, which occurs with the use of agricultural machinery, irrigation in some places, improved seed, production inputs, capital investment and labor in annual and perennial crops, covering a 2, 31%, of the surface in the Chaco. This type of use is more common in the foothill landscape, with altitudes of 380 - 820 meters above sea level. The agricultural surface (including effectively cultivated areas, fallow areas and areas in rest) reaches an approximate extension of 209,765 ha (Table 11), of which 49% corresponds to agricultural areas in farmer communities, 16% in indigenous communities and 26% in private properties. The total area under agricultural and forestry use in the Project intervention area is approximately 2,189,087 ha, of which 38% is in the hands of private owners (Entrepreneur and cattle ranchers) and 41% correspond to farming communities (234 communities); 20% of this area is part of the indigenous territory, and 1% would be Mennonite colonies.

The spatial distribution of the titled lands is concentrated in the western sector of the project intervention area, however, in recent years, in this sector there has been a strong process of occupation by unplanned settlements (locally known as "intercultural"), which settled in the area adjacent to the Carmen Rivero Torres Municipality, which currently includes the AP "Embi Guasu. In the rest of the titled territory, there is a heterogeneous mosaic between private properties (small, medium and large), Farmer Communities and Guaran? Indigenous Communities within the limits of 9 TIOCs. The occupation by the Mennonites is in the northwest sector of the GAIOC Charagua Iyambae. After a long process of titling the claims of Guaran? territory, the APG managed to title 17 territories as TIOCs in the Chaco, although with notorious differences between the demanded territories and what was finally titled (Tamburini, 2019).

With regard to sustainable productive initiatives, in the municipalities that are part of the Project's intervention area, 164 enterprises have been identified, of which the largest number directed to the management and access to water resources, being the availability of this resource one of the greatest limitations for agricultural development. The smallest number of existing activities are related to the management and management of forests and soils, and specifically related to comprehensive management systems such as silvopastoral, silvoagricultural, and modernization of irrigation for productive diversification. At present, beekeeping involves a process of raising, protecting and caring for bees and their natural environment, so that there can be a good quality and guaranteed production. In the Chaco forests there is a diversity of species of native honey flora (cuchi, tajibo), which can be used to implement beekeeping systems for the production of organic honey and promote the conservation of native forests. The management of agricultural systems and the use of natural resources, in most indigenous communities, are still carried out based on ancestral and traditional knowledge and knowledge, which prioritizes ecological and socio-cultural elements. In the project intervention area, there are areas where families have an average of between 0.5 ha and 2 ha productive for agricultural production. There are also sectors where the availability of land for agricultural

production is greater, between 3 ha or more, and in some communities it may reach 15 ha. Agroecological management of Guaran? agricultural systems includes the use of native seeds, the use of biological inputs to control pests, diversified crops with associated crops, minimal tillage with hoes, among others. This type of agriculture is important for the food security of families, because it is a cleaner and healthier production. However, various factors such as changes in the periods of rains and droughts, the more recurrent presence of pests and external influence for the use of GMOs and agrochemicals are affecting the traditional form of agricultural production. It is necessary to resume traditional practices with technologies and new adequate production techniques so that families can face these external changes and their food security can be strengthened. The so-called native seeds are the product of generations of agricultural communities that have adapted them to their environments, production systems and local needs; they are typical of rural peasant and indigenous communities. The rescue of native seeds is an alternative within the framework of achieving Food Sovereignty, since, in this way, dependence on transnational companies is avoided, and the producers are free in some way, to produce the item they want (Vidal Bogado, 2017).

Conservation context: protected areas in the project intervention area

69. The project intervention area covers a series of protected areas of different types: three NPs (PN-ANMI Kaa Iya, PN-ANMI Serran?a del I?ao and PN-ANMI Otuquis); ten sub-national PAs (Serran?a Sararenda, ?embi Guasu, Serran?as de Ig?embe, Quebracho Colorado Cabo Juan, Serran?a de Mandiruyenda, Serran?a cordillera de los Milagros, Ivi Mara?ei, H?roes del Chaco, Irenda, Alto Isoso-Iviguzi Zone); and two Ramsar sites (Palmar de las Islas Salinas de San Jos? and Ba?ados del Izozog and R?o Parapet?).

70. National protected areas play a key role in the conservation of the representative biodiversity of the Chaco area (PN-ANMI Kaa Iya); the Bolivian-Tucumano Forest (PN-ANMI Serran?a del I?ao), and the Chiquitan?a-Chaco transition zones (PN-ANMI Pantanal del Otuquis). They are home to species of flora and fauna that are of exceptional value, endangered, and/or endemic. Due to their extension and state of conservation, they play a key role in the conservation of environmental functions and the provision of environmental services necessary for the survival of the inhabitants of the region (FAN, 2015).

71. The main objective of the PN-IMNA Kaa Iya is to ensure the protection of the largest remaining area of ??tropical dry forests worldwide, presenting outstanding values ??of biological diversity in a good state of conservation (Taber *et al.*, 1994; Navarro *et al.*, 1998). Practically 80 percent of the protected area is a National Park, with some sectors classified under the category Natural Area of ??Integrated Management (ANMI), which allows certain uses such as research, tourism, monitoring, guardianship and the use of natural resources (hunting, fishing, gathering) for family consumption by indigenous Guaran? and Ayoreo communities. These indigenous peoples are in voluntary isolation, moving between the PN-ANMI Kaa Iya, ?embi Guasu and PN-ANMI Otuquis. The PA Kaa Iya, in addition to protecting biodiversity, seeks to conserve important sites for the Guaran?-Isosa? culture,

such as geoforms associated with water sources and hunting sites. In the strict protection zone (intangibile zone) of the AMNI Kaa Iya, it is sought to conserve the palm groves of sa? (*Trithrinax schizophylla*), which outside the protected area have been practically eliminated by the expansion of agro-industry (MMAyA, 2012).

72. It is important to highlight the role that the Guaran? people have played in the processes of creating this protected space. The indigenous people supported and promoted the creation of the PN-IMNA Kaa Iya to protect their territory and ensure their subsistence as a people, with the area representing part of their strategy to stop the expansion of the agricultural frontier. In this way, a very well conserved representative portion of the Chaco ecoregion is also protected, thus responding to one of the conservation priorities established by SNAP. In 1994, a complex process of governance and synergy between the government levels and the Isosan people ended with the creation of the proposed Kaa Iya area to protect the Ivi Iyambae and its natural resources, thus ensuring the subsistence of indigenous populations and their livelihoods (MMAyA, 2012).

73. In the territory of the GAIOC Charagua Iyambae is the Area of ??Conservation and Ecological Importance of the Guaran? Nation ?embi Guasu (?the great hiding place? or ?the great refuge? in Guaran?), which was created in 2019 and is the first conservation area created within the scope of the indigenous autonomous territory. The protected area extends over an area that exceeds one million hectares of very well preserved forests with a great biodiversity of flora and fauna. It is also the territory of the Ayoreo indigenous people, who remain in voluntary isolation. It corresponds to the second largest protection zone of the South American Chaco, which includes species of fauna such as the jaguar (*Panthera onca*), the puma (*Puma concolor*), the night monkey (*Aotus Azarae*) and the anteater (*Tamandua tetradactyla*) (GAIOC Charagua Iyambae, 2017). Among the main pressures that affect the Area of ??Conservation and Ecological Importance in the Indigenous Autonomous Territory of Charagua ??embi Guasu? are the frequent forest fires, with the most important in magnitude being those that occurred in 2019. Associated with this, the process of land trafficking and the establishment of new settlements of colonists threaten ecological conservation (NATIVA, 2019).

74. With the establishment of ?embi Guasu a continuous conservation territory was created, since it is located between two national parks ? the PN-ANMI Kaa Iya and PN-ANMI Otuquis ? thus protecting around six million hectares (Suarez Augsten, 2019). The three protected areas make up a corridor of connectivity to Chiquitan?a, with ecosystems in a good state of conservation. These PAs cover a wide area in order to guarantee the conservation of endangered species of fauna and flora, including the jaguar (*Panthera onca*), the solitaire (*Catagonus wagneri*) and the peta de monte (*Chelonoidis carbonaria*) in addition to a large number of species with high biogeographic representation, which together form a group of species with very high value for conservation. In the project intervention area, many opportunities to protect and manage connectivity corridors at the landscape or regional scale stand out, such as important links between conservation reserves to aid their long-term viability. The

need for ecological links is recognized as a fundamental principle in territorial planning (Smith and Hellmund 1993; Forman 1995; Jongman 1995, Bennett, 2004, cited in FCBC, 2014).

75. In the project intervention area, the mountainous areas are important "water production" sites. They are areas of the headwaters of basins and their associated vegetation is essential for the regulation of hydrological cycles and water production. Several sub-national protected areas were created to protect the mountainous areas from where the "waters are born" for human, irrigation and animal consumption. This is the case of the mountains of Sararenda, Iguembe, Mandiruyenda, and Serran?a de los Milagros, among others. The wooded vegetation of the mountains allows the capture of humidity, the progressive infiltration into the soil, and the reduction of runoff. The water runs in a northeast direction, through small rivers that descend from the Charagua mountain range to the plain, infiltrating before joining the Parapet? River (Guzman *et al.*, 2014).

76. Ramsar sites constitute a key conservation strategy to guarantee the functionality of ecosystems, the provision of environmental services and human well-being. Bolivia acceded to the Ramsar Convention on October 27, 1990, committing to ensure the maintenance of the ecological conditions of each site on the list, through management based on the concept of "wise use of wetlands?". According to the Ramsar Strategic Plan for 2016-2024: "wetlands are conserved, used wisely and restored, and their benefits are recognized and valued by all?". Under this vision, member countries should promote the conservation and wise use of all wetlands through local and national actions. In the project intervention area, there are two Ramsar sites: El Palmar de las Islas Salinas de San Jos? and Ba?ados del Izozog and R?o Parapet?. Although these sites are classified under this international protection category, since they are wetlands of international importance, internally there are no specific management instruments.

ISMBF as a strategy to promote the achievement of LDN

77. Bolivia has an institutional and regulatory framework that is conducive to the incorporation of the ISMBF approach at different levels, which can help to reduce the processes of degradation of land, forests and biodiversity, improve the socioeconomic conditions of local populations, recover traditional practices and knowledge, and improve the functions of ecosystems, among others.

78. In Bolivia, the LDN-2030 Strategy presents a series of administrative limitations for its implementation in relation to the reduced investment for the use and management of land by the State and other autonomous entities. The ministries, governorates and municipalities have approved limited initiatives to serve the sector through policies, plans, programmes and projects aimed at recovering and/or improving the productive capacity of the Earth as a basis for the development and well-being of the ecosystem community that depends on this resource. The latter is both an opportunity and a

limitation for the LDN process, depending on the resources and training of the autonomous entities. Autonomy represents an opportunity because, under a clear general framework of LDN actions, the autonomous entities are empowered to implement local development and conservation policies that include LDN as an integral component and to autonomously approve resources for this purpose. However, the frequent turnover of the personnel means that even with training efforts and the investment of greater resources, results are not achieved or solid and sustainable development actions are not observed. In addition, some municipal governments have weak structures, since they do not have environmental units or if they do, they are overburdened with tasks and with reduced personnel, despite being large and diverse municipalities (MMAyA, 2018).

79. At the local level, a series of instruments contribute to the scope of ISMBF, which are aimed at SLM and SFM. In this regard, the Authority for the Supervision of Forests and Land (ABT) is responsible for regulation, inspection and control with transparency and social inclusion for the welfare of forest users, agricultural producers and Bolivian society. In relation to forest management and territorial planning instruments, Law No. 1700 and current technical standards are used to establish the General Forest Management Plan (PGMF), the Integral Forest Management Plan (PMIB) and the Integrated Management Plan of Forests and Land (PGIBT). The ABT also authorizes the Property Management Plans (POP) and Deforestation Plans (MP). All these tools promote the conservation and preservation of forests and lands through their sustainable management, facilitating the management of natural resources by private and community actors through the preparation of Management Plans. In this sense, it is important to highlight that 95 percent of the requests received by ABT in 2019 were made by indigenous and peasant communities, having approved 249,752 ha under the PGMF modality at the national level.

80. The implementation of SFM and SLM practices improves land management to meet the needs and well-being of communities in a sustainable way and thus improve livelihoods, thereby contributing to the achievement of the LDN goals (Akhtar-Schuster *et al.*, 2016). However, it should be mentioned that many SLM and SFM initiatives developed at the local level remain off the radar of those responsible for formulating policies and institutions related to the issue. As a result, by not being recognized, these initiatives are unlikely to be adopted in institutional frameworks, which provide economic incentives and technical support necessary for their development and replicability (van Haren *et al.*, 2019). In this regard, in 2014 the UNCCD recognized WOCAT (World Overview of Conservation Approaches and Technologies) as the main recommended database for reporting on SLM practices (UNCCD, 2015; Wunder *et al.*, 2018). WOCAT (www.wocat.net) is a platform, created in 1992, where numerous local practices from around the world have been registered, through the use of standardized methods and tools that are developed and refined through their application in various projects, initiatives, countries and institutions (Schwilch *et al.*, 2014). Countries can contribute to the systematization of SLM and SFM practices on this platform or simply adopt the approach developed by WOCAT, adapting it to the national reality and including it in their monitoring systems.

81. The SFM and SLM initiatives developed at the local level are often deeply rooted and linked to community livelihoods and cultural traditions. They have great potential to contribute to LDN, the

improvement of environmental functions and sustainable development. According to the study by van Haren *et al.*, (2019), the implementation of SLM practices can generate important positive impacts with limited resources, since they contribute in a relevant way to the achievement of LDN, particularly by improving the productivity of the land and soil carbon stock, and the net primary productivity. It is important to note that, according to this study, agroforestry practices led to substantially greater improvements in the three LDN-related indicators compared to the other types of land use.

82. An important experience in the implementation of SLM and SFM practices related to ISMBF is the tri-National GEF Chaco project 'Sustainable management of forests in the transboundary ecosystem of the Great American Chaco' implemented by the governments of Argentina, Bolivia and Paraguay (2011-2017). Its objective was to reverse the trend of land and forest degradation in the Gran Chaco Americano by supporting sustainable land management in the productive sector. In the case of Bolivia, one of the areas of action was the implementation of four pilot sites where more than 20 SLM and SFM practices were carried out in the municipalities of Yacuiba, Villamontes, Monteagudo and Charagua. The initiatives promoted by the project including the following: harvesting water for efficient use, nurseries and forest plantations, silvo-agricultural systems, silvopastoral systems, live barriers, deferral and management of native forest, minimum tillage and contour planting, use of green manures, micro-irrigation and beekeeping, among others. The project also provides a baseline of systematized environmental information that facilitates the evaluation of conditions prior to the implementation of the practices in the territories of two municipalities that belong to the project intervention area.

83. Currently, the MMAyA has 279 projects in development in Chaco to be concluded between 2019 and 2023, of which 84 are located in the municipalities of the project's intervention area. The following are the national plans and programmes that support the LDN 2030 process and the Biodiversity Action Plan 2019-2030 (MMAyA, 2018):

(i) *PDES 2016 2020*: by 2020, it aimed to reach an area of 500,000 ha of recovered soils, achieve the integral management of productive livestock in approximately 1,000,000 ha of land, increase the forest cover by 750,000 ha, achieve the integral and sustainable management of 13,000,000 hectares of forests and strengthen environmentally friendly production systems with the prioritization of ecological and organic production. This plan is currently in the mid-term evaluation process and remains in effect until it is updated by the Government of the Plurinational State of Bolivia.

(ii) *My Irrigation (Mi Riego) and My Water (Mi Agua) Programmes*: includes actions to reduce sediment transport and reduce degraded areas through a water supply scheme for human consumption and for irrigation of prioritized crops, and in this way, increase agricultural production and reduce the opening of new productive areas. Within the project area, these include the Boyuibe Potable Water System Expansion projects, and the Uruguay Potable Water System Improvement projects in Huacareta and Charagua.

(iii) *Multi-year Programme for Integrated Management of Water Resources and Integrated Management of Watersheds (GIRH-MIC)*: this is a multi-year Programme 2014-2020 of the National

Watershed Plan (PNC) under the strategic guidelines established by the Political Constitution of the State. It includes Integrated Watershed Management (MIC) focused on reducing degraded areas and increasing plant cover. The MIC prioritizes 14 strategic basins for conservation and management actions in order to generate greater availability of water for lower basins. In the project intervention area, specifically in the I?ao area, the programme intervenes in the Azero River Basin. It also includes the identification and action in all types of active degradation processes.

(iv) *National Soil Recovery Programme (PRORESU)*: currently in the implementation phase, it includes the development of actions within the framework of the LDN-2030 Strategy.

(v) *My Tree Programme (Mi ?rbol)*: promotes reforestation processes that support the recovery of soils and degraded areas, including social actions for afforestation and reforestation of basin headwaters.

(vi) *MMAyA Institutional Strategic Plan and Nationally Determined Contributions (NDC), Plurinational Authority of Mother Earth (APMT)*: involves actions to reach zero-deforestation, avoid illegal deforestation of 100,000 ha per year and promote the reforestation of 4.5 million hectares through 2030.

(vii) *MMAyA National Afforestation and Reforestation Programme*: implemented by the General Directorate of Forest Management and Development with support from the SUSTENTAR Decentralized Unit and the National Forest Development Fund (FONABOSQUE). For example, in the project intervention area, projects are being developed for afforestation and reforestation of the Imbochi micro-basin and reforestation in the ?acamiri and Parapet? river basins.

(viii) *National Registry of Agricultural Varieties*: administered by the National Institute of Agricultural and Forestry Research (INIAF), which provides space for the communal registry of native varieties used in agriculture. This has the potential to contribute to the project in terms of the protection of native varieties and their registration to support indigenous peoples.

(ix) *Project Conservation and sustainable use of agrobiodiversity to improve human nutrition in five macro-regions*: executed by the MMAyA and FAO. Objective: to recover and promote the consumption of native species and varieties to improve nutritional security. The project is implemented in five macro-regions of the country, including the departments of Chuquisaca and Tarija in the Chaco, through five municipalities and five captaincies.

84. Regarding government initiatives that address issues related to LDN, biodiversity and environmental functions, a series of studies and reports can be highlighted that in many cases constitute the baseline for the project. In 2018, Bolivia prepared the PRAIS Report, reporting for the first time on the status of land degradation under the LDN approach. In addition, in 2017, the Special Studies Unit of the VRHR prepared the ?Assessment of land degradation in dry areas (LADA)? (2017). Another important related antecedent at the national level is the map of the soil organic carbon stock, carried out by the MMAyA in 2018. In relation to environmental functions, there is a map of the Composite Index of Environmental Functions at the national level, which takes as parameters the INFO-SPIE data

related to soil organic matter, carbon capture and storage, water availability, habitat conservation and biodiversity. On a regional scale, there is the experience of monitoring environmental functions developed by the Cordillera Foundation (2020), which considers eight dimensions (environmental, forest, water, soil, urban, economy, social and climate change) and 27 indicators (variables). The analysis was carried out for the municipalities of Yacuiba, Carapari and Villamontes, and can be considered as a model for the municipalities in the project intervention area. Another precedent on a regional scale is the study of identification of ecosystem functions carried out within the framework of the PAS Chaco project (Camacho Olgún, 2012).

85. The results of the project can be shared with a series of institutional monitoring systems. Currently, for the monitoring of forest management, there is the Forest Information and Monitoring System (SIMB) under the General Directorate of Forest Development Management, which receives information processed by ABT, the Institute National Agrarian Reform (INRA) and SERNAP, which monitor deforestation, burned areas, heat sources and other aspects related to the subject. Also, there is the Water Resources Environmental Information System (SIARH), the BIOBOL that systematizes information on protected areas and biodiversity, and the GAIIOC Charagua Iyambae Monitoring Center.

- 3) Proposed alternative scenario with a brief description of the expected outcomes and components of the project and the Theory of Change

Project strategy

86. The project approach seeks to contribute to the reduction of the processes of land degradation and loss of biodiversity and forests, caused by deforestation, fires, expansion of the agricultural frontier, not always adequate use of natural resources by local communities and a weak incorporation of ISMBF into integral territorial planning policies, among other factors. It is expected that, through the implementation of territorial management strategies and sustainable production systems in the dry and sub-humid (agro) ecosystems of the Bolivian Chaco, it will be possible to contribute to the strengthening of governance and institutional and local capacities in ISMBF, as well as the scaling-up of SFM and SLM. The comprehensive and multiscale framework proposed aims to promote the incorporation of the ISMBF approach in integral territorial planning as a contribution to the achievement of the national goals of LDN, the Aichi biodiversity targets and the NDC.

87. During the execution of the project, it will seek to overcome the three barriers that negatively impact the adoption of the ISMBF at the institutional level, as well as by indigenous peoples and other local actors, both in terms of integral territorial planning and the implementation of SLM and SFM practices at the landscape level.

88. The project strategy seeks to link the participation of indigenous peoples in territorial governance and management, and the sustainable management of land and forests. The implementation of SLM and SFM practices, as well as the ISMBF, will be promoted in a participatory manner, with a gender and intergenerational approach, and the strengthening of capacities, in order to achieve the improvement of environmental functions, the livelihoods of the local communities and advance the achievement of national LDN goals, in accordance with the provisions of the UNCCD. In addition, it will contribute to the achievement and monitoring of the Aichi Targets of the CBD and the NDCs within the framework of the UNFCCC. In this context, the project seeks to contribute to national efforts and promote the strengthening of capacities for monitoring the ISMBF and the LDN through the generation of a system that allows the evaluation and monitoring of the LDN and environmental functions, with a special interest in quantifying the impacts of the implementation of ISMBF practices at the field level.

89. Within the project strategy, a series of actions have been designed in order to minimize the risks in the face of the global COVID-19 pandemic and facilitate its implementation by adapting the activities to the protocols and current health measures, while considering the evolution of the pandemic and its effects at the local level. Given the impacts on local livelihoods due to the health emergency, the project will channel efforts that contribute to the food security of small-scale producers in the short term, and increase their resilience in the context of global environmental change and external shocks. The project will apply the corresponding security measures and protocols to safeguard the health of direct participants (including project staff) and local communities.

90. Monitoring and evaluation (M&E) of progress in achieving the project's outcomes and objectives will be carried out based on the established goals and indicators. Continuous monitoring of the project will allow the periodic evaluation of the progress towards the proposed goals and, depending on the adaptive capacity of the project, the adjustment of actions, if necessary, in order to achieve the expected changes.

91. Figure 1 shows the Theory of Change of the project.

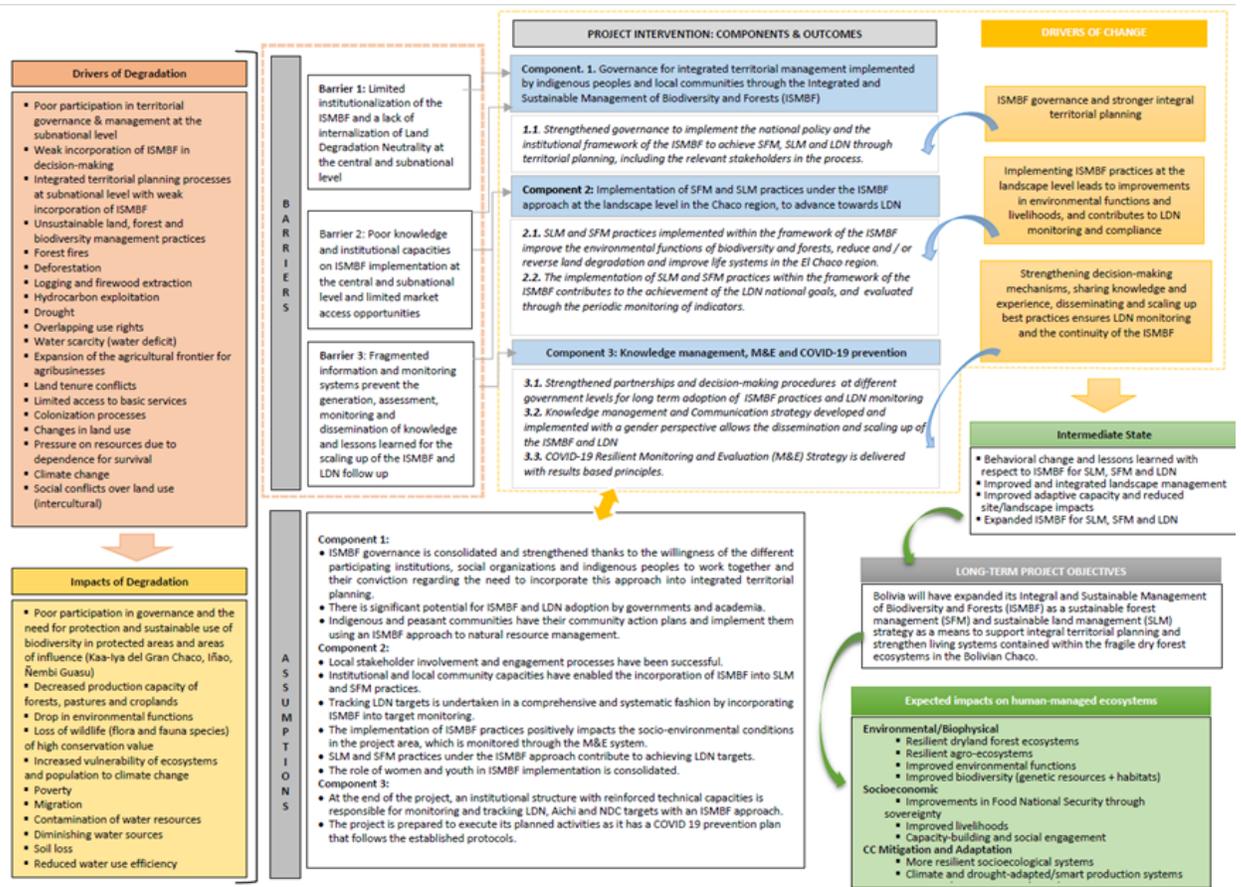


Figure 1. Project Theory of Change

Project Objective, Components, Outcomes, and Outputs

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89. The fundamental objective of the project is to expand and integrate Integral and Sustainable Management of Biodiversity and Forests (ISMBF) into territorial planning, through the strengthening of governance for its implementation and monitoring, and thus increase the resilience of life systems (livelihoods) in fragile ecosystems of dry forests in the Bolivian Chaco region and advance towards Land Degradation Neutrality (LDN). In so doing, the aim is to recover and restore degraded spaces and improve environmental functions, via training in ISMBF and the implementation of biodiverse and resilient production systems using Sustainable Forest Management (SFM) and Sustainable Land Management (SLM) practices predicated on the existing cultural scaffolding and scientific knowledge.

90. The project will contribute to developing an ISMBF model to serve as a supplemental and operational tool for the Integrated State Planning System (SPIE) and as an input for policies related to natural resource management, by strengthening ISMBF governance, implementing and scaling up SFM and SLM practices in a participatory fashion, and tracking achievement of national LDN, Aichi, and NDC targets, among other actions. The work done by governmental and academic institutions in conjunction with the indigenous peoples, local communities, farmers, private sector businesspeople, and other local stakeholders will be essential to achieving the described objective and overcoming identified barriers. Through this approach of cooperation and intersectoral engagement, the project will develop and become consolidated in order to achieve the planned targets. In so doing, local environmental, sociocultural, and economic benefits will result in the Bolivian Chaco, having an impact in terms of further benefits at the national and global level.

91. To achieve the proposed objective, the project is organized into three components:

- 1. Governance for integrated territorial management implemented by indigenous peoples and local communities through the Integrated and Sustainable Management of Biodiversity and Forests (ISMBF)*
- 2. Implementation of SFM and SLM practices under the ISMBF approach at the landscape level in the Chaco region, in order to advance towards LDN*
- 3. Knowledge management, M&E and COVID-19 prevention*

Component 1: Governance for integrated territorial management implemented by indigenous peoples and local communities through Integral and Sustainable Management of Biodiversity and Forests (ISMBF)

92. Component 1 will strengthen ISMBF governance from a territorial standpoint, with a gender and intergenerational approach, and with the active participation and involvement of indigenous peoples, local communities, and governmental and academic entities, in the project intervention area in the Bolivian Chaco region. Efforts will also be made to involve the private sector through representatives from their organizations. Interinstitutional coordination in conjunction with different stakeholders involved in ISMBF will help overcome the barriers identified as part of the project, by incorporating the approach into current national and subnational regulatory mechanisms. Accordingly, the project will overcome the sectoral and compartmentalized implementation characteristic of natural resource planning and management, including community processes geared toward SLM and SFM, with the ultimate goal of LDN. As such, it is important to note that ISMBF will contribute to achieving national commitments made under the UNCCD, CBD, and UNFCCC.

To overcome the sectoral and compartmentalized implementation of natural resource planning, as mentioned above, and ensure the sustainability of the results of this component, the project will build on the current Integrated State Planning system (SPIE) of the Plurinational Government of Bolivia. This system articulates the existing planning tools at different levels. The project will start from this base to support the integration and strengthening of the ISMBF. The current institutionalization of these tools favors the possibilities of incorporating the approach and lays the foundations for the strengthening of governance in comprehensive territorial planning with an ISMBF approach. The Assembly of the Guaran? People also has different territorial planning strategies integrated into the SPIE. Their participation in the project is essential for the involvement of local communities and will contribute to the local strengthening of ISMBF. Through the development of Component 1, capacities will be created and the appropriation of territorial planning instruments with an ISMBF approach will be achieved, already created by autonomous municipal governments, national institutions, indigenous autonomies, local communities, among others.

93. Moreover, capacity-building in ISMBF and LDN among representatives of the government, academia, the Assembly of the Guaran? Nation (APG), and local stakeholders is essential to both achieving the targets provided for in the project framework and to ensuring the replicability and sustainability of the results over time.

94. Special emphasis should be placed on ensuring the participation of women in capacity-building and territorial planning processes. To do so, the information contained in the Gender Plan in the attachments should be considered. Likewise, the Plan for Indigenous Peoples (Attachment J) should be considered when undertaking any territorial planning process with an ISMBF approach, ensuring Free, Prior and Informed Consent (FPIC) (see attachments), a fundamental practice for decision-making among indigenous peoples, because in addition to guaranteeing their basic rights, this practice fosters buy-in and engagement with proposed initiatives (FAO, 2016).

95. In accordance with the priorities identified during the participatory processes conducted as part of project preparation, which will furnish formal opportunities to exchange know-how and experiences, reflecting the different interests of the stakeholders, as well as training with a technical foundation to strengthen local territorial planning with an ISMBF approach. These processes require technical environmental inputs, as well as local knowledge and know-how, in order to achieve an integrated approach to the loss of biodiversity, land degradation, loss of environmental functions, and other territorial dynamics with an impact on natural resources.

96. To develop this component, the incremental GEF funding is USD 609,036, while co-financing amounts to USD 22,571,046. This financing will be allocated to technical assistance for: 1) capacity-building in integrated planning and participatory governance for ISMBF at the central, subnational, and local government, indigenous and autonomous peoples, and social organization levels, with a gender and generational equity approach; 2) institutional capacity-building for ISMBF planning and implementation and LDN monitoring; 3) creation of territorial organizational plans and connecting them to integrated territorial planning with an ISMBF approach; 4) developing community action plans in a participatory fashion for ISMBF and to achieve LDN; 5) establishing, strengthening, and/or approving participatory processes in integrated territorial management to support ISMBF decision-making; and 6) implementing a biodiversity community co-management model with a gender approach and integrating it with management of protected areas and territorial planning under the ISMBF approach.

97. As part of this work to strengthen governance, the proposal for co-management of already-existing protected areas entails a true step forward in involving indigenous peoples and local communities for ISMBF. Implementing co-management strategies in this territory is one of the direct demands of the indigenous peoples located in the project intervention area, so this is an opportunity to implement it here. The transition areas surrounding the national protected areas prioritized in this project are home to many of the local communities and belong to areas where ISMBF practices could potentially be implemented, aiming to bolster livelihoods.

Outcome 1.1: Strengthened governance to implement the national policy and the institutional framework of the ISMBF to achieve SFM, SLM, and LDN through territorial planning, including the relevant stakeholders in the process.

Output 1.1.1: Capacity-building program developed and implemented for integrated planning and participatory governance for ISMBF at the central, subnational, and local government level, autonomous indigenous peoples and social organizations, with a gender and generational equality approach

98. This output will provide the knowledge and technical foundation necessary to incorporate ISMBF into the different instruments making up the Integrated State Planning System, while at the same time promoting exchange of local know-how and expertise related to natural resource and territory management, with a gender and intergenerational approach. The Plurinational State of Bolivia recognizes the need to improve institutional capacities through its staff, public organizations, academic

organizations, and other entities relevant to supporting the project in order to foster integral and sustainable forest and biodiversity management by reaching agreements among the stakeholders involved both directly and indirectly.

99. Training and exchange processes will involve indigenous peoples through governance committees, the APG, oversight committees, management committees, consultation platforms, Indigenous Councils (*cabildos*), and other local producers. Their participation will make it possible to identify and include their demands in the different planning instruments with an ISMBF approach, such as the Territorial Plan for Integrated Development (PTDI), the Community Territorial Management Plan (PGTC), community action plans, and more. Accordingly, the acquisition of new knowledge will enable local stakeholders, and especially indigenous communities, to advance toward identifying possibilities to link up their planning instruments with the guidelines of Law No. 777, which sets out the rules for and lends legality to state planning in all of its forms. As part of these training processes, the project will offer capacity-building and technical knowledge to representatives of the central, subnational, and local governments, who will in turn play an essential role in subsequent project phases.

100. The capacity-building program guidelines shall be developed in conjunction with the Vice Ministry of the Environment, Biodiversity, Climate Change, and Forest Management and Development (VMABCCCGDF), as the main agency charged with implementing the ISMBF model at the institutional level, alongside the National Service for Protected Areas (SERNAP), the Vice Ministry of Water Resources and Irrigation (VRHR), the Forest and Land Authority (ABT), the National Institute for Agrarian Reform (INRA), and the municipalities, and at the local level, with social organizations, management committees, and others.

101. This program will be implemented by the technical team of the Project Coordinating Unit (PCU), in conjunction with the VMABCCCGDF, at workshops to outline and implement the ISMBF model for the Chaco region with social and institutional stakeholders. Support will be provided by a team of consultants. The institutions and entities that will benefit from capacity-building include: Ministry of Environment and Water (MMAyA), through the VMABCCCGDF and VRHR, the Ministry of Rural Development and Land (MDRyT), the Ministry of Development Planning (MPD), SERNAP, the Plurinational Authority of Mother Earth (APMT), the APG, the Departmental Governments of Santa Cruz and Chuquisaca, the Autonomous Municipal Governments of Monteagudo, Macharet?, Huacaya, Huacareta, Boyuibe, Villa Vaca Guzm?n (Muyupampa), Cuevo, and the Indigenous Peasant Autonomous Government (GAIOC) of the Guaran? nation of Charagua Iyambae, as well as the Captainships, Governance Committees, oversight committees, management committees, Captainship Councils, consultation platforms, and Indigenous Councils (*cabildos*), among others.

102. The training program will include different profiles from the stakeholders involved, structured into two large participant groups: one, local stakeholders (native indigenous peasant peoples, producers,

local businesspeople); and two, institutional stakeholders from different levels. This program will be designed by a consultant in cooperation with the government sectors involved. To develop the program, the ISMBF conceptual framework will be designed using a participatory planning approach with gender and intergenerational equity. Accordingly, special attention will be paid to the experience carried out to construct the governance model as part of the Program to Strengthen the Community Social Economy through the Integral and Sustainable Management of the Amazon Forest (ISMAF). The program will include a definition and participatory consensus around the ISMBF concept and approach, identifying key actors and their expertise in order to implement ISMBF and adopt it in the framework of existing policy; current territorial management instruments; territorial pressures; land use and suitability; exchanging experiences in governance and territorial management with other municipalities and/or communities; the regulatory framework (national, local, and indigenous), among other topics. Moreover, any topics identified during the consultation processes, such as deforestation, fires (including monitoring, prevention, and management), drought, soil degradation, expansion of the agricultural frontier, conflicts derived from land tenure, and climate change adaptation, will also be addressed. Likewise, the training will deal with topics related to setting up Management Plans to cultivate potential agrobiodiversity species, Land Use Plans (POP), and other instruments that will be developed as part of Output 1.1.3.

103. Once the program is designed, training workshops to conduct participatory planning with an ISMBF approach will be held, based on the current national regulatory framework, including the opportunity for different territories to share and exchange their experiences in governance processes. Also, workshops to strengthen the institutionalization of ISMBF will be held, with consultation platforms, with the central and subnational governments. These workshops will moreover make it possible to boost awareness concerning the ISMBF approach, fostering buy-in from all stakeholders relevant to the intervention area and internalizing ISMBF in current management instruments.

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Output 1.1.2: Public and academic institutions strengthened in ISMBF and LDN, to support the implementation of local processes in ISMBF with a gender perspective

104. This output will bolster the institutional capacities in ISMBF and LDN at the technical and academic level, as well as among autonomous territorial entities (ETAS) and the APG captainships, aiming to improve know-how in the topics and do capacity-building for stakeholders who will be in charge of training and transferring knowledge at different levels as part of the project. This will enable the ISMBF and LDN approaches to become internalized in integrated territorial planning processes and enable the advances in technical knowledge needed to monitor ISMBF, environmental functions, and LDN at different scales. The training will address the technical guidelines for integral forest and biodiversity management in the Chaco macro region, including the local regulatory framework, technical aspects, and methodology, fostering practices related to SLM and SFM.

105. Considering that this output will further boost the internalization of the ISMBF and LDN approaches in local integrated territorial planning, there is a need to ensure full participation in the design of the local regulations and technical reference documentation related to SLM and SFM, on the part of the VMABCCCGDF, VRHR, ABT, and INRA. This output will be executed by the PCU technical team and consultants, alongside local institutional stakeholders (Governance Committees, APG, oversight committees, management committees, Captainship Councils, consultation platforms, Indigenous Councils (*cabildos*). The VMABCCCGDF and VRHR shall set the basic guidelines to advance on strategic topics meant to avoid genetic erosion and soil degradation.

106. Under a gender and generational equity approach, civil servants and technical employees from government institutions at the national, departmental, municipal, and local level, as well as representatives of academic institutions and local grassroots organizations, will receive training. The institutions and entities that will benefit from capacity-building include: the MMAyA, through the VMABCCCGDF and VRHR, the MDRyT, the MPD, SERNAP, the APMT, the APG, the Departmental Governments of Santa Cruz and Chuquisaca, the Autonomous Municipal Governments of Monteagudo, Macharet?, Huacaya, Huacareta, Boyuibe, Villa Vaca Guzm?n (Muyupampa), Cuevo, and the Indigenous Peasant Autonomous Government of the Guaran? nation of Charagua Iyambae, as well as other captainships belonging to the APG. Likewise, on behalf of the academic sector, UNIBOL Guaran? and the Apiaguaiki T?pa Peoples of the Lowlands, the Autonomous University Gabriel Ren? Moreno, and other universities, state institutions, and research centers in the project intervention area will participate.

107. The training process will serve as a strategy to boost the incorporation of ISMBF and LDN approaches, primarily, into the technical guidelines pertaining to integrated territorial planning processes, SLM and SFM, tracking the impact of ISMBF practices on environmental functions and life systems, and on national LDN, Aichi, and NDC targets.

108. Then, the training processes will be designed and implemented, to be held in the workshop format, covering regulatory and technical aspects of ISMBF. Accordingly, technical guidelines shall be provided and developed for ISMBF in the Chaco macro region, including incentives for developing local technical standards for forest management (timber and non-timber), technical standards for managing agrobiodiversity, technical standards pertaining to slash and burn practices. Content pertaining to developing management plans, sustainable use plans for biodiversity, local regulations designed to prevent genetic degradation in every captainship, the legal framework for addressing land tenure disputes, and other topics will be addressed.

110. In the project area, fire prevention and management are a key topic to be addressed through assistance to carry out good slash and burn practices and training to mitigate fire events and their impacts in an area highly vulnerable to droughts. Accordingly, possible institutional synergies to

strengthen fire prevention and management will be identified. After that, the next step is to design and implement a training plan in fire prevention and management for the fifteen captainships in the project area, including women and youth as firefighters. Progress will be made in defining guidelines and priorities to develop a contingency plan in conjunction with the municipal Risk Management Unit. Capacity-building will be complemented by delivery of equipment and other supplies for fire management (industrial protection equipment - IPE).

111. Aiming to improve technical capacities around LDN monitoring and evaluation, a training plan for this topic will be designed and implemented, incorporating open-access tools. This plan will be designed in accordance with the LDN approach, recognizing the importance of LDN monitoring with respect to the implementation of practices under an ISMBF approach. Progress will be made in knowledge and analysis of Bolivia's 2030 National LDN Strategy, in coordinated fashion with the Aichi targets and the NDCs proposed by the country. At the methodology level, technical capacity-building will be done around calculating indicators for net primary productivity, land coverage, and organic carbon in the soil at different levels, using remote sensors, largely. To do so, training will be offered in using the trends.earth tool, which will make it possible to evaluate the proportion of degraded lands (Target 15.3) using global data sources or, where there is national and/or subnational information available, degraded lands can be calculated with greater precision. Trends.earth is an online platform that helps countries analyze data to prepare their reports for the UNCCD.

112. In addition, given the need to address dimensions pertaining to land degradation and loss of biodiversity and forests not directly included in LDN, such as environmental functions, livelihoods, and other aspects, training will be offered in the LADA-WOCAT methodology. During the project, the LADA-L (local) tool will be used to evaluate, in a participatory and expeditious fashion, factors pertaining to soil, vegetation, water resources, erosion, socioeconomic aspects, and more. Knowledge will also be furnished about the WOCAT platform, which makes it possible to systematize SLM and SFM practices under standardized protocols. This tool can be adjusted to fit country characteristics, offering the possibility to integrate with international databases or simply provide the framework to incorporate the practices into individual country's national systems.

113. Other open-access supplementary tools proposed by FAO, which will be offered in the trainings and which are extremely useful in carrying out environmental assessments at the national and macro-region level, are Ex-Act and AQUASTAT. The first one (Ex-Act) is used to calculate greenhouse gas (GHG) emissions, quantified based on changes in coverage and land use (changes in soil carbon stocks - C), as well as GHG emissions per unit of soil, expressed in tons of CO₂ equivalent per hectare (tCO₂e/ha), whereas AQUASTAT is a system for collecting, analyzing and sharing data and information about water resources, water use, and agricultural water management, with an emphasis on irrigation agriculture. The objective is to support agricultural and rural development via the sustainable use of water and land, facilitating comprehension and monitoring of water resources, uses, and irrigation management.

Output 1.1.3: Territorial plans have been prepared at the municipal and GAIOC level for the implementation of SFM and SLM and to facilitate the achievement of ISMBF and LDN and contribute to the formulation of life plans.

114. This output will provide technical assistance to develop and/or update territorial management instruments for a PTDI in at least one of the municipalities belonging to the sub-Andean strip in the project intervention area (Monteagudo, Huacareta, Muyupampa, Huacaya, or Cuevo) and to update the PGTC of the GAIOC Charagua Iyambae, incorporating ISMBF into territorial planning instruments. Likewise, the project will provide technical assistance to the APG in developing the Life Plan with the Guaran? nation and the different captainships, as this information will serve as the foundation to advance on the territorial planning process with an ISMBF approach.

115. The PTDIs will be developed by the Autonomous Territorial Entities (ETA), with the aim of guiding the territorial planning process for comprehensive development. It is a guiding, regulatory, and methodological instrument that aligns the Autonomous Territorial Entities along the same planning horizon, with guidelines driven by the SPIE and the Economic and Social Development Plan (PDES). For their part, the PGTCs will be prepared by the Native Indigenous Peasant Peoples with a view to strengthen territorial planning for comprehensive development in the midterm (five years) of the native indigenous peasant peoples and nations and other populations composing them, taking into account their own social visions. Capacity-building achieved by the development of Outputs 1.1.1 and 1.1.2 will create an environment favorable to the active participation of the captainships, which, in turn, will enable defining actions that incorporate a local approach to forest and biodiversity management, and the priorities emanating from their life systems. These management instruments (PTDI and PGTC) will be updated in conjunction with processes to strengthen cooperation mechanisms with other relevant stakeholders through governance committees, the APG, oversight committees, management committees, the Chuquisaca Council of Captainships (CCCH), the Santa Cruz Council of Captainships, the consultation platforms, and the Indigenous Councils (*cabildos*). This process must be carried out in parallel with updating the instruments and the life systems belonging to the Guaran? nation.

116. Municipal and autonomous governments are responsible for updating and developing the local territorial planning instruments (PDTI and PGTC), but these must be in compliance with participatory and cooperative processes related to the land use policy, forest management, life plans, land management, and other actions related to environmental functions, which are of interest to both local stakeholders and the central government. To execute this output, there will be a staff of consultants to develop, update, and manage this process. Local management instruments must be made compatible with the PDES and the Integrated Sectoral Development Plan (PSDI) of the MMAyA to 2025. Likewise, coordination and management will be handled from within the VMABCCCGDF involving the Vice Ministry of Planning and Coordination (VPC), to approve and validate the PTDIs, PGTCs, and more. This will also enable updating the guidelines documents for developing the PTDI and PGTC, as well as the MDRyT?s and MMAyA?s PSDIs.

117. The formulation, application, and implementation of both planning instruments exhibits major shortcomings with respect to establishing environmental actions designed to harmonize the life systems triangle, given that, generally speaking, priority is given to aspects pertaining to health, education, infrastructure works, and more. This is reflected in how the investments have been distributed, where amounts set aside for initiatives related to strengthening and conserving environmental functions and to strengthening SLM and SFM are low. Accordingly, as per the results of the participatory processes conducted during project formulation, the captainships affirm that these management instruments do not reflect the Guaran? Nation vision or the needs set forth under their Life Plans. Likewise, they assert that the way these instruments are developed do not include participatory processes or real consensus.

118. The PTDIs and PGTCs need to be updated by the deadlines set by the Bolivian SPIE. Given the scope of current plans, it is necessary for these planning instruments to link up with and match PSDI and MMAyA activities, the Sectoral Rural Development Plan, the PSDI of the MDRyT, and others at the departmental level. In this context, to develop the PTDI of the municipality to be selected, and update the PGTC of the Charagua Iyambae GAIIOC, work will be done to incorporate the ISMBF approach, integrating actions related to the different environmental problems, with emphasis on those pertaining to land degradation and climate change. To do that, the following actions will be carried out, taking into account the following considerations:

- ? Participatory environmental diagnosis of the territory at the municipal level and by priority captainship and zoning, depending on the sustainable use potential at the captainship level.
 - In terms of content, consider the following: i) current zoning; ii) mapping of actors and participatory identification of life zones, as per ISMBF priorities; iii) developing thematic maps of physical-biological variables (including an inventory of species of interest for sustainable management of agrobiodiversity, such as native maize and other species of high genetic and nutritional value), socioeconomic variables, and variables pertaining to degradation and pressures; iv) raise awareness around current management related to territorial planning (Life Plans, PTDI, PGTC, land use plans from the governments), and current rules at the level of state management, organic bylaws, and internal regulations of the Guaran? Nation.
 - The methodology should include conducting participatory processes (workshops), systematizing, and compatibilizing available information, identifying various thematic and spatial gaps, generating the environmental information needed to build up an integrated inventory of resources. Subsequently, the problems, potentialities, land uses, degraded areas, and proposals related to sustainable use of natural resources will be identified with an emphasis on managing water, forest, and soil resources, among others, to then construct and validate a participatory environmental diagnosis.
- ? Design actions that reflect an integrated standpoint when it comes to SFM, SLM, integrated water resource management, sustainable agrobiodiversity management, and genetic resources, among others. All of these should be incorporated into the planning by virtue of the suitability

of soil use, territorial occupation processes, regulatory mechanisms, and more, all related to territorial planning with free, prior, and informed consent.

- ? Establish, as per the aforementioned guidelines, an organizational and methodological framework to develop Life Plans in a comprehensive fashion under the CSFBM approach, as part of the PTDI and/or PGTC. The development and or updating of these management instruments should be done as part of the right to self-determination for the peoples.
- ? In this framework of participatory integrated planning, the hope is to strengthen governance for the indigenous peoples and other local communities by consolidating consultation mechanisms and participatory processes for decision-making. Cooperation among all relevant stakeholders will be fostered by setting up and/or bolstering governance committees, the APG, oversight committees, consultation platforms, cooperation among municipalities, protected areas management committees, and more.
- ? Once the PTDI(s) is/are developed and the PGTC updated, they must be institutionally validated, via the aforementioned strengthened participation mechanisms.
- ? Finally, there must be an effort made to ensure the instruments generated are shared, published, disseminated, and that there is free access to them, in order to foster implementation and compliance with the terms set out in the planning for both territories and, in turn, contribute to encouraging the Autonomous Governments and/or Municipalities of the Bolivian Chaco to adopt the approach.

Output 1.1.4. Community action plans for ISMBF have been developed in a participatory manner and contribute to the scope of LDN

119. The objective of this output is to guide and support the indigenous native and farming communities to develop different operational and/or technical instruments for territorial management for ISMBF, in the framework of Free, Prior, and Informed Consent, with a gender and intergenerational approach. This will thus contribute to planning of forest use and exploitation, agrobiodiversity, and land products in a sustainable fashion, without exercising pressure and preventing impairment to natural resources. Work will be carried out with one community from each of the captainships in the intervention area.

120. It is important to note that at the community level, the Guaran? nation develops myriad actions and management plans for its natural resources, related to appropriate forest management, biodiversity, soil, water resources, agrobiodiversity, and more, which in some cases have the approval of the APG. However, there are no mechanisms for their validation and integration at the institutional level, and they do not have the technical instruments to guide and promote their replication or the adoption of practices at the local level. In this sense, it is necessary for these action plans to be driven directly by

local institutions and indirectly by the national guiding bodies, such as the ABT, INRA, and SERNAP. This output will make it possible to support the communities from the technical standpoint in constructing these instruments (plans), with an aim to their subsequent insertion into institutional natural resource management mechanisms. To design and implement these technical instruments, the plan is to work with a specialized technical team involved with SLM and SFM.

121. The plans and/or instruments that the communities develop are not done with an integrated ISMBF-oriented approach, but rather aim to improve the conditions of forest, land and water resource management, and more, in a sectoral way. Accordingly, developing this output must take place under an integrated approach that incorporates ISMBF at the community level, in order to improve the environmental functions of ecosystems and boost benefits for local communities in the framework of *Buen Vivir*. It is worth noting that these plans will be formulated in accordance with the plans drawn up for Output 1.1.3, and integration with them will be fostered through State planning. The Bolivian Chaco is home to already-developed integrated experiences, which constitute examples that can serve as a reference for other initiatives. The *¿aurenda* community in the municipality of Carapari has an Integrated Forest and Land Management Plan that was approved by the ABT, which enables healthy land management for production, promoting environment conservation, and preserving environmental functions. On another note, through the *¿Conservation and Sustainable Use of Agrobiodiversity to Improve Human Nutrition in Five Macro Regions GCP/BOL/046/GFF?* project, 15 community management plans related to agrobiodiversity, based on conservation plans for diverse species, are currently under development. Bear in mind that the local regulatory instruments will be aligned with current national regulations around agrobiodiversity, forests, land, and more.

101. To achieve this output, the following activities will be carried out:

- ? The plans developed in Output 1.1.3 will be distributed, incorporating ISMBF into municipal territorial planning and planning at the level of the Charagua Iyambae GAIOC.
- ? Existing local management instruments will be systematized and analyzed in order to identify potential opportunities for replication in other communities.
- ? One community will be selected for each of the 15 captainships in order to participatively construct the community action plans. Via the workshops held, the principal problems and demands of the local population tied to their life systems will be identified, as well as pressures emanating from loss of land productivity and biodiversity.
- ? The topics to address in the action plans to carry out in each of the selected communities will be defined and agreed upon in a participatory fashion.

- ? The community action plans, with technical support from the project executing unit and other government bodies involved in the topic, are meant to support achieving ISMBF and LDN, and will be developed pursuant to the guidelines laid out in the Plurinational Strategy for Integral and Sustainable Biodiversity Management, 2019-2030 Action Plan. They may include Agrobiodiversity Management Plans, Forest Management Plans (timber and non-timber), Integrated Forest Management Plan, Integrated Forest and Land Management Plan, Land Use Planning Operational Plans (POP), slash and/or burn plans (pasture lands), fire prevention and management plans, sustainable biodiversity use plans, and more.
- ? Action plans will be defined and developed in a participatory fashion via community-level workshops, prioritizing activities, stakeholders, and financing sources, among other aspects.
- ? Action plans will be validated and follow-up on implementation carried out. If necessary, efforts will be taken to update the community action plans in a participatory fashion, ensuring that the ISMBF approach is incorporated into the process.

Output 1.1.5. ISMBF has been integrated into existing territorial management planning and decision-making mechanisms

123. This output is designed to integrate ISMBF into decision-making mechanisms at different levels, thereby contributing to strengthening the ISMBF governance model in the Bolivian Chaco region, making it possible to breathe new energy into the sustainable management of biodiversity, agrobiodiversity, forests, and land, to the benefit of these communities.

124. At this stage it is necessary to construct the model associated with the Chaco ISMBF, establishing the most appropriate SLM- and SFM-related initiatives and actions, which are appropriately associated with ecological floors and cultural practices, driven by the peoples of the Guaran? nation, which may be of relevance to municipal and local management policy. Some relevant aspects identified include having an inventory of biodiversity products with high genetic and nutritional value, technical studies, policies to incentivize SLM and SFM, all in support of ISMBF.

125. The first step in the process to institutionalize ISMBF in decision-making entails performing a diagnosis of the existence and functioning of territorial planning mechanisms with an ISMBF approach in the Chaco macro region. The development of an ISMBF model for Chaco, which includes cultural practices and ecological floors will provide for local needs that are integrated and compatible with institutional mechanisms for integrated territorial planning. In addition, opportunities to incorporate ISMBF into existing planning mechanisms will be identified. Likewise, those instruments prone to being integrated into the ISMBF model and which require legal or operational instruments shall be identified. Once brought to the fore, institutional agreements shall be forged with an eye to incorporating them into the ISMBF governance model. Criteria to track LDN, Aichi, and NDC targets

will be incorporated into these plans, so that the indigenous peoples can contribute to and monitor the impact on national targets from management in their own territories.

126. Efforts will be made to institutionalize the community territorial action plans developed under Output 1.1.4 at both the municipal level and the level of the Charagua Iyambae GAIOC, as well as the central government. To do so, workshops will be held with the participation of the municipalities, communities, and stakeholders from institutions and organizations with responsibilities in this area. At these workshops, each municipality, alongside the local communities, will prioritize, in a participatory fashion, what action plans to incorporate in the ISMBF governance system. It is worth noting that the institutionalization processes respond to the needs identified in the MMAyA PSDI, in terms of developing policies related to the forest regulatory framework and to institutionalizing the deforestation monitoring system.

127. In this context of institutionalizing ISMBF at multiple levels, it will be necessary to have technical assistance and advising related to ISMBF, develop forest inventories, analyze the potential for using timber and non-timber forest products, guidelines for sustainable management of agrobiodiversity, baseline studies to design environmental contingency plans (for example, to face drought and fire), and more. The municipalities, autonomous, and indigenous communities, and other bodies must adopt and institutionalize the ISMBF model for Chaco and its regulatory technical instruments in order to advance towards SFM, SLM, and LDN. In turn, these contributions will be incorporated into the guideline documentation for PTDI and PGTC, in coordination with the VPC. To instrumentalize and develop the mechanisms that support ISMBF, there will be a technical team available to develop these actions.

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Output 1.1.6. Protected areas co-management model has been developed under the ISMBF approach

128. This output constitutes a strategic conservation tool for ISMBF, by strengthening engagement capacity, and thereby governance, in decision-making about sustainable natural resource management on the part of the indigenous peoples inhabiting the nationally protected buffer areas located in the Charagua Indigenous Native Peasant Territory (TIOC). In this context, a co-management proposal will be developed to promote the strengthening of existing social participation mechanisms, community organization, and support for different bodies of the Charagua Iyambae GAIOC in the sustainable management of natural resources.

129. Environmentally, the co-management proposal will strengthen connectivity among diverse forest and wetland ecosystems found in the area, thereby improving the environmental functions that protected areas and their buffer areas provide. Key and representative species of biological diversity

shall be protected thanks to the new proposed conservation status, which will be based on ISMBF sustainability principles.

130. Bear in mind that this co-management proposal responds to an express request made by the APG via the Charagua Iyambae GAIOC, which is based on the need to bolster participation in territorial decision-making processes designed to diminish and stop the accelerating degradation of biodiversity, forests, and lands that the area is experiencing. In this context, conflicts due to land occupations, related to the setting of intentional fires and the opening of new roads to access oil and gas plants, are one of the main concerns stated by the local communities during the project design process (Anzaldo Garcia and Guti?rrez Galean, 2014). Likewise, the area covered by the proposal belongs to one of the areas with critical land degradation as identified in the environmental diagnosis process developed to formulate this project, with high levels of forest and biodiversity loss caused by large-scale, recurring fires that affect the area, and by intense deforestation.

131. Specifically, the co-management proposal includes the area of influence and the following protected areas located in Charagua Iyambae: PN-ANMI Kaa Iya del Gran Chaco, PN-AMNI Otuquis, ?embi Guasu Conservation Area, El Aviguzi, Serran?as (Irenda), the Ba?ados del Izozo Ramsar Sites, the Parapet? River, and Palmar de las Islas Salinas de San Jos?. Together, these encompass 68% of the total surface area of the Charagua TIOC. The co-management proposal includes the area where the native indigenous peasant peoples and other social groups are settled, with greater concentration found in the western end of the TIOC, at the foot of the mountain range, which gives rise to quite a few social and environmental problems. From that ISMBF standpoint, the proposed area for co-management will acquire a new conservation status, given that it currently lacks any sort of formal protection. As such, the area included in the proposal will serve as a ?buffer zone? for the national protected areas already established in the area. Likewise, there is an aim to contribute to managing protected areas through management committees, strengthening practices, and oversight and surveillance operations. It is worth noting that the region has one key precedent: the creation of the ?embi Guasu Area of Conservation and Ecological Importance, as part of the Charagua Indigenous Farmers Autonomy initiative in April 2019, with the objective of establishing a continuous conservation space between the Kaa Iya and Otuquis protected areas. This is an area of high ecological importance, which exhibits great wealth of diversity, and a large quantity of wildlife, including the jaguar, puma, and anteater, among others, as well as the Ayoreo indigenous peoples, which remain in voluntary isolation. The 2019 fires affected over 50% of the conservation area (Vos et al., 2020). It is important to note that much of the areas affected by these fires have been prioritized for the implementation of actions under the project framework (see Section 1.b.).

132. To develop the co-management model, the first step is to foster interinstitutional coordination between SERNAP, national, subnational, and local public agencies, as well as the different organizing bodies making up the APG. This coordination will be done through workshops, which will also make it possible to involve the local communities, in order to guide and leverage public policies related to

strengthening environmental functions and sustainable production development in the buffer zones of the protected areas. This will in turn contribute to improving livelihoods for local communities while also contributing to the scope of LDN in protected spaces and areas of influence. In this context, institutional capacities will be consolidated to promote and develop the collective process to design and construct the co-management model, furnishing technical capacity-building, via participatory workshops, for indigenous communities and other stakeholders involved in the project, highlighting those involved in incorporating the criteria of connectivity, representativity, and governance in protected areas under the ISMBF approach.

133. There will also be extensive analysis of the framework of regulations and standards guiding biodiversity management in the protected areas of the Plurinational State of Bolivia, addressing areas under national and subnational jurisdiction, as well as those created as part of the formation of the Indigenous Autonomous communities. This analysis will prioritize legal and regulatory aspects around the creation and management of protected areas, biodiversity conservation, and soil suitability and use, in order to formulate the co-management proposal in accordance with the provisions of Law No. 777 of 2016, mentioned in the Integrated State Planning System, in Framework Law No. 300 of 2012 on Mother Earth and Integrated Development to Live Well, in Law No.71 on the Rights of Mother Earth, and in Law No.1333 on the Environment, among other legal instruments that furnish a solid regulatory framework to ensure a territorial approach and sustainable use of biodiversity and forests located in the protected areas under the ISMBF approach. Moreover, to design the co-management approach, special attention shall be paid to the guidelines of the shared management model already in effect for a set of protected areas that belong to the National System of Protected Areas (SNAP). This model is defined as Art. 383 of the CNE as *the modality of public management that harmonizes management among the indigenous, original peoples and farming communities with territorial rights in protected areas and their external buffer zones, with State management, for political and strategic decision-making in the SNAP, via shared mechanisms in conditions of parity.* Considering that this model constitutes a key instrument to advance ISMBF in the region, given that it promotes social buy-in to the protected areas, and therefore the establishment of their governance processes. The project will also bring about adoption on the part of key stakeholders in managing protected spaces located in the Guaran? Charagua Iyambae Autonomous area, such as SERNAP and the Charagua Iyambae GAIIOC.

134. After that, there will be a process to systematize and analyze the participatory co-management models for protected areas and buffer zones in the country, in order to identify potential and prospects for replicability in the project intervention area. Concurrently, there will be a participatory socio-environmental diagnosis of the protected areas and their areas of influence, including conflicts related to the use of biodiversity and lands and the priorities of the local communities in relation to territory management. This information will be essential for formulating the co-management proposal, which, once drafted, shall be developed via a participatory workshop, involving all of the institutional and local stakeholders related to the proposal.

135. The development of this output will also contribute to strengthening management of national and subnational protected areas and Ramsar Sites located in the region, via the generation of information inputs that will contribute to updating and/or the management plans for the protected areas that so require it. Accordingly, support will be provided to subnational protected areas to monitor their socio-ecosystems, to draft deforestation, SFM, SLM, carbon fixation, and other reports.

136. To develop the co-management model, interinstitutional coordination between SERNAP and other public bodies at the national, subnational, and local levels must be promoted. It is both the interest and responsibility of SERNAP and the municipalities to promote this mode, which will enable managing protected areas. For this output, implementation will be done via SERNAP, with support from the PCU and consultants. The community co-management model will be validated by the MMAyA and the VMABCCCGDF.

Component 2 Implementation of SFM and SLM practices under the ISMBF approach at the landscape level in the Chaco region, to advance towards LDN

137. This component aims to establish SFM and SLM practices in the framework of ISMBF to advance towards achieving national LDN targets, as well as contributing to Aichi and NDC targets. To do so, efforts will be made toward capacity-building among indigenous peoples and local communities, in support of community initiatives and practices harmonious with ISMBF, and in the constitution and solidification of Communal Economic Organizations (OECOMs). For this purpose, it is necessary to accompany the institutional strengthening actions developed in Component 1 with capacity-building among the indigenous peoples and local communities related to the ISMBF. It is important to note strengthening sustainable production systems with an ISMBF approach will enable consolidating local food sovereignty with a gender and intergenerational approach, as well as the recovery, use, and exploitation of degraded soils. Considering that the implementation of ISMBF practices contributes to improving environmental functions, improving livelihoods, and achieving national LDN targets, an evaluation and monitoring system will be designed to enable periodic tracking of the impacts of ISMBF on socio-ecosystems in the project area.

138. To develop this component, the incremental GEF funding is USD 2,097,788, while co-financing amounts to USD 22,571,046. This financing will be allocated to technical assistance to: 1) do capacity-building through a training and technical exchange program with local stakeholders to design, implement, and manage sustainable production systems under the ISMBF approach; 2) prioritize, in a participatory way, SFM and SLM practices and sites for implementation at the landscape scale; 3) implement priority SFM and SLM practices in the field; 4) establish and/or strengthen Communal Economic Organizations (OECOMs) to market products (with or without processing) from ISMBF implemented by indigenous peoples and local communities.

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Outcome 2.1. SLM and SFM practices implemented within the framework of the ISMBF improve the environmental functions of biodiversity and forests, reduce and / or reverse land degradation and improve life systems in the El Chaco region

Output 2.1.1. Training programme and technical exchange with local actors (with a gender and intergenerational approach) developed for the design, implementation and management of sustainable production systems under the ISMBF approach

139. This output will build up local capacities to implement ISMBF, via a training program and exchange of knowledge among indigenous and rural communities, social organizations, and other local stakeholders in production, under a gender and intergenerational equity approach, in which women, youth, and senior citizens will be the main figures, with the aim of providing the tools necessary to design, implement, and manage sustainable production systems.

140. The guidelines for the program to implement and manage sustainable production systems under the ISMBF approach shall be provided by the MDRyT and the MMAyA, together with the PCU. Implementation will be executed by the PCU technical team, alongside local institutional stakeholders (Governance Committees, APG, oversight committees, management committees, Captainship Councils, consultation platforms, Indigenous Councils (*cabildos*)), and local stakeholders.

141. This output will be developed with the aim of helping local communities acquire new skills in relation to SLM and SFM at the landscape scale in the different communities making up the project area. Considering the technical and institutional capacity-building achieved in Component 1, at this phase, the idea is to achieve exchange of knowledge among technical workers, indigenous peoples, communities, and local producers.

142. To achieve this output, the recommendation is to carry out the following activities:

- ? Identify technical capacities and transfer capacities via consulting work.
- ? Coordinate between the MDRyT and the MMAyA to outline programs and the scope of training and practice implementation.
- ? Develop the training program with a gender approach, reflecting topics that address the following points: scope of current national and local management instruments (soil management instruments, local water management instruments, forest management),

directed at the indigenous peoples, farming communities, and other local production actors, with special emphasis on women, youth, and senior citizens; design, implementation, and maintenance of SLM, SFM, and water resource management practices, agrobiodiversity, agroforestry, agroecology, agrolivestock, and restoration practices, as well as creating nurseries, processing, linkages with markets, and more, all in the framework of ISMBF.

- ? Organize and carry out training and workshops to share and exchange knowledge and experiences related to ISMBF, targeted toward indigenous peoples, farming communities, and other local production stakeholders, with ample participation of women and youth. The idea is to promote exchanges among these local stakeholders and participants in other projects with experience in implementing SLM, SFM, and other practices in the framework of ISMBF (Pas Chaco, Conservation Project, and Sustainable Use of Agrobiodiversity to Improve Human Nutrition in Five Macro Regions, among others).
- ? Strive to generate local capacities through the Soil Doctors Program, to contribute to sustainability and the scaling-up of good practices thanks to technical assistance promoted in the local realm (Soil Doctors: <http://Guaran?.fao.org/global-soil-partnership/pillars-action/2-awareness-raising/soil-doctor/es/>).

Output 2.1.2. SFM and SLM practices within the ISMBF framework have been prioritized and implemented at the local level, in line with the action plans as formulated under 1.1.4, with the aim of restoring degraded lands, supporting the reestablishment of the environmental functions of biodiversity and forests, and strengthening local life systems, with participation of at least 30% women and 10% young people

143. The aim of this output is to implement SLM and SFM practices at the local level to achieve ISMBF via SLM and SFM, as well as sustainable management of biodiversity and agrobiodiversity, restoration of degraded areas, support for reestablishment of the environmental functions of biodiversity and forests and strengthening local life systems. It is important to note that the practices to be established shall be selected and prioritized during participatory processes in which the local communities, having already gone through ISMBF capacity-building, will work in conjunction with the technical teams. Interinstitutional coordination between the MMAyA and the MDRyT and the other institutions involved in the project will be relevant to completing this outcome and output. Accordingly, rural outreach, assistance, and technical support will be essential to achieving the planned results. This engagement will boost adoption of the practices and their sustainability, once the project is complete.

144. The first step to developing the output entails developing a detailed production-environmental study to prioritize, in a participatory way, the implementation sites and the SLM and SFM practices in the framework of ISMBF. This will be done via workshops, working on the six priority areas with guidance, by virtue of the key factors related to land degradation, conservation, poverty, and more in the project intervention area (see Section 1.b). On this basis, and depending on the interests, needs, and priorities of the indigenous peoples and local communities, the sites to implement the practices will be agreed upon. In parallel, the group will collectively select those practices that are of interest to improving environmental conditions and which support strengthening local life systems.

145. The workshops will serve as opportunities to promote equitable participation of men and women with an intergenerational approach. The project must take into account when women are working, in order to make sure that they can actively participate and foster their leadership in different phases of the project. The idea is also to encourage youth participation, in both the training workshops and in informal sharing of the project. Likewise, it will be essential to have senior citizens participate, as they will be able to provide ancestral know-how and knowledge about managing agrobiodiversity and traditional SLM and SFM practices that are feasible to implement as part of the project.

146. The practices to be implemented will be identified via a participatory process led by the APG with the support of the PCU, in spaces for cooperation, considering local needs, community expectation, and sustainability once the project is complete, as well as possibilities to replicate it either locally or regionally. This output will be coordinated by the VMABCCCGDF and the MDRyT through the project executing unit, with the support of a consulting team. The implementation of practices in the field will be carried out in a coordinated manner between the project technicians and the local communities. The appropriation of these practices by local producers will be sought through the strengthening of capacities and technical support to support the sustainability of the implementation of these practices over time.

147. On the basis of an evaluation conducted in the project preparation phase, a series of practices in the Chaco region with the potential to be scaled up were identified. This evaluation was carried out by incorporating field surveys, interviews with local stakeholders, and the systematization and analysis of practices developed via other initiatives and those recommended by the VMABCCCGDF. Accordingly, of note is the GEF Project "Sustainable Forest Management in the Cross-Border Ecosystem of the Great American Chaco" (2011-2017), which can be looked to as a significant experience in implementing SLM and SFM practices at the macroregional level. In Bolivia, experiences took place at four pilot sites in the municipalities of Yacuiba, Villamontes, Monteagudo, and Charagua. The Guide to the Sustainable Management of Land and Forests of the Great American Chaco, as well as videos to raise awareness, available online, offer a clear and systematic description (including costs) of the most relevant SLM and SFM practices implemented under the aforementioned project.

148. Based on this information, a suggested list of possible practices that could be implemented as part of ISMBF will be presented, and then undergo a participatory selection and prioritization process.

Improving water efficiency:

? Implement and improve management systems to increase water use efficiency (support and upgrading of higher-tech irrigation, micro-irrigation, water harvest in ferroconcrete tanks, waterproof harvest reservoirs with a geomembrane to improve water efficiency)

? Build water impoundment areas known as *atajados* (reservoirs to store water taking advantage of topography)

? Biosand filter for domestic use of water resources

? Protect water sources and water recharge zones with covers and revegetation

Forest protection and management:

? Protection and natural regeneration on degraded slopes and hillsides (including areas affected by fires)

? Management of the fallow lands technique (during rainy season)

? Build family and/or community nurseries (encourage school participation) to grow native forest species (timber and non-timber) and fruit species

? Install and produce agroforestry nurseries with native species

? Reforestation and revegetation of degraded areas, with, for example, enrichment of lands with *Prosopis sp.*

? Establish family and/or community nurseries of native forest species (timber and non-timber) and fruit species

? Production of honey and byproducts (transformation and commercialization, including honey extraction, hives)

? Use of dead forest wood with fine finishes for commercialization (furniture and artisan products)

? Artisan products using products from the landscape (seeds, palm leaves in basket-weaving), weaving, with a main role for women.

Soil management and other agricultural/production practices

? Implement soil management and conservation practices to produce maize on dry lands (green fertilizer, level planting, minimal tillage, etc.)

? Implement soil re-carbonization practices with local capacity development as an alternative to mitigating GHG and carbon sequestration (RECSOIL initiative: <http://Guaran?.fao.org/global-soil-partnership/areas-of-work/recarbonization-of-global-soils/en/>)[4]⁴.

? Bovine and goat management via the implementation of modules for this purpose

? Support for livestock management as part of a system adapted to climate change, taking as a basis examples of climate-smart husbandry (ref.: <http://Guaran?.ganaderiaclimaticamenteinteligente.com/>)

? Livestock management with gatton panic and other practices

? Native maize seed production

? Maize production for feed and silage with machinery

- ? Border cultivation practices to control erosion
- ? Improved seed production (bean, vegetable and fruit, peanut)
- ? Organic fertilizer production (biofertilizer and Bokashi)
- ? Carob flour enrichment
- ? Germplasm studies and inventories of native agrobiodiversity species, including analysis of their nutritional potential and genetic value
- ? Establishment, at the family level and on community lands, of agroecological practices; SAF; SSP (including large and small livestock)
- ? Sustainable gathering, hunting, and fishing practices
- ? Agro-ecotourism and community tourism
- ? Recovery and strengthening of knowledge and ancestral practices and native species (for example, community seed banks, medicinal gardens, and small animal husbandry).
- ? Establish spaces and processes for community learning (for example, field schools, participation in local and regional fairs, knowledge-sharing events).
- ? Implement participatory guarantee systems (PGS) and apply the national ecological label to ISMBF products as implemented by indigenous peoples and local communities.
- ? Strengthen systems to protect genetic resources and associated traditional knowledge, ancestral practices and technologies, cultural expressions, and gastronomy, to prevent them from being improperly or wrongly used.

Fire management practices

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- ? Identify and implement alternatives to using fire in slash and burn practices (weeding, biotillage, agroforestry, implementation of silvopastoral systems, use of legumes and sustainable use of grasslands)
- ? Firefighting and management techniques (fire ditches, improvement of fire prevention communications and control, fire risk early warning system, mobile water storage tanks, improvement in fire-retardant equipment for firefighting, awareness program and prevention of fires, among others). These fire management practices will be accompanied by training aimed at the local population and in particular at the beneficiary actors of the project.
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Output 2.1.3: Communal Economic Organizations (OECOMs) have been established by indigenous peoples and local communities for the commercialization of ISMBF products (with or without processing).

150. The State, through Law No. 144, recognizes the territorial management capacity of indigenous native peasant communities, intercultural and Afro-Bolivian communities and their territorial organic structures with responsibility, commitment and mutual respect concerning implementation of the production, transformation, commercialization and financing phases of agricultural and forestry

activities designed to attain food sovereignty and generate economic surplus. Likewise, Communal Economic Organizations (OECOMs) are recognized under this Law whereas Law No. 338 regulates Sustainable Family Agriculture and diversified family activities carried out by Indigenous Native Peasant Economic Organizations (OECAS) and Communal Economic Organizations (OECOMs), and indigenous native peasant farming families.

151. Having established the institutional context through Supreme Decree No. 3639 of 2018, the government seeks to use market actions and state purchases to promote economic and production activities carried out by the OECOMs, i.e.: SENASAG certification, Bolivian social seal and preference for private purchases, technical assistance, markets and commercialization prices, including the use and exploitation of biodiversity and forests. It is worth noting that, so far, the drive of the OECAS and OECOMs in the project area has been very little.

152. Against this background, the Integral and Sustainable Management of the Amazon Forest (ISMAF) model, which is being implemented by MMAyA with FAO support in Bolivia, is an interesting precedent that could contribute to the design and development of this output. ISMAF seeks to promote the adoption of comprehensive and sustainable forest management measures, through implementation of forest management for the sustainable use and commercialization of Amazonian product, in relation to life systems. This initiative will increase the number of value-added products on the market, including goods and ecosystem functions provided by the forest. This initiative is intended to strengthen the sustainable family economy of Amazonian communities, support organizational strengthening, commercialization and capacity-building to ensure the incorporation of a sustainable production system and self-run economic organizations.

153. This activity will be coordinated by the VMABCCGDF and the Ministry of Production Development and Plural Economy (MDPyEP). Likewise, the APG will play a central role in prioritizing and setting up the OECOMs. Moreover, support will be provided by a consultant to carry out, update and manage said process alongside the entrepreneurs engaged in the OECOMs.

154. The following activities are recommended to ensure this output is carried out:

? An analysis of the strengths and opportunities of the regulatory framework.

? Conducting a market study that clearly identifies demand and/or agreements already established through local commercial partnerships. Identifying which OECOMs are in the process of being established and require support for strengthening.

? Conducting market studies for potential agrobiodiversity species. Participatory and consensual identification and systematization with local stakeholders of potentially marketable alternative forest products.

- ? Drafting market linkage strategies. Identifying nearby markets.
- ? Identifying partners and strategic alliances for the creation and sustainability of OECOMs, such as municipalities.
- ? Characterization and participatory organization of the supply of products according to the identified markets.
- ? Capacity-building for processing biodiversity, forest and agrobiodiversity products, including traditional handicrafts, via workshops.
- ? Institutional, technical, logistical, administrative and financial organization of OECOMs, in a participatory fashion, ensuring women and youth are involved.
- ? Enrolling OECOMs on the National Registry of OECOMs.
- ? Capacity-building and strengthening in technical, logistical and administrative operational protocols.
- ? Implementation of participatory guarantee systems (PGS) and applying the national label for eco-friendly products.

Outcome 2.2:The implementation of SLM and SFM practices within the framework of the ISMBF contributes to the achievement of the LDN national goals, and evaluated through the periodic monitoring of indicators.

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Output 2.2.1. System of evaluation and monitoring of LDN at multiple scales has been developed, including environmental functions and complementary indicators, within the framework of the implementation of the ISMBF to contribute to the national goals of LDN, Aichi and NDC.

155. Integration of the ISMBF into comprehensive territorial planning and the implementation of practices at the landscape level leads to changes in environmental functions, livelihoods, biodiversity, and other areas. That is why it is essential to monitor and evaluate the impacts of the various project actions on the life systems of the communities in the project intervention area, placing emphasis on the conditions of land degradation, conservation of forests and their biodiversity, and the benefits achieved for living well. Within this context, a monitoring & evaluation (M&E) system for LDN, environmental functions and complementary indicators ("*LDN for ISMBF M&E System*") is needed, within the framework of ISMBF implementation to assist with tracking achievement of LDN, AICHI and NDC national targets. A suitable monitoring and evaluation system will facilitate the provision of information for informed decision-making and dissemination of good practices at the regional level.

156. The LDN for ISMBF M&E System will contribute to attaining LDN and NDC targets by producing innovative and useful information for decision-making, since it combines the approaches of LDN, environmental functions and land degradation (with an integral vision). The system should be

designed to allow for the possibility of coordinating and providing feedback among various governmental systems, both as data providers and users of the available information, in order to prevent unnecessary overlapping of efforts and to leverage the resources invested. Some of the most relevant systems are the Monitoring System of the Special Studies Unit for NTD (MDRyT), which is in charge of monitoring Bolivia's 2030 National NTD Strategy; the SERNAP management monitoring system; the Forest Information and Monitoring System (SIMB), which monitors forest areas and deforestation while issuing daily reports on temperature increases and forest fires to the departments. Also noteworthy are the APMT's Information and Integral Monitoring System for Mother Earth, the ABT's monitoring and geospatial information system, BIOBOL, and the MPD's INFOSPIE system, and others. This, in turn, will facilitate the provision of information on indicators aligned with national strategies and international commitments such as the Aichi Targets and the NDCs.

157. System design will address the definition of scale levels, indicators and monitoring and evaluation variables, protocols for collecting physical-biological and socioeconomic information, consolidation and systematization of field information, closing information gaps and validation for their inclusion in the M&E system, among other procedures.

158. It is important to point out that the project's LDN for ISMBF M&M System is expected to be mainstreamed into the institutional structure of the respective agency(s). Accordingly, it will be necessary to set up mechanisms for dialogue and coordination between the Vice-Ministry of Water Resources and Irrigation (focal point of the UNCCD) and the Vice-Ministry of Environment, Biodiversity and Water Resources (focal point of the CBD and the UNCCD) in order to develop and institutionalize the system, which will include information from both institutions. Efforts should also be taken to include the National Agrarian Reform Institute (INRA), the ABT, and the Vice-Ministry of Lands (VT).

159. Although Bolivia's 2030 National LDN Strategy provides a national degradation baseline status that has been calculated using the three LDN sub-indicators (i.e., *net primary productivity, changes in soil carbon stock and changes in land cover and land use*), this approach is not yet part of a multi-scale monitoring system, due to technical limitations associated with the recent development of the LDN framework. In 2018, the Ministry of Environment and Natural Resources (MMAyA) itself identified these limitations and took on the task of strengthening and adjusting LDN monitoring at various levels, in order to properly track the country's progress towards the goals set. As such, the project will design an LDN for ISMBF M&E System that will allow for advancing towards adjustments in LDN sub-indicators at the subnational level, concerning environmental functions and supplementary land degradation indicators (based on the LADA-L methodology), addressing the impact of ISMBF implementation on these dimensions.

160. Taking into account the fundamental components of the system (LDN, environmental functions, complementary degradation indicators, and SLM and SFM practices in place for the ISMBF), the multi-scale levels contemplated for ISMBF internalization and strengthening should be taken into account during the system's design phase. This will allow for integrating information from the field, from socioeconomic surveys of local stakeholders, from geographic information systems and remote sensing, and other data sources.

161. According to the national LDN baseline (MMAyA, 2018), Bolivia has two important pieces of information: a soil carbon stock map (MDRyT, 2018) and a land cover and current land use map (MDRyT, 2010). This valuable information made it possible to report the proportion of nationwide degraded land for the first time using an LDN approach, and thus set a series of voluntary goals for the year 2030, framed within the 2030 National LDN Strategy. However, there isn't a multi-scale LDN monitoring system that would allow for integrating information from the local to the national scale. The SLM and SFM practices implemented as part of the ISMBF under the project are expected to have an impact on physical-biological conditions in the intervention area. Therefore, the LDN for ISMBF M&E system should be designed to: address monitoring of the three LDN sub-indicators at different scales, identify sources of information, and set deadlines for monitoring, among other aspects.

162. For the attainment of the targets set out under this output, the LDN for ISMBF M&E System will have to consider a multi-scale approach:

- ? At the farm level, it would be interesting to know the impact of SLM and SFM practices under ISMBF on soil carbon stock. To this end, the project will work with soil carbon stock and biomass data from nine plots, provided by the GEF Chaco Project (2011-2017), corresponding to the project intervention area. The monitoring (second measurement) should be carried out on this baseline. Four additional plots will also be selected from different land use systems employing SLM and SFM practices, which will be used to measure the baseline carbon stock
- ? At the subnational/landscape level, work will focus on adjusting the LDN indicators, starting with a definition of the appropriate sources of information and methods for measuring LDN indicators at the landscape level using available tools (e.g., trends.earth). At this level of approach, it is recommended that opportunities be provided for land users to participate in the collective definition of degradation criteria resulting from changes in land use and land cover at the landscape and property level (for example, if a property changes from shrubland to crops, it will be classified as either degradation, an improvement or a change that does not imply a change in the property's condition). In addition, supplementary land degradation indicators should be defined and measured following a LADA approach.

163. Land degradation, conceived as a complex, multi-dimensional and multi-causal environmental problem, will be addressed in an integrated fashion by monitoring and evaluating the biophysical and socioeconomic aspects involved. Bear in mind that a broader approach is needed at the subnational level to supplement the LDN framework, to gain a systemic understanding of the cause-and-effect relationships of degradation in terms of livelihoods. To this end, the methodological framework provided by LADA-L/FAO (2009) will be used. It is flexible and allows for designing a conceptual model of the degradation in the project area, which will be used to identify key monitoring variables and indicators. This methodology combines comprehensive landscape surveys, use of remote sensing, expeditious analysis of soil quality and water resources, visual assessment of erosion evidence, as well as field-level surveys of the socioeconomic conditions of indigenous peoples and local communities. The outcomes obtained under this framework will be summarized through the "livelihoods analysis" or "pentagon" method, which provides for the integration of biophysical and socioeconomic information into five categories (natural, physical or infrastructure, financial, social and human). This tool can also be used to evaluate the "baseline" conditions prior to the establishment of SLM and SFM practices, and their impact on each category.

164. The LDN for ISMBF M&E System will adopt the WOCAT methodological framework for surveying and systematizing existing practices in the field and other practices that will be introduced as a result of the project. Protocols derived from WOCAT (Liniger et al., 2019) are flexible and adaptable to national and regional contexts, while retaining the standardization capacity required at the global level to meet national LDN commitments under the UNCCD.

165. Regarding monitoring of the environmental functions of forest and land (carbon capture and storage in the soil and biomass, to replenish organic matter and soil fertility, water availability, provision of diversified and healthy food and pollination, among others), the focus is on evaluating and monitoring the impacts of SLM and SFM practices in the framework of ISMBF on these functions at the landscape level. This index was developed by the Cordillera Foundation and takes into account eight dimensions (environmental, forest, water, soil, urban, economic, social and climate change) and 27 indicators (variables). This experience provides the framework for monitoring environmental functions adjusted to the local level in terms of the ISMBF implemented, considering parameters such as soil organic matter, carbon capture and storage, water availability, and habitat and biodiversity conservation. FAO's EX-act and AQUASTAT tools will be used to assist in the monitoring of environmental functions related to carbon storage in soil/CO₂ emissions and those related to water resources.

166. Harmonizing and updating LDN, AICHI and NDC-related systems is within the purview of the MMAyA, through its managing and executing agencies as follows: LDN by the VRHR; AICHI by the VMABCCGDF; NDC by the AMPT. The MMAyA will negotiate specific agreements with strategic stakeholders, including the MPD, MDRyT and FAO, for the purpose of managing necessary data and

information. The VMABCCGDF will follow up on field activities to ensure the attainment of project goals and will work in coordination with the PCU and consultants.

Component 3: Knowledge management, M&E and COVID-19 prevention

167. Incremental GEF funding for USD 629,336, coupled with USD 22,571,046 in co-financing, will be earmarked for M&E activities comprising of the monitoring of project progress and compliance with indicators, mid-term and final external reviews, developing a communication strategy, and the COVID 19 Prevention Plan to minimize pandemic-related risks for the project.

Outcome 3.1: strengthened partnerships and decision-making procedures at different government levels for long term adoption of ISMBF practices and LDN monitoring

Output 3.1.1. Exit strategy including (i) knowledge sharing mechanisms (ii) strategic partnerships (iii) consolidated institutional technical teams, and (iv) streamlined decision-making procedures, prepared and adopted by the institutions involved in the project and approved by the Project Steering Committee

168. Once the project implementation period is completed, the exit strategy should have laid down the foundations for forming a technical team at the institutional level to ensure the monitoring of attainment of LDN targets, and the operability and sustainability of the LDN M&E system. Likewise, inter-institutional relations should have been strengthened through agreements and strategic partnerships, in order to install and strengthen the ISMBF in national policies at different levels. This, in turn, will contribute to monitoring the country's commitments under the CBD, UNFCCC and UNCCD.

169. Decision-making is also consolidated via the integration of an ISMBF model into territorial planning at the national, subnational and even community level, developed for the Chaco region. Once the project is completed, this will provide the methodological and practical basis, and the institutional and social capacities, to replicate the approach in other municipalities in the Bolivian Chaco.

170. Upon completion, the project should have contributed to consolidating capacity for ISMBF implementation at the landscape level, which is expected to result in a large number of hectares and members of indigenous, peasant and other farming communities with the potential for scaling up SFM and SLM practices.

171. MMAyA and the ETAS are jointly responsible for developing and strengthening participatory and management mechanisms in territorial management for decision-making, as well as for the adoption of ISMBF practices and LDN monitoring at the local level. Although the responsibilities for LDN are shared, an inter-institutional strategy should be developed to establish and agree on these responsibilities

The following activities will be developed to implement Output 3.1.1, and achieve the Outcome proposed under 3.1:

- The formation of a technical team at the institutional level that guarantees the monitoring and compliance with the LDN goals, and the operability and sustainability of the LDN Monitoring and Evaluation System.
- Agreements and strategic alliances.
- Integration of the different tools of territorial planning at national, sub-national and even community scale in an ISMBF model.
- Strengthening capacities in the implementation of the ISMBF and in the monitoring of the LDN
- Design and execution of interinstitutional strategy

Outcome 3.2: Knowledge management and Communication strategy developed and implemented with a gender perspective allows the dissemination and scaling up of the ISMBF and LDN.

Output 3.2.1. Knowledge management and Communication strategy formulated and implemented.

171. The project will develop and implement a communication strategy to support the positioning of ISMBF and LDN in the region. This will be undertaken with the aim of achieving awareness on both approaches, in order to ensure their buy in at different levels and by different stakeholders. The experience will be shared and replicated with municipalities in the region and/or projects that may be concurrent.

172. The PCU technical team, together with a communication consultant and the gender consultant, will be responsible for developing this output.

173. The following is a series of activities that will be considered in order to achieve this outcome:

- ? Development of a communication and information strategy aimed at different stakeholders, with gender and generational equity criteria.
- ? Preparation of virtual and printed outreach materials, adapted to the different stakeholders and audiences and with gender and generational sensitivity.
- ? Designing a project website for the ongoing exchange of experiences, dissemination of information and encouraging replication of the project. This site should be hosted by a project-related entity in order to ensure its sustainability and operability throughout the lifetime of the project and after its completion.
- ? Systematization and publication of the PTDI, PGTC, Life Plans and other action plans that will be developed in the project with an ISMBF approach.
- ? Systematization and dissemination of capacity-building processes, knowledge and lessons learned.
- ? Drafting of a policy brief that summarizes the project's experience.
- ? Informational workshops for disseminating the national LDN strategy.
- ? Creating informational and educational material on ISMBF and LDN to be distributed among schools in the region.
- ? Production of videos and multimedia material featuring the main lessons learned, in order to ensure project dissemination.

Outcome 3.3: COVID-19 Resilient Monitoring and Evaluation (M&E) Strategy is delivered with results based principles.

Output 3.3.1: COVID-19 prevention plan implemented with the different project stakeholders

182. This output will be done in support of the implementation and development of all stages of the project, since a COVID-19 prevention plan will be designed to prevent and minimize possible infections that may occur during the development of the planned activities. A framework of control measures will be provided in the context of the Covid-19 pandemic, in accordance with current national

regulations. The Plan must be prepared and implemented starting in the first semester of the project until the third year of the project. The PCU, local health units and a COVID 19 consultant, with support from the MMAyA, will be in charge of implementing the plan. Appropriate final disposal of all waste generated by the implementation of the prevention plan must also be ensured.

183. In this context, the FAO Indigenous Peoples Unit, based on the United Nations Declaration on the Rights of Indigenous Peoples and messages issued by the World Health Organization, issues the following recommendations that shall be considered when developing this output (FAO, March 27, 2020):

- ? It is suggested that all messages concerning prevention, hygiene and containment measures be shared with traditional leaders and representatives of indigenous youth, who can translate and disseminate them in their native languages.
- ? Include the intercultural approach in health actions taken within the context of the pandemic, taking into consideration indigenous caregivers and traditional healers. It is suggested that they be trained in prevention and containment measures and in the use of appropriate equipment to prevent the spread of the virus.
- ? FAO suggests that governments and health organizations include indigenous communities in the distribution of prevention materials such as face masks, gloves and disinfectants, among others.
- ? The right of indigenous peoples to live or remain in voluntary isolation must be respected.
- ? Several indigenous communities have voluntarily declared themselves in quarantine and have set up control measures to limit access to their communities. These measures must be supported and reinforced, if so requested by the indigenous peoples.

Output 3.3.2. Project Evaluations (mid-term and final) completed in a timely manner to inform and guide the implementation of the project.

175. The PCU will be in charge of rolling out the M&E plan (see section 9). The purpose of M&E is to provide accurate and timely information and feedback on project implementation and outcomes in order to enable project management to make decisions that address issues as they arise. M&E will be performed at three levels: project outcomes and impacts in relation to the logical framework; delivery of project outputs in accordance with annual work plans; and monitoring of project implementation and outcomes.

176. The PCU will develop the M&E system and train project and implementing agency staff (National Focal Points and counterpart staff) to facilitate accurate data collection and reporting.

177. The project will adhere to FAO standard monitoring, reporting and evaluation processes and procedures. The project M&E Plan has been developed in accordance with the GEF Monitoring and Evaluation policy. The project outcomes framework outlined in Annex A1 contains SMART indicators for each expected outcome, mid-term targets and end-of-project targets.

178. The M&E Plan will be reviewed, if necessary, during the Project Inception Workshop to ensure that stakeholders understand their roles and responsibilities with respect to the project Monitoring and Evaluation process. Indicators and the means to verify them may also be adjusted in detail during the inception workshop. The project management team will be responsible for monitoring the project on an ongoing basis while the other partners will be responsible for gathering specific information required to track indicators. The Project Director will be responsible for notifying FAO of any delays or difficulties encountered during implementation so that support can be provided or corrective action can be taken in a timely manner.

179. The Project Outcomes Framework contains indicators for each expected result and will provide the corresponding means of verification. The indicators (outcomes), together with the outputs to be delivered and the key benchmarks (Annex A1) will be the principal tools for assessing progress in project implementation and verifying whether the outcomes are being achieved. Additional indicators (socio-economic, environmental and gender) for the project area will be developed, if necessary, at the Inception Workshop and during the first few months of project implementation.

The project will use the following indicative monitoring tools and will seek synergies with other projects to assess impact:

? EX-ACT for estimating changes in CO₂ content in soil from the interventions carried out.

? Country Soil Organic Carbon Map

? SLM Progress Calculator or TAPE to assist project coordinators in comprehensively recording progress.

? Trends.Earth for multi-scale land degradation monitoring and assessment.

? The project will develop tools to support the evaluation of land use and land cover change trends, trends in carbon stock and soil productivity. These tools may be developed in coordination with existing ongoing initiatives such as RECSOIL (Recarbonization of global soils) in Costa Rica supported by the Global Soil Partnership (GSP). The latter, together with the *Alianza por los Suelos de Am?rica Latina y el Caribe* (ASLAC), could become strategic project partners.

180. Mid-Term and Final Reviews will be performed to identify project strengths, document lessons learned, and provide opportunities for correcting project shortcomings. These will include field visits to sites of interest, consultations and interviews with local and institutional stakeholders, review of project reports and the website created, in order to determine whether there is a need to revise the project's course based on the expected outcomes framework.

181. The PCU technical team and the implementing agency will be in charge of this output.

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

184. This project is part of the GEF-7 biodiversity and land degradation focal area strategies, (Objective 1: Integrate biodiversity in all sectors, as well as landscapes and seascapes) and (Objective 1: Support the implementation of SLM on the ground to achieve LDN and Objective 2: Create an enabling environment to support the voluntary implementation of the LDN target), respectively. Its main purpose is to scale up the ISMBF as a strategy for SFM and SLM, in support of integrated territorial planning and the strengthening of life systems in dry forest ecosystems in the Bolivian Chaco.

185. With this project, in accordance with the "Plurinational Policy and Strategy for the Integral and Sustainable Management of Biodiversity ? 2019-2030 Action Plan" and the "2030 National Strategy for Land Degradation Neutrality (LDN)," the Plurinational State of Bolivia seeks alignment with SDG 2 and SDG 15 (UN, 2015). In doing so, it will reinforce the sustainability of ecosystems and environmental functions, particularly in dryland forests, and their contributions to sovereign food security and achieving zero hunger.

186. Most notably, Component 1 *Governance for the integrated territorial management implemented by indigenous peoples and local communities through Integral and Sustainable Management of Biodiversity and Forests (ISMBF)* and its respective outcomes are aligned with focal areas BD-1-1: Mainstreaming biodiversity across sectors as well as landscapes and seascapes by integrating biodiversity in priority sectors; and BD-2-7: Addressing direct drivers to protect habitats and species and improve financial sustainability, effective management and ecosystem coverage of world heritage

of protected areas. This component seeks, by strengthening ISMBF governance, to achieve the incorporation of the approach in the different regulatory instruments for integrated territorial planning. This, in turn, will facilitate advances in addressing the drivers of the degradation processes impacting protected areas and their areas of influence. In doing so, work will be carried out with indigenous peoples and local communities on a proposal for the co-management of existing protected areas in order to reduce pressures on them.

187. *Component 2 Implementation of SLM and SFM under the ISMBF approach at the landscape level in the Chaco region, to advance towards LDN* and its outcomes, is aligned with focal area BD-1-1: Mainstreaming biodiversity in all sectors, and in landscapes and seascapes via the integration of biodiversity in priority sectors. This component, based on the implementation of SLM and SFM practices under an ISMBF approach, will provide for integrating the use of biological diversity in a sustainable fashion in the livelihoods of indigenous peoples and local communities in the Chaco region. Setting up OECOMs will make it possible to commercialize ISMBF products, thus contributing to the financial sustainability and improving the socioeconomic circumstances of the population. It is also aligned with focal area LD-1-1: Maintaining or improving the flow of agro-ecosystem services to sustain food production and livelihoods through SLM. Accordingly, the project will strengthen organizational, institutional and knowledge capacities for the implementation of sustainable production systems and diversification of livelihood sustaining activities through ISMBF, while encouraging the participation of women and different generations. By implementing SLM and SFM practices within the ISMBF framework, the project will contribute to the improvement of environmental functions, the achievement of national LDN targets and the strengthening of local livelihoods.

5) Rationale for incremental/additional costs and expected contributions from baseline, GEFTF, LDCF, SCCF, and co-financing

188. Through incremental GEF funding, the Plurinational State of Bolivia will continue to advance towards removing the identified barriers by incorporating the ISMBF approach into its integrated territorial planning and strengthening its governance as a contribution to attaining national-level LDN goals. This will be accomplished by 1) strengthening governance, both at the institutional level and at the level of indigenous peoples and local communities, for incorporating ISMBF in national policy and in institutional framework to achieve SFM, SLM, and LDN through territorial planning and capacity-building; 2) implementing SFM and SLM under the ISMBF approach at the landscape level and observing its impact as an input for monitoring LDN, AICHI and NDC goals; 3) having a reinforced mechanism for monitoring the adoption of ISMBF practices and LDN, AICHI and NDC targets, and a communication strategy geared to the project's various stakeholders. In doing so, the gender and inter-

generational approach should be mainstreamed, thereby encouraging the active participation and leadership roles of women and young people.

189. At present, assessments of the impact of SLM and SFM practices on contributions to meeting LDN goals are very preliminary and are not integrally aligned with Bolivia's 2030 LDN Strategy. As such, AICHI and NDC target monitoring is performed in a piecemeal manner, which does not allow for measuring real contributions and impacts of ISMBF practices at a physical-biological or socioeconomic level. As a result, the project constitutes a veritable opportunity since the integrated nature of the ISMBF provides the country with a means to respond to the guidelines provided under its national policy, in accordance with its international commitments under the UNCCD, the CBD and the UNMCCF.

190. The project will build on efforts associated with activities under (i) PDES 2016-2020, (ii) National Soil Recovery Program (PRORESU), (iii) Plurinational Policy and Strategy for the Integral and Sustainable Management of Biodiversity ? 2019-2030 Action Plan, (iv) programs related to the restoration and maintenance of forest ecosystems ("Mi Arbol" program, National Forestation and Reforestation Program and Institutional Strategic Plan to eliminate deforestation), and water management programs ("Mi Riego" and "Programa Mi Agua"). While the Bolivian government has made significant efforts to ensure coordination among the different programs, in some cases there are overlapping activities or coordination is not entirely efficient. This project seeks to improve the potential for inter-institutional coordination among institutions with remits related or contributing to ISMBF, SFM, SLM, and LDN in the Chaco region.

191. The development of the Project's Component 1 will deal with barriers 1 and 2, as identified above. ISMBF governance will be further consolidated through the willingness of the different institutions, social organizations and indigenous peoples involved in the project to work together, their capacity-building, and adoption by the governmental and academic sectors, indigenous peoples and local populations of the ISMBF approach to integrated territorial planning and natural resource management. Stronger ISMBF and LDN capacities will also allow for making progress on internalizing the approach at different institutional levels, with a view to monitoring and consolidating the ISMBF governance model in the Chaco region

192. Component 2 is intended to remove barriers 2 and 3, as identified. Resources from the GEF Trust Fund will be used to finance a training and technical exchange program for designing and implementing sustainable production systems. These enhanced capacities will facilitate implementation of SFM and SLM practices under an ISMBF approach at the landscape level. In addition, developing an M&E system for LDN and environmental functions to track LDN targets, based on ISMBF

implementation, will contribute to lifting barrier 3. GEF resources will contribute to the implementation of integrated management at the landscape level with the implementation of SLM and SFM practices as proposed by Output 2.1.2. In this sense, the incremental resources received with this project will be used for the following activities: 1) prioritize, in a participatory manner, the places and SLM/SFM practices to be implemented, so that they take into account the needs, livelihoods and priorities of indigenous and local communities; 2) Implementation of the practices as selected under step 1. The specific practices to be implemented will be selected based on identified activities during project preparation (see the description of the output 2.1.2 on the alternative scenario, above) based on their upscaling potential and opportunities to contribute to local livelihoods. As a result, with the incremental resources from the GEF, the project will implement practices for improving water management, protecting and sustainably managing forests, sustainably managing soil and agricultural land, and managing the occurrence of fires. To complement this approach, the project will improve the opportunities of communities to commercialize ISMBF products by conducting market studies, drafting market linkages strategies, and implementing strategies to certify biodiversity friendly products (Output 2.1.3).

193. Finally, under component 3, GEF resources will be channeled to overcome barrier 3, since an exit strategy for the project will be fostered through the project management process, and inter-institutional agreements will be reached to follow up on LDN, Aichi and NDC targets. Likewise, the Communication Strategy will be used to disseminate project outcomes at different levels, from a gender perspective and adapted to the multicultural nature of the region, in order to enable SLM and SFM to be replicated and scaled up within the framework of the ISMBF. This component will also address project M&E.

194. Co-financing resources amount to total of USD 22,571,046.

6) Global Environmental Benefits (GEFTF) and/or Adaptation Benefits (LDCF/SCCF)

195. The project will yield benefits for the global environment, in accordance with the national priorities established by the Plurinational State of Bolivia. These benefits will be derived from stronger ISMBF governance, its integration into integrated territorial planning, upscaling of SLM and SFM practices at the landscape level, multi-level capacity-building for implementation of these practices and monitoring their impact on LDN, Aichi Targets and NDC, among others.

196. The main benefits for the global environment expected from the project are as follows:

? Core Indicator 1: Over 250,000 ha of protected land areas under improved conservation and sustainable use management.

- Sub-indicator 1.2: 250,000 hectares of protected land areas under more efficient management.

? Core Indicator 3: 1,200 hectares of restored lands

- Sub-indicator 3.1: 1,200 hectares of degraded agricultural lands under restoration

? Core Indicator 4: 108,000 hectares of landscapes under better practices (not including protected areas).

- Sub-indicator 4.1: 60,000 ha of landscapes under better management (SFM) for the benefit of biodiversity (area 1: sub-Andean belt and Chaco plains).

- Sub-indicator 4.3: 40,000 ha under silvopastoral, agroforestry and/or agroecological management systems and 8,000 ha of forests and other types of vegetation with improved environmental functions in production systems, including CO₂ mitigation, through the implementation of the SLM and SFM practices in the framework of the ISMBF.

Both the practices and the implementation sites will be selected and prioritized in a participatory manner together with the APG, taking as reference the list of preliminary practices in Output 2.1.2. As indicated above, these were validated in the Chaco ecoregion during past experiences with previous projects (e.g.: SFM Sustainable Forest Management in the Transboundary Gran Chaco American Ecosystem 2011-2017). The implementation of practices such as improving water efficiency, improving soil management, forest protection, fire management, RECSOIL tools, among others, will generate an improvement in environmental functions and local life systems (possible activities are highlighted in the description of Outcome 2.1.2, in the alternative scenario, above).

Through the construction of water impoundments (reservoirs to store water taking advantage of topography); biosand filter for domestic use of water resources and the protection of water sources and water recharge zones with covers and revegetation, an improvement in water quality and an increase in the provision of fresh water will be achieved. On the other hand, an improvement in the provision of food and fiber will be achieved through sustainable and sovereign productive systems. The consequent improvement of the quality of life of local populations will also be achieved through the establishment of family and / or community nurseries of native forest species (timber and non-timber) and fruit species, production of honey and by products (transformation and commercialization, including honey extraction, hives), use of dead forest wood with fine finishes for commercialization (furniture and artisan products), artisan products using products from the landscape (seeds, palm leaves in basket-weaving), weaving, with a main role for women, agro-ecotourism and community tourism, recovery and strengthening of knowledge and ancestral practices and native species (community seed banks, medicinal gardens, and small animal husbandry) and the establishment of spaces and processes for community learning (field schools, participation in local and regional fairs, knowledge-sharing events). The provision of biodiversity habitat will be improved through practices of reforestation and revegetation of degraded areas, with enrichment of lands with *Prosopis spicigera*, germplasm studies and inventories of native agrobiodiversity species, including analysis of their nutritional potential and genetic value and native maize seed production. The implementation of soil management and

conservation practices to produce maize on dry lands (green fertilizer, level planting, minimal tillage, etc.), the soil re-carbonization practices with local capacity development as an alternative to mitigating GHG and carbon sequestration, and organic fertilizer production (biofertilizer and Bokashi), among other practices, will positively impact the environmental functions of SOC sequestration, the improvement of nutrient cycling and climate regulation.

? Core Indicator 6: 2,535,071 Mt CO₂-e Greenhouse emissions mitigated.

- Sub-indicator 6.1 2,535,071 Mt CO₂-e Carbon Sequestered or Emissions avoided in the AFOLU (Agriculture, Forestry, and Other Land Uses) sector.

NOTE: The Plurinational State of Bolivia implements its programs, projects and activities following a comprehensive approach to the joint mechanism of climate change adaptation and mitigation using non-market approaches and engagement of indigenous peoples, local communities, peasant and small farmers. This approach is consistent with Article 6.8 of the Paris Agreement and with the national regulatory framework such as Framework Law No. 300 for the Mother Earth and Integral Development for Living Well. In addition, Bolivia's NDCs do not include a reduction in carbon emissions; instead, the country has committed to transformative change based on climate justice and a focus on the Rights of Mother Earth in three key sectors: water, energy and forests.

? Core Indicator 11: Number of direct beneficiaries broken down by gender as a co-benefit of GEF investments

Core Indicator 11: At least 15 000 direct beneficiaries will have strengthened their capacity through processes for territorial planning, implementing SLM and SFM practices, and their incorporation into governance under the ISMBF framework (7 500 men and 7 500 women)[5]⁵

- 450 people (30% women and 10% young people under age 28) from central, subnational, local governments and local actors trained in comprehensive territorial planning and ISMBF participatory local governance.

- 200 indigenous producers and/or members of local communities who implement SLM and/or SFM practices under ISMBF (at least 30% women and 10% youth)

- 350 local stakeholders trained in ISMBF (50% women and 20% youth).

197. The project will also contribute to attaining SDGs 2 and 15. SDG 2 seeks to: *End hunger, achieve food security and improved nutrition and promote sustainable agriculture*; and its target 2.4: *Ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and progressively improve land and soil quality*. For its part, SDG 15 seeks to: *Protect, restore and promote sustainable use of*

terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss; and its target 15.3: By 2030, combat desertification, restore degraded land and soils, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world (UN, 2015).

7) Innovation, sustainability, potential to expand and build capacity

Innovation

198. The approach to generating ISMBF innovations and governance techniques adapted to local contexts will be based on dialogue involving scientific, academic, traditional and applied research knowledge and inter-institutional linkages. This in turn will enable the adaptation of knowledge and technologies to the establishment and strengthening of ISMBF through agro-ecological systems that are sustainable and resilient to climate change. The project is particularly innovative in four areas: i) ISMBF design and implementation is based on the use of technological tools; ii) capacity-building is linked to the formulation and implementation of M&E for LDN with ISMBF approach; iii) achievement of national SLM AND SFM objectives from the ISMBF perspective; and iv) capacity-building and strengthening current mechanisms for participatory decision-making and adoption of ISMBF in the public policy arena, particularly at the subnational level. Within the framework of technological innovations, different validated methodologies, tools?many of them open source (WOCAT platform, trends.earth tools, ASIS, EX-ACT, VCA, Collect Earth, Open Foris, EarthMap, LADA-L methodology, among others)?will be applied.

199. ISMBF implementation will contribute to the achievement of the goal set under Bolivia?s LDN Strategy, with the project area functioning as a pilot site, as it will be developed under UNCCD standards and in line with the Bolivian NDCs on forests. This will allow for replicating, adjusting, verifying and disseminating the ISMBF approach throughout the region and in other countries.

Sustainability

Social Sustainability

200. In terms of social sustainability, one of the main purposes of the project is to strengthen local governance (including capacities and public institutions related to land planning and management

under an ISMBF approach). This entails public participation as an activity whose main stakeholders are the national indigenous peoples' captainships, which will base the participatory processes on Prior, Informed and Participatory Consultation with the direct process stakeholders. It is under this framework that the project will ensure that the following is documented: (i) the mutually accepted consultation processes that is undertaken with the indigenous communities; and (ii) evidence of the agreement between the parties as a result of these consultations.

201. In particular, and given the essential participation of indigenous and community organizations in the sustainability of the Chaco ecosystem, the project takes into account the Principles and Guidelines for the Participation of Indigenous Peoples (GEF / C.42 / Inf.03 / Rev. 1) and other GEF guidelines, and specifically the following:

- ? The project is designed in such a way that during implementation it fosters full respect for the identity, dignity, human rights and cultural uniqueness of indigenous peoples and their members so that 1) they receive culturally appropriate social and economic benefits; and 2) they do not suffer adverse effects during the development process.
- ? The full and effective participation of indigenous peoples underpins the project across the board. Responsibility for ensuring public participation rests with central and subnational government agencies and primarily with the project executing agency. The project addresses the social, cultural, forest-related and economic needs of the indigenous peoples affected by the project.
- ? The inclusion and participation of indigenous and public sector organizations in project implementation will be ensured through their direct participation in the governance bodies as determined through State planning at the municipal and autonomous indigenous levels.
- ? The project incorporates and mainstream the important role of indigenous women and youth in the maintenance, improvement and transfer of traditional knowledge, innovations and practices related to forest management, and supports the inclusion of these groups and other traditional experts in project activities, as needed.
- ? Through the project's framework for action, the importance of traditional knowledge, innovations and practices for the long-term well-being of indigenous peoples, and of applicable national legislation or international obligations designed to support the maintenance of this traditional knowledge, innovations and practices, is recognized.

202. Social sustainability is also ensured by the project budget, which includes the necessary financial and technical assistance to all stakeholders involved to ensure effective participation of indigenous peoples. FAO will work with all stakeholders to ensure that activities in support of indigenous peoples' participation are effectively carried out over the long term. It will also support implementing partners in: (i) providing relevant, timely and accessible information to as many stakeholders as possible; (ii)

facilitating broad and project-specific consultations, especially at the local or sub-national level; and (iii) promoting the active participation of indigenous peoples throughout the project cycle, including through awareness raising and capacity-building activities.

Environmental Sustainability

203. The environmental sustainability of this project will be achieved through SFM and SLM, based on cultural activities related to the recovery of indigenous knowledge and practices concerning forest management and soil management, which is reflected in component 2. The practices to be implemented will enable evaluating SFM and SLM contributions to national LDN, Aichi and NDC targets, since they contribute to the maintenance and improvement of environmental functions, climate regulation, restoration of degraded ecosystems and diversification of production activities.

204. The project will work to strengthen the institutional framework of the directorates of three national protected areas, which will contribute to the management of 4.7 million hectares. It will also help establish the co-management model for subnational protected areas.

Financial and Economic Sustainability

205. The PTDIs and PGTCs provide economic sustainability since these municipal planning instruments and GAIOC allow for the allocation of resources from the National General Treasury (TGN) and other local funding sources. The formulation of the PTDIs at the municipal level and the PGTCs for the indigenous autonomous level (particularly in the Charagua region) include the incorporation of activities that contribute to the maintenance of environmental functions within the triangle of life systems, which incorporates an investment base in this area. The project, by contributing to the updating of management instruments at the territorial level, will make it possible to prioritize, incorporate and improve the budget for actions in the area of MSB and SLM, and others that contribute to environmental functions and climate regulation.

206. The project actions and interventions will be incorporated into the Environment sector's new ISDP, which will allow and ensure that the actions can be taken on by the MMAyA and committed to before the MPD. Locally, by forming OECOMs for the commercialization of products (with or without processing) related to ISMBF implemented by indigenous peoples and local communities, the project will seek to drive and set up economic activities to strengthen the livelihoods of local stakeholders. In this sense, strategic partnerships will be formed for the creation and sustainability of OECOMs,

participatory guarantee systems (PGS) will be implemented and the national eco-friendly production label will be applied. Finally, through bioeconomic studies (avoided costs) at the level of environmental functions, we will seek to strengthen the concept of investments related to environmental projects that incorporate management and conservation.

Scaling Up/Scaling Out

207. The project, under the leadership of the MMAyA, will expand the processes of strengthening the knowledge and experiences acquired. It will channel support from national programs related to sustainable agri-food systems, strengthen communal economic organizations, and promote the diversification and processing of agrobiodiverse products, among others. The project's ISMBF approach has the potential to be scaled up and expanded from the family farm to the community, watershed and regional levels in terms of improved agroecological production systems, large-scale improvement of environmental functions and ensuing climate change adaptation and mitigation. This is consistent with current initiatives in the Chaco region that seek the integrated management of natural resources at a tri-national level (Argentina, Bolivia and Paraguay). Among them, the Gran Chaco Americano Committee, the Subregional Action Program of the Gran Chaco Americano (PAS), the International NGO Network on Desertification (RIOD-Chaco and RIODLAC) and the Redes Chaco platform should be highlighted.

208. Participating institutions have ties to academic and research centers that will help scale up/expand innovations among indigenous peoples, farmers, the public and civil society organizations. The cross-sectoral governance of ISMBF and LDN is expected to generate large-scale change through replication of clear methodologies, policies, tools and practices. Finally, the institutional and policy context is positive and conducive to the intended outcomes as there is political will for collaboration, participation and implementation of ISMBF objectives for SFM, SLM and LDN.

8) Summary of changes to project design compared to the original PIF

209. Changes were made to the project document text in order to provide greater coherence and consistency with the logic designed for project intervention. These changes do not represent any changes in the project objective or scope (Table 1).

MAIN CHANGES MADE TO THE PIF AND PROJECT DOCUMENT

Project Objective	To scale up the integral and sustainable management of biodiversity and forests (ISMBF) as a strategy for sustainable forest management (SFM) and sustainable land management (SLM) to support integral territorial planning and the strengthening the life systems in fragile ecosystems of the dry forests in the Bolivian Chaco. -	Expand and internalize the Integrated and Sustainable Management of Biodiversity and Forests (ISMBF by its Spanish acronym) in integral territorial planning, through the strengthening of governance for its implementation and monitoring, and thus increase the resilience of life systems (livelihoods) in fragile ecosystems of dry forests in the Bolivian Chaco and advance towards Land Degradation Neutrality (LDN).
<u>COMPONENTS</u>	<u>NAME PIF COMPONENT</u>	<u>NAME PROJECT COMPONENT</u>
Component 3	Monitoring, evaluation and awareness	Knowledge management, M&E and COVID-19 prevention
-	<u>PIF OUTCOMES AND OUTPUTS</u>	<u>PROJECT DOCUMENT OUTCOMES AND OUTPUTS</u>

<p>Component 1</p>	<p>N/A</p> <p>Output 1.1.2. Territorial plans at municipal or captainship level for ISMBF as a strategy to advance the SFM, SLM and LDN</p> <p>Output 1.1.3. The community action plans for ISMBF have been developed and implemented in a participatory fashion, in line with territorial plans under 1.1.2.</p> <p>Output 1.1.4. The ISMBF has been integrated into existing territorial management decision-making and planning mechanisms.</p>	<p>Output 1.1.2* Public institutions and academic institutions strengthened in ISMBF and LDN, to support the implementation of local processes in ISMBF with a gender perspective (<i>*formerly PIF Output 2.1.3</i>)</p> <p>Output 1.1.3. Territorial plans have been prepared at the municipal and GAIOC level for the implementation of SFM and SLM and to facilitate the achievement of ISMBF and LDN and contribute to the formulation of life plans.</p> <p>Output 1.1.4. Community action plans for ISMBF have been developed in a participatory manner and contribute to the scope of LDN</p> <p>Became part of Output 1.1.5.</p> <p>Output 1.1.6. Protected areas co-management model has been developed under the ISMBF approach</p>
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Component 2

Outcome 2.1. ISMBF practices implemented that generate sustainable productive systems and strengthen the local economy, the organizational systems of indigenous peoples and local communities, and restore ecosystems and their functions, in addition to avoiding and reducing degradation, reestablishing environmental functions of biodiversity and forests, and improving life systems in the Chaco region

Output 2.1.1. Establishment of local ISMBF design and management practices aimed at reducing and restoring degraded lands, support the reestablishment of environmental functions of biodiversity and forests and strengthening local life systems (with at least 50% participation of women and 20% participation of youth)

Output 2.1.2. Technical capacity building and exchange program in ISMBF, with a gender and

Outcome 2.1. SLM and SFM practices implemented within the framework of the ISMBF improve the environmental functions of biodiversity and forests, reduce and / or reverse land degradation and improve life systems in the El Chaco region.

Output 2.1.2. SFM and SLM practices within the ISMBF framework have been prioritized and implemented at the local level, in line with the action plans as formulated under 1.1.4, with the aim of restoring degraded lands, supporting the reestablishment of the environmental functions of biodiversity and forests, and strengthening local life systems, with participation of at least 30% women and 10% young people

Output 2.1.1. Training programme and technical exchange with local actors (with a gender and intergenerational approach) developed for the design, implementation and management of sustainable production systems under the ISMBF approach

Became part of **Output 1.1.2.**

Became part of **Output 2.1.3.**

	N/A	Outcome 2.2. The implementation of SLM and SFM practices within the framework of the ISMBF contributes to the achievement of the LDN national goals, and evaluated through the periodic monitoring of indicators.
	N/A	Output 2.2.1. System of evaluation and monitoring of LDN at multiple scales has been developed, including environmental functions and complementary indicators, within the framework of the implementation of the ISMBF to contribute to the national goals of LDN, Aichi and NDC.
Component 3	Component 3: Monitoring, evaluation and awareness raising	Component 3: Knowledge management, M&E and COVID-19 prevention
	Outcome 3.1. Knowledge management, monitoring and evaluation, and communication	Outcome 3.1: Strengthened partnerships and decision-making procedures at different government levels for long term adoption of ISMBF practices and LDN monitoring

Output 3.1.1.
Integrated monitoring and evaluation (M&E) system for the implementation of ISMBF within the framework of the SFM, SLM and LDN in the El Chaco region.

Output 3.1.1. Exit strategy including (i) knowledge sharing mechanisms (ii) strategic partnerships (iii) consolidated institutional technical teams, and (iv) streamlined decision-making procedures, prepared and adopted by the institutions involved in the project and approved by the Project Steering Committee

Became part of **Component 2, Outcome 2.2, Output 2.2.1**

Output 3.1.2.
Environmental functions resulting from the ISMBF for the SFM, SLM and LDN monitored (e.g., capture and storage of carbon in soil and biomass, to replenish organic matter and soil fertility, water availability, provision of diversified and healthy food, and pollination, among others).

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Output 3.1.3. Mid-term and final project reviews.

Outcome 3.2. Knowledge management and Communication strategy developed and implemented with a gender perspective allows the dissemination and scaling up of the ISMBF and LDN

Output 3.1.4.
Communication strategy developed and implemented to support the realization and scaling up of the ISMBF to contribute to LDN objectives

Output 3.2.1. Knowledge management and Communication strategy formulated and implemented

Outcome 3.3. COVID-19 Resilient Monitoring and

	<u>PIF BARRIERS</u>	<u>PROJECT BARRIERS</u>
	<p>Barrier 1: Limited institutionalization of the ISMBF at the subnational levels</p> <p>Barrier 2: Poor knowledge and institutional capacities on ISMBF implementation at the landscape level</p> <p>Barrier 3: Insufficient systems for generation, assessment, monitoring and dissemination of relevant information for the scaling up/out of the ISMBF</p> <p>Barrier 4: Insufficient capacity to prevent and control forest fires</p>	<p>Barrier 1: Limited institutionalization of the ISMBF a lack of Land Degradation Neutrality internalized at the central and subnational levels</p> <p>Barrier 2: Poor knowledge and institutional capacities on ISMBF implementation at the central and subnational level and limited market access opportunities</p> <p>Barrier 3: Fragmented information and monitoring systems prevent the generation, assessment, monitoring and dissemination of knowledge and lessons learned for the scaling up of the ISMBF and LDN follow up</p> <p>This barrier was removed and included under Barrier 1.</p>
	<u>PIF INDICATORS</u>	<u>PROJECT DOCUMENT INDICATORS</u>

Component 1

450 people (50% women and 20% youth under 28) from central government, subnational government and local stakeholders, trained on integrated territorial planning and local participatory governance of ISBFM

Two (2) land use plans linked to integrated territorial planning from the ISMBF approach, of the Charagua Iyambae GAIOC and municipal governments (PTDIs and other instruments from the Integral State Planning System) (i. sub-Andean: Monteagudo, Huacay, Villa Vaca Guzm?n, Huacareta; ii. Llanos del Chaco: Charagua, Macharet? and Cuevo)

Seven (7) participatory processes of integral territorial management established, strengthened or approved to support decision- making on ISMBF (one in each municipality), including allocation of funds in the municipal annual budgets.

At least 15

450 people (30% women and 10% youth under 28) from central government, subnational government and local stakeholders, trained on integrated territorial planning and local participatory governance of ISBFM

Two (2) land use plans prepared and linked to integrated territorial planning from the ISMBF approach (updating the Charagua Iyambae GAIOC?s PGTC and preparing an PTDI in Monteagudo, Huacaya, Villa Vaca Guzm?n or Huacareta)

Eight (8) participatory processes of integral territorial management established, strengthened or approved to support decision- making on ISMBF, related to updating the GAIOC?s PGTC and the Monteagudo, Huacaya, Villa Vaca Guzm?n or Huacareta PTDI, including allocation of funds in the municipal annual budgets.

At least 15 communal action plans (drafting Life Plans) developed and implemented in a participatory manner, for ISMBF

Thirteen (13) institutions with strengthened capacity to plan and implement ISBFM and monitor LDN (MMAyA, MDRyT and others, as well as universities, local grassroots organizations, local governments and municipalities)

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Core Indicator -11: At least 15,000 direct beneficiaries have had their capacities reinforced through territorial planning processes, implementation of SLM and SFM practices and their integration into governance within the framework of the ISBMF (7 500 men and 7 500 women). **Moved from Component 2 to Component 1.**

<p>Component 2</p>	<p><u>Core Indicator -4.1:</u> 100,000 hectares of landscapes under improved management to benefit biodiversity (area 1: Sub-Andean strip and Chaco plains) (60,000 ha under SFM; 39,000 ha under agroforestry and silvopastoral systems management; 1,000 ha under agriculture focused on agroecological systems)</p> <p><u>Core Indicator -4.3:</u> 6,000 ha of forests and other types of vegetation under ISMBF in productive landscapes 2,000 ha with strengthened environmental functions through the implementation of ISMBF</p> <p>-</p> <p>-</p> <p><u>Core Indicator -11</u></p> <p>-</p> <p>-</p> <p>-</p> <p>2,500 families (50% women and 20% youth) implement sustainable products</p>	<p><u>Core Indicator -4.1:</u> <i>60,000 hectares of landscapes under improved management (SFM) for the benefit of biodiversity (area 1: sub-Andean fringe and plains of the Chaco) management systems.</i></p> <p>-</p> <p>-</p> <p><u>Core Indicator -4.3:</u> <i>40,000 ha under silvopastoral, agroforestry, and/or agroecological management systems and 8,000 ha of forests and other types of vegetation with improved environmental functions in production systems through the implementation of the ISMBF</i></p> <p>-</p> <p>-</p> <p>-</p> <p><u>Core Indicator -11:</u> modified and moved to Component 1.</p> <p>200 villagers and/or producers implement SLM and/or SFM practices under the ISMBF, including women and youth.</p> <p>Eight (8) OECOMs set up (one in each municipality and with the participation of women) dedicated to the commercialization of ISMBF products (with or without processing) by indigenous peoples and local communities</p> <p>Thirteen (13) experiences of ISMBF whose soil carbon stock outcomes were integrated into LDN monitoring and assessment</p>
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Component 3	N/A	Communication strategy with a gender approach was implemented
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	N/A	Project M&E plan has been implemented
	N/A	COVID 19 Prevention Plan has been prepared and implemented starting in the first semester of the Project term up until the AP3 pursuant to national regulations
	N/A	
Co-financing	USD 24,396,831	USD 22,571,046

Table 1. Main Changes in PRODOC resulting from changes to the PIF

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[1] In accordance with the provisions of COP-14 (2018), through decision 14/34, the Parties decide to establish the Post-2020 Global Biodiversity Framework Process, which will be adopted during COP 15 to be held in China in 2021. This framework will replace the Strategic Plan 2011-2020 and the Aichi Targets.

[2] Life systems are organized and dynamic communities of plants, animals, microorganisms and other beings and their environment, where human communities and nature interact as a functional unit, under the influence of climatic, physiographic and geological factors, as well as productive practices, the cultural diversity of Bolivians, including the worldviews of the indigenous peoples, and the intercultural and Afro-Bolivian communities. In operational terms, life systems are established based on the interaction between life zones and the predominant sociocultural units that inhabit each life zone, and identify the most optimal management systems that have been developed or may be developed as a result of this relationship (Law 300).

[3] The Integrated and Sustainable Management of Biodiversity and the Integrated and Sustainable Management of Forests are governed by the Plurinational Policy and Strategy for the Integrated and Sustainable Management of Biodiversity, in accordance with the regulations established by the PDES 2016 - 2020, the PSDI 2016 - 2020 and the current regulations governed by the CPE, Law No. 071, Law No. 300, Law No. 144, Law No. 835, and Supreme Decrees No. 1696, No. 2912, No. 2013 and No. 2914, among others.

[4] The objective of RECSOIL is to support and improve national and regional GHG mitigation and carbon sequestration initiatives. It can also contribute to mitigating climate change via nationally determined contributions as part of the UNFCCC.

[5] The 15,000 beneficiaries include people who will see their capacities strengthened at different levels, people who implement SLM and SFM practices, in the framework of ISMBF, people who form OECOMs, and those who are beneficiaries of the different integrated territorial planning processes with an ISMBF approach (including PTDI, PGTC, community action plans, co-management model for protected areas, among others).

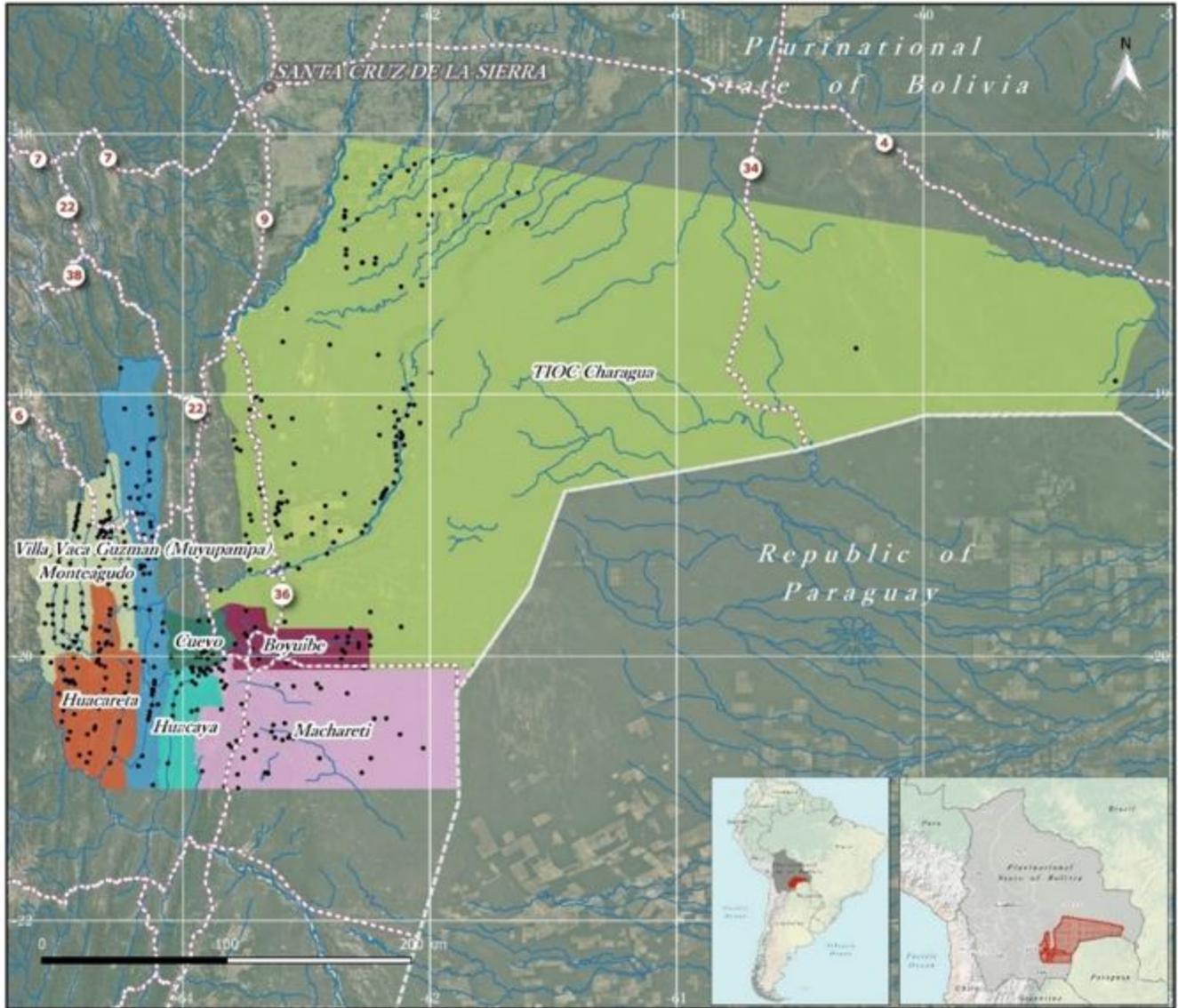
1b. Project Map and Coordinates

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

210. The project intervention area covers eight municipalities in the departments of Santa Cruz and Chuquisaca: Macharet?, Boyuibe, Cuevo, Villa Vaca Guzm?n, Monteagudo, Charagua Iyambae, Huacareta and Huacaya, all belonging to the Bolivian Chaco region. The project area covers 9,868,207 ha and is home to 94,652 inhabitants.

211. One of the project's goals, via strengthening of ISMBF governance, is to ensure its integration into the State's Integrated Planning System at the subnational level. The various instruments that will allow its incorporation are developed at different levels, from the municipal level down to the property level, and even at the Captainship level. Accordingly, the activities related to integrated planning under the ISMBF will be carried out in the intervention area municipalities, specifically in those that have been prioritized as a result of the participatory decision-making processes. As part of these planning

processes, community action plans will be developed in areas within the municipalities, coinciding with the territorial units that make up the APG (Figure 2).



Project Intervention Area

Legend

- | | | |
|-------------------------|------------------------|-------------------------------|
| • Settlements | Project municipalities | Machareti |
| — Water network | Boyuibe | Monteagudo |
| ⋯⋯⋯ Road network | Cuevo | Charagua Iyambae |
| ⋯⋯⋯ National boundaries | Huacareta | Villa Vaca Guzman (Muyupampa) |
| | Huacaya | |



Geographic Coordinate System-WGS84

Source: Rubio, C.; Rubio, M.C.; Diaz, F. y E. Abraham (2019).
Data: GeoBolivia, Government of the Plurinational State of Bolivia (2019).

Figure 2. Project Intervention Area

212. The prioritization of six areas of intervention at the local level is the result of the analysis of components and a series of variables with support from geographic information systems. These components and variables were assessed according to their relevance for the implementation of territorial planning processes and practices using the ISMBF approach, with a view to achieving LDN in the project intervention area. Aspects related to i) land degradation (condition and vulnerability) and fires were considered, with higher value being placed on those areas with greater degrees of degradation; in addition to ii) conservation, including national and subnational protected areas and RAMSAR sites, which are prioritized according to the implementation of co-management and management actions, and GAP areas, corresponding to sites with great value and biodiversity richness that have no protection; and iii) social aspects, such as poverty by locality and presence of communal lands, considering the need to implement actions to improve livelihoods and food security (Table 2 and Figure 3).

Component	Variable	Category	Score
Degradation	<i>LDN degraded areas, Indicator 15.3.1 (2000-2015)</i> <i>(MDRyT, 2018)</i>	Degraded	5
		Not degraded	1
	<i>Vulnerability to degradation (LADA Degree of degradation, 2017)</i> <i>(MMAyA, 2017)</i>	Very high	5
		High	4
		Medium	3
		Low	2
		Very Low	1
	<i>Fires 2000-2019</i> <i>(NASA, 2020)</i>	Burnt areas	5
		Not burnt (areas)	1
	Conservation		National protected areas

	Protected Areas (PA) <i>(SERNAP and Legislation creating sub-national PAs)</i>	Sub-national protected areas	5	
		RAMSAR Sites	5	
		No protected areas	1	
	GAP (priority areas for conservation) <i>(FAN, 2005)</i>	High value	5	
		Medium	3	
		Low	1	
	Social	Poverty by locality (2012) <i>(INE, 2012)</i>	A (very high)	5
			B (high)	4
			C (medium)	3
D (low)			2	
E (very low)			1	
Communal Land of Origin (Territorios comunitarios de origen) <i>(GeoBolivia, 2021)</i>		TCO	5	
		Outside of TCO	1	

Table 2. Components and variables considered priority.

213. Based on the assessment and combination of the components, a map was obtained at pixel level (120 m) prioritizing six possible areas of intervention at the local level: I) north Charagua; II) Embi Guasu and Otuquis; III) Ipa; IV) Parapetí River; V) Kaa Iya del Gran Chaco; VI) Macharé (east and west portions), which cover a total of 5,426,644 ha (Figure 3). It should be noted that the priority areas are for guidance only, and considering that the project seeks to strengthen governance and the collective construction of knowledge, their definition at the local scale will be carried out through participatory processes guided by the institutions and technical teams involved.

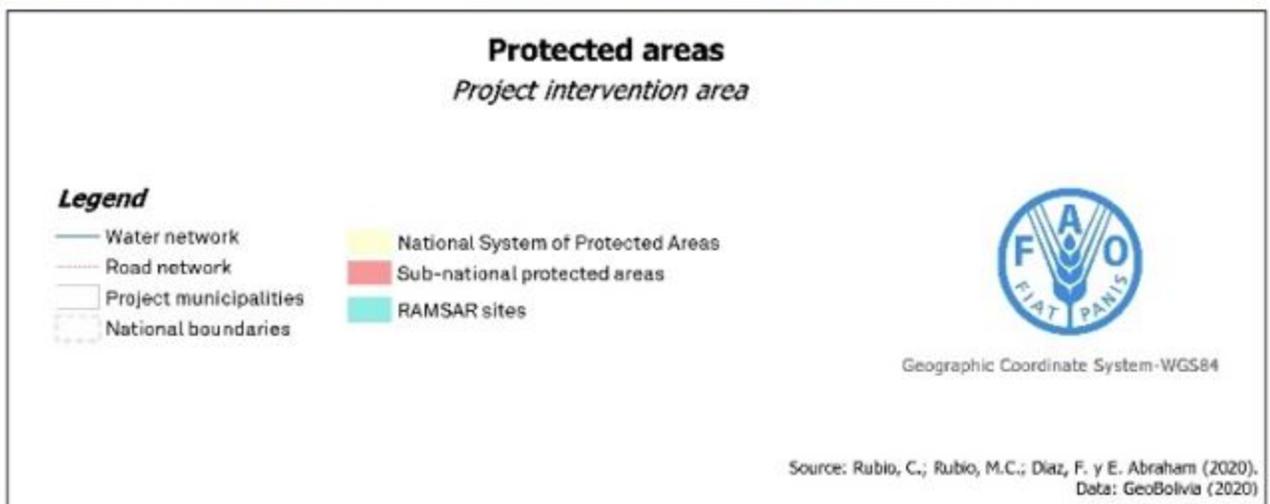
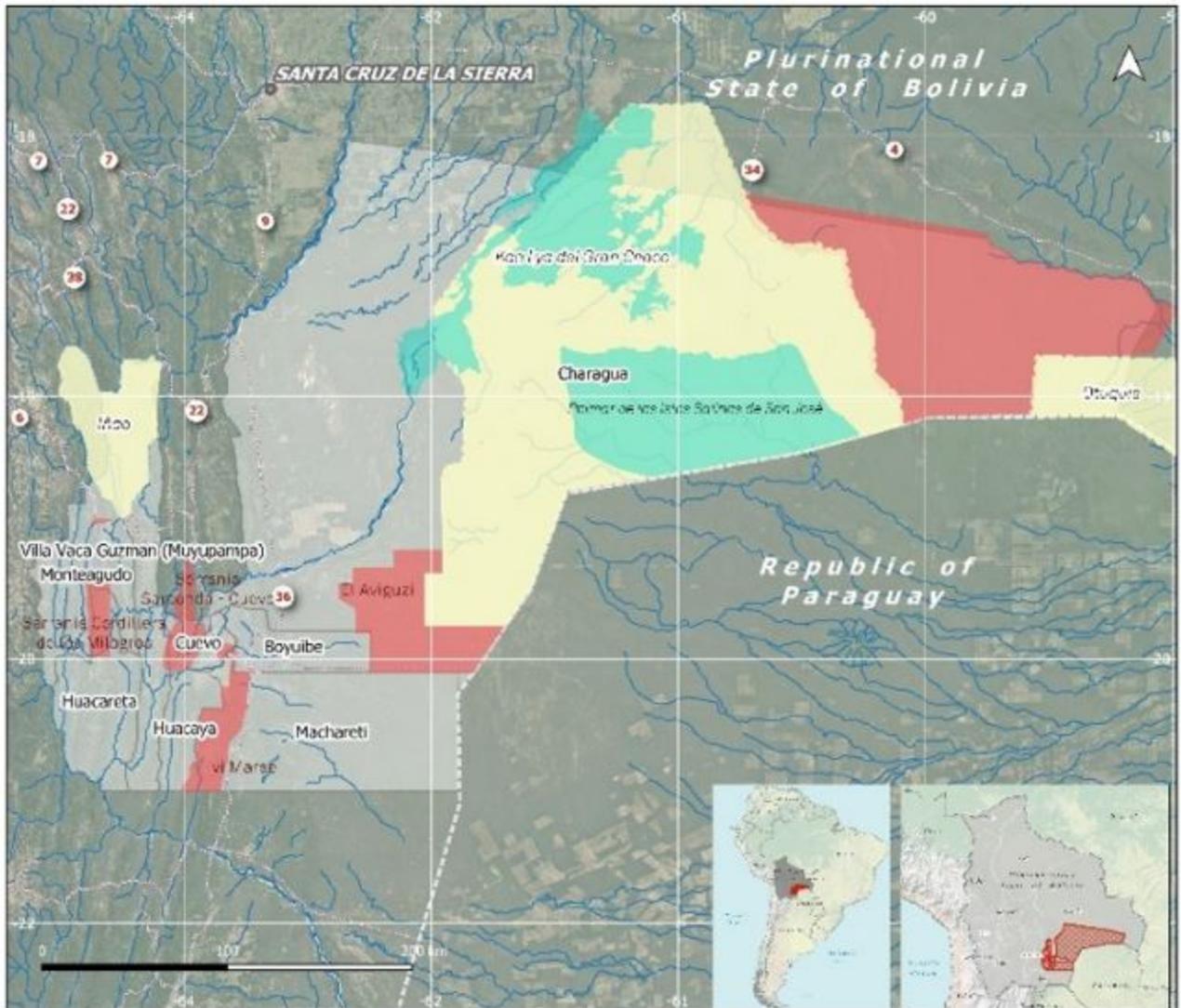


Figure 3. Priority Areas

214. For online inquiries, please visit the following link:

<https://projectgeffao.users.earthengine.app/view/bolivia-chaco>

215. Table 3 contains a summary of the main features of the priority field intervention sites.

Table 3. General characteristics of the sites given priority by the project

Areas	1. Norte Charagua	2. ?embi Guazu and Otuquis	3. I?ao	4. R?o Parapet?	5. Kaa Iya del Gran Chaco	6. Macharet? (E and O)
Dimensions						
Social groups	Indigenous Guaran? communities (Bajo Isoso Captaincy) Commercial properties; small and medium-sized properties; farming communities; Mennonite colony.	Indigenous community of Kuapeguay (Bajo Isoso Captaincy). ?embi Guasu is part of the Indigenous Community Lands (TCO) of Santa Teresita (Ayoreode). Intercultural communities. Illegal settlements. Private properties and cattle ranchers. Transit zone used by Ayoreo groups in voluntary isolation (uncontacted).	Farming and indigenous communities in the municipalities of Villa Vaca Guzm?n and Monteagudo, some lie within and some are outside the PN-ANMI Serran?a del I?ao buffer zone. Private properties (ranches) and cattle ranchers.	Indigenous Guaran? communities (Alto Isoso and Bajo Isoso Captaincies); farming communities; Mennonite colonies; Private property (ranches) (<i>Imperio</i>).	PN-ANMI Kaa Iya, no human settlements. Guaran? communities, subsistence hunting, fishing and gathering activities are only allowed in the ANMI zones. Transit zone used by Ayoreo groups in voluntary isolation (uncontacted).	Indigenous Guaran? communities (Macharet? and Ivo Captaincies); farming communities; commercial properties; small and medium-sized properties.
Local livelihoods	Extensive cattle ranching and corn crops predominate in the indigenous communities. Gathering (fruit, medicinal plants and honey) to supplement the family?s diet. Mennonites, farming	Main indigenous activities: Subsistence hunting, fishing and gathering. Intercultural communities? activities: Agricultural land-use change. Ranchers (large	Indigenous and farming communities grow corn, mainly. Drip irrigation in some communities. There are also modernized irrigation, horticulture, fruticulture and apiculture projects. Cattle	Indigenous and farming communities: Small-scale traditional farming ? mainly corn. Indigenous communities: Use carob seeds to make the traditional drink <i>chicha</i> . Hunting, fishing and	Indigenous communities may enter the protected area for subsistence hunting, fishing and gathering (fruit, seeds, medicinal	Extensive cattle ranching con cultivos de pastos/forrajes and ramoneo, and uso intensivo de Indigenous and farming communities grow corn, mainly. Drip irrigation in some communities. There are also modernized

Areas	1. Norte Charagua	2. Embi Guazu and Otuquis	3. I?ao	4. R?o Parapet?	5. Kaa Iya del Gran Chaco	6. Macharet? (E and O)
Dimensions	<p>communities and companies involved in resource-intensive farming.</p> <p>Genetically-modified seeds have been introduced.</p> <p>Extensive cattle ranching with cultivated fodder/pasture.</p> <p>Mechanised land clearing on rented Guaran? property and land.</p>	<p>and medium-sized companies): Extensive cattle ranching with cultivated fodder/pasture and resource-intensive farming.</p>	<p>grazing predominates.</p> <p>Extensive cattle ranching with cultivated fodder/pasture and resource-intensive farming.</p> <p>Resource-intensive farming in several indigenous and farming communities.</p>	<p>gathering (fruit, medicinal plants and honey) to supplement the family?s diet.</p> <p>Private and Mennonite properties: Extensive cattle ranching with cultivated fodder/pasture and resource-intensive farming.</p>	<p>plants and honey).</p>	<p>irrigation, horticulture, fruticulture and apiculture projects. Cattle grazing predominates.</p> <p>Extensive cattle ranching with cultivated fodder/pasture and resource-intensive farming.</p> <p>Resource-intensive farming in several indigenous and farming communities.</p>
Land ownership	<p>TIOCs (Communal), private properties (small, medium, company-owned), local farmers? properties.</p>	<p>TIOCs (Communal), private properties (small, medium, company-owned).</p>	<p>TIOCs (Communal), private properties (small, medium, company-owned), local farmers? properties.</p>	<p>TIOCs (Communal), private properties (small, medium, company-owned), local farmers? properties.</p>	<p>No permanent human settlements.</p>	<p>TIOCs (Communal), private properties (small, medium, company-owned), local farmers? properties.</p>
Socio-economic conditions	<p>Poverty level (unsatisfied basic needs) between 70% and 75%. Illiteracy rate around 5%. No schools.</p>	<p>Poverty level (unsatisfied basic needs) between 70% and 75%. Illiteracy rate around 5%. No schools.</p>	<p>Poverty level (unsatisfied basic needs) between 60% and 69%. Illiteracy rate around 12%. There are schools.</p>	<p>Poverty level (unsatisfied basic needs) between 70% and 75%. Illiteracy rate around 5%. There are schools.</p>	<p>No inhabitants.</p>	<p>Poverty level (unsatisfied basic needs) between 60% and 69%. Illiteracy rate around 6%. There are schools.</p>

Areas Dimensi ons	1. Norte Charagua	2. Temb Guazu and Otuquis	3. I?ao	4. R?o Parapet?	5. Kaa Iya del Gran Chaco	6. Macharet? (E and O)
Access to water	Different technologies used to store water (ponds, reservoirs, tanks, biofilters for consumption, etc.). Water from wells may be salty and/or sodium-rich. Even though some communities/captaincies have piped water, water for consumption and production is a problem for the Chaco plains. The water table is very deep (230 m).	Different technologies used to store water (ponds, reservoirs, tanks, biofilters for consumption, etc.). Water from wells may be salty and/or sodium-rich. Even though some communities/captaincies have piped water, water for consumption and production is a problem for the Chaco plains. The water table is very deep (230 m).	Good availability. Moderate to Good quality water. Natural sources (tributaries) used for both consumption and irrigation. Some captaincies and families have access to piped water network. Water table is close to the surface (10-80 m)	The main water source is the River Parapet?, mainly used for irrigation. Different technologies used to store water (ponds, reservoirs, tanks, biofilters for consumption, etc.). Water from wells may be salty and/or sodium-rich. Even though some communities/captaincies have piped water, water for consumption and production is a problem for the Chaco plains. The water table is very deep (230 m).	Almost uninhabited. Mainly indigenous peoples (Izoze?os and Ayoreos) that use natural water sources.	Different technologies used to store water (ponds, reservoirs, tanks, biofilters for consumption, etc.). Water from wells may be salty and/or sodium-rich. Even though some communities/captaincies have piped water, water for consumption and production is a problem for the Chaco plains. The water table is very deep (230 m).

Areas Dimensions	1. Norte Charagua	2. Embi Guazu and Otuquis	3. I?ao	4. R?o Parapet?	5. Kaa Iya del Gran Chaco	6. Macharet? (E and O)
Main degradational processes (see Annex E)	<p>Forest loss on titled lands because of land-use change.</p> <p>Deforestation.</p> <p>Fires.</p> <p>Due to the physical and biological conditions, and drought tendency, this area is highly vulnerable to extreme degradation.</p>	<p>Loss of forests and biodiversity.</p> <p>Major and recurring fires.</p> <p>Land ownership conflicts.</p>	<p>Forest loss on titled lands.</p> <p>Fires.</p> <p>Due to the physical and biological conditions, and drought tendency, this area is highly vulnerable to extreme degradation.</p>	<p>Forest loss on titled lands because of land-use change.</p> <p>Deforestation.</p> <p>Fires.</p> <p>Due to the physical and biological conditions, and drought tendency, this area is highly vulnerable to extreme degradation.</p>	<p>Deforestation.</p> <p>Due to the physical and biological conditions, and drought tendency, part of this area is highly vulnerable to degradation.</p>	<p>Due to the physical and biological conditions, and drought tendency, this area is highly vulnerable to extreme degradation.</p>
Basic services and infrastructure	<p>Major road network, Route 34 in particular, connects Chiquitos-Palmar de las Islas.</p> <p>Dirt roads connect communities.</p> <p>Mobile phone, internet connection only in populated areas and large towns.</p> <p>There are health facilities.</p>	<p>Dirt roads connect communities.</p> <p>The Santa Cruz-Corumb? Highway crosses the northern tip.</p>	<p>Dirt roads connect communities. Mobile phone, internet connection only in populated areas and large towns.</p> <p>There are health facilities.</p>	<p>Dirt roads connect communities. Mobile phone, internet connection only in populated areas and large towns.</p> <p>There are health facilities.</p>	<p>Two landing strips.</p> <p>Roads off the main north-south highway. Santa Cruz-Yacuiba to the west and Santa Cruz - Corumb? to the north.</p>	<p>One landing strip.</p> <p>Dirt roads connect communities. Roads off the main highway connecting to Macharet? and Boyuibe.</p> <p>Santa Cruz-Yacuiba railway.</p> <p>Mobile phone, internet connection only in populated areas and large towns. Telecentre.</p> <p>There are health facilities</p>

Areas Dimensions	1. Norte Charagua	2. Tembipati Guazu and Otuquis	3. Izoceño	4. Rapa Nui Parapetí?	5. Kaapitani del Gran Chaco	6. Macharet? (E and O)
SLM and SFM practices	<ul style="list-style-type: none"> ? Handicrafts ? Transform/process carob seeds ? Crop rotation ? Efficient water harvesting and management ? Improved seeds production ? Water harvesting and storage ? Forest management and conservation ? Silvopastoral management 	<ul style="list-style-type: none"> ? Crop rotation ? Green manure ? Forest products management and exploitation ? Water harvesting and storage 	<ul style="list-style-type: none"> ? Farming with modernised irrigation systems ? Apiculture ? Conserve and regenerate soil productive capacity ? Silvopastoral management ? MIC-Basins ? Produce and/or store seeds, protect riverbanks and water sources ? Nurseries ? Crop rotation ? Direct seeding/minimum tilling ? Green manure ? Associated crops ? Pasture/livestock (cattle) management ? Native forest management ? Silvopastoral management ? Agroforestry management ? Agro-silvopastoral management ? Forest 	<ul style="list-style-type: none"> ? Handicrafts ? Transform/process carob seeds ? Crop rotation ? Direct seeding/minimum tilling ? Forest products management and exploitation ? Silvopastoral management ? Agro-silvopastoral management ? Green manure ? Water harvesting and storage 	<ul style="list-style-type: none"> ? Biodiversity conservation ? Tourism ? Research 	<ul style="list-style-type: none"> ? Farming with modernised irrigation systems ? Apiculture ? Forestation/reforestation ? Sustainable ranching-Silvopastoral system ? Water harvesting and storage ? MIC-Basins ? Crop rotation ? Direct seeding/minimum tilling ? Green manure ? Associated crops ? Native forest management ? Silvopastoral management ? Agro-silvopastoral management ? Forestation/forest nurseries ? Efficient water harvesting and management ? Improved seeds production ? Organic fertilizers

Source: Author's own using the Plan Estratégico de la Nación Guaraní (2008); ADEMAF (2016); INFO-SPIE (2016) (<http://si-spie.planificacion.gob.bo>); Tamburini (2019); PGTC GAIOC Charagua Iyambae (2016-2020); FCBC, 2014. Interviews with the local Captains of Guaraní TIOCs in the study area (2021).

1c. Child Project?

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

Not applicable

2. Stakeholders

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

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

216. Identification of the project stakeholders took into account the rationale for the activities to be carried out as part of the project and the different social groups in the project's intervention area. Thought was also given to institutional strengthening needs at the local and national level and needs for other support that will benefit project implementation and the likelihood of convergence with other projects and co-funding.

217. The following groups emerge from the identification of the different social and institutional stakeholders in the area: a) stakeholders who will promote the project; b) subnational government institutions interested in territorial planning and other issues related to the project; c) community and local beneficiaries; d) other local institutions that are interested.

218. The stakeholders who will promote the project are concentrated in central government institutions (MMAyA, MDRyT, SERNAP, APMT, vice-ministries and decentralized agencies), who are seeking to ensure that public policy on forest and biodiversity management is implemented at the local level. The project will benefit and assist with the actions planned in the Ministry of the Environment and Rural Development's sectoral plans, which are part of the Economic and Social Development Plan 2025. The experience gained with the project will provide ISMBF guidelines and models for the Chaco, suited to

the ecological level and the cultural practices of the captaincies that belong to the Guaran? people?s nation.

219. Local government institutions will benefit from the work to update the territorial plans at the municipal and GAIOC level and the advice provided on this, promoting participation in territorial planning and establishing new ways of working that will enable activities related to SFM, SLM and environmental functions to be strengthened. The ETAS will be strengthened by means of technical studies, management models, technical training, local regulations and guidelines for SFM and SLM, and others that will enable ISMBF to be implemented and promoted.

220. The beneficiaries will be the communities in the different captaincies, through their organizational structures (APG, CCCH, local committees, management committees, consultation platforms, associations, etc.), together with other local stakeholders such as small, medium and large producers and others. These will be given training so that they can include their needs related to territorial planning and ISMBF in the TIDP and CTMP. In order to ensure that the ISMBF model is promoted, the project will seek to establish initiatives to strengthen resource management and use systems, training, marketing and other areas considered capable of contributing to the sustainable management of natural resources.

221. Local civil society organizations will also be included in the process as relevant stakeholders, as they can assist with forest and biodiversity conservation processes by developing new techniques. The universities will also be project partners who will play an essential role by providing training and technical advice, and they will also find that their own capacities in SLM, SFM and LDN are strengthened at the same time (Table 4).

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

The participation of diverse stakeholders is very important for the project. There are two different ways in which stakeholders may be involved in the project: First, the consultation of the stakeholders during project formulation, and second, the expected role of the stakeholders during project implementation.

For this project, the relevant stakeholders are described below divided by the ways in which they have been or will be involved:

1) Stakeholder Consultation in project formulation

The following stakeholders were consulted during project formulation:

Stakeholder Name	Stakeholder Type	Stakeholder Profile	Consultation Methodology	Consultation Findings	Date	Comments
Government Stakeholders						
Ministry of Environment and Water (MMAyA)	Executing Agency	Implements national biodiversity and forest policies, as well as projects and standards for their compliance.	In-person and on-line executive meetings.	On the steps, procedures, requirements for presenting the Project.	Sept 2020- June 2021	Conducted the follow-up of the project development.
Vice Ministry of the Environment, Biodiversity, Climate Change, and Forest Management and Development (V MABCCGDF)	Co-Implementing Agency	Makes and defines policies for the conservation and sustainable use of biodiversity and forests; implements related strategies, programs and plans. Focal Point of the CBD and its Protocols.	In-person and on-line technical meetings.	Coordination of the project's contribution to the Plurinational Policy and Strategy for Integral and Sustainable Biodiversity Management - 2019-2030 Action Plan.	Sept 2020- June 2021	Performed follow-up as part of the technical committee for the project development.

Stakeholder Name	Stakeholder Type	Stakeholder Profile	Consultation Methodology	Consultation Findings	Date	Comments
Vice Ministry of Water Resources and Irrigation (VRHR)	Strategic Partner	Implements Integrated Watershed Management and Integrated Water Resources Management for the efficient and equitable use of multiple water resources. UNCCD Focal Point.	In-person and on-line technical meetings.	Coordination of the project's contribution to the 2030 National Strategy for Land Degradation Neutrality.	Feb-May 2021	Technical questions were made regarding the LDN Reports and Strategy.
Kaa Iya Gran Chaco National Park-Natural Area under Integral Management, National Service for Protected Areas (SERNAP)	Strategic Partner Project Beneficiary	Highest decision-making authority within the area's territorial jurisdiction, within the scope of its jurisdiction.	Telephone interview	On the progress and limitations of PA management, in the implementation of the Management Plan. Ties with local stakeholders.	Abril 22, 2021	Marcel Caballero. Director of Kaa Iya Gran Chaco National Park-Natural Area under Integral Management
Serranía del Iñao National Park-Natural Area under Integral Management, National Service for Protected Areas (SERNAP)	Strategic Partner Project Beneficiary	Highest decision-making authority within the area's territorial jurisdiction, within the scope of its jurisdiction.	Telephone interview	On the progress and limitations of PA management, in the implementation of the Management Plan. Ties with local stakeholders.	April 19, 2021	Guido García. Director of Serranía del Iñao National Park-Natural Area under Integral Management, National Services for Protected Areas (SERNAP)

Stakeholder Name	Stakeholder Type	Stakeholder Profile	Consultation Methodology	Consultation Findings	Date	Comments
Authority of Mother Earth (APMT)	Strategic Partner	Implements the Joint Mechanism on Climate Change Mitigation and Adaptation. UNFCCC Focal Point.	In-person and on-line technical meetings.	Guidance on project implementation in light of the Joint Climate Change Mitigation and Adaptation Mechanism and NDCs.	Feb-May 2021	Technical questions were made regarding the environmental functions and LDN Reports.
Ministry of Rural Development and Land (MDRyT)	Strategic Partner	Contributes to the integral and sustainable management of agrobiodiversity, forests and lands, and their mainstreaming in rural areas and production development strategies.	In-person technical meeting	Coordination of ISMBF capacity-building and implementation activities.	Feb-May 2021	Technical questions were made regarding the LDN Reports and Strategy.
Grassroot Stakeholders						

Stakeholder Name	Stakeholder Type	Stakeholder Profile	Consultation Methodology	Consultation Findings	Date	Comments
Indigenous Peoples and their organizations in Santa Cruz and Chuquisaca	Beneficiary	Provides technical assistance for LDN monitoring and target setting systems and SLM / SFM practices. Supports methodologies according to international standards. Supports project implementation and supervision as implementing agency as per the Project and Program Cycle Policy.	Virtual technical meetings	Support for project development, including consultation and participatory project formulation.	September - May 2021	Technical questions were made regarding the project's logical framework.
Assembly of the Guaran? People (APG)	The APG is the highest national-level representative body of the organized Guaran? communities. Project Promotor	Vindication of the rights of the Guaran? people over territories and promoting development in all communities.	Virtual and in-person technical meetings Technical workshop	Support for the mobilization of local stakeholders during project preparation, as well as direct participation through local authorities and municipal staff (GAIOC-Charagua Iyambae).	September - May 2021	Validation meetings and workshops, managed through the APG president. Justino Zambrana,

Stakeholder Name	Stakeholder Type	Stakeholder Profile	Consultation Methodology	Consultation Findings	Date	Comments
Highest authorities of the Captainships (Male Captains or Great Female Captains or Mburuvicha Guasu)	Highest authorities of the Guaran? territories	They represent their territories organized in captainships	Technical workshop	Supports the preparation of strategic guidelines for the project regarding local capacities, governance and production initiatives. Supports the approach of key technical documents for the project preparation phase such as communication strategy, gender strategy, strategy for indigenous peoples.	April 8 & 9, 2021	Participants: Claudio Aramayo, Mburuvicha, Ipaguasu Captainship; Fidel Meriles, Mburuvicha, Kaaguasu Captainship; CIDOB Indigenous Court of Justice; Javier Cruz, Representative of CCNagua (Aracuaiya) Bolivia; Justino Zambrana, President of APG; Pedro Castillo, In charge of Natural Resources Ipaguasu; Vicente Ferreira, Mburuvicha Ingre Captainship, Carlos Abapori, Mburuvicha, Guaran? Kereimba Iyaambae Guaran? Autonomous Indigenous Community; Florencio Lopez, Mburuvicha, Machareti Captainship; Jorge Mamani, Mburuvicha, Tacobo Mora Captainship; Juan Carlos Reyes, Iyasurenda

Stakeholder Name	Stakeholder Type	Stakeholder Profile	Consultation Methodology	Consultation Findings	Date	Comments
Highest authorities of the Captainships (Male Captains or Great Female Captains or Mburuvicha Guasu) and other authorities in the Project Area of Intervention	Highest Guarani territorial authorities of the captainships involved in the Project.	They represent their territories organized in captainships	Phone Interviews	Production projects required by the captainships within the framework of ISMBF, local capacity-building needs and strengthening of the enterprises currently underway. Recovering and strengthening traditions in crafts, gastronomy and production.	April 12-19, 2021	Ademar Flores, Charagua Iyambae GAIIOC Legislator; Carlos ?atui?a, Mburuvicha Santa Rosa Captainship. Gerardo Mena, Mburuvicha, Ivo Captainship; Huber Rivero, Mburuvicha Bajo Isoso Captainship; Raquel Anturez, Mburuvicha Charagua Norte Captainship; Vicente Ferreira, Mburuvicha, Ingre Captainship; V?ctor Rivera, Mburuvicha, Muyupampa Captainship; Agapo Lozano, Mburuvicha, Iguembe Captainship; Mburuvicha, Iti-Karaparirenda Captainship;

Stakeholder Name	Stakeholder Type	Stakeholder Profile	Consultation Methodology	Consultation Findings	Date	Comments
Civil Society Organizations						
Conservation and Production Development Foundations and NGOs working in the Project Area	Conservation and Production Development Foundations and NGOs with experience in the Project Area	Institutions that are supporting biodiversity conservation initiatives or production initiatives with indigenous and peasant communities in the region. Have been present for several years in the Bolivian Chaco area.	Phone Interviews	On the activities carried out in the area, lessons learned, and lines of work in biodiversity conservation and production development that could be supported with new projects.	April 12-19, 2021	Natalia Araujo and Richard Estrada from Fundaci?n Natura Bolivia; Marcela Zamora, Waldo Cossio from Fundaci?n Nativa, CIPCA.

2) Stakeholder Consultation foreseen in project Implementation.

Project implementation foresees the following consultations and participations of stakeholders:

Stakeholder	Stakeholder Type	Stakeholder Profile	Consultation Methodology	Expected Timeframe	Comments
Government Entities					

<p>Ministry of Environment and Water (MMAyA)</p>	<p>Executing Agency</p>	<p>The MMAyA is responsible for the development and implementation of public policies, regulations, plans, programs and projects related to ISMBF (forests, biodiversity and agrobiodiversity), environmental management and water management (drinking water and irrigation). Its principal focus is on managing actions intended for the implementation of forest and biodiversity management, as well as capacity-building with decentralized and subnational bodies, in collaboration with other institutions that are also interested in the subject.</p>	<p>In-person and on-line executive meetings.</p>		
<p>Vice Ministry of the Environment, Biodiversity, Climate Change, and Forest Management and Development (VMABC CGDF)</p>	<p>Co-Executing Agency</p>	<p>Make and defines policies for the conservation and sustainable use of biodiversity and forests; implements related strategies, programs and plans. Focal point of the CBD and its Protocols. GEF Focal Point.</p>	<p>In-person and on-line technical meetings.</p>		

Vice Ministry of Water Resources and Irrigation (VRHR)	Co-Executor	Makes and defines policies for the conservation and sustainable use of biodiversity and forests; implements related strategies, programs and plans. Focal point of the CBD and its Protocols. GEF Focal Point.	In-person and on-line technical meetings.		
National Service for Protected Areas (SERNAP)	Strategic Partner/Project Beneficiary	The highest decision-making body within the area's territorial jurisdiction, within the scope of its jurisdiction.	In-person and on-line technical meetings, workshops		
Kaa Iya Gran Chaco National Park-Natural Area under Integral Management (PN-ANMI), National Service for Protected Areas (SERNAP)	Strategic Partner/Project Beneficiary	The highest decision-making body within the area's territorial jurisdiction, within the scope of its jurisdiction.	In-person and on-line technical meetings, workshops		When implementing actions involving the PA
Serran?a del I?ao National Park-Natural Area under Integral Management (PN-ANMI), National Service for Protected Areas (SERNAP)	Strategic Partner/Project Beneficiary	The highest decision-making body within the area's territorial jurisdiction, within the scope of its jurisdiction.	In-person and on-line technical meetings, workshops		When implementing actions involving the PA
Authority of Mother Earth (APMT)	Strategic Partner	Implements the Joint Mitigation and Adaptation Mechanism for the integrated management of forests and Mother Earth. Focal point of the UNFCCC.	In-person and on-line technical meetings, workshops		The project's affiliation to the Joint Climate Change Mitigation and Adaptation Mechanism and NDC.

<p>Ministry of Rural Development and Land (MDRyT)</p>	<p>Strategic Partner</p>	<p>The MDRyT is responsible for: 1) Promoting land regulation, titling and distribution processes nationwide, 2) Developing agricultural, fishing and forestry producers' production capacities, 3) Promoting the sustainable use and management of land for agricultural production.</p> <p>Contributing to the integrated and sustainable management of agrobiodiversity, forests and land, and mainstreaming it in rural areas and production development strategies.</p>	<p>In-person and on-line technical meetings</p>	<p>Coordination of capacity-building and implementation activities in SLM and SFM practices.</p>
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Ministry of Development Planning (MPD)	Strategic Partner	Establishing strategic guidelines for the Integral Planning of the Plurinational State, towards the achievement of the objectives of Integral Development for Living Well in Harmony with Mother Earth, within the framework of the 2025 Patriotic Agenda.	In-person and on-line technical meetings.		Support for processes related to integrated planning within the project framework.
Municipal Autonomous Governments of Monteagudo, Machare?, Boyuibe, Huacaya, Huacareta, Villa Vaca Guzm?n (Muyupampa), Cuevo.	Beneficiaries, Liaisons with local stakeholders	Integrating forest and biodiversity management actions with a focus on maintaining environmental functions in municipal planning mechanisms. Supporting governance and territorial management processes. Providing support for concurrent initiatives related to forest and biodiversity management.	In-person and on-line Technical Meetings, Workshops		
National Service for Agricultural Health and Food Safety (SENASAG)	Strategic Partner	Administration of the agricultural health and food safety regime in production and processing sectors.	In-person and on-line technical meetings.		Coordination of the national food safety label to be obtained for communal businesses that process (agro) biodiversity and forest products; and registering farmers with eco-friendly production with the national organic production label.

National Agricultural and Forestry Innovation Institute (INIAF)	Strategic Partner	Regulates and conducts research, outreach, technical assistance, agricultural, aquaculture and forestry technology transfer, agrobiodiversity genetic resource management and seed certification services. Coordinator of the International Treaty on Genetic Resources for Food and Agriculture.	In-person and on-line technical meetings.		Coordination of capacity-building related to conservation; and sustainable use of agricultural genetic resources, research on ISMBF.
National Agricultural and Forestry Innovation Institute (INIAF)	Strategic Partner	Regulates and conducts research, outreach, technical assistance, agricultural, aquaculture and forestry technology transfer, agrobiodiversity genetic resource management and seed certification services. Coordinator of the International Treaty on Genetic Resources for Food and Agriculture.	In-person and on-line technical meetings.		Coordination of ISMBF-related technical assistance.

National Agricultural Insurance Institute INSA	Strategic Partner	Contributes to the protection of agricultural production and the livelihoods of agricultural producers from adverse weather events.	In-person and on-line technical meetings.		Providing comments on the regulations related to the protection of production systems under ISMBF.
Implementing/Executing Agency (FAO)	Implementing Agency	Provides technical assistance on monitoring and target setting systems for LDN and SLM/SBM practices. Supports methodologies according to international standards in different thematic areas related to the project (EXACT, WOCAT, LADA, Collect Earth, AQUA STAT, among others). Identifies and declares Globally Important Agricultural Heritage Systems (GIAHS). Supports the implementation and supervision of the project as implementing agency as established under the Project and Program Cycle Policy.	In-person and on-line Technical Meetings, Workshops Other technical work mechanisms		Supports project implementation, follow-up and monitoring. Supports the transfer and application of international methodologies in different thematic areas related to the project (EXACT, WOCAT, LADA, Collect Earth, AQUA STAT, among others). Identifies potential sites that could be declared as GIAHS.

<p>Governorates</p> <p>1. Santa Cruz Departmental Governorates</p> <p>2. Chuquisaca Government s</p>	<p>Strategic Partners</p>	<p>Governorates have the role of supporting and implementing local policies related to the subject within the framework of their established competencies.</p>	<p>Workshops, in-person and on-line technical meetings</p>		<p>Supports territorial governance and management processes. Provides support to concurrent initiatives related to forest and biodiversity management, with a view to achieving LDN.</p>
<p>Charagua Iyambae GAIOC</p>	<p>Project Beneficiary</p>	<p>Decision-making body responsible for the management of subnational protected areas within its territorial jurisdiction.</p>	<p>Workshops, in-person and on-line technical meetings</p>		<p>Coordination of activities to be carried out with protected areas: ?embi Guasu and others.</p>
<p>Assembly of the Guaran? People</p>	<p>Beneficiaries and Strategic Partner</p>	<p>Highest Authority of the Guaran? Indigenous People</p>	<p>Workshops, in-person and on-line technical meetings.</p>		<p>Summons captainships, agreements, definition of beneficiary captainships/communities</p>
<p>Grand Captains of the Guaran? Captainships</p>	<p>Strategic Partner and Beneficiary</p>	<p>Highest Authorities of the Guaran? Captainships</p>	<p>Workshops, in-person and on-line technical meetings.</p>		<p>Coordination of activities and training with the beneficiary communities within their captainships. Monitor activities. Support for project coordination.</p>
<p>Individual Producers and Members of Producer Associations</p>	<p>Beneficiaries</p>	<p>Participates in all project activities under its three components, particularly in participatory planning, ISMBF implementation and dissemination, M&E, among others.</p>	<p>Workshops and technical meetings</p>		<p>Consultation and detailed participatory project design; and definition of the specific communities for the implementation of project component 2.</p>

Individual Producers and Members of Producer Associations	Beneficiaries	Manages local agroecosystems for agricultural and livestock purposes.	Workshops and technical meetings		Participation in ISMBF capacity-building events; contribution to ISMBF through the implementation of diversified or agroecological production systems; and participation in environmental functions monitoring and the project mid-term and final review.
Local and Regional Markets and Fairs	Opportunities for dissemination, commercialization and negotiation.	Sells products on national markets.	Meetings and gatherings		Buying and selling ISMBF products produced by indigenous peoples and local communities.
Territorial Grassroots Organizations and peasant producers as a family unit	Beneficiaries	Local stakeholders with property rights, land and natural resources use activities	Workshops and technical meetings		Participation in training courses on good agricultural and livestock practices and environmental conservation
Local Water Committees	Beneficiaries	Workshops and technical meetings	Workshops and technical meetings		Participation in water source protection initiatives

<p>Universities, Institutes and Research Centers, including:</p> <p>?Apiaguaiki T?pa? Guaran? Indigenous University UNIBOL (Machareti).</p> <p>Monteaguado Higher Institute of Agro-industrial Technology (ISTAM)</p> <p>International Center for Tropical Agricultural (CIAT) (Santa Cruz Departmental Government)</p> <p>?Tarema Ikua? Higher Institute of Technology (San Antonio Community, Parapitiguasu-Charagua Zone).</p> <p>San Isidro Center for Alternative Education (CEA) (Monteagudo).</p>	<p>Beneficiaries and Strategic Partners</p>	<p>Universities and institutes, with technical and academic training capacity.</p> <p>Research centers with agricultural and forestry sector research capacity</p>	<p>Workshops and technical meetings</p>	<p>Universities and institutes with facilities in the project intervention area will participate in specific training and may be partners for training and technical assistance required by the project.</p>
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In addition, the following producer associations are expected to be consulted during project implementation:

<p>GAIOC Municipal Government</p>	<p>Local Organizations</p>
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Charagua	<ul style="list-style-type: none"> ? Inter-Communal Center for Ise?as Women Captains (CIMCI). ? SUMBI REGUA Association of Knitters in Charagua. ? Charagua Association of Shampoo Producers ? Charagua Association of Carob Flour Producers ? Charagua Association of Local Irrigation and Drainage ? Cordillera Association of Livestock Farmers (AGACOR). ? Charagua Town and Charagua Station Irrigation Cooperative ? Eirenda de Charagua Norte Association of Beekeepers (Charagua GAIOC) ? ?San Francisco? Association of Small Agricultural Producers ? Charagua Norte Association of Small Agricultural Producers (APPACHN) ? San Isidro Labrador Association of Agricultural Producers (ASOAGRO - SIL) ? Aguiraguasu Association of Small Agricultural Producers ? Charagua Pueblo and Charagua Estaci?n Irrigation Cooperative
Cuevo	<ul style="list-style-type: none"> ? Cuevo Association of Beekeepers ? APICUEVO ? Cuevo Association of Livestock Farmers ? AGASCUEVO ? Cuevo Association of Dairy Farmers ? APLECUEVO
Huacareta	<ul style="list-style-type: none"> ? Water Committees (Huirasay irrigation system) ? Chili and Peanut Grower Association (APROMANI). ? Association of small farmers of communal vegetable gardens ? Association of Citrus Fruit Growers ? Association of Small Beekeepers (APPA) ? Huacareta Association of Livestock Farmers ? Association of Seamstresses ? Association of Dairy and Fruit Products (ADELFRUT).
Machareti	<ul style="list-style-type: none"> ? Machareti? Municipality Association of Beekeepers (AAPIMMACH). ? Association of Agricultural Producers from the Southern Zone (ASOPROSUR IPATI).
Huacaya	<ul style="list-style-type: none"> ? Eireka de Huacaya Association of Beekeepers
Monteagudo	<ul style="list-style-type: none"> ? Monteagudo Association of Beekeepers ? Depensas and Palmarcito Association of small livestock farmers (ASOGADP) (Peasant communities) ? Serran?a del I?ao Association of Agricultural Producers (ASOPOAGRO-Serran?a I?ao). ? Hernando Siles Association of Agricultural Producers (APA-HS). ? Los Sauces Association of small peanut and chili (Sauces-APROMAJI). ? Monteagudo Association of Artisanal Seed Producers (APROSAM). ? Monteagudo Association of Women Producers and Sellers (AMPROCOM) ? Amandiya OECOM (Monteagudo)
Villa Vaca Guzm?n	<ul style="list-style-type: none"> ? Muyupampa Association of Women Honey Producers (AMPROM) ? Association of Peanut and Chili Producers ? Association of Grain and Seed Producers from El Chaco (Agrosemillas-Chaco)

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier;

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

Executor or co-executor; Yes

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

222. Recent assessments in Bolivia indicate that gender roles are very clearly defined, and women play an important role in managing the country's natural resources, including in the Chaco region in particular. While men have traditionally controlled resources and decision-making, women are responsible for domestic reproductive and caring activities, subsistence agriculture and other small-scale income-generating activities, as well as supporting men in the productive sector. In general terms, women's participation in decision-making processes has been limited.

223. Nevertheless, the region is undergoing changes as women are taking on decision-making roles traditionally assigned to men. This is associated with seasonal migration by men to other areas of the country in search of paid work. Although these changes increase women's workload, they also provide a means to participate in community decision-making mechanisms, development projects, training and other productive activities.

224. A high percentage of Bolivian women are engaged in the workforce in comparison to other countries in the region. Indigenous women are more likely to work in the informal sector, which contributes to their income vulnerability. Although the country has made good progress, it has not yet achieved gender parity in education or in the management of natural resources.

225. In a context dominated by the effects of land degradation processes and climate change, it is essential to include the gender approach right from the initial stages of the project, such as consultation and decision-making on the design and implementation of ISMBF practices, with the aim of improving life systems and achieving food security and sovereignty for family groups.

226. In this context, the project will seek to enhance women's participation across the board, including in leadership and decision-making positions. The project will also seek to include young people and

older people in the activities. Accordingly, it will apply a generational equity approach with a gender focus. If necessary, special arrangements will be made to ensure the effective participation of all the stakeholders under equal conditions.

227. Under component 1, the project will implement capacity-building activities aimed at women and young people to boost their active participation in territorial planning with the ISMBF approach. The project will also work to eliminate behaviours and attitudes that discriminate against women, young people and older people. Likewise, the project will guarantee the participation of women and young people in the shared management of protected areas.

228. Under component 2, the project will develop and implement training programmes that include women and young people to ensure that they can participate in decision-making processes for the implementation of SLM and SFM practices. Women and young people are expected to participate actively in the selection, implementation and maintenance of practices, as well as in setting up CEOs. This will enable them to manage productive resources, value chains, and other economic activities that may or may not involve cash. In this component, elderly people will play an essential role in the design and implementation of SFM and SLM practices, given the importance of including ancestral knowledge and worldviews in the management of natural resources.

229. Under component 3, the project will promote the participation of women and young people in the design of the key indicators for the project and the gathering of data to measure them. It will also encourage elderly people to participate in documenting the experiences and lessons learned.

230. The project is aligned with the goal of the FAO Policy on Gender Equality of achieving equality between women and men in sustainable agriculture and rural development for the elimination of hunger and poverty. Women should be able to participate on an equal footing with men in decision-making in rural areas, in institutions, and in the shaping of laws, policies and programmes. In addition, women and men should have equal access to and control over land and other productive resources, employment and a decent income, and goods and services for sustainable agricultural development in the ISMBF framework and for markets.

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

Yes

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

Yes

4. Private sector engagement

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

232. The project will create the conditions for smallholder farmers to include the agroecological approach, while also encouraging their participation in local and national processes. It will promote alliances between local producers and suppliers? associations, community enterprises, collection centres and farmers.

233. The project will promote the participation of private sector actors in regional and local consultation processes on technical guidelines for integrated forest management and land management. This means that the guidelines to be established in regulatory frameworks by the municipalities and the GAIOC will enable these practices to be adopted by private sector actors. In this context, it is recommended that issues such as good slash and burn practices be included in the local regulatory frameworks, in order to avoid problems related to the use of fire.

234. Another important aspect in territorial planning is the definition of property rights and the use of resources. Agreements need to be reached in the local area on the management of micro-watersheds, forest management, and other aspects that are currently dealt with at the community level. With regard to the consolidation of OECAS, the private sector actors who promote and develop markets for products related to forests and biodiversity need to be involved.

235. The project plans to work closely with public-private partnerships to provide incentives for ISMBF production and to identify the products concerned, such as by using the national eco-seal through PGS. The agroecology, gender and inter-generational equity approaches will be included in these processes. The private sector actors who will be involved in the project include: the Monteagudo Association of Cattle Farmers, the Huacareta Association of Cattle Farmers, the Muyupampa Association of Cattle Farmers, the Huacaya Association of Cattle Farmers, the Macharet? Association of Cattle Farmers, the Cuevo Association of Cattle Farmers, the Villamontes Association of Cattle Farmers, the Charagua Association of Cattle Farmers and the Monteagudo Beekeepers? Association.

236. The need for the participation of the private oil sector was raised by the members of the APG to align the project activities with current oil extraction regulations. The project activities related to the identification of SLM and SFM practices and action plans (Output 1.1.4) will consider the roles of the private oil sector, and will be complemented by with resources from FONABOSQUE, the Indigenous Fund, the Productive Development Bank or microfinance institutions to which a space of articulation and dialogue with local producers who wish to access financial resources. Hence, the private sector will not only be committed to donation and / or non-reimbursable resources, but the project will also seek access to reimbursable financial resources. In this understanding, during the execution of the project, a technical sustainability strategy based on the management and leverage of reimbursable and non-

reimbursable financial resources will be elaborated based on the willingness of the private sector to invest. The project was designed through a participatory methodology and process carried out in different consultation and participation events with the potential partners and beneficiaries of the Project. It was possible to identify the risks that implementation entails, partner's/beneficiaries' expectations regarding the benefits the project will generate, in addition to the needs and demands of local actors, so that they could be reflected in the final scope of the project. On the other hand, group meetings and interviews were held, as well as individual interviews with key actors, which allowed to conclude that the project was highly participatory in its design, in order to make it socially viable and with a high probability of achieving its goals successfully. FONABOSQUE, the BPD, the Indigenous Development Fund and micro-finance companies such as PROFIN, among others, were notified of the design and possible execution of the Project, through interviews and participation in construction workshops and validation of the Final project document, expressing full interest in complementing and strengthening the productive community enterprises to be developed, all through financial education workshops and reimbursable as well as non-reimbursable financial promotion.

On September 27 and 29, 2020, in the indigenous communities *Sausalito* and *Zapaterambase*, the participatory construction process of the Project began, through workshops carried out together with the operational focal point of the GEF (VMA) and the FAO Representative in Bolivia. These spaces that started the construction of the Final Project Document allowed the PIF to be socialized to local actors in their territories, but above all it has made it possible to know their main needs and expectations related to the objective of the project. In this sense and after a series of consultations and complementary interviews with communities of the *Chuquisaqueo Chaco*, on April 8, 2021 the PRODOC validation was carried out with the participation of the captains and the President of the Assembly of the Guarani People. This is included in the project design initiation and closing records that are part of the annexed Indigenous Peoples Plan.

5. Risks to Achieving Project Objectives

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

Section A: Risks to the project

Description of risk	Impact	Probability of occurrence	Mitigation actions	Responsible party

<p>Environmental and climate risks:</p> <p>The influence and interaction of climate change and drought impact the environmental conditions modelled for the project intervention area. The climate baseline, and associated risks are explained below.</p>	M	H	<p>Strengthen the links between the MMAyA and the different projects and programs being executed, such as the National Soils Recovery Program, Mi Riego, Integrated Water Resources Management, and others, through a panel discussion (Component 1).</p> <p>Setting up the project technical committee should encourage knowledge transfer from the academic world and other technical entities to the project, to improve the resilience of the ISMBF practice to climate change. This interaction will enable the indigenous peoples, farming communities, and other actors in the project intervention area to adapt their livelihood strategies.</p> <p>The project will consider the climate risks as described on the climate baseline during the design and implementation of territorial plans, action plans and the implementation of SLM and SFM practices. To address these risks the project will consider incorporating forest and climate variables monitoring tools, as well as early warning systems, to its activities.</p>	<p>UCP</p> <p>National River Basin Plan</p> <p>Vice-Ministry of Water and Irrigation (VRHR)</p> <p>National Soils Program</p> <p>(PROSUELOS)</p> <p>Vice Ministry of Lands</p> <p>Vice Ministry of the Environment, Biodiversity, Climate Change and Forest Management and development</p> <p>The Ministry of Rural Development and Lands? Agro-environmental and Productive Observatory</p> <p>The Universidad Indígena Guaraní and Pueblos de Tierras Bajas, and other academic institutions</p>
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<p><u>Economic / financial:</u></p> <p>The COVID-19 pandemic affects tourism and the demand for local products decreases</p>	M	H	<p>Develop strategic alliances with private actors to ensure the sale of products obtained through the ISMBF.</p> <p>Find strategies to boost socio-economic aspects, by developing the municipal governments? ITDP and the GAIIOC PGTC.</p>	<p>UCP</p> <p>MMAyA</p> <p>Implementing agency</p>
<p><u>Economic/financial:</u></p> <p>Financial resources from the private sector and other economic support entities (oil sector, FONABOSQUE, Indigenous Fund, Productive Development Bank, among others) do not materialize continuously during the life cycle of the project</p>	M	M	<p>Preparation of a technical strategy for the involvement, commitment and sustainability, based on the management and leverage of reimbursable and non-reimbursable financial resources.</p> <p>Promotion and dissemination of the project to achieve the support of new strategic partners</p> <p>Strengthening sustainable production systems, in order to minimize the degree of dependence on external financing by small producers</p>	<p>UCP</p> <p>MMAyA</p> <p>Implementing agency</p>
<p><u>Political / institutional:</u></p> <p>Political changes may lead to interruptions in the agreements reached in the framework of the project, affect continuity and decision-making, as well as creating employment instability and limited human resources</p>	M	M	<p>Strengthen governance processes from the grassroots up, including indigenous assemblies, committees, the GPA and other social organizations, by reaching agreements within the Project execution frame, with a view to all actors involved in the ISMBF taking over.</p> <p>Strengthen the interinstitutional agreements and information, financial resources and other transfer mechanisms, etc. to ensure the project is developed and implemented in the time proposed.</p>	<p>UCP</p> <p>MMAyA</p> <p>Implementing agency</p>

<p><u>Social:</u></p> <p>Developing the project relies in the health measures and protocols related to the COVID - 19 pandemic. Fewer locals will get involved in the activities as a result</p>	M	H	<p>Develop communication and involvement strategies to overcome these obstacles.</p> <p>Set up agreements and strategic alliances between national, subnational and local governments to facilitate implementing the project activities at the local level, always respecting social distancing and other measures</p>	<p>UCP</p> <p>MMAyA</p> <p>Implementing agency</p> <p>Ministry of Health, through the departmental and municipal governments and their offices</p>
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<p>Social:</p> <p>Cultural differences, pre-existing conflicts, everyday sexism, little will on the part of the groups interested in adopting sustainable management practices, etc., hamper knowledge exchange and transfer given the inclusive nature of the project</p>	M	M	<p>Strengthen institutional capacities by training in and raising awareness of the basis of the gender, multicultural and intergenerational approach.</p> <p>Encourage the equative participation of women, young people and older adults from the GPA, the la Universidad Indígena Guaraní and Pueblos de Tierras Bajas, and other actors involved in ISMBF, both to generate and transfer knowledge, and implement the ISMBF practices, and more importantly, decision making.</p> <p>In the frame of free, prior and informed consent, generate a registration and systematization system to respond quickly to conflicts.</p> <p>Set up a direct line of communications with the corresponding authority.</p> <p>Project communication strategy (Component 3) adapted to include the gender and multicultural approach, to ensure project beneficiaries' active participation. This will include the elaboration of graphic materials adapted to the different stakeholders to communicate the main environmental, social and economic benefits obtained from the implementation of SFM and SLM practices.</p> <p>Include lines of action developed in the gender plan</p>	<p>UCP</p> <p>MMAyA</p> <p>Implementing agency</p> <p>Municipal Governments (Human Development Office)</p> <p>GPA</p> <p>The Universidad Indígena Guaraní and Pueblos de Tierras Bajas</p>
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Table 5. Risks to the project

COVID-19 and risk analysis:

237. Even though the Covid-19 pandemic could be problematic for the project, it could also provide some opportunities to rethink initiatives from the grassroots level and see whether there is a chance to generate Global Environmental Benefits. And so, the environmental benefits expected from the ISMBF may, on the one hand, contribute to reducing the risk of emerging infectious diseases in the future, and on the other, increase the resilience of local socio-ecological systems when faced with these threats.

238. This project will contribute to protecting and restoring the Bolivian Chaco forests and their environmental functions, by promoting SLM and SFM and incorporating the biodiversity in priority sectors. Regarding the sustainable management of water resources, the project will support initiatives linked to integrated water management already up and running in the area. Likewise, by incorporating SLM and SFM practices at the landscape level, the project will look to boost sustainable productive systems and food security by increasing local communities' resilience to climate change and drought. Inserting products from ISMBF into the local and regional markets and economic circuits will improve local livelihoods and boost their resilience to the health crisis and ensuing economic consequences. It should be noted that Component 3 of the project includes drafting a Covid-19 prevention plan to be implemented with the different project actors to minimize spread. This plan includes distributing essential hygiene and sanitation supplies, as well as designing measures for disposing of them so as not to have any negative impact on the environment.

239. The Covid-19 pandemic has affected how people can participate and construct knowledge together, with the gender and intergenerational approach used by the project. Different access to technology and the lack of connectivity severely hamper all of the project actors being able to participate effectively. Because of the restrictions put in place by the national and sub-national governments to stop the spread of the virus, it will be difficult for beneficiaries, especially those at high risk, to participate in the project activities. Therefore, if the project conditions allow it, one of the ways to minimize this risk will be to deploy a team of facilitators on the ground, who comply with all biosecurity protocols, and involve the local governments as strategic allies.

240. Among the main mitigation measures is designing a work strategy with focus groups to disseminate the project progress to all of the actors involved; designing and rolling out a communication strategy, which includes using community radio stations and preparing printed material, etc., should guarantee that all of the project actors participate. In addition, holding on-line events will be given priority, supplemented with information dissemination on the ground. Strategic agreements and alliances will be forged among local, sub-national and national governments to facilitate implementing the project, always complying with nationwide and FAO health guidelines. A biosecurity protocol will be drafted for all actors involved in the

project and, through the health providers and representatives of the indigenous communities (e.g., the captaincies) and local communities, evaluate how the people living in the project intervention area are affected by the pandemic. Should there be any signs of concern, the GEF will be contacted immediately to take measures to adjust the project activities.

241. Furthermore, as the local economy has been hit by the pandemic, to give it a boost eight CEOs will be set up to commercialize local products, mainly in markets close by.

Climate risk baseline and analysis:

Climate baseline

The climate risk of the aforementioned project is substantial (on a scale of low, moderate, substantial, and high). The areas of intervention are characterized by a mosaic of climates that change with longitude, from west to east. The western parts of the area of study (I?ao National Park) have a warm semi-arid climate (BSh) and are slightly influenced by the easterlies that bring some precipitation during the austral summer (December, January and February); whereas the rest of the year, prevailing westerly winds prevent moisture transport from the east from reaching the Bolivian Altiplano (Vuille, 1999; K?ttek, 2006). The eastern project?s areas (Kaa Iya del Gran Chaco and Otuquis National Parks) have a tropical savannah climate (Aw) with a year-round monthly precipitation higher than 25mm and up to 150-200mm during the austral summer (K?ttek, 2006; Vicente-Serrano et al., 2016). More in detail, the Bolivian Chaco is under the influence of two high pressure systems, sub-tropical south Atlantic and sub-tropical south Pacific anticyclones, which determine the spatiotemporal variability of the precipitation within the project?s locations.

The mean monthly maximum temperature (Tmax) in all three project areas exceeds 24oC throughout the year, reaching 34oC during the austral summer. The mean monthly minimum temperature (Tmin) drops below 10oC towards the Bolivian Altiplano during May-August, while the other areas record mean monthly Tmin higher than 18oC from October to April (Vicente-Serrano et al., 2016). In addition, the climate in the project area is also shaped by inter-annual rainfall fluctuations associated with El Ni?o Southern Oscillation (ENSO), that result in a reduction of annual precipitation in the eastern parts of the Bolivian Andes (Ronchail and Gallaire, 2006). Finally, there is a positive correlation between ENSO years and temperature increase (Aparicio-Effen et al., 2016).

Past and future climate trends: temperature and precipitation

A study conducted using data from 25 weather stations in the Bolivian Altiplano indicates that Tmax has increased at rate of 0.08-0.41oC decade⁻¹ over the period 1945-2015 (López-Moreno, 2016). However, the rate of increase was lower, 0.1-0.3oC decade⁻¹, in the southern parts of the Bolivian Altiplano when compared to northern parts bordering Peru (López-Moreno, 2016). Regarding the Chaco region, Camiri's weather station has recorded an increase of 1.0 and 4.1oC in Tmax and Tmin, respectively, between 1960 to 2012 (Aparicio-Effen et al., 2016). An increase in Tmin will likely affect nighttime plant respiration rates, reduce biomass accumulation and crop yield; whereas if Tmax exceeds the critical threshold for flowering yields will also decrease (Hatfield et al., 2011). Finally, Camiri's weather station has reported a precipitation decrease of 8.1% between 1960 to 2012; while the low and middle watersheds of the Bolivian Chaco have experienced a rainfall decrease of 5-12%, and up to 25% in winter (July, August and September) (Aparicio-Effen et al., 2016).

Up until now, the amount of studies examining the effect of different climate scenarios in the Bolivian Chaco is still limited. Some of the work, using five CMIP5 climate models, for lowland Bolivia show a temperature increase of 2.5 to 5.0oC by 2070-2099 under RCP 4.5 and 8.5, respectively (Seiler et al., 2013); while Nagy et al. (2016) estimate a temperature increase of 1.0 to 2.0oC, respectively by 2030 and 2050. In addition, the precipitation in the Chaco region is expected to decrease by 9% in 2070-2099 (Seiler et al., 2013).

Natural hazards, exposure, and vulnerability

In recent years, the area of study has been affected by multiple hazards, such as riverine floods, landslides, droughts, and wildfires. For instance, in 2019, Tarija's and Santa Cruz's Departments were hit by flooding and landslides which affected more than 300 thousand people (CRED, 2020). In addition, the economic impact of the 2007-08 ENSO event was estimated at \$443million (4% of the GDP), being agriculture one of the most affected sectors. Locusts have also been reported in the Chaco region; for example, in 2017, 33 thousand hectares of agricultural land were affected, particularly maize and groundnut plantations (BBC, 2017). As a result, Bolivia's vulnerability to weather related hazards is moderate (ranked 112 out of 181 countries). In fact, it has a moderate adaptive capacity and exposure to natural hazards (ranked 130/180 and 107/192 countries, respectively) (ND-GAIN index, 2017).

The natural hazard risk will be exacerbated under climate change, with intensified extreme floods, prolonged droughts, food insecurity and forest fires (GFDRR, 2017). In addition, some studies have looked at the impacts of climate change in indigenous health in the Bolivian Chaco, concluding that increasing temperatures and water stresses will result in outbreaks of water/air borne diseases such as cholera, malaria and dengue (Aparicio-Effen et al., 2016; GFDRR, 2017). Agricultural systems are already experiencing climate change impacts, with increasing crop failure and livestock mortality due to reduce water availability and heat-stress conditions occurring during the austral summer. The Chaco dry forests are also affected by climate change and by intentional wildfires for soybean and beef production. In fact,

deforestation from agricultural expansion is now the primary source of carbon emissions in the region (Gasparri et al., 2008).

Adaptive Capacity

Regarding the sustainable management of forests, Bolivia has committed to achieve zero illegal deforestation by 2020, increase its reforested areas to 4.5 million ha by 2030, improve carbon capture and storage, soil fertility and water availability in approximately 29 million ha by 2030 (INDC, 2013).

The national meteorological service (SENAMHI) of Bolivia has recently implemented a package of information systems for delivering climate/weather and agrometeorological information to extension services, private sector, and end-users. For instance, SENAMHI currently has a system for monitoring extreme weather events (FEXNET), an operational system for monitoring hydrometeorological events (SOPHI), just like the agricultural stress index system (ASIS, developed by FAO). In addition, daily weather bulletins are produced, as well as decadal agrometeorological bulletins, including information about the probability of precipitation, potential evapotranspiration, and thermic indicators of interest for crops. Monthly reports are also elaborated by the Met Service determining the probability of ENSO events year-round (SENAMHI, 2020). Finally, the communication on natural disasters is coordinated by the National Council of Disaster Risk Reduction (CONARADE).

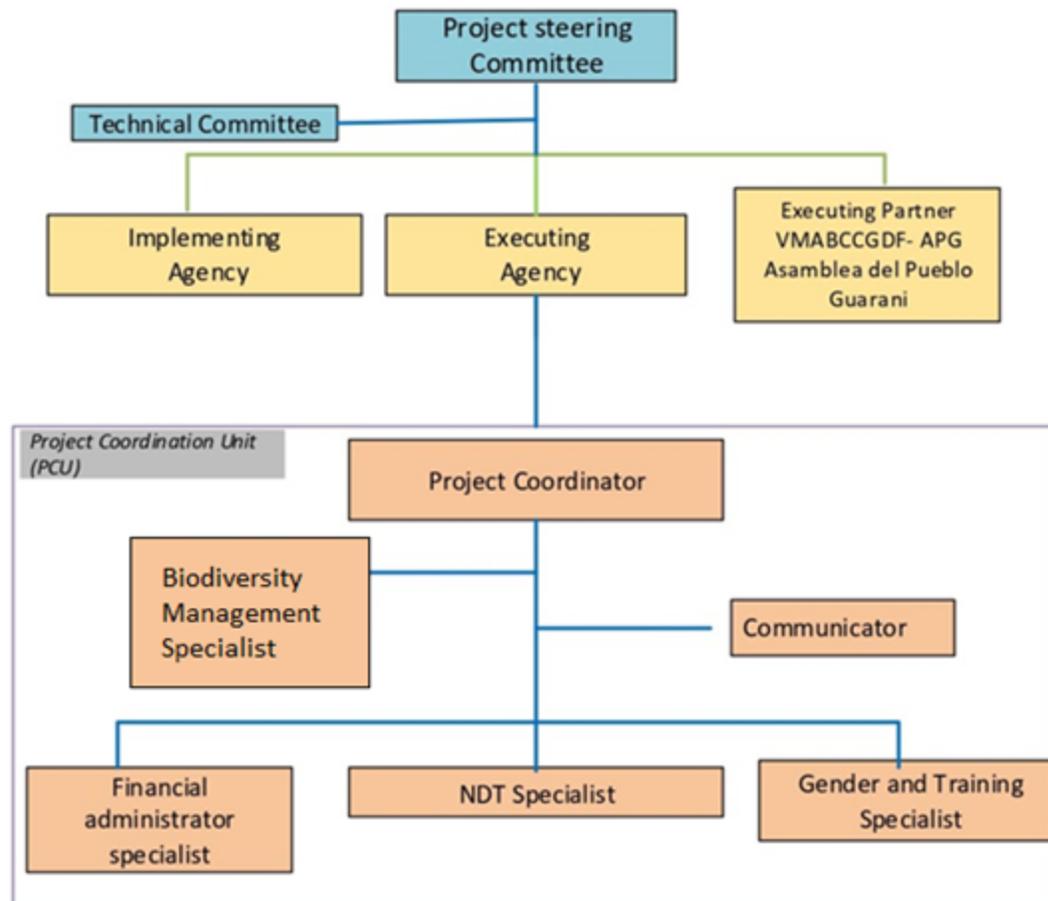
6. Institutional Arrangement and Coordination

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

6.a Institutional arrangements for project implementation.

243. The Vice Ministry of the Environment, Biodiversity, Climate Change and Forest Management and Development (VMA) will be the main project coordinating and executing partner. The project will have a Steering Committee (PSC) led by the VMA, and other participating ministries and municipal governments. The Project Coordinating Unit (PCU), financed with resources from the GEF under PMC and in part with co-financing, will be led by a project coordinator responsible for executing the day-to-day activities of the project.

Considering the characteristics of the project, the proposed organizational structure is as follows:



Implementing agency

The Food and Agricultural Organization (FAO) will be the **Implementing Agency (IA)** of the project for the GEF. FAO will provide support services and project cycle management as established in the GEF Policy. As the GEF IA, FAO holds overall accountability and responsibility to the GEF for delivery of the results. In the IA role, FAO will utilize the GEF fees to deploy three different actors within the organization to support the project (see Annex K for more details):

- ? The Budget Holder (BH), who will be the Representative of the FAO office in Bolivia, will supervise the execution of the project;
- ? The Lead Technical Officer (LTO), from FAO's Regional Office for Latin America and the Caribbean, will supervise/support the technical work of the project in coordination with the government representatives that participate in the Project Steering Committee;
- ? The Funding Liaison Officer(s) (FLO) within FAO will monitor and support the project cycle to ensure that the project is being carried out and that reporting is done in accordance with agreed standards and requirements

As the Implementing Agency, FAO will have the following responsibilities:

- ? Supervise the execution of the project in line with the project document, work plans, budget agreements with the co-founders and the rules and procedures of the FAO;
- ? Provide guidance to ensure that technical quality is applied to all project activities;
- ? Inform the GEF Secretary and the Evaluation Office on the progress of the project and present financial reports to the GEF Trustee.

Executing Agency

The VMA will be the project's **Executing Agency** and will be responsible for (i) the day-to-day management of project results; (ii) the overall coordination of project execution, including participating in the selection of project consultants and leading the planning of resources to achieve project results, and (iii) the coordination and collaboration with project participating institutions, local community organizations, and other entities participating in the project through the structure and mechanisms defined by the project.

At the request of the VMA, the **FAO Representation in Bolivia** (FAO-Bolivia) will provide administrative and operational support to the executing agency and will manage the funds assigned allocated to the project. Other responsibilities include:

- ? Execute the budget in accordance with the approved Annual Work Plans; Administering the GEF donation will be done in accordance with FAO rules and procedures and in accordance with the agreement made between FAO and the GEF trustee
- ? Provide technical assistance;
- ? Articulate the project alongside local actors by strengthening their capacities;
- ? Ensure the expected impact results of the project;
- ? Provide administrative and operational support to the project; and
- ? Provide technical reports to the monitoring committees, according to established regulations.

Every year, FAO will carry out at least one supervision mission (led by Staff from Headquarters in Rome) and one Technical Assistance mission (led by Staff from the Regional Office in Santiago de Chile) to oversee project execution. This mission will be covered by the agency fee as part of FAO's IA function.

Co-executing partners

The Guarani People's Assembly (APG) will be a **co-executing partner, and** in coordination with the Executing Agency will be responsible for executing the project, including the integration of its diverse components. The VMA through its DGBAP/ DGGDF departments and the APG will be responsible for: (i) Planning and supervising the technical aspects of the project including regular visits to the intervention areas and monitoring progress to achieve its results and products; (ii) Assisting in the preparation of regular progress and technical reports as well as periodic consultations with beneficiaries; (iii) Supporting the development of AWP with the help of local actors that participate in the implementation of the project; (iv) participate in the development of the ToR and selection and hiring processes; (v) Mobilizing core and co-financing resources as contemplated in the project document; and (iv) Coordinating with governmental entities on topics related to Land Degradation and others that correspond to territorial planning.

Steering Committee

The National Project Steering Committee (PSC) will be made up of the Ministry of Environment and Water, the General Directorate of Biodiversity and Protected Areas, the General Directorate of Forest Management and Development, the Vice Ministry of Water Resources and Irrigation -VRHR, the Guarani People's Assembly (APG), the FAO representative in Bolivia and the executing agency's representative.

The Project Steering Committee (PSC) will establish the project policies and strategies and provide guidance and supervision to the activities financed by the GEF and the source of co-financing. The PSC is the highest-level decision-making body in the overall project management and will coordinate between the different actors. The PSC will meet at least twice a year to oversee the implementation and monitor the progress of the project. The Project Coordinator will act as the secretary in said meetings. Other activities of the Steering Committee will include: (i) overall monitoring of project progress and the achievement of the overall results, these will be presented in semi-annual and annual progress reports; (ii) provide strategic guidance for decision making; (iii) review and agree on the strategy and methodology of the project, as well as the changes and modifications derived from the implementation of such; (iv) call and organize meetings with different national, regional and local actors; and (v) review and approve operational budgets and progress reports (semi-annual and annual). The Steering Committee may seek support to monitor the project from the Technical Committee, which may be made up of various entities such as local and academic institutions/organizations. The PSC will meet at least twice a year; however, if its members consider it necessary, the PSC may call for extraordinary meetings. Its functions will be detailed in the project manual or guide that will be prepared by the Project Coordinating Unit.

The Project Coordinating Unit (PCU)

The PCU will be physically established in one of the Sub-governorates of the project execution area within three months of starting the activities. The specific place will be defined during the Introductory Workshop. The PCU will be under the supervision of the Executive Director of the Project. The PCU will be in charge of the daily coordination and management of the project through work plans and Appropriate Term of Reference and carefully designed administrative arrangements that meet the requirements of the Implementing Agency. The VMA will take the necessary steps to finalize the installation of the UCP office, providing proper assistance. The PCU will be made up of professionals and adequate support personnel who will provide the technical assistance required for the execution of the project. The PCU staff will be comprised of the following:

Project Coordinator (NPC): will be in charge of the technical implementation, management, and oversight of the project within the framework outlined in the Project Results Framework (Annex A), and approved Project Budget (Annex B). He/she will work under the technical supervision of the FAO Project Task Force, particularly the FAO Lead Technical Officer (LTO). Detailed TORs for the NPC can be seen in Annex N. The NPC will have both an administrative and a technical role centered around Component 1. The NPC will be responsible, among others, for:

Administrative support (55% of the time)

i. Lead project execution, including preparation of Annual Work Plans and Budgets (AWP/B) for approval by the PSC, preparation of terms of reference and contracts to implement the AWP/B, monitoring the implementation of project activities, and ensuring coordination with relevant initiatives

ii. Ensure project monitoring and evaluation follows GEF guidance, including leading the preparation of the annual Project Implementation Review (PIRs), FAO Project Progress Reports, and ensuring Mid-Term and Final Evaluations are implemented on time.

iii. Ensuring compliance with donor requirements, including ensuring implementation of the Gender Action Plan and the Stakeholder Engagement Plan, and informing the Project Steering Committee and FAO of any technical difficulties or delays that arise during project implementation

iv. Ensure financial resources are used appropriately in alignment with the PSC-approved AWP/B, submitting six-monthly technical and financial reports to FAO, and managing requests for funding as per FAO rules

Technical lead (45% of the time, with emphasis on Component 1)

v. The NPC will act as technical lead to ensure inter-institutional coordination between national/local government institutions and indigenous/local organizations. The NPC will serve as a neutral broker to ensure the interests of partner organizations are taken into account when designing the different project interventions;

vi. Under Component 1, the NPC will lead the inter-institutional working groups designing the Capacity Building Programme, the Territorial Plans at the municipal and GAIOC levels, and the community action plans to implement ISMBF within the context of LDN

vii. Under Components 2 and 3, the NPC will lead the inter-ministerial, multi-stakeholder working groups that will select beneficiaries and prioritize SLM/SFM practices to be applied, ensure the LDN monitoring system is adopted, and lead the design of the Knowledge Management and Communications Strategy

- **Biodiversity Management Specialist:** A professional with significant experience in relation to the scope of the Project (ISMBF). This person will provide the project with leadership and general guidance with regards to the development and implementation of mechanisms for the ISMBF framework, and will work directly with the executive Agency and other key stakeholders.

- **Logistics Assistant/ Secretary:** Will work with the PCU and will provide support to the Project Coordinator as well as secretarial and administrative support for the project implementation.

- **Technical specialists (LDN/Wocat, Communication, Gender/training):** Will be responsible for providing proper technical support in their areas of competence to achieve the results of the project. They will constitute the technical support team for the Project Coordination.

The responsibilities of the PCU include the following activities:

- Achieve the results and objectives of the project;
- Manage the implementation of the project, coordinating the activities in accordance with the rules and procedures for the FAO/FMAM and based on the general guidelines provided by the Project Steering Committee (PSC);
- Carry out the general coordination of the project and the M&E;
- Provide technical outputs, as appropriate, for results;
- Coordinate with interested stakeholders and other programs/projects that are relevant;
- Convene periodic meetings to review the progress of the implemented work plans;
- Ensure, with the FAO and the Executing agency, that certain tasks are outsourced to suitable providers of Technical Assistance Services that will be subcontracted to national or international consultants through bids or contests. The responsibilities of the UCP in this sense, include the drafting of bidding documents and the terms of reference;
- Organize project meetings and workshops, for example the Introductory Workshop, the Project Steering meetings (PSC), among others;
- Work closely with the Executing Agency and the FAO to organize and provide technical and logistical support and coordinate all the missions of national and international constants; and
- Prepare the general reports of the project.

The VMA will appoint counterpart personnel to provide assistance in the management of the project at the local level, including technical support, compliance with the administrative procedure of the FAO and the Executing Agency and support the implementation of the M&E plan. Co-financing will be used to cover counterpart staff salaries.

Logistics Assistant/Secretary (LAS):

The LAS will be based in the field office in El Chaco and will support the coordinator in the implementation of the project activities. The LAS will work under the supervision of the Project Coordinator and will coordinate their work with the VMA team as well as other interested actors in order to ensure proper implementation of the project. The LAS will provide secretarial and administrative support for the project management and will be responsible for properly directing the acquisition of the different supplies for the project, following FAO and the Executing Agency procedures.

Their main duties and responsibilities will be the following:

- ? Comply with the internal work procedures of the PCU and with the agreed coordination mechanisms, ensuring adequate compliance with FAO and the executing agency procedures;
- ? Hold periodic coordination meetings with the team of VMA and participate in the meetings of work groups established within the framework of the project as well as in those of the inter-institutional coordination mechanisms at the local level;
- ? Provide support to the Project Coordinator and the Executing Agency for the preparation of work plans, annual budgets and procedure plan;
- ? Provide support to the Project Coordinator in the preparation of the Project Progress Reports as required by FAO/ FMAM;
- ? Carry out field missions to the project sites and prepare reports on the missions carried out. Support and, in some cases, lead workshops;
- ? Provide support for the implementation of the project visibility plan and the dissemination of the project's results as well as lessons learnt;
- ? Prepare monthly work plans and activity reports and present them to the Project Coordinator for approval;
- ? Support the Coordinator in the preparation of semi-annual and annual reports;
- ? Handling of phone calls and messages;

- ? Manage correspondence which includes writing letters, as well as their registration and filing;
- ? Manage the Project Coordinator's agenda;
- ? Classify and file correspondence and documents;

- ? Provide support in the preparation of project documents and reports;
- ? Provide support in administrative and financial procedures;
- ? Provide support to the Project Coordinator, FAO staff and the Executing Agency field missions and in the Mid-term and Final External Reviews;
- ? Provide support to the organization by holding meetings, which includes acting as secretary and minute writing; and
- ? Provide support to the organization to implement making activities visible and disseminating information.

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

The project's activities will be coordinated with other initiatives currently being implemented, by organizing joint work between different stakeholders. The GEF-funded projects with which this project will work are the following:

- ? GEF ID 10295 ? Amazon Sustainable Landscape Approach in the Plurinational System of Protected Areas and Strategic Ecosystems of Bolivia. The project will share experiences related to strengthening community forest management efforts and the promotion of market integration in the ISMBF context.
- ? GEF ID 4577 ? Conservation and Sustainable Use of Agro-biodiversity to Improve Human Nutrition in Five Macro Eco-regions. The aim of this project is to conserve agrobiodiversity in situ and promote the sustainable use of agro-biodiversity in five macro eco-regions, to improve the livelihoods of local people by mainstreaming the valuation, conservation and sustainable use of agro-biodiversity in national policies, regulatory frameworks and programmes (health, education, rural development and food security). It also involves providing market incentives and a process of awareness-raising and training on the sustainable use of native species.
- ? GEF ID 10030 (UNEP) ? Support for the United Nations Convention to Combat Desertification (UNCCD) 2018 National Reporting Process: this focuses on assisting country parties to establish sound reporting and monitoring systems for the effective submission of reports (PRAIS) to the CCD. This will provide capacity-building for the MMAyA.
- ? GEF ID 9248 ? Sixth Operational Phase of the GEF Small Grants Programme in Bolivia: To enable local communities in the Chaco, Chiquitan?a and Pantanal eco-regions in Bolivia to enhance and sustain their livelihoods by protecting natural habitats, restoring degraded ecosystems and improving productivity and sustainability of production landscapes for socio-ecological resilience.
- ? GEF BOL 99776 ? Sustainable Management of Forest Ecosystems in Amazonia by Indigenous and Local Communities to Generate Multiple Environmental and Social Benefits. The project's objective is to promote the management of Amazon forest ecosystems by indigenous and local communities, so that they generate multiple environmental and social benefits. Component 1 focuses on developing and strengthening the institutional context for this purpose. Component 2 focuses on developing local capacities for the implementation of the Joint Mechanism for Climate Change Mitigation and Adaptation. Both involve leadership with aims that include introducing comprehensive approaches for integrated and sustainable resource management at the landscape level, acknowledgement and promotion of environmental functions, socio-ecological resilience to climate change, resource conservation and sustainable use. The project is implemented by the Plurinational Authority for Mother Earth (APMT). The findings and knowledge that will be generated will be useful for the proposed project.
- ? GEF 9993 - AVACLIM: Agro-ecology, aimed at ensuring food security and sustainable livelihoods while mitigating climate change and restoring land in dryland regions. The development objective of the AVACLIM project is to contribute to the mainstreaming of agroecology in drylands, as a tool to address food insecurity, mitigate and adapt to climate change, and restore degraded land. The project is aimed at policy-makers, CSOs and farmers in selected countries and will support efforts to (i) increase practical knowledge on agroecology, (ii) develop scientifically harmonized protocols to measure the impacts and success factors of agroecological systems, (iii) support evidence-based decision-making on agroecology at the landscape level, and (iv) increase public knowledge of the impacts and success factors of agroecology. This is a global project that will include working in Caatinga-Cerrado in Brazil. The proposed GEF project for Bolivia will explore synergies and share experiences of good practices in agroecology.
- ? Impact Program on Dryland Sustainable Landscapes - GEF-7 SFM. The objective of the Sustainable Forest Management Impact Program on Dryland Sustainable Landscapes (SFM-IP) is to avoid, reduce, and reverse further degradation, desertification, and deforestation of land and ecosystems in drylands, through the sustainable management of production landscapes. The IP will achieve this objective by (i) strengthening the enabling environment for the sustainable and

inclusive management of drylands, and (ii) implementing and expanding sustainable dryland management to enable resource managers and users to apply sustainable management practices, strengthening value chains and increasing the availability of financing for resource managers, among other measures. The project currently being proposed for Bolivia is aligned with the SFM-IP, as it will strengthen governance and the capacities of local communities and indigenous peoples as resource managers, enabling them to implement ISMBF practices and ensure appropriate knowledge management and awareness-raising. Given that the tools and approaches to be developed / implemented in this project are similar to those that will be used in the SFM-IP, both projects will benefit from knowledge-sharing. This will ultimately strengthen the country's capacity to achieve its commitments under the UNCCD.

FAO Bolivia projects in the region: This project will contribute to the objective of integrated and sustainable management of land, water, forests and biodiversity, in which the FAO's Regional Priority is the sustainable use of natural resources, adaptation to climate change and disaster risk management. Accordingly, this project will focus on strengthening Bolivian institutions to improve governance mechanisms at every level of decision-making, from the community to the national level. It will also intensify promotion of the sustainable use of biodiversity species to improve nutrition. The project will develop skills among producers and natural resource users to enable them to adopt practices that increase and improve the supply of food.

The projects that contribute to and converge with these objectives are: TCP/BOL/3802 indigenous peoples, which seeks to support the development of life plans which will assist with territorial governance; likewise, the project entitled Enhancing the resilience of family farming by rural native indigenous peoples with a gender and generational approach for COVID 19 recovery seeks to improve food security and boost the resilience of rural, native and indigenous peoples' livelihoods in response to the COVID emergency.

Additionally, the project will seek synergies, and coordinate with other project being implemented by other development partners, including the following:

IFAD is currently preparing a credit to strengthen producers and local communities. The project is called "Building Resilience among Rural Families of Bolivia to Face Climate Change and Ensure the Country's Food Security". This project is being proposed for the municipality of Monteagos in the area of ??influence of the project and once its management is concluded, coordination actions must be carried out to complement the tasks to be developed within the framework of this project.

CAF, the IDB, GIZ and the European Union, are financing the Ministry of the Environment and Water, through credits and technical cooperation to strengthen the National Basin Plan, within the framework of which the project's intervention municipalities are financing activities for the integrated management of basins, irrigation systems, conservation of water sources, afforestation and reforestation processes. The counterpart co-financing resources committed by MMAyA to the GEF come from the financing provided by the CAF, the IDB, the GIZ, the EU to the National Basin Plan.

7. Consistency with National Priorities

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

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

The project will help to achieve the goals in the Economic and Social Development Plan 2016-2020 associated with the following pillars: integrated scenarios for the production and processing of food and biodiversity resources in forests (Pillar 6); diversification of production, protection of local varieties and promotion of food cultures and traditions (Pillar 8); development of sustainable production systems in the territorial management process framework, and increase of forest cover (Pillar 9). The project will also help to achieve departmental, municipal and GAOIC goals set out in the Territorial Integrated Development Plans (TIDP) which are related to ISMBF and the conservation and regeneration of environmental functions (Law N° 300). In addition, it will contribute to: SLM in the Chaco region and improved food security and sovereignty (Law N° 144); the production of organic, bio-healthy and healthy food (Law N° 3525 and Law N° 775); rural organizational development at the socioeconomic level (Law N° 338); and reducing poverty, strengthening food security with sovereignty, promoting gender equality and advancing towards the framework of integrated development for Living Well.

The objectives formulated for the project contribute directly to the National Strategy for Land Degradation Neutrality 2030 in the UNCCD framework, focusing on SLM and SFM. In particular, it will make a direct contribution to the following targets: i) zero illegal deforestation by 2020; ii) 16.9 million hectares of forest under integrated and sustainable community-based management plans by 2030; iii) no extreme poverty among people who depend on forests by 2025 (baseline: 350 000 people in 2010); iv) 6 per cent growth in forestry sector gross domestic product (GDP) by 2030; v) 4.5 million hectares of land forested and reforested by 2030; vi) 29 million hectares with improved environmental functions by 2030; and vii) 1 million hectares with resilient irrigation systems for food production by 2030. This Strategy is aligned with the GEF-7 Land Degradation Focal Area, which considers supporting the implementation on the ground of land degradation neutrality targets as reported to the UNCCD.

Regarding the Plurinational Policy and Strategy for the Integrated and Sustainable Management of Biodiversity ? 2019-2030 Action Plan under the CBD, the project is aligned with the globally-agreed biodiversity goals, which encourage actions to develop, promote and strengthen biodiversity conservation, sustainable use, and the development of inter-scientific dialogue. The Plan seeks to guide national and international efforts to achieve the Convention Objectives and its mission is to contribute to ?halting the loss of biological diversity in order to ensure that, by 2020, ecosystems are resilient and continue to provide essential services, thus ensuring the variety of life on the planet and contributing to human well-being and the eradication of poverty ?. Therefore, the Plurinational Policy and Strategy for the Comprehensive and Sustainable Management of Biodiversity and its Action Plan (2019 - 2030) will contribute to the achievement of the Sustainable Development Goals, through the fulfillment of the twenty goals known as Aichi Goals. The project is fully compatible with the five strategic areas defined in the strategy, under which biodiversity will be strengthened throughout the country: 1. Political - Normative, 2. Institutional and Territorial Governance, 3. Conservation and Sustainable Use of Biodiversity, 4. Comprehensive Environmental Management for the Conservation of Biodiversity and 5. Knowledge Management and Mobilization. The strategy includes 11 Strategic Objectives , 15 Lines of Action with their respective prioritized actions, goals for 2020, 2025 and 2030 respectively; Likewise, two cross-cutting areas are established: Climate Change and development and incorporation of the Gender approach. The cross-cutting axis of Climate Change seeks to ensure that the integral and sustainable management of biodiversity contributes to adaptation and mitigation to climate change and, therefore, to the socio-ecological resilience of life systems, while the Gender approach aims to ensure that the Comprehensive and Sustainable Management of Biodiversity addresses gender gaps, particularly in the field of access and sustainable use of biodiversity, the definition of policies and norms, and fair share of the derived benefits.

It is important to highlight that the Strategy for the Integrated and Sustainable Management of Biodiversity is aligned with the GEF7 Biodiversity focal area through which the integration of biodiversity in priority sectors (agriculture, forestry, tourism, among others), the sustainable use of plant and animal genetic resources (agrobiodiversity); inclusive conservation, among others.

Finally, the project will also contribute to the government's efforts to address climate change in the context of integrated development. In particular, over the period 2021-2030 the government of Bolivia has undertaken to increase the combined climate change adaptation and mitigation capacity through sustainable forest management. The government's objectives include: (i) increasing forested areas (from 3.1 million hectares in 2010 to 16.9 million hectares in 2030) with integrated and sustainable community-based management, (ii) strengthening environmental functions (biodiversity conservation, water availability, carbon capture and storage) on approximately 29 million hectares by 2030, (iii) eliminating extreme poverty among people who depend on forests, (iv) increasing net forest cover, (v) increasing the combined climate change adaptation and mitigation capacity in forested areas, (vi) conservation of areas with outstanding environmental functions, and (vi) consolidation and strengthening of the regeneration capacities of forests and forest systems.

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

Knowledge management is a key activity that is mainstreamed across the project. As a result of participatory knowledge-building processes and the sharing of traditional knowledge related to ISMBF, governance will be strengthened both at the institutional level and among the rural native indigenous peoples and other local communities who are the project's beneficiaries. In line with the principles set out in the FAO Knowledge Management Strategy, the knowledge management process designed for the project is aimed at both government stakeholders and project beneficiaries and their partners (indigenous and rural communities, producers and the various local actors in the project's area of intervention). Accordingly, it will promote continuous learning processes aimed at strengthening capacities related to ISMBF, in keeping with the profile of the different social groups involved in the project. It will focus particularly on promoting the active participation of women, young people and older people in the different communities. In this context, it will be essential to carry out the planned activities in the Communications Strategy (Component 3), such as producing documentation to support the scaling-up of the project's results and the visibility tactics for capacity development and policy advocacy.

ISMBF provides an opportunity to fine-tune mechanisms for collective knowledge-building, experience-sharing and information dissemination among the project's different actors. The flow of information that will link the different actors involved in the project will encourage their participation in many different ways, leading to the design, implementation and management of sustainable production systems under the ISMBF approach (Component 2). With regard to this, it is important to highlight that knowledge management will achieve, firstly, the revaluing, social acceptance and dissemination of knowledge that will contribute to SLM and SFM, and secondly, follow-up of the institutional and community processes under way, in order to find alternatives or solutions to any difficulties that may arise in the different project intervention scales. These follow-up mechanisms will also make it possible to evaluate the results and impact of the capacity-building programme for integrated planning and governance envisaged in Component 1. It is important to emphasize that the governance processes developed as part of this project will be systematized for the purpose of helping to consolidate the ISMBF model in the Chaco. This will include the practices developed under SFM and SLM, in order to facilitate their replicability and upscaling in other parts of the region. These will be evaluated by means of a series of complementary indicators and their impact will be monitored in terms of the national LDN, Aichi and NDC targets (Component 2).

The project plans to produce and disseminate different types of outputs to systematize the knowledge, experiences and lessons learned that will be drawn from the design, implementation and monitoring of the practices implemented under ISMBF, with the aim of contributing to the achievement of LDN and sustainable biodiversity management. Some of the most important of these outputs will be: leaflets and other types of resources which will be produced in two languages (Spanish and Guaran?), with an image-heavy graphic design to publicize SLM y SFM practices and the improvements LDN can make to livelihoods in a simple way; publication of the TIDP, CTMP, Life Plans and other community action plans developed under the ISMBF approach; production of teaching resources to promote ISMBF in the region?s educational establishments; production of audio-visual and multimedia resources on the lessons learned during the process of strengthening ISMBF; production of a policy brief that systematizes the project?s experience and the contributions made to the National LDN and Biodiversity Strategies, as well as its contributions to the NDC that the Plurinational State of Bolivia has undertaken to fulfil. The project will have a website linked to those of the MMAyA, FAO and other project partner institutions, and it will be regularly updated to publicize the project?s progress.

Workplan and Budget for the implementation of the Knowledge Management Plan:

Activity	Responsible	Budget Line	Total Budget (USD)	Timeline
Development of a communication and information strategy aimed at different actors, with criteria of gender and generational equity	Project Coordinator / Communication Consultant / Gender Consultant	Coordinator (Fraction Output 3.2)	2,000	Project Year (PY) 1
Preparation of virtual and printed materials for dissemination, adapted to the different actors and audiences and with gender and generational sensitivity	Communications consultant	Communications Materials Designer Design for the Difussion Materials Branding Materials	13,600 20,000 5,000	PY 2 ? PY 4

Activity	Responsible	Budget Line	Total Budget (USD)	Timeline
Development of a project website to continuously share experiences, disseminate information and motivate the replication of the project	Communications consultant	Design and maintain the webpage	20,000	PY 2 ? PY 5
Systematization and dissemination of capacity building processes, knowledge and lessons learned	Communications consultant	Develop and disseminate videos of the lessons learned from the project	20,000	PY 2 ? PY 5
Publication of lessons learned and other project documents	Project team	Publications	80,000	PY 2 ? PY 5
Field Communicator (Cross-cutting all activities above and responsible for the implementation of the communication strategy)			67,200	
Total			227,800	

Tabla 7. Knowledge Management Plan

Communication Strategy:

The project will also implement a communication strategy that supports the positioning of the project and its results, which places special emphasis on indigenous peoples and local communities, and involves the MMAyA, the GEF, and the authorities at different national and subnational levels (Government, municipalities, captaincies) and different interest groups such as civil society organizations and NGOs; the academy, research and learning centers; United Nations agencies and other development partners

The communication strategy with a gender approach will seek to support the following actions of the project: strengthen the integral and sustainable management of forests and biodiversity in the Chaco region; promote practices for the recovery and restoration of degraded areas and protection of the environmental functions; mainstream the gender approach, work with and from indigenous peoples and their organizations to strengthen local food security, valuing ancestral knowledge, cultural practices and

customs and uses; and generate information on project activities, to make the project visible (progress, achievements, learning) at local, national and international levels.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

231. The project will guarantee transparent preparation, execution and presentation of reports, and evaluation of its activities. This includes full disclosure of all non-confidential information and any consultation with key groups and representatives of local communities. Dissemination of information will be guaranteed by publishing on the website and disseminating the results through products and events. Project reports will be widely available and free of charge, and the results and lessons learnt will be accessible.

232. Monitoring and evaluation (M&E) progress towards achieving the outcomes and objectives of the project will be based on the goals and indicators established in the Project Results Framework (Annex A1) and the description in section 1.a The Monitoring and Evaluation Plan of the project, which can be found in table 7.

233. The design of the M&E project will be based on the standard processes and procedures of the FAO for monitoring, reporting and evaluation which are in accordance with the GEF Monitoring and Evaluation Policy. The project results framework will be presented in Annex A1, which includes SMART indicators for each of the expected outcomes as well as for the medium-term goals and those obtained at the end of the project.

234. The M&E Plan will be reviewed, if necessary, during the Introduction Workshop of the project to ensure that all interested parties understand their roles and responsibilities in the project's M&E process. The indicators and the means to verify them can also be adjusted in detail during the Introduction Workshop. The Project Coordinating Unit (PCU) will be in charge of continuously monitoring the project while other partners will be in charge of gathering specific information to monitor the indicators. The Project Coordinator will be responsible for informing the FAO about any delay or difficulty that arise during its implementation so that support can be provided or any corrective action can be taken, in a timely manner.

235. The M&E will be implemented by the PCU and the FAO office. Monitoring will be carried out on three levels: i) project results and impacts related to the Logical Framework; ii) delivery of project products in accordance with annual work plans; and iii) monitoring the implementation and performance of the project. The PCU will elaborate the M&E system, implement the M&E Plan and train project staff and counterparts to facilitate accurate data collection and reporting. The Baseline will be reviewed at the beginning of the project to fill any gaps and contribute to the measurements of the project's indicators during the first year of its execution.

236. FAO will support supervising and monitoring the project, ensuring the quality of reports, products generated and the application of procedures according to the standards required regarding, for example,

financial management. Furthermore, it will exercise a periodic control of the risks and hypothesis of the project, considering that an important tool in the execution of a project is an adaptive management approach.

237. The Mid-Term and Final Evaluations will be carried out to identify the strengths of the project, document the lessons and provide a framework to correct weaknesses. The PCU will prepare and implement a plan to make the project visible and will regularly disseminate information among the different organizations, institutions and beneficiaries that participate in the project. These will include project reports and results, the project's website, as well as the dissemination of other materials.

Evaluation provisions

Mid-Term Review

As outlined in the GEF Evaluation Policy, Mid-Term Reviews (MTRs) or mid-term evaluations (MTEs) are mandatory for all GEF-financed full-sized projects (FSPs), including Enabling Activities processed as full-sized projects. It is also strongly encouraged for medium-sized projects (MSPs). The Mid-Term review will (i) assess the progress made towards achievement of planned results (ii) identify problems and make recommendations to redress the project (iii) highlight good practices, lessons learned and areas with the potential for upscaling.

The Budget Holder is responsible for the conduct of the Mid-Term Review (MTR) of the project in consultation with the FAO-GEF Coordination Unit halfway through implementation. He/she will contact the FAO-GEF Coordination Unit about 3 months before the project half-point (within 3 years of project CEO Endorsement) to initiate the MTR exercise.

To support the planning and conduct of the MTR, the FAO GEF CU has developed a guidance document **“The Guide for planning and conducting Mid-Term Reviews of FAO-GEF projects and programmes”**. The FAO-GEF CU will appoint a MTR focal point who will provide guidance on GEF specific requirements, quality assurance on the review process and overall backstopping support for the effective management of the exercise and for timely the submission of the MTR report to the GEF Secretariat.

After the completion of the Mid-Term Review, the BH will be responsible for the distribution of the MTR report at country level (including to the GEF OFP) and for the preparation of the **Management Response** within 4 weeks and share it with national partners, GEF OFP and the FAO-GEF CU. The BH will also send the updated core indicators used during the MTR to the FAO-GEF CU for their submission to the GEF Secretariat.

Terminal Evaluation

The GEF evaluation policy foresees that all medium and large size projects require a separate terminal evaluation. Such evaluation provides i) accountability on results, processes, and performance; ii) recommendations to improve the sustainability of the results achieved and iii) lessons learned as an evidence-base for decision-making to be shared with all stakeholders (government, execution agency, other national partners, the GEF and FAO) to improve the performance of future projects.

The Budget Holder (BH) will be responsible to contact the Regional Evaluation Specialist (RES) within six months prior to the actual completion date (NTE date). The RES will manage the decentralized independent terminal evaluation of this project under the guidance and support of OED and will be responsible for quality assurance. Independent external evaluators will conduct the terminal evaluation of the project, taking into account the "GEF Guidelines for GEF Agencies in Conducting Terminal Evaluation for Full-sized Projects". FAO Office of Evaluation (OED) will provide technical assistance throughout the evaluation process via the OED Decentralized Evaluation Support team in particular; it will also give quality assurance feedback on: selection of the external evaluators, Terms of Reference of the evaluation, draft and final report. OED will be responsible for the quality assessment of the terminal evaluation report, including the GEF ratings.

After completing the terminal evaluation, the BH will be responsible for preparing the management response to the evaluation within four weeks and sharing it with national partners, GEF OFP, OED, and the FAO-GEF CU.

238. Below is a summary of the project's M&E plan (Table 7):

Type of Activity	Responsible	Budget	Timeline
Introduction Workshop	Project Coordinator FAO	7 808	Within two months of the start of the project
Initial Report	Project Coordinator FAO	None	One month after the Introduction Workshop
Measurement of LB and indicators	Project Coordinator, project team, PCU, studies/consultants hired by the PCU	36 000	Within two months of the start of the project

Measurements of project indicators (objective, progress and performance indicators, monitoring tools)	Project Coordinator, project team, PCU, studies/consultants hired by the PCU	36 000	Objective indicators: at the beginning, medium term and at the end of the project. Progress/ performance indicators: annually
Semi-annual report APR Annual report PIR	Project Coordinator FAO	None	Every six months Annually
Project's progress report and other reports (monthly, trimestral, Tracking Tools)	Project Coordinator Project Team	None	When appropriate (monthly, trimestral, FAO requirements, counterparts)
Committee meetings Project committee	Project Coordinator FAO	None	After the Introduction Workshop and subsequently once a year
Committee meetings Project technician	Project Coordinator FAO	9 000	At least twice a year
Mid-Term External Evaluation - MTE	Project Coordinator FAO/GEF External consultant (s)	30 000	Half way through the implementation of the project
Final External Evaluation- FE	Project Coordinator FAO/GEF External consultant (s)	36 000	At the end of the implementation of the project
Final Report of the project	Project Coordinator Project Team	None	Two months after the project's completion date

Exchange of lessons learnt	Project Team	12 000	Annually
Field visits	FAO Counterparts	Paid with the IA commissions and the operating budget	Annually

Table 7. The M&E Plan for the project and budget

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCE/SCCF)?

238. The project direct beneficiaries are 15 000 people from the project intervention area, of which 7 500 are women and 7 500 are men. They will benefit through the development of project actions as a whole (benefited by different instruments of integrated territorial planning with a ISMBF approach, because of the implementation of SLM and SFM practices at a landscape level, for the formation and strengthening of CEOs, for the strengthening of capacities at different levels, among others).

239. The integrated and multiscale approach will contribute to the strengthening of governance and capacities in ISMBF, the escalation of SFM and SLM and will allow for the construction of a common vision in the ISMBF with the goal to promote its incorporation into integrated territorial planning as a contribution to achieving the national goals of LDN. The project's approach will help decrease the deforestation and degradation of land through the implementation of territorial management strategies and sustainable production systems in the dry and sub-humid (agro) ecosystems of the Bolivian Chaco. The participating institutions will coordinate the implementation of the ISMBF that are best suited to address the loss of environmental functions and land degradation processes in the project intervention area. The restoration, the SFM and the SLM will contribute to reduce food and nutritional insecurity, strengthen and diversify livelihoods with gender and generational equity and will increase socioecological resiliency to climate change. The actions will be carried out in a participatory manner, promoting the involvement of indigenous peoples, local communities, small farm holders, local authorities, among others, throughout the different stages of the project. In the context of strengthening governance, the project seeks to generate a proposal with the GAIOC Charagua to co-management protected areas and their zones of influence in order to halt the intense processes of biodiversity loss and land degradation.

240. Another contribution at the institutional level is related to the generation and strengthening of knowledge for the follow-up of the LDN, Aichi and NDC targets. In this context, the project will contribute to these national efforts

1) The project will contribute to generating global environmental benefits, the social-economic and environmental sustainability of local communities, and strengthening capacities at different levels: 1) 250 000 ha of protected areas managed within the framework of comprehensive territorial planning; 2) 1 200 ha of degraded agricultural land in the process of being restored; 3) 100 000 ha of landscapes under improved management for the benefit of biodiversity; 4) 6 000 ha of forest and other types of vegetation using the ISMBF productive landscapes approach, and 2 000 ha with improved environmental functions

through the implementation of the ISMBF; 5) at least 15 000 direct beneficiaries with strengthened capacities through the territorial planning process, implementing SLM, SFM and integrating them into governance within the framework of the ISMBF (7 500 men and 7 500 women).

2) By developing project components and strengthening beneficiary capacities, benefits will be generated at the local, regional and national levels in terms of livelihoods, environmental sustainability, progress towards LDN in the region of El Chaco, among other benefits. From an environmental point of view, this will have a positive impact on conserving and maintaining environmental functions; improving cultural and identity values; benefits to the local economy through the sale of products obtained in the ISMBF by strengthening and generating CEOs, which will also allow for the creation of jobs, productive diversification, the endowment of added value to agrobiodiversity products, improved income, etc.

3) The project will promote Decent Rural Employment by developing actions framed in the four pillars of decent employment established by the FAO (Table 8)

Pillars	Related project activities	Specific project actions
<p>1. 1. Job creation and business development</p>	<p>? Increase rural labour productivity through better access to training, extensions, services and technology</p> <p>? Promote entrepreneurship in rural areas by supporting commercialization for micro-enterprises, access to markets, training and others</p> <p>? Support national institutions to collect and analyse data disaggregated by age and sex in rural labour markets</p>	<p>? Training and technical exchange (Product 2.1.1)</p> <p>? Implement SFM and SLM in the framework of ISMBF (Product 2.1.2)</p> <p>? Formation and strengthening of the CEOs (Product 2.1.3)</p>
<p>241. Social Protection</p>	<p>? Improve working conditions in rural areas, including effective protection of maternity and income</p>	<p>? Training and technical exchange (Product 2.1.1)</p> <p>? Implement SFM and SLM in the framework of ISMBF (Product 2.1.2)</p> <p>? Formation and strengthening of the CEOs (Product 2.1.3)</p>

<p>242. Standards and rights at work</p>	<p>? Support freedom of association and the formation of producer organizations</p> <p>? Eliminate discrimination and promote equality. The project seeks to reduce/eliminate discrimination based on gender and age</p>	<p>? Community Action Plan (Product 1.1.4)</p> <p>? Formation and strengthening of the CEOs (Product 2.1.3)</p> <p>? Training and technical exchange (Product 2.1.1)</p> <p>? Capacity Building Program for comprehensive and participatory planning of ISMBF (Product 1.1.1)</p> <p>? Implement SFM and SLM in the framework of ISMBF (Product 2.1.2)</p>
<p>243. Governance and Social Dialogue</p>	<p>? Empowerment and greater participation of rural populations in social and political dialogue through their organizations, especially women and young people</p> <p>? Support the participation of the rural poor populations, especially disadvantaged groups, in local decision-making and governance mechanisms.</p>	<p>? Capacity Building Program for comprehensive and participatory ISMBF planning (Product 1.1.1)</p> <p>? Municipal territorial plans and the GAIOC for the SFM and SLM (Product 1.1.3)</p> <p>? Community action plans (Product 1.1.4)</p> <p>? Joint management model of protected areas under the ISMBF focus (Product 1.1.6)</p>

Table 8. Project contribution to the pillars of Decent Rural Employment

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification *

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

242. The project was classed as moderate risk. Table 6 describes the environmental and social risks that have been identified and Annex II includes the project risk certification. During the first year the project will prepare the ESSP alongside the Free, Prior and Informed Consent (FPIC) process, in line with the requirements of the FAO Environmental and Social Management (ESM-Unit).

Question	Risk level	Possible impacts	Mitigation measure(s)	Indicator / Means of Verification	Progress made on mitigation actions

<p>2.1. Will this project be implemented in a protected area or its buffer zone?</p>	<p>Moderate</p>	<p>If the project does not coordinate with SERNAP and the people in charge of managing the Protected Areas (PAs), and does not take into account what is allowed and livelihoods in the PAs and buffer zones, the project could spark conflicts and have a negative impact on the internal management of the PAs and the biodiversity.</p>	<p>The project will work in national, departmental and municipal PAs and RAMSAR sites. We propose working within an integrated territorial management framework, contemplating cultural heritage and biodiversity with a view to halting degradation processes and restoring degraded ecosystems. Thus, we aim to develop a model for the joint management strategic ecosystems through a participatory process.</p>	<p>Develop a joint management model for the PAs and their buffer zones, based on an ISMBF approach</p>	<p>250 000 ha of PA managed using the ISMBF integrated territorial planning approach. Proposal for joint management of PAs and their buffer zones.</p>
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<p>2.5. Will this project have access to /use genetic resources and/or access to traditional knowledge associated with genetic resources that the indigenous and local communities and/or producers have?</p>	<p>Moderate</p>	<p>If , when implementing the SLM practices that incorporate local communities? genetic resources, the project does not respect current legislation and international protocols on access to genetic resources and the fair and equative distribution of the benefits from using them (CBD), it will be in breach of basic agreements and undermine national sovereignty over natural resources, in addition to disrupting the relationship we seek to form with the indigenous and farming peoples.</p>	<p>The project will work in eight municipalities in Chuquisaca (municipalities of Monteagudo, Huacareta , Muyupampa, Huacaya and Macharet?), and Santa Cruz (municipalities of Cuevo, Boyuibe and the Autonomous Indigenous Territory of Charagua), promoting implementing the ISMBF practices, designed and prioritized in a participatory process, using an approach that focusses on recovering local ancestral knowledge about the sustainable use of the agrobiodiversity, with a view to contributing to LDN. Therefore, special attention Will be paid to both the indigenous communities? knowledge as well as that of local producers when looking at how to achieve integrated and sustainable management of their production.</p>	<p>The project is geared to giving priority to the small-scale producers and the indigenous communities implementing the ISMBF practices</p> <p>Support developing ISMBF practices through community action plans (management plans that incorporate the biodiversity, the integrated forest management, and other tools) as a strategy to move forward with SFM, SLM and LDN.</p> <p>Support drafting the ITDPLW for the Captaincies, based on the ISMBF in the frame of LDN.</p>	<p>200 producers implementing ISMBF practices.</p> <p>No. of actions implemented in the frame of the ITDP, ITDPLW and life plans.</p> <p>6 000 ha of forest and other vegetation types being managed using ISMBF in productive landscapes.</p> <p>2 000 ha with environmental functions improved through implementing the ISMBF.</p> <p>1 200 ha of degraded farmland being restored.</p>
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<p>3.4. Will this project set up or manage planted forests?</p>	<p>Low</p>	<p>If, by setting up nurseries and planting forest species, the project brings in exotic and/or invasive species, it could have a negative impact on the key values of the biodiversity in the area.</p>	<p>In the frame of ISMBF, the project seeks to reduce and restore degraded areas, as well as improve provisioning the biodiversity and forest ecosystem functions.</p> <p>Among the strategies to mitigate the effects of deforestation and forest fires, reforestation stands out, which will be done taking the biodiversity of the ecosystems into account.</p>	<p>Implement ISMBF practices with a focus on SFM, making reforestation with native species a priority.</p>	<p>No. of ha reforested to restore degraded areas.</p> <p>No. of nurseries with native forest species.</p> <p>No. of native forest species seedlings grown in the nurseries.</p>
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<p>8.1. Could this project run the risk of reinforcing existing gender discrimination because it does not take into account the specific needs and priorities of women and girls?</p>	<p>Low</p>	<p>If the project does not incorporate the mechanisms and conditions needed to promote women effectively participating, it will further entrench men in productive activities and decision making in general.</p>	<p>Given that the project has been drafted using a gender and generational approach to prepare each component, hopefully the discrimination and inequality that women face should be reduced. Including women in the SLM, SFM and LDN processes to achieve ISMBF should help reduce the discrimination faced by female heads of household, women's relegation to the home, their lack of Access to information, lack of time to be trained because of household chores and work in the fields, lack of recognition of women's organizations, and violence against women. The project aims to strengthen the role of women in making decisions regarding ISMBF.</p>	<p>Raise the different actors? awareness of gender.</p> <p>Incorporate women in all the different ISMBF activities, setting up mobile nurseries to look after children so that mothers can participate.</p> <p>Identify women leaders so that they can replicate their knowledge.</p> <p>Communication strategy: communication products free of gender stereotypes, raising awareness of making roles in the family democratic, using community radio stations, etc.</p> <p>Disseminate protection laws and local norms, set up alliances with municipal governments.</p>	<p>15 000 direct project beneficiaries, of whom 50% are female.</p> <p>450 people (30% women and 10% people under the age of 28) from the central, sub-national, local governments and local actors trained in integrated territorial planning and ISMBF participatory local governance.</p> <p>200 producers implement SLM and/or SFM practices in the frame of ISMBF, including women and young people.</p> <p>350 local actors trained in ISBMF (50% women and 20% young people).</p>
<p>9.2. Do indigenous peoples live in the project intervention area?</p>	<p>Moderate</p>	<p>If Free, Prior and Informed consent is not given, and the project is not socialized, the indigenous and farming communities will not commit to it and it will lose</p>	<p>The project is based on ensuring that the indigenous communities are involved, taking into account their traditional organizational structures, the current legal framework, their life systems, always incorporating their prior knowledge when</p>	<p>Planning and implementing ISMBF based on the principles of participatory governance at different levels, in order to reach a consensus about how the territory and its resources are</p>	<p>No. of actions that support the Free, Prior and Informed process.</p> <p>System to register and systematize complaints and concerns coming from the community.</p>

<p>9.4. Will the project be located in an area where there are cultural resources?</p>	<p>credibility and interest in the benefits the project hopes to furnish.</p>	<p>implementing ISMBF. Likewise, they will be fully involved in the integrated territorial planning processes.</p> <p>By consolidating ISMBF governance, the project seeks to include the cultural wealth of the local communities, by taking their ancestral knowledge, livelihoods and other aspects.</p> <p>The joint construction of knowledge about ISMBF provided for in the project seeks to incorporate local cultural resources smoothly into territorial planning.</p> <p>The project will aim to:</p> <ul style="list-style-type: none"> - Document the communities' needs and include them in the project during the implementation phase. - Ensure consultation processes for specific and main activities during the project implementation phase. - Design a participatory communication, dissemination and awareness-raising plan. - Share detailed, objective, accurate and clear information in the local language, including the project's 	<p>used, encouraging boosting the local communities' life systems.</p> <p>Ensure free, prior and informed consent is given.</p> <p>Promote the effective participation of the local and indigenous communities when making decisions about the compensation for environmental services? mechanisms.</p> <p>Generate, in the frame of free, prior and informed consent, a system to register and systematize complaints and deal with conflict quickly and effectively. and concerns coming from the community.</p> <p>Set up a direct line of communication with the</p>	<p>No. of communication actions adapted for the different actors.</p> <p>System to register and systematize complaints and concerns coming from the community.</p>
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Table 6. Environmental and social risks associated with the project

Supporting Documents

Upload available ESS supporting documents.

Title

Module

Submitted

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<p>Objective: Expand and internalize the Integrated and Sustainable Management of Biodiversity and Forests (ISMBF) in integral territorial planning, through the strengthening of governance for its implementation and monitoring, and thus increase the resilience of life systems (livelihoods) in fragile ecosystems of dry forests in the Bolivian Chaco region and advance towards Land Degradation Neutrality (LDN).</p>							
<p>Component 1: Governance for integrated land management implemented by indigenous peoples and local communities through the Integrated and Sustainable Management of Biodiversity and Forests (ISMBF)</p>							

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<p>Outcome 1.1:</p> <p>Strengthened governance to implement the national policy and the institutional framework of the ISMBF to achieve SFM, SLM and LDN through territorial planning, including the relevant stakeholders in the process.</p> <p>-</p>	<p>Core indicator-1.2.</p> <p>250 000 ha of protected areas managed within the framework of integrated territorial planning, strengthening their contribution to avoid degradation and/or restore degraded ecosystems</p>	<p>The lack of participatory governance mechanisms and systems to address land-use planning focusing on land degradation and loss of biodiversity, and from the gender perspective, are an obstacle to moving towards ISMBF and LDN</p> <p>0 ha of protected areas using the integrated land-use planning framework to avoid degradation and/or restore degraded ecosystems</p>	<p>At least 1 local interinstitutional process reflected in a strengthened Guarani? People's Assembly (GPA) as a community territorial governance system to incorporate the ISMBF in integrated land-use planning and public funding, with the aim of achieving LDN</p> <p>250 000 ha of protected areas in the process of being managed using the integrated land-use planning framework to avoid degradation and/or restore degraded ecosystems</p>	<p>At least 1 interinstitutional process (multi-level, multi-actor and intersectoral) to support governance in the Chaco macroregion has been rolled out, incorporating the ISMBF in integrated land-use planning and public funding, with the aim of achieving LDN</p> <p>250 000 ha of protected areas managed using the integrated land-use planning framework</p>	<p>Interinstitutional cooperation and coordination agreements</p> <p>Minutes of coordination meetings</p> <p>Institutional reports</p> <p>Project progress reports</p> <p>Project M&E reports</p>	<p>ISMBF governance has been consolidated and strengthened thanks to the different institutions, social organizations and indigenous peoples wanting to work together and convinced of the need to incorporate the approach into integrated land-use planning</p>	<p>Project coordination unit (PCU)</p> <p>MMAyA/MDRyT</p> <p>Implementing agency</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	<p><u>Core Indicator - 11:</u></p> <p><i>At least 15 000 direct beneficiaries boost their skills for land-use planning, implementing SLM and SFM practices, and integrate them in the ISMBF governance (7 500 men and 7 500 women)</i></p>	0	At least 7 500 beneficiaries have boosted their ISMBF governance skills implementing SFM, SLM and land-use planning practices	At least 15 000 beneficiaries (7 500 women and 7 500 men) have boosted their ISMBF governance skills implementing SFM, SLM and land-use planning practices	<p>Project progress reports</p> <p>Project M&E reports</p> <p>List of people attending training sessions and meetings to share experiences</p> <p>CTMP and ITDPLW drafted</p> <p>Community action plans</p>	The methods used to involve local actors have been successful and have enabled ISMBF to be integrated in to land-use planning processes	<p>PCU</p> <p>Gender specialist</p> <p>GPA</p> <p>MMAyA/M DRyT</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<p><u>Output 1.1.1</u></p> <p>Capacity building programme developed and implemented for the integrated planning and participatory governance of the ISMBF at the central, sub-national and local government levels, autonomous indigenous peoples and social organizations, with a gender and</p>	<p><i>Number of local actors (from autonomous indigenous peoples and local organizations, and other actors) trained in integrated land-use planning and local ISMBF participatory governance from a gender approach (men, women and young people)</i></p>	<p>Little knowledge and weak institutional capacities</p>	<p>At least 170 local actors (from autonomous indigenous peoples and local organizations, and other actors) (30% women</p> <p>and at least 10% young people under the age of 28) trained in integrated land-use planning and local ISMBF participatory governance</p>	<p>At least 320 local actors (from autonomous indigenous peoples and local organizations, and other actors) (30% women</p> <p>and at least 10% young people under the age of 28) in integrated land-use planning and local ISMBF participatory governance</p>	<p>Reports and attendance sheets from the training sessions</p> <p>Strengthening program document</p> <p>Reports and technical documents</p>	<p>ISMBF and land-use planning skills are developed at different government levels and are applied in piecemeal fashion</p>	<p>PCU</p> <p>Capacities strengthening program consultant</p> <p>Gender specialist</p> <p>Communication specialist</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
generational equity approach.	<i>Number of staff/technicians in the central, subnational and local government levels trained in integrated land-use planning and ISMBF local participatory governance (men, women and young people)</i>		At least 80 staff/technicians (30% female and at least 10% young people under the age of 28) in the central, subnational and local government levels trained in integrated land-use planning and ISMBF local participatory governance	At least 130 staff/technicians (30% female and at least 10% young people under the age of 28) in the central, subnational and local government levels trained in integrated land-use planning and ISMBF local participatory governance			

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<p><u>Output 1.1.2.</u> Public and academic institutions strengthened in ISMBF and LDN to support the implementation of local ISMBF processes with a gender perspective</p>	<p><i>Number of institutions able to plan and implement ISMBF and monitoring LDN (MMAyA, MDRyT and others, as well as universities, local grassroots organizations, local and municipal governments) with a gender focus</i></p>	<p>Lack of local land-use planning processes that incorporate ISMBF and LDN</p>	<p>6 institutions able to plan and implement ISMBF and monitoring LDN</p>	<p>13 institutions able to plan and implement ISMBF and monitoring LDN</p>	<p>Reports and attendance sheets from the training sessions</p> <p>Institutional reports on progress being made on incorporating ISMBF and/or LDN in the land-use planning and ecosystems management tools</p>	<p>Good potential uptake of ISMBF and LDN by government and academic sectors</p>	<p>PCU</p> <p>LDN-WOCAT Consultant</p> <p>EXact Consultant</p> <p>Gender specialist</p> <p>Communication specialist</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<p><u>Output 1.1.3.</u> Territorial plans have been prepared at the municipal and GAIOC level for the implementation of SFM and SLM and to facilitate the achievement of ISMBF and LDN and contribute to the formulation of life plans.</p>	<p><i>Number of land-use plans drafted and aligned with integrated land-use planning using the ISMBF approach (update the CTMP of the AIFG</i> <i>Charagua Iyambae and draft an ITDPLW in Monteagudo, Huacaya, Villa Vaca Guzm?n or Huacareta)</i></p>	<p>Municipal land-use planning uses, to some extent, the environmental functions, SFM and SLM approaches to ISMBF, whereas LDN has no influence on decision making</p>	<p>1 process to update the Community Territory Management Plan (CTMP) of the AIFG Charagua Iyambae, that incorporates environmental functions, ISMBF and LDN with gender criteria</p> <p>At least 1 process to draft the Integrated Territorial Development Plan to Live Well (ITDPLW) in the municipality of Monteagudo, Huacaya, Villa Vaca Guzm?n or Huacareta well underway that incorporates the environmental functions, ISMBF and LDN focus with gender criteria</p>	<p>1 Community Territory Management Plan (CTMP) of the AIFG Charagua Iyambae, that incorporates environmental functions, ISMBF and LDN with gender criteria</p> <p>At least 1 Integrated Territorial Development Plan to Live Well (ITDPLW) drafted in the municipality of Monteagudo, Huacaya, Villa Vaca Guzm?n or Huacareta that incorporates the environmental functions, ISMBF and LDN focus with gender criteria</p>	<p>Technical monitoring reports</p> <p>Reports and attendance sheets from the planning meetings</p> <p>Planning tools developed in the framework of integrated land-use planning with a focus on ISMBF, LDN and gender</p>	<p>The current public policies, legal framework and tools for land-use planning make a favourable context for integrating the ISMBF focus at the municipal level</p>	<p>PCU</p> <p>Consultancy team to do plans</p> <p>AIFG Charagua Iyambae</p> <p>Municipality of</p> <p>Monteagudo, Huacaya, Villa Vaca Guzm?n or Huacareta</p> <p>Gender specialist</p> <p>Guaran? People?s Assembly</p> <p>Communication specialist</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<p><u>Output 1.1.4.</u> Community action plans for ISMBF have been developed in a participatory manner and contribute to the scope of LDN</p>	<p><i>Number of community action plans developed and implemented through a participatory process and contribute to achieving LDN</i></p>	<p>The community action plans do not have technical guidelines to develop and strengthen the territorial management tools, which have been identified as requested by the indigenous peoples and/or local communities, to use the forest, biodiversity, and/or agrobiodiversity in an integrated way</p>	<p>At least 7 community action plans developed and implemented through a participatory process for ISMBF with a gender focus</p>	<p>At least 15 community action plans developed and implemented through a participatory process for ISMBF with a gender focus</p>	<p>Reports and attendance sheets from the planning meetings</p> <p>Technical reports on processes for developing the life plans</p> <p>Management plans (POP, slash and burn plans, etc.)</p>	<p>The indigenous and farming communities have their Life Plans and are implementing them using the ISMBF approach to managing natural resources</p>	<p>PCU</p> <p>Consultancy team to do action plans</p> <p>Gender specialist</p> <p>Guaran? People?s Assembly</p> <p>Communication specialist</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<p><u>Output 1.1.5.</u> ISMBF has been integrated into existing territorial management planning and decision-making mechanisms</p>	<p><i>Number of participatory processes on integrated territorial management established, strengthened and validated as a way of making decisions about ISMBF, linked to updating the CTMP of the AIFG and the ITDPLW of Monteagudo, Huacaya, Villa Vaca Guzmán or Huacareta, included in annual municipal budgets</i></p>	<p>There is no strategy to integrate the ISMBF into the planning and decision-making mechanisms at different levels, both governmental and in local communities</p>	<p>4 participatory processes on integrated territorial management established, strengthened and validated as a way of making decisions about ISMBF, linked to updating the CTMP of the AIFG and the ITDPLW of Monteagudo, Huacaya, Villa Vaca Guzmán or Huacareta, included in annual municipal budgets</p>	<p>8 participatory processes on integrated territorial management established, strengthened and validated as a way of making decisions about ISMBF, linked to updating the CTMP of the AIFG and the ITDPLW of Monteagudo, Huacaya, Villa Vaca Guzmán or Huacareta, included in annual municipal budgets</p>	<p>Reports and attendance sheets from the planning meetings</p> <p>Technical reports on processes for developing the life plans</p>	<p>The ISMBF is included in the action plans and is a tool for decision making in the indigenous communities</p>	<p>PCU</p> <p>Consultant</p> <p>Gender specialist</p> <p>Guaran? People?s Assembly</p> <p>Communication specialist</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<u>Output 1.1.6.</u> Protected areas co-management model has been developed under the ISMBF approach	<i>Number of joint management model for protected areas developed using the ISMBF approach</i>	The protected areas in the project implementation area and their areas of influence need to be strengthened using a joint management mechanism that involves local communities in decision-making using the ISMBF approach	Community joint management biodiversity conservation model proposal integrated into the protected areas management and land-use planning tools, using the ISMBF approach	Community joint management biodiversity conservation model integrated into the protected areas management and land-use planning tools, using the ISMBF approach	Minutes, reports and attendance lists from participatory events Technical reports Interinstitutional and community agreements Joint management model	The SERNAP commits to supporting the joint management model The interested parties want to participate The eco-financiers disburse resources on time	PCU Consultant Gender specialist SERNAP Communication specialist
Component 2: Implementation of SFM and SLM practices under the ISMBF approach at the landscape level in the Chaco region, to advance towards LDN							
<u>Outcome 2.1.</u> SLM and SFM practices implemented within the framework of the ISMBF improve the	<i>Core Indicator - 3.1.: 1 200 ha of degraded farmland being restored</i>	0	At least 200 ha of degraded farmland being restored	1 200 ha of degraded farmland being restored	Project progress reports Project M&E reports	Processes to involve local actors have been successful Strengthen	Project coordination unit MMAyA/MDRyT

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
environmental functions of biodiversity and forests, reduce and / or reverse land degradation and improve life systems in the El Chaco region..	<i>Core Indicator - 4.1: 60 000 hectares of landscapes under improved management (SFM) for the benefit of biodiversity (area 1: sub-Andean fringe and plains of the Chaco)</i>	0	At least 20 000 being managed has improved	60 000 ha being managed has improved	Project progress reports Project M&E reports	institutional and local communities? capacities have enabled them to take the ISMBF SLM and SFM practices on board	Universities, NGOs Implementing agency

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	<p><i>Core Indicator - 4.3:</i></p> <p><i>40,000 ha under silvopastoral, agroforestry, and/or agroecological management systems and 8,000 ha of forests and other types of vegetation with improved environmental functions in production systems through the implementation of the ISMBF</i></p> <p>-</p>	0	<p>At least 10 000 ha under silvopastoral , agroforestry , and/or agroecological management systems.</p> <p>At least 4,000 ha of forests and other types of vegetation with improved environmental functions in production systems through the implementation of the ISMBF</p>	<p>40 000 ha under silvopastoral , agroforestry , and/or agroecological management systems.</p> <p>8,000 ha of forests and other types of vegetation with improved environmental functions in production systems through the implementation of the ISMBF</p>	<p>Project progress reports</p> <p>Project M&E reports</p>		

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	<p><u>Core Indicator - 6.1:</u></p> <p>2,535,071 metric tons of CO₂-e Carbon Sequestered in the AFOLU Sector</p> <p>-</p>	0	0	2,535,071 metric tons of CO ₂ -e Carbon Sequestered in the AFOLU Sector over a 20 year accounting period as a result of project activities	FAO's Ex-Act tool, Country Soil Organic Carbon Maps, Global Soil Organic Carbon Map	Forest degradation and Soil Organic Carbon sequestration trends do not worsen after the implementation of the project.	PCU MMAyA/M DRyT Project Implementing Agency
	<p><u>Core Indicator - 11:</u></p> <p>At least 15 000 direct beneficiaries boost their capacities through land-use planning, implementing SLM and SFM practices and integrating governance in the framework of the ISMBF (7 500 men and 7 500 women)</p>	0	At least 7 500 beneficiaries have boosted their ISMBF governance skills, implementing SFM, SLM and land-use planning skills	At least 15 000 beneficiaries (7 500 women and 7 500 men) have boosted their ISMBF governance skills, implementing SFM, SLM and land-use planning skills	<p>Project progress reports</p> <p>Project M&E reports</p> <p>List of people attending training sessions and meetings to share experiences</p> <p>CTMP and ITDPLW drafted</p> <p>Life plans drafted</p>	<p>Processes to involve local actors have been successful</p> <p>and have enabled them to integrate the ISMBF in their land-use planning</p>	PCU Gender specialist GPA MMAyA/M DRyT

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<p><u>Output 2.1.1.</u> Training programme and technical exchange with local actors (with a gender and intergenerational approach) developed for the design, implementation and management of sustainable production systems under the ISMBF approach</p> <p>-</p>	<p><i>Number of producers trained in ISMBF (50% women and 20% young people)</i></p>	0	At least 100 women and 100 men from the local communities (at least 40 under the age of 28) have strengthened their capacities to design, implement and manage sustainable production systems using the ISMBF approach	At least 175 women and 175 men from the local communities (at least 70 under the age of 28) have strengthened their capacities to design, implement and manage sustainable production systems using the ISMBF approach	<p>Project progress reports</p> <p>Project M&E reports</p> <p>List of people attending training sessions and meetings to share experiences</p>	Local producers actively involved in implementing the sustainable production systems using the ISMBF approach	<p>PCU</p> <p>Gender specialist</p> <p>GPA</p> <p>MMAyA</p> <p>Consultant/trainer</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 2.1.2. SFM and SLM practices within the ISMBF framework have been prioritized and implemented at the local level, in line with the action plans as formulated under 1.1.4, with the aim of restoring degraded lands, supporting the reestablishment of the environmental functions of biodiversity and forests, and strengthening local life systems, with participation of at least 30% women and 10% young people	<i>Number of indigenous producers and/or members of local communities that implement SLM and/or SFM practices in the framework of the ISMBF (at least 30% women and 10% young people)</i>	0	100 indigenous producers and/or members of local communities (30 women and 10 people under the age of 28) implement SLM and/or SFM practices in the framework of the ISMBF	200 indigenous producers and/or members of local communities (60 women and 20 people under the age of 28) implement SLM and/or SFM practices in the framework of the ISMBF	Project progress reports Project M&E reports Consultancy team reports	Local actors incorporate the ISMBF approach implementing SLM and SFM practices The role of women and young people in implementing the ISMBF is consolidated	PCU Gender specialist GPA MMAyA/M DRyT SLM and SFM practices consultant Consultancy team for implementing practices

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<p><u>Output 2.1.3.</u> Communal Economic Organizations (OECOMs) have been established by indigenous peoples and local communities for the commercialization of ISMBF products (with or without processing)</p>	<p><i>Number of CEOs established (one in each municipality, involving women and at least one made up of women producers) commercializing the products (processed or not) of the ISMBF implemented by indigenous peoples and local communities</i></p>	0	8 CEOs being set up to commercialize the products of the ISMBF, one in each municipality, developed with the indigenous people and local communities, involving women (at least one made up of women producers)	8 CEOs being set up to commercialize the products of the ISMBF, one in each municipality, developed with the indigenous people and local communities, involving women (at least one made up of women producers)	<p>Project progress reports</p> <p>Project M&E reports</p> <p>Market study done and/or agreements already established through local commercial partnerships</p> <p>Agreements and strategic alliances to set up and ensure sustainability of the CEOs</p>	<p>The CEOs contribute to improving the socio-economic conditions of the local people by commercializing the products of the ISMBF and improving their resilience to possible socio-environmental risks</p>	<p>PCU</p> <p>Gender specialist</p> <p>GPA</p> <p>Consultant CEOs</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	<i>Number of training sessions and/or workshops on setting up and ensuring the sustainability of the CEOs</i>	0	At least 8 training sessions and/or workshops to set up the CEOs, geared to the processing and storing of the biodiversity outputs and handicrafts, commercialization, etc.	At least 16 training sessions and/or workshops to set up the CEOs, geared to the processing and storing of the biodiversity outputs and handicrafts, commercialization, etc.	Project progress reports Project M&E reports Attendance lists from the training sessions and workshops		

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<p>Outcome <u>2.2</u>:</p> <p>The implementation of SLM and SFM practices within the framework of the ISMBF contributes to the achievement of the LDN national goals, and evaluated through the periodic monitoring of indicators.</p> <p>-</p>	<p><i>Number of ISMBF practices implemented and systematized that contribute to achieving national LDN targets and improving environmental functions</i></p>	<p>ISMBF practices that contribute to LDN have not been systematized</p>	<p>At least 15 ISMBF practices have been identified to be evaluated</p>	<p>At least 10 ISMBF practices implemented and systematized that contribute to achieving national LDN targets and improving environmental functions</p>	<p>Project progress reports</p> <p>Project M&E reports</p> <p>Reports on systematizing practices that contribute to LDN</p> <p>M&E system for LDN, environmental functions and complementary indicators developed</p>	<p>ISMBF practices contribute to achieving LDN targets</p>	<p>PCU</p> <p>MMAyA</p> <p>MDRyT</p> <p>LDN/WOC AT Consultant</p> <p>Implementing agency</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<p><u>Output 2.2.1.</u> System of evaluation and monitoring of LDN at multiple scales has been developed, including environmental functions and complementary indicators, within the framework of the implementation of the ISMBF to contribute to the national goals of LDN, Aichi</p>	<p><i>LDN M&E system including environmental functions and complementary indicators, developed with the ISMBF approach incorporates a database to help monitor the national LDN, AICHI and NDC targets</i></p>	<p>The government does not have an integrated system to monitor the LDN, Aichi and NDC targets or environmental functions using the ISMBF approach</p>	<p>LDN M&E system including environmental functions and complementary indicators, developed with the ISMBF approach incorporates ISMBF practices designed to help monitor the national AICHI and NDC targets</p>	<p>LDN M&E system including environmental functions and complementary indicators, incorporates ISMBF practices</p> <p>Up and running with a database and team trained to help monitor the national AICHI and NDC targets</p>	<p>Project progress reports</p> <p>Project M&E reports</p> <p>LDN M&E system including environmental functions and complementary indicators</p> <p>Database</p>	<p>LDN target monitoring is integrated and systematic because it incorporates ISMBF</p>	<p>PCU</p> <p>MMAyA</p> <p>MDRyT</p> <p>LDN/WOC AT Consultant</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
and NDC.	<i>Number of SLM and/or SFM experiences in the framework of the ISMBF whose resulting carbon stock was included in the LDN M&E</i>	9 plots that implement SLM and SFM practices (baseline PAS Chaco) have data on their carbon stock	9 plots that implement SLM and SFM practices (baseline PAS Chaco) monitoring their data on their carbon stock 4 plots implementing SLM and/or SFM in the framework of the ISMBF set up to get a baseline of carbon stock	13 SLM and/or SFM experiences in the framework of the ISMBF whose resulting carbon stock was included in the LDN M&E (9 monitoring the carbon stock and 4 with a baseline calculated)	Project progress reports Project M&E reports LDN M&E system including environmental functions and complementary indicators developed Carbon consultancy team reports	Carbon monitoring enables the impact of the ISMBF practices to be measured	PCU MMAyA/MDRyT Carbon consultancy team

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	<p><i>Number of LDN indicators (net primary production, land cover and carbon stock), and complementary indicators defined, monitored and evaluated at the landscape level in the project intervention area</i></p>	The LDN is not monitored at the subnational level	<p>LDN indicators and evaluation methods, and complementary indicators defined at the landscape level</p> <p>At least 2 LDN indicators and 5 complementary indicators evaluated at the landscape level</p>	LDN baseline and complementary indicators developed at the landscape level for the project intervention area	<p>Project progress reports</p> <p>Project M&E reports</p> <p>LDN M&E system including environmental functions and complementary indicators (including socio-economic and gender indicators) developed</p>	The Bolivian government adopts the LDN approach, fulfils its commitments and meets its national targets as established with the UNCCD	<p>PCU</p> <p>MMAyA/MDRyT</p> <p>LDN/WOCAT</p> <p>Consultant</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	<i>Number of SLM and/or SFM experiences in the framework of the ISMBF whose results were integrated in the LDN M&E system, including the environmental functions and complementary indicators</i>	The LDN (with complementary indicators) and the environmental functions are not monitored or systematized at the sub-national level	At least 18 SLM and/or SFM experiences in the framework of the ISMBF whose impact is evaluated using the LDN and environmental functions approach At least 18 practices are systematized using the WOCAT approach linked to the SIMB, BIOBOL, APMT system	At least 35 SLM and/or SFM experiences in the framework of the ISMBF whose impact is evaluated using the LDN and environmental functions approach At least 35 practices are systematized using the WOCAT approach linked to the SIMB, BIOBOL, APMT system	LDN M&E system including environmental functions and complementary indicators (including socio-economic and gender indicators) developed	Implementing ISMBF practices has a positive impact on the socio-environmental conditions in the project intervention area, which is monitored by the M&E system	PCU MMAyA/MDRyT Consultant LDN/WOCAT
Component 3: Knowledge management, M&E and COVID-19 prevention							
Outcome 3.1. Strengthened partnerships and decision-making procedures at different government	<i>Institutions with agreements in place to monitor national commitments to the CNULD, CDB and CMNUCC</i>	Gaps in following up on complying with national LDN, Aichi Targets and NDC targets	Institutions starting to draft national commitments to the CNULD, CDB and CMNUCC	Institutions with agreements in place to monitor the national commitments to the CNULD, CDB and CMNUCC	Reports and attendance lists from the training sessions (sex-disaggregated data)	At the end of the project, the institutional structure has strengthened technical capacities	PCU MMAyA and MDRyT

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
levels for long term adoption of ISMBF practices and LDN monitoring	<i>Number of additional producers implementing SLM and SFM practices in the framework of the ISMBF that contribute to LDN</i>	N/A	N/A	At least 400 additional producers able to implement SLM and SFM practices in the framework of the ISMBF that contribute to LDN	Technical and progress reports LDN, Aichi Targets and NDC monitoring reports (project level)	and is capable of monitoring and following up on LDN using the ISMBF approach	Implementing agency
	<i>Number of additional hectares implementing SLM and SFM practices in the framework of ISMBF that contribute to LDN</i>	N/A	N/A	At least 2 000 additional hectares able to implement SLM and SFM practices in the framework of la ISMBF that contribute to LDN	Interinstitutional agreements to set up a sustainable monitoring mechanism		

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 3.1.1 Exit strategy including (i) knowledge sharing mechanisms (ii) strategic partnerships (iii) consolidated institutional technical teams, and (iv) streamlined decision-making procedures, prepared and adopted by the institutions involved in the project and approved by the Project Steering Committee	<i>Exit strategy adopted by the project Steering Committee</i>	N/A	Exit strategy drafted	Exit strategy adopted by the PSC and implemented by the PCU	Memoire from the PSC	VMA and other stakeholders willingness to mobilize staff and resources to ensure the exit strategy can be achieved	PCU

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Outcome 3.2. Knowledge management and Communication strategy developed and implemented with a gender perspective allows the dissemination and scaling up of the ISMBF and LDN	<i>Communication strategy with a gender focus implemented</i>	N/A	Different outreach material (printed, audio-visual, webpage, etc.) designed and being made	Different outreach material (printed, audio-visual, webpage, etc.) made and distributed to support scaling up ISMBF	Web page up and running. Virtual and printed material with a gender focus and intergenerational affairs ready to be distributed Informational material for schools Video with lessons learned from the project distributed	N/A	PCU Consultant communicator Implementing agency
Output 3.2.1. Knowledge management and Communication strategy formulated and implemented	<i>Communication strategy prepared and implemented by the PCU</i>	Project does not have a communications strategy	Communication Strategy adopted by the PSC, implementation started	Communication strategy implemented	Minutes from PSC meeting Project progress reports	N/A	PCU

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Outcome 3.3. COVID-19 Resilient Monitoring and Evaluation (M&E) Strategy is delivered with results based principles.	<i>Project M&E plan implemented</i>	N/A	<p>Studies to build on the baseline finished in PY1 including indicators and on-site measuring where SLM and SFM practices are used with a focus on ISMBF</p> <p>PCU set up in PY1 running until PY3</p> <p>Steering Committee and Technical Committee set up in PY1 and running until PY3</p>	<p>Each year measure the indicators and incorporate lessons learned into the project database</p> <p>At the end of PY3, 1 000 copies of the project lessons learned document are printed and distributed</p>	<p>Project progress reports</p> <p>Reports with sex-disaggregated data and analysed from a gender lens contrasted with the baseline</p> <p>MTE and final reports</p>	N/A	<p>PCU</p> <p>Implementing agency</p> <p>MMAyA</p>

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 3.3.1 COVID-19 prevention plan implemented with the different project stakeholders .	<i>The COVID 19 prevention plan implemented from the first semester of PY1 through to PY3 in line with national guidelines</i> <i>Any waste generated by the prevention plan disposed of correctly</i>	There is no plan for disposing of waste generated by the prevention plan	The COVID 19 prevention plan contemplating disposing of waste up and running	The COVID 19 prevention plan contemplating disposing of waste does not have any negative impact on the environment	PPE (masks, alcohol, etc.) distributed by the project complies with the protocols to be followed at meetings, etc.	The COVID 19 prevention plan is implemented and enables the project activities to be developed and reduces the risk of any of the actors becoming infected with the virus	PCU MMAyA Local health facility
Output 3.3.2. Project Evaluations (mid-term and final) completed in a timely manner to inform and guide the implementation of the project			Mid-term evaluation (MTE) done in first half of PY2	Final Evaluation in PY5			

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

GEF Comments	Response
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<p>We request the project developers to further explore during the PPG phase possible articulation with actions supported by development partners such as the World Bank, IFAD, GIZ, JICA (which begins discussion on value chains in 2019) and others.</p>	<p>Please refer to the coordination section (Coordination with other relevant GEF-funded projects and other initiatives) were we explain coordination with initiatives from IFAD, CAF IDB and GiZ.</p>
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Council Comments	Response
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United States:

Though we support the project, climate change is not adequately addressed in the approach to improve biodiversity and

sustainable management of working lands. Attention to the major threat of wildfire is not enough, particularly after this year's

fires. There should be explicit adaptive management techniques embedded in planning and training to ensure long-term

sustainability for both resilience and mitigation of the impacts of wildfires, pests, drought and flooding. The larger economic and social questions of why small holders are expanding productive lands in unsustainable ways is also not addressed.

Environmentally sustainable management training may not address underlying historical and economically opportunistic reasons for this type of expansion. We additionally advise continued participation from indigenous and peasant communities.

Finally, during the development cycle of this project there has been a complete changeover at the relevant ministry under Bolivia's transitional government. The GEF should ensure that these changes have not altered the capacity for success in the proposed activities.

The Prodoc has sought to make visible the important contributions that the project will have towards the adaptation and mitigation of climate change and the contributions of the ISMBF to NDC. Parallel to this, the Climate Risk Detection Annex addresses in detail the climate baseline in el Chaco region, observed and future climate trends, natural hazards, exposure and vulnerability, the impacts of climate change on the project and the assessment of the project's climate risk (medium risk).

Considering the great threat that forest fires present in the project intervention area, a strategy has been designed to prevent and control forest at the local level, with greater coordination between government institutions and local communities. Component 1, through capacity building, seeks to strengthen the knowledge of local communities on how to prevent fire which includes, in addition, designing a fire prevention and management plan and access to personal protective equipment and firefighting. Likewise, Component 2, seeks to implement sustainable alternative practices to traditional *chaqueo* (slash and burn). On the other hand, the proposal for the joint management of protected areas and their zones of influence to be developed between the government and institutions and the GPA, seeks to stop the intense process of land settlement and trafficking which generally originate from international fires. The

Germany:

Germany requests that the following requirements are taken into account during the design of the final project proposal:

? Germany requests that sections on project risks, and stakeholder engagement strategies are thoroughly revised to address the political situation in the country. The project was prepared and negotiated with the previous Bolivian Government.

Environmental authorities at subnational level are key partners for the sustainability of this program approach, and should be included as part of this revision.

? Before final authorization, GEF and FAO should seek consent with the new national government on approach, partners at national and sub-national level.

Considering that the presentation of the FPD was made in 2019 and subsequently there was a change of government and corresponding authorities, it is important to clarify that since 2020 the Government of Bolivia has new, stable and democratically elected authorities. During the project preparation stage, FAO actively worked to establish agreements and alliances with different Ministries and Vice Ministries that will participate in the project.

It is important to highlight that sub-national government areas and the highest authorities of the GPA have agreed and expressed great interest in participating in the project.

Comments from STAP	Response
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STAP Overall Assessment

Minor issues to be considered during project design. STAP

welcomes this project focused on biodiversity and forest management in the Bolivian Chaco, and generally views it as an exciting and positive initiative based on a comprehensive problem definition and careful targeting of drivers. Its main weakness is very unclear writing and undefined terminology, which makes it difficult at times to determine exactly what is planned. For example, the project hinges on the concept of "Integral Sustainable Management of Biodiversity and Forests", a concept that appears well-entrenched nationally, but this is not defined and described clearly anywhere.

Information on the relationship between indigenous-held lands and National Park areas is lacking, making interpretation and understanding of the local governance/tenure context and how the intervention will change this difficult. The project would be strengthened by incorporating a clear and explicit TOC that identifies pathways for change and underlying assumptions.

The definition of ISMBF and other specific terms included in Bolivian legislation were clearly specified in the Prodoc. We consider that this had not been clearly stated in the PIF and so it has been rectified. For example, the definition and scope of the ISMBF can be found in paragraphs 6, 7, 8 and 9 of this document.

Regarding the issue of protected areas in relation to land tenure and the presence of indigenous communities, this has been addressed in the section ?Conservation context: protected areas and RAMSAR sites in the project intervention area?, paragraphs 67 and 73.

The Theory of Change was improved and expanded, incorporating the assumptions, barriers and drivers of change that will allow the expected results to be achieved (Figure 1).

<p>Project Objective</p>	<p>Is the objective clearly defined, and consistently related to the problem diagnosis?</p> <p>No, the objective is very long and hard to follow. It uses unclear terms such as "integral management" and "strengthening life systems", and is composed of a long sequence of dependent terms i.e. sustainable mgt of biodiversity/forests FOR sustainable forest management FOR integral planning. (How can sustainable management of forests (along with biodiversity) be a strategy for sustainable management of forests?) The actual objective of all this is unclear. It needs to be stated simply and clearly. It appears to be simply establishing or increasing sustainable forest management and sustainable land management in the Chaco. "Integral" is used throughout but it may be that a better translation is "integrated", as the meaning of integral management is unclear.</p>	<p>The objective stated by the PIF was not clear. This was revised, adjusted and stated as follows: <i>?Scale up and internalize the Integrated and Sustainable Management of Biodiversity and Forests (ISMBF) in integrated territorial planning, by strengthening implementation and monitoring governance, and thus increase the resilience of life systems (livelihoods) in fragile ecosystems of dry forests in the Bolivian Chaco and move towards Land Degradation Neutrality (LDN)?.</i></p> <p>It is important to clarify that the concepts of Integrated Sustainable Management of Biodiversity and Forests (ISMBF) and Integrated Territorial Planning are established in the legal framework of the Plurinational Government of Bolivia. The ISMBF is defined in the Plurinational Policy and Strategy for Comprehensive and Sustainable Biodiversity Management (2019-2030), while Law NO. 777 of Territorial Planning for Integrated Development determines and gives legality to the comprehensive planning of the state at all levels. How these concepts were addressed can be found in detail in the different sections of the project.</p>
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<p>Project components</p>	<p>A brief description of the planned activities. Do these support the project's objectives? There are some unclear aspects. Are components 1 and 2 referring to activities in the same areas? Component 1 reads as if this is about strengthening management by IPLCs, and in the description there is no reference to PAs, but the indicators for this component (p 15) refer to improvements in management of National Parks. Component 1 is about establishing the basis of governance and planning for ISMBF, which is clear. But component 2 is about implementing ISMBF, but doesn't refer to the plans developed in 1. Presumably component 2 is largely about various structures implementing the plans that they have developed in 1? Making this clearer would be helpful.</p>	<p>The project design, through its components and products, was reviewed and adjusted in order to provide greater consistency and internal logic. The adjustments made can be found in Annex A1 Project Results Framework, as well as in the description of the Components, Products and Activities. Table 1 ?Changes made between PIF and Project Document? summarizes the main changes made in order to correct the gaps that were identified.</p>
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<p>1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)</p>	<p>Is the problem statement well-defined? Yes, quite well. It is good to see some of the socio-political/economic drivers. A map in this section would be very helpful, given the extensive geographic description. The term ISMBF needs to be clearly defined the first time it is used. It is not clear why, if the impacts are primarily caused by intensive agriculture, why the project is targeting indigenous territories rather than industrial farmers/farming. In this sense the intervention is not clearly linked to the problem statement. For example, if the rationale is that these areas are most critical for remaining biodiversity, or improved management is more possible here, or the co-benefits in terms of cultural integrity and livelihoods are stronger, this should be clearly stated.</p>	<p>Although the problem is considered to be well-defined, it has been improved and the drivers of biodiversity loss and land degradation at different levels are further explained in detail (paragraph 1 to 26). Detailed maps of the project intervention area can be found in sections 1.b and Annex E. Likewise, a link is included to consult the maps through an app designed to facilitate the analysis of the geographical context of the project execution area (paragraph 214). According to the observations, the term ISMBF was more clearly and precisely defined and made explicit in paragraphs 6 to 9. Considering the identified barriers, the project proposes, in its different components, various actions to seek. On the one hand, improve environmental conditions in areas of high value of global diversity, incorporating the ISMBF approach in integrated territorial planning and strengthening the livelihoods of indigenous and farming communities, who are the main defenders of biodiversity and forests. Improving participatory governance and capacities for the implementation of SLM and SFM and the commercialization of their products aims to generate contributions to strengthen the resilience of local communities when facing possible threats.</p>
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	<p>Are the barriers and threats well described, and substantiated by data and references?</p> <p>A definition for "territorial planning" is required - does this refer to planning for indigenous territories, or some other territories? Barrier 2 is framed as a lack of capacity, but it appears that addressing this barrier is not just about building capacity, but about changing paradigms, assumptions, and ways of thinking. This has implications for how interventions are designed and implemented, so is worth considering explicitly. Finally, assessing whether integrating ISMBF will address all these barriers depends critically on what ISMBF really consists of, and this is not defined clearly anywhere, so this is very hard to judge.</p>	<p>The term "Integrated territorial planning" was clarified and is defined in paragraph 10 and in section "Institutional framework".</p> <p>Regarding identified barriers, it is important to note that these were modified, both in wording and in description, in order to clarify the scope of each one of them. In the first place "Barrier 4: Insufficient capacity to prevent and control forest fires" was removed and integrated in Barrier 1. Likewise, the wording for the three remaining barriers was improved, this can be seen in paragraphs 30 to 41.</p>
<p>2) the baseline scenario or any associated baseline projects</p>	<p>Is the baseline identified clearly? No. The baseline description mainly describes government policy/planning instruments, without specifying the level of likely implementation and impact of these.</p>	<p>The baseline and associated projects have been expanded and improved. This can be found in paragraphs 42 to 82.</p>

	<p>Does it provide a feasible basis for quantifying the project's benefits?</p> <p>No. The baseline description mainly describes government policy/planning instruments, without specifying the level of likely implementation and impact of these.</p>	<p>This has been improved and expanded, and can be seen in the following sections: Global environmental and/or adaptation problems, main causes and barriers to be taken into account (description of systems) and Baseline Scenario and associated projects.</p>
	<p>are the lessons learned from similar or related past GEF and non GEF interventions described; and how did these lessons inform the design of this project?</p>	<p>The experience from the initiatives generated in the implementation of the project GEF ID 4577 has been incorporated: <i>Conservation and Sustainable Use of Agrobiodiversity</i> as well as the project <i>Sustainable Forest Management in the Transboundary Ecosystem of the American Gran Chaco</i>.</p>
<p>3) the proposed alternative scenario with a brief description of expected outcomes and components of the project</p>	<p>What is the theory of change?</p> <p>There is no explicit theory of change, and including a graphic and narrative TOC showing how the pathways of action address the drivers and barriers would be very helpful.</p>	<p>The TOC has been reformulated. The drivers and the impact of degradation were expanded, an adjustment was made in how the barriers were described and suppositions regarding the components and drivers of change, intermediate state and long-term objectives were generated. Figure 1 shows the connections between the main components of TOC.</p>

	<p>What is the sequence of events (required or expected) that will lead to the desired outcomes?</p> <p>Again, the lack of definition of ISMBF makes it hard to work out what exactly will change on the ground. Some of the text is very hard to follow e.g. "Hence, OECOMs will contribute the economic sustainability of the OECOMs by acting as their value adding and commercial body of the ISMBF implemented by indigenous peoples". Overall, however, there is a reasonably clear sequence of events to lead to positive biodiversity, SFM and LD outcomes.</p>	<p>This has been remedied. The logical sequence of the project can be seen in the TOC (Figure 1), in Annex A1 Project Results Framework and the description of the Components, Products and Activities.</p>
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	<p>What is the set of linked activities, outputs, and outcomes to address the project's objectives?</p> <p>The details of component 1 are very hard to understand, particularly regarding land tenure, overlap between National Parks and indigenous territories. The indicators for this section are improvement of National Parks management, but the activities and outputs seem to be largely about strengthening indigenous (co) management and developing territory plans/community plans. How do these relate? Is it the NPs themselves that are also indigenous territories to be co-managed? Also, it would be helpful to have clear information on how much of the intervention area is indigenous territory, and how much small-scale farmers (or other groups).</p>	<p>This has been reviewed, modified and adjusted to provide greater clarity to each of the planned products, depending on the expected results. A clear definition of the activities to be drafted for each product along with who will be responsible for execution. This can be seen in Annex A1 Project Result Framework and in the description of Components, Products and Activities. The information referring to protected areas has been modified and improved based on a critical analysis and the contributions obtained through a consultation process with different local actors. Annex E contains a series of maps related to the indigenous territories and communities to help understand what is stated in each of the sections: global environmental and/or adaptation problems, main causes and barriers to be considered (description of the systems) and in the baseline, scenario and associated projects.</p>
	<p>Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions? There is little articulation of underlying assumptions.</p>	<p>The Theory of Change has been reformulated and expanded. A series of assumptions articulated with the components are presented (Figure 1).</p>

	<p>Is there a recognition of what adaptations may be required during project implementation to respond to changing conditions in pursuit of the targeted outcomes?</p> <p>No. The baseline description mainly describes government policy/planning instruments, without specifying the level of likely implementation and impact of these.</p>	<p>The environmental baseline was expanded and enriched. Likewise, the approach to the project's capacity to adapt to changing conditions was addressed in the climate change risks analysis and risks for the project mainly those associated with the global Covid-19 pandemic. Considering the continuous changes associated with the FAO and the central government guidelines on the pandemic, the need to develop a strong adaptive capacity for the project has been considered in order to achieve the expected results, always looking for alternatives that ensure the execution of the project. Therefore, Component 3, Product 3.3.1 is proposed - a Covid-19 prevention plan to minimize the risks of spread during the project implementation period.</p>
<p>5. Risks</p>	<p>Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project's control?</p> <p>The risks around "Conflicts arising from competition for the use of the land and other resources" appears to be potentially quite serious, and the mitigation measures provided aren't entirely convincing. It is not clear, in any case, that reaching consensus is an appropriate goal, where protection of indigenous tenure rights to ancestral territories is concerned, for example.</p>	<p>The risk analysis for the project was improved and enriched, based on improving the environmental diagnosis. This can be seen in Annex 5 on risks for the project.</p>

<p>6. Coordination</p>	<p>Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects?</p> <p>Yes, there is a range of relevant projects identified and links articulated for some (but not all).</p>	<p>This has been addressed through the experience generated in the implementation of the GEF ID 4577 project- Conservation and Sustainable Use of Agrobiodiversity to improve human nutrition in five macro Eco-regions.</p>
<p>8. Knowledge management</p>	<p>What overall approach will be taken, and what knowledge management indicators and metrics will be used?</p> <p>This is only sketched out vaguely and requires more detail.</p>	<p>This is addressed in Component 3 and described in paragraphs 174 to 181.</p>

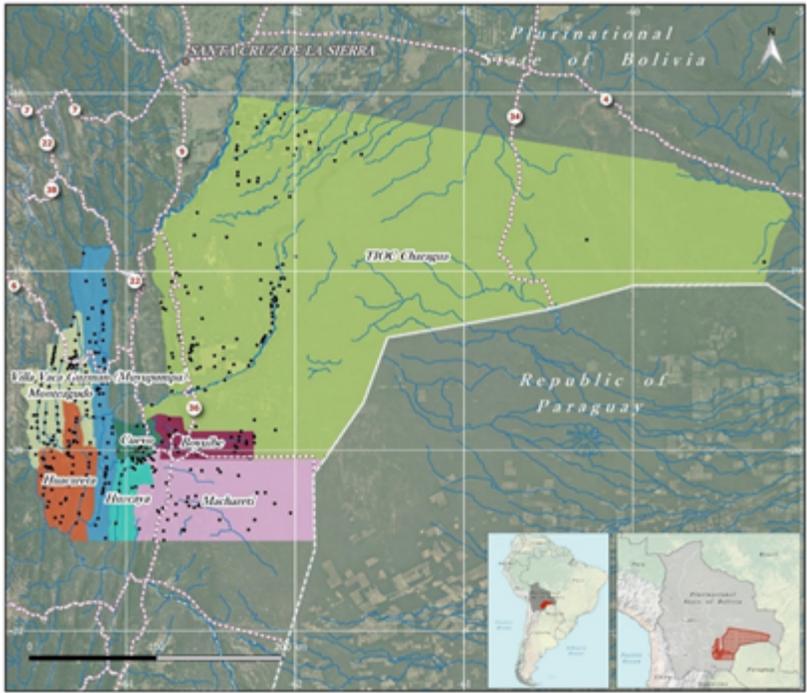
**ANNEX C: Status of Utilization of Project Preparation Grant (PPG).
(Provide detailed funding amount of the PPG activities financing status in the table below:**

<p>PPG Grant Approved at PIF: 150,000</p>			
<p><i>Project Preparation Activities Implemented</i></p>	<p><i>GETF/LDCF/SCCF Amount (\$)</i></p>		
	<p><i>Budgeted Amount</i></p>	<p><i>Amount Spent to date</i></p>	<p><i>Amount Committed</i></p>
<p>Activity 1: Preparation of component 1: Governance for integral territorial management implemented by indigenous peoples and local communities through ISMBF</p>	<p>29,500</p>	<p>8,127</p>	<p>21,373</p>
<p>Activity 2: Preparation of component 2: Implementation of the ISMBF for SFM and SLM at the landscape level in the El Chaco region, to advance towards LDN</p>	<p>130,000</p>	<p>120,000</p>	<p>10,000</p>

Activity 3: Preparation of component 3: Monitoring, evaluation and awareness raising	<u>30,000</u>	<u>15,000</u>	<u>15,000</u>
Activity 4: Consultation process with the main actors and incorporation of the gender and generational approach.	<u>15,500</u>	<u>1,500</u>	<u>14,000</u>
Activity 5: Systematized information, project design and budget	<u>45,000</u>	<u>40,000</u>	<u>5,000</u>
<u>TOTAL</u>	<u>150,000</u>	<u>84,627</u>	<u>65,373</u>

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.



Project Intervention Area

Legend

- Settlements
 - Water network
 - Road network
 - National boundaries
- | | | | | | | | | |
|-------------------------------|--------|-------|-----------|---------|-----------|-----------|------------------|-------------------------------|
| Project municipalities | Boyube | Curvo | Huacareta | Huacaya | Machareti | Momeagudo | Charagua Iyambac | Villa Vaca Guzman (Meyupampa) |
|-------------------------------|--------|-------|-----------|---------|-----------|-----------|------------------|-------------------------------|



Geographic Coordinate System WGS84

Source: Rubin, C.; Rubin, M.C.; Diaz, F. y E. Abraham (2019);
 Data: GeoBolivia, Government of the Pinarón State of Bolivia (2019).

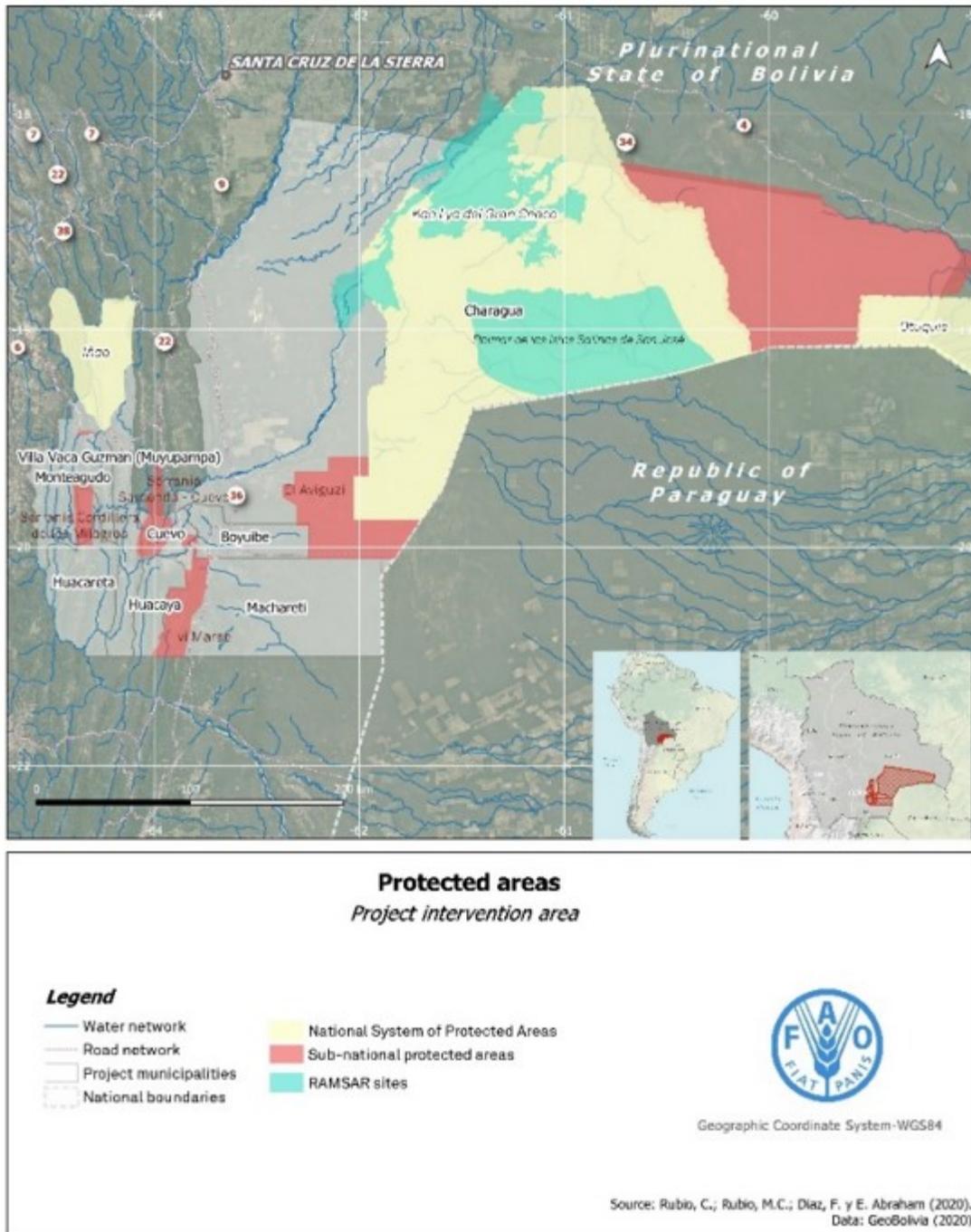


Figure 3. Priority Areas

please visit the following link: <https://projectgeffao.users.earthengine.app/view/bolivia-chaco>

ANNEX E: Project Budget Table

Please attach a project budget table.

FAO Cost Categories	Unit	No. of units	Unit cost	Component	Component	Component	PMC	Total GEF	M&E (Accounted for in 3.3.2)	Executed by VMA	FAO Support Services	Total GEF
				1	2	3						
				Total	Total	Total						
5013 Consultants												
Coordinator	month	60	3,000	66,000	8,000	6,000	100,000	180,000		180,000		180,000
Biodiversity management specialist	month	48	2,000	42,000	32,000	22,000		96,000		96,000		96,000
Financial Administrator	month	60	400	-	-	-	24,000	24,000		24,000		24,000
Logistics assistant/Secretary	month	24	1,000	-	-	-	24,000	24,000		24,000		24,000
Expert LDN/WOCAT (management, monitoring and evaluation of the projects)	month	48	2,500	42,000	38,000	40,000		120,000		120,000		120,000
Monitoring and evaluation consultants for the LDN	month	3	5,000	-	15,000	-		15,000		15,000		15,000
Field Communicator	month	48	1,400	21,000	14,000	32,200		67,200		67,200		67,200
Communication materials designer/Dissemination	month	8	1,700	4,600	3,000	6,000		13,600		13,600		13,600
Consultant for the capacity building design	month	2	2,500	5,000	-	-		5,000		5,000		5,000
ISMBF NDT trainer	month	4	625	2,500	-	-		2,500		2,500		2,500
WOCAT, EXACT, AQUASTAT trainers	month	4	625	2,500	-	-		2,500		2,500		2,500
Gender training specialist	month	48	1,840	33,320	32,000	23,000		88,320		88,320		88,320
Fire Management consultant	month	3	3,000	9,000	-	-		9,000		9,000		9,000
M&E consultant	month	36	2,000	-	-	72,000		72,000	72,000	72,000		72,000
ISMBF implementation consultant	month	12	2,500	30,000	-	-		30,000		30,000		30,000
Protected Areas consultant - ISMBF	month	6	2,000	12,000	-	-		12,000		12,000		12,000
Consultant for the identification of Prioritized Areas SLM-SFM	month	4	3,000	-	12,000	-		12,000		12,000		12,000
Support consultant to integrate health and safety approach for COVID	month	10	2,000	-	-	20,000		20,000		20,000		20,000
5013 Sub-total consultants				269,920	154,000	221,200	148,000	793,120	72,000	793,120	-	793,120
5014 Contracts												
Transportation costs in terms of materials, supplies and others	days	25	400	6,000	4,000	-		10,000		10,000		10,000
Equipment rentals	days	12	1,000	-	12,000	-		12,000		12,000		12,000
Territorial Plans	global	1	240,000	240,000	-	-		240,000		240,000		240,000
Community Action Plans	global	1	180,000	180,000	-	-		180,000		180,000		180,000
Market Study, Diagnosis and Training for CEOs	global	1	20,000	-	20,000	-		20,000		20,000		20,000
Instal plots, measurement and monitoring of carbon stocks in the soil (field and laboratory)	global	1	75,000	-	75,000	-		75,000		75,000		75,000
M&E Mid-Term Review	dias	20	1,500	-	-	30,000		30,000	30,000		30,000	
M&E Independent Final Evaluation	global	30	1,200	-	-	36,000		36,000	36,000	36,000	36,000	
Design for the Diffusion of materials	global	1	20,000	-	-	20,000		20,000		20,000		20,000
Design and maintain the web page	global	1	20,000	-	-	20,000		20,000		20,000		20,000
Develop and disseminate videos of the lessons learned from the project	global	1	20,000	-	-	20,000		20,000		20,000		20,000
Auditing	global	1	10,000	-	-	-	10,000	10,000			10,000	10,000
Letters of agreement to implement SFM and SLM practices	global	1	200,000	-	200,000	-		200,000		200,000		200,000
5014 Sub-total Contracts				426,000	311,000	126,000	10,000	873,000	66,000	797,000	76,000	873,000
5021 Travel												
Travels Project Specialist and field Work (DSA-T)	tickets	50	2,207	66,000	31,350	13,000		110,350		110,350		110,350
Travel - local car rental expenses	Trips	50	1,500	27,000	30,000	18,000		75,000		75,000		75,000
M&E follow-up missions	days	30	300	-	-	9,000		9,000	9,000	9,000		9,000
5021 Sub-total travel				93,000	61,350	40,000	-	194,350	9,000	119,350	-	119,350
5023 Training												
Local workshops on capacity building (ISMBF)	working day	20	1,000	20,000	-	-		20,000		20,000		20,000
National workshops on capacity building (ISMBF)	working day	5	2,000	10,000	-	-		10,000		10,000		10,000
Training workshops in ISMBF and NDT	working day	8	1,000	8,000	-	-		8,000		8,000		8,000
Workshops on Territorial Planning to integrate ISMBF	working day	10	2,000	20,000	-	-		20,000		20,000		20,000
WOCAT Workshops	working day	8	1,000	8,000	-	-		8,000		8,000		8,000
Workshops on the joint management of Protected Areas	working day	6	2,000	12,000	-	-		12,000		12,000		12,000
Workshops on the gender perspective for the implementation of the ISMBF	working day	7	3,000	-	21,000	-		21,000		21,000		21,000
Local Meetings to develop the design, implementation and management of sustainable production systems with ISMBF	working day	3	6,000	-	18,000	-		18,000		18,000		18,000
Workshops for the prioritization of intervention areas and practices to be implemented on SLM and SFM	working day	10	1,500	-	15,000	-		15,000		15,000		15,000
Workshops on OECOM	working day	10	2,000	-	20,000	-		20,000		20,000		20,000
Workshops to monitor LDN (Outside the intervention areas)	working day	10	3,000	-	15,000	15,000		30,000		30,000		30,000
National workshops on LDN	working day	10	3,000	-	15,000	15,000		30,000		30,000		30,000
LDN workshops on the dissemination of AICHI targets	sessions	10	1,000	-	-	10,000		10,000		10,000		10,000
M&E roll out workshop	global	1	7,808	-	-	7,808		7,808	7,808	7,808		7,808
M&E Learning missions	global	3	4,000	-	-	12,000		12,000	12,000	12,000		12,000
5023 Sub-total training				78,000	104,000	59,808	-	241,808	19,808	241,808	-	241,808

5024 Expendable procurement												
Industrial Protection Equipment PPE, tanks, blowers	global	1	25,000	25,000	-	-	-	25,000		25,000		25,000
Inputs for the implementation of water efficiency practices (As described on Output 2.1.2)	global	1	238,298	-	238,298	-	-	238,298		238,298		238,298
Inputs for the implementation of Forest protection and management practices (As described on Output 2.1.2)	global	1	348,085	-	348,085	-	-	348,085		348,085		348,085
Inputs for the implementation of soil management and other agricultural/production practices (As described on Output 2.1.2)	global	1	348,085	-	348,085	-	-	348,085		348,085		348,085
Inputs for the implementation of fire management practices (As described on Output 2.1.2)	global	1	217,085	-	217,085	-	-	217,085		217,085		217,085
Field supplies	global	1	55,637	13,137	42,500	-	-	55,637		55,637		55,637
Personnel biosecurity supplies	global	1	5,000	-	-	5,000	-	5,000		5,000		5,000
Work clothes	global	1	5,000	-	5,000	-	-	5,000		5,000		5,000
Publications	global	1	80,000	-	-	80,000	-	80,000		80,000		80,000
Branding materials	global	1	5,000	-	5,000	-	-	5,000		5,000		5,000
Security supplies - MOSS equipment	global	1	3,000	-	3,000	-	-	3,000		3,000		3,000
5024 Sub-total expendable procurement				38,137	1,207,053	85,000	-	1,330,190		1,266,977		1,266,977
6100 Non-expendable procurement												
Laptops	Pieces	10	2,000	-	20,000	-	-	20,000		20,000		20,000
GCPs	Pieces	4	250	-	1,000	-	-	1,000		1,000		1,000
Multifunctional printers	Pieces	10	400	1,000	2,000	1,000	-	4,000		4,000		4,000
Data Show	Pieces	5	900	2,500	1,000	1,000	-	4,500		4,500		4,500
Equipment for field offices	global	1	15,000	6,000	3,000	6,000	-	15,000		15,000		15,000
Monitoring equipment	global	1	5,000	-	-	5,000	-	5,000		5,000		5,000
Server	Pieces	1	15,000	-	15,000	-	-	15,000		15,000		15,000
6100 Sub-total non-expendable procurement				9,500	42,000	13,000	-	64,500		64,500		64,500
5028 GOE budget												
Field office support-internet/telephony/stationary	month	60	100	-	-	-	6,000	6,000		6,000		6,000
6300 Sub-total GOE budget				-	-	-	6,000	6,000		6,000		6,000
TOTAL				914,557	1,879,403	545,008	164,000	3,502,968	166,808	3,288,755	76,000	3,364,755
SUBTOTAL Comp 1										914,557		
SUBTOTAL Comp 2										1,879,403		
SUBTOTAL Comp 3										545,008		
Subtotal										3,338,968		
Project Management Cost (PMC)										164,000	4.9%	
TOTAL GEF										3,502,968		

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agency is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required

clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).

Not applicable