



Conservation and sustainable use of biodiversity within the sustainable use areas of the State Subsystem of Protected Areas (SEAP) of Ecuador and its buffer zones.

Part I: Project Information

GEF ID

10396

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

CBIT **No**

NGI **No**

Project Title

Conservation and sustainable use of biodiversity within the sustainable use areas of the State Subsystem of Protected Areas (SEAP) of Ecuador and its buffer zones.

Countries

Ecuador

Agency(ies)

FAO

Other Executing Partner(s)

Ministry of Environment, Water and Ecological Transition (MAATE)

Executing Partner Type

Government

GEF Focal Area

Biodiversity

Taxonomy

Focal Areas, Biodiversity, Paramo, Biomes, Tropical Rain Forests, Agriculture and agrobiodiversity, Mainstreaming, Certification - International Standards, Community Based Natural Resource Mngt, Protected Areas and Landscapes, Influencing models, Communications, Private Sector, Civil Society, Stakeholders, Type of Engagement, Women groups, Gender Mainstreaming, Gender Equality, Sex-disaggregated indicators, Beneficiaries, Gender-sensitive indicators, Access to benefits and services, Gender results areas, Participation and leadership, Capacity Development, Awareness Raising, Adaptive management, Learning, Capacity, Knowledge and Research, Theory of change, Indicators to measure change, Terrestrial Protected Areas, Strengthen institutional capacity and decision-making, Demonstrate innovative approach, Deploy innovative financial instruments, Transform policy and regulatory environments, Convene multi-stakeholder alliances, Partnership, Information Dissemination, Participation, Consultation, Local Communities, Individuals/Entrepreneurs, SMEs, Capital providers, Financial intermediaries and market facilitators, Indigenous Peoples, Non-Governmental Organization, Academia, Community Based Organization, Behavior change, Public Campaigns

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 1

Climate Change Adaptation

Climate Change Adaptation 1

Submission Date

8/31/2021

Expected Implementation Start

3/1/2022

Expected Completion Date

2/28/2027

Duration

60In Months

Agency Fee(\$)

419,540.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-1-1	Mainstreaming of biodiversity across sectors, as well as landscapes and seascapes through the mainstreaming of biodiversity in priority sectors	GET	3,091,347.00	26,273,271.00
BD-2-7	Address the direct drivers to protect habitats and species and improve financial sustainability, management effectiveness, and the ecosystem coverage of the global protected area estate	GET	1,324,863.00	11,259,973.00
Total Project Cost(\$)			4,416,210.00	37,533,244.00

B. Project description summary

Project Objective

Promote conservation, sustainable use of biodiversity and capacity building in sustainable use zones and buffer zones within the State Subsystem of Protected Areas (SEAP).

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: Strengthening the national governance of SEAP for the management of protected areas with an emphasis on their sustainable use zones	Technical Assistance	<p>Outcome 1.1:</p> <p>Improved and integrated management of protected areas and their sustainable use zones</p> <p>Target:</p> <p><u>GEF Core Indicator #1.2:</u></p> <p>Increase in the management effectiveness score of two protected areas (PA) measured by the GEF Management Effectiveness Tracking tool (METT).</p> <p>Cayambe Coca National Park: Baseline: 45</p> <p>Target: 65</p> <p>Sangay National Park: Baseline: 43</p> <p>Target: 55</p>	<p>Output 1.1.1:</p> <p>SEAP Integrated Information System for the management of protected areas and sustainable use zones operational, including a module for monitoring socio-environmental conflicts which is implemented in the Cayambe Coca and Sangay NPs, and validated by the communities, technical teams and park rangers</p> <p>Output 1.1.2:</p> <p>Technical, operational and legal standards and tools, with a gender and intercultural approach, for the management of sustainable use zones of the SEAP established within the framework of the new Environmental Organic Code, its regulations and secondary legislation</p>	GET	835,777.00	18,531,147.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
2: Development of local territorial governance to prevent the loss of biodiversity (BD) in the buffer zones of Protected Areas	Technical Assistance	<p>Outcome 2.1:</p> <p>Strengthened institutional capacities of the Decentralized Autonomous Governments (DAG) to carry out integrated management of the landscape in the buffer zones, to prevent the loss of BD</p> <p>Target:</p> <p>8 DAGs have strengthened their capacities for integrated landscape management in buffer zones and participate in local governance to prevent the loss of BD, as measured by the GEF capacity tracking tool (baseline scores and targets to be defined in year 1. A target increase of 20% with respect to the baseline is preliminarily estimated)</p>	<p>Output 2.1.1:</p> <p>Standards and tools developed for the conservation and sustainable use of BD in the buffer zones of SEAP, integrated into the local planning framework</p> <p>Output 2.1.2:</p> <p>Mechanism for shared governance and inter-institutional and intersectoral coordination at the territorial level between the MAATE, the Ministry of Agriculture (MAG), DAGs and other key stakeholders at the national, provincial, municipal and parish levels</p> <p>Output 2.1.3:</p> <p>Training programs implemented for DAGs and key stakeholders on regulations for buffer zone management</p>	GET	646,735.00	12,776,035.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
3. Improvement of alternative livelihoods to reduce pressure on ecosystem services and BD in the Cayambe Coca and Sangay NPs	Investment	<p>Outcome 3.1:</p> <p>Pressure from agricultural activities is reduced through diversification and improvement of local livelihoods</p> <p>Targets:</p> <p><u>GEF Core Indicator #4.1:</u></p> <p>6,000 hectares in sustainable use zones and buffer zones of the Cayambe Coca and Sangay NPs where BD conservation and sustainable use practices are implemented (sustainable production, tourism, restoration and conservation)</p> <p><u>GEF Core Indicator #11:</u></p> <p>3,000 people (1,200 women and 1,800 men) participate in the implementation of gender-sensitive BD</p>	<p>Output 3.1.1:</p> <p>Technical assistance and rural extension services of the MAATE, MAG and DAGs coordinated and strengthened to promote associativity initiatives and foster BD conservation and sustainable use practices in buffer zones and sustainable use zones, with a gender and intercultural approach</p> <p>Output 3.1.2:</p> <p>BD conservation and sustainable use practices implemented with the population of the sustainable use zones and buffer zones of two PAs, within the framework of the PA zoning, related legislation and specific technical guidelines for each practice.</p> <p>Output 3.1.3:</p> <p>Incentives?</p>	GET	2,325,826.00	3,507,035.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
4. Knowledge management and Monitoring and Evaluation (M&E) based on the principles of adaptive management , and the delivery of measurable and objectively verifiable results	Technical Assistance	<p>Outcome 4.1:</p> <p>Knowledge Management and Monitoring and Evaluation (M&E) Strategy based on adaptive management and delivery of measurable and verifiable results</p> <p>Target:</p> <p>100% of results achieved.</p> <p>Proven sustainability</p>	<p>Output 4.1.1:</p> <p>Mechanisms implemented for the dissemination and exchange of best practices and lessons for the replication and scaling of project results to SEAP</p> <p>Output 4.1.2:</p> <p>Monitoring and Evaluation Strategy developed with relevant stakeholders, clearly defining expected results, the expected time periods for their completion, and their confirmation through objectively verifiable indicators and means of verification.</p> <p>Output 4.1.3:</p> <p>Mid-term review and final evaluation conducted in order to constructively inform and guide project implementation</p>	GET	397,576.00	1,027,175.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Sub Total (\$)					4,205,914.00	35,841,392.00
Project Management Cost (PMC)						
GET			210,296.00		1,691,852.00	
Sub Total(\$)			210,296.00		1,691,852.00	
Total Project Cost(\$)			4,416,210.00		37,533,244.00	

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	MAATE - Ministry of the Environment and Water	In-kind	Recurrent expenditures	11,025,506.00
Recipient Country Government	Chimborazo Provincial DAG	In-kind	Recurrent expenditures	50,000.00
Recipient Country Government	Napo Provincial DAG	In-kind	Recurrent expenditures	72,053.00
Recipient Country Government	El Chaco Municipal DAG	In-kind	Recurrent expenditures	354,800.00
Recipient Country Government	Azogues Municipal DAG	In-kind	Recurrent expenditures	50,000.00
Recipient Country Government	Morona Municipal DAG	In-kind	Recurrent expenditures	220,000.00
Recipient Country Government	Cayambe Municipal DAG	In-kind	Recurrent expenditures	604,325.00
Private Sector	FONAG	In-kind	Recurrent expenditures	1,000,000.00
Other	Fund for Sustainable Environmental Investment (FIAS)	Grant	Investment mobilized	12,309,256.00
Civil Society Organization	CONDESAN	In-kind	Recurrent expenditures	251,823.00
GEF Agency	FAO	In-kind	Recurrent expenditures	430,000.00

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Ministry of Agriculture	In-kind	Recurrent expenditures	11,165,481.00
Total Co-Financing(\$)				37,533,244.00

Describe how any "Investment Mobilized" was identified

The investment mobilized will be provided by FAO through the following ongoing initiatives: Project GCP/GLO/931 "Mechanism for Forests and Farms Facility" which supports value chains and initiatives for sustainable land management in Imbabura; Project TCP/ECU/3803 "Identification and promotion of investments for post COVID-19 economic recovery and agricultural transformation in hand in hand territories that support value chains in Chimborazo"; as well as FAO Ecuador regular program including administration and communication support costs. The investment mobilized by the Fund for Sustainable Environmental Investment (FIAS) corresponds to the execution of resources by the Fund for Protected Areas (FAP), administered by FIAS, to invest in protected area needs during the implementation years of the project.

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(\$)
FAO	GET	Ecuador	Biodiversity	BD STAR Allocation	4,416,210	419,540
Total Grant Resources(\$)					4,416,210.00	419,540.00

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

Agenc y	Trust Fund	Country	Focal Area	Programmin g of Funds	Amount(\$)	Fee(\$)
FAO	GET	Ecuador	Biodiversity	BD STAR Allocation	150,000	14,250
Total Project Costs(\$)					150,000.00	14,250.00

Core Indicators

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
889,715.00	910,392.00	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)
889,715.00	910,392.00	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)
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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 Cayambe Coca NP	125689183	Selected National Park	486,612.00	408,287.00			45.00		
Akula National Park Sangay NP	125689188	Selected National Park	403,103.00	502,105.00			43.00		

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)
8000.00	6000.00	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)
8,000.00	6,000.00		

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)

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)
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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
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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	3,280	1,788		
Male	4,920	3,272		
Total	8200	5060	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 consider (systems description)

Global environmental significance

1. South America contains 6% of the world's population and 28% of the planet's renewable water resources (Muñoz, Macias and García 2009); thanks to the presence of the Andes and the Amazon rainforest, which play an extraordinary role in the production, storage and regulation of water.

2. The Andes, with 7,240 kilometers in length, is considered the longest mountain range in the world, crosses the countries of Argentina, Chile, Bolivia, Peru, Ecuador, Colombia, and Venezuela. Its highest point is the Aconcagua Mountain, with 6,960 meters above sea level (masl) (DW 2021); and it hosts endemic high Andean ecosystems, such as the moors and *jalcas*. In the region, approximately 50 million people depend on this mountain range for their water supply (CAN 2010). This mountainous system, which is the backbone of the region, constitutes a natural barrier that intercepts both the winds coming from the Amazon laden with moisture, a product of the evapotranspiration of the jungle, and those coming from the Pacific Ocean, dry towards the south and very humid to the north. This barrier generates abundant rainfall that characterizes a large part of the territory of the Andean community (CAN 2010). In Ecuador, the formation of the Andes has given rise to three well differentiated geographical regions in the continental territory: the Coast, the Sierra and the East or the Amazon region. "The Sierra region or mountainous region of Ecuador extends between the two chains of the Andes Mountain range, the Western and the Eastern, occupying a strip of 600 km long by 100 km at 120 wide, the average height is 4,000 masl with more than a dozen peaks above 4,877 meters of altitude" (FAO 2012). 157,632 km² of the territory of Ecuador is within the mountain area according to the UNEP-WCMC classification (FAO 2012).

3. The Amazon is the largest humid tropical forest on the planet (8,470,209 km²), located in the northern part of South America. There are nine countries that share this great region: Bolivia, Brazil, Colombia, Ecuador, Guyana, French Guyana, Peru, Suriname and Venezuela (RAISG 2020). The Amazon is recognized for an extensive humid forest; however, it also houses a great diversity of landscapes, with different geological and evolutionary histories that contribute 20% of the fresh water incorporated into the Earth's oceans. Its great biodiversity (50% of the world's biodiversity), and high rate of endemism make it unique in the world, which is why it is considered a key place in global biodiversity conservation strategies. In Ecuador, the Amazon covers 132,292 km² or what is equal to 1.6% of the total (RAISG 2020).

4. Ecuador belongs to the group of 12 megadiverse countries, which together represent between 60% and 70% of the planet's biodiversity; Ecuador stands out as the country with the greatest biological diversity in relation to its area, with 0.2% of the earth's surface housing 18% of all species of

birds (1,626) and orchids (3,500), 10% of amphibians (394) and 8% of mammals (369), in general, 10% of the world's plants and animals (FAO 2012).

5. Ecuador makes important efforts for the conservation of its BD. Of the 91 recognized ecosystems, 85 are represented in Protected Areas (PA). According to statistics from the Ministry of the Environment, Water and Ecological Transition (MAATE) (2018), 9.51% of the Sierra region is under some level of protection, and 27.80% for its equivalent in the Amazon region (Ministry of the Environment 2018). The National System of Protected Areas (SNAP) covers 56 PAs. These areas are important providers of ecosystem services, highlighting that they give origin to 60% of the water for hydroelectric energy, 60% of the water for agriculture and 50% of the water for human consumption, with Quito being a notable example with the almost total supply coming from the Cayambe Coca National Park. Likewise, almost 24% of the carbon in the biomass of continental Ecuador is stored in the PAs. On the other hand, within the protected area there is a significant cultural diversity represented by 26 indigenous nationalities, local communities and Afro-Ecuadorian populations. The PAs generate 35% of the country's tourist income.

6. Despite conservation efforts, the 2015-2030 National Biodiversity Strategy (NBS) recognizes that at the national level, 17.5% of the species registered in the country are under some category of threat, with amphibians being the group that has the highest percentage of threatened species (28.5%) and among vertebrates at least 530 species of vertebrates (not including fish) are under some category of threat. An average annual gross deforestation of 94,353 hectares (ha)/year can still be observed (Ministry of the Environment 2018), which among other things, increases the number of threatened species in Ecuador.

7. Carbon stocks vary according to strata. For example, for the strata related to the Andean region the following data have been calculated: Andean dry forest (47.91 T/ha), Andean *Ceja* Evergreen Forest (105.1 T/ha); Andean Piedmont Evergreen Forest (122.77 T/ha) and Andean Montane Evergreen Forest (122.77 T/ha). For the Amazon Lowlands Evergreen Forest, the calculation is of 160,4 T/ha of carbon (Ministry of the Environment 2018).

The global environmental problem

8. The project will intervene in the Cayambe Coca (PNCC) and Sangay (PNS) National Parks and their buffer zones, the first located in the Andean region and the second in the Amazon. These two PAs extend throughout the provinces of Napo, Sucumb?os and Pichincha (PNCC), Ca?ar, Chimborazo and Morona Santiago (PNS) (see Section 1b with the detailed description of the intervention areas). These two regions cover 41% and 33% of the country's total area respectively and are home to about 50% of the country's forests, mainly evergreen forests of the Amazon, the Andean foothills and the Andes[1]¹, and provide important ecosystem services. In these two PAs it is possible to visualize the achievements in terms of conservation. Diverse ecosystems are being preserved in different climatic tiers, with an important variety of endemic species, as well as a diverse cultural wealth. The management of the areas has yielded positive results, for example, in the PNCC a wetland has been delimited as a RAMSAR site and progress is being made in the process of certifying the area on the Green List of Protected and

Conserved Areas of the International Union for Conservation of Nature (IUCN),^[2] while the PNS is a Natural World Heritage Site declared by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

9. However, the main conservation problems of PAs are not environmental, but social (within and outside their limits). According to Global Forest Watch, between the years 2001-2019, Cayambe Coca has suffered a loss of tree cover of 1,720 ha, which is equivalent to a decrease of 0.53% of tree cover since 2000, in relation to an increase of 143 ha (Global Forest Watch, 2021). These losses, in terms of CO₂ emissions released into the atmosphere, are equivalent to 35,800t per year. In the case of Sangay, the estimated loss of tree cover is 1,550 ha, which is equivalent to a 0.44% decrease in tree cover since 2000, in relation to an increase of 98 ha due to natural recovery (Global Forest Watch, 2021). The losses found, calculated in terms of CO₂ emissions released into the atmosphere, are equivalent to 30,300t per year (Global Forest Watch, 2021).

10. All the aforementioned in a global context where the Amazon is seen as a strategic planetary place that, due to the threats it supports at the regional level, is close to reaching a tipping point (Steffen et al. 2018; The Nature Conservancy 2020). International experts (for example, Thomas Lovejoy and Carlos Nobre), warned the international community that the loss of only 20% to 25% of forest area could lead the Amazon to a point of no return, or a turning point, which once overcome would unleash irreversible changes, with its own destructive dynamics that can no longer be stopped (cascade effect), transforming the dense forests into a drier, savanna-like ecosystem, which would cause one of the largest climate catastrophes in the world (Molina et al. 2017; Steffen et al. 2018).

11. The enormous biodiversity found in the project areas is also threatened by climatic events. For example, the changes observed in tropical regions and in the Southern Hemisphere show that between 20% to 30% of plant and animal species are at high risk of extinction if the average global temperature increase exceeds 2°C to 3°C of the pre-industrial level (IPCC 2014); Andean biomes will show upward vertical displacement, with the moor being the biome that suffers the greatest loss in its current area of distribution (Republic of Ecuador 2019). Some climatic scenarios in Ecuador determine that in the PNCC there would be a loss of biodiversity that can range from 4.04% to 8.18% and in the PNS the loss would range from 5.36% to 8.6% (Cuesta et al. 2015).

12. The populations settled in the buffer and sustainable use zones of the PNCC and PNS cultivate various agricultural products, which represent the basic source of food supplies for families and constitute a small source of income. An important productive force linked to livestock activities is recognized, especially the production of raw milk and to a lesser degree dairy by-products. Regarding value chains related to endemic species, the following are identified: *morti?o* or Andean blueberry (*Vaccinium floribundum*), poroton or Andean tree bean (*Erythrina edulis*) and *sunfo* (*Clinopodium nubigenum* Kuntz), in the PNCC; and honey, pollen, vanilla and alpaca fiber in the PNS. It is important to mention that the enterprises linked to these species are in an initial state of idea or development, turning them into possible initiatives with potential, on which it is necessary to generate knowledge and

specific research (socioeconomic analysis, market study, value chains, management plans, among others).

13. In addition, the extraction of non-timber products is identified to obtain fibers, seeds, dyes and barks, elements that are used for the generation of popular expressions of art, which are acquired as souvenirs. There is a close relationship between the elaboration of handicrafts and the tourist flow that is registered in certain parishes of the PNCC and PNS.

14. As a result of the productive characterization undertaken in 13 cantons and 22 parishes of the provinces where the PNCC and PNS are located, which correspond to 61% of the total area of the PNCC and 91% of the total area of the PNS, of the total mapped productive systems with approximately 6,270 producers grouped in unions, cooperatives and associations, 70% corresponds to livestock activities, mainly cattle; 27% to mixed farming systems made up mostly of cultivated pastures with the presence of trees; and, the remaining 3% is distributed among purely agricultural systems, distributed entirely in small plots. In addition, aquaculture activities linked to the cultivation of tilapia and trout are identified, an activity associated with tourist activities, which are not regularized. Finally, in a particular way in the PNCC, small formations of forest plantations of eucalyptus, pine and guadua cane and bamboo are identified.

15. The main threats to biodiversity in these protected areas are described below:

Cayambe Coca National Park:

16. The forms of production and consumption in the buffer zone of the PNCC are mainly based on livestock activities and to a lesser degree, on agriculture, hunting and fishing for subsistence. According to the Management Plan of the Cayambe Coca National Park (2019), the predominant economic activities, especially in the provinces of Napo and Sucumbos, are informal (Ministry of the Environment, 2019).

17. Regarding land use, it was identified that 6.1% of its territory has anthropic activities, mainly on the lower eastern flank. The analysis carried out by the Ministry of the Environment (2015) determined that the highest percentage of these activities, 4.8%, corresponds to grasslands, followed by agricultural mosaic (0.8%), and is completed with different uses such as: annual and semi-permanent crops, forest plantations and other agricultural lands, whose individual percentages are very small (Ministry of the Environment, 2015). According to the aforementioned study, in the upper part, kikuyu grass (*Pennisetum clandestinum*) predominates for livestock activities such as cattle and horses; and, in the lower part, the dominant species is honey grass (*Setaria splendida*). The agricultural mosaic that is observed above all in the lower zone of the protected area, includes species such as: tree tomato, corn, naranjilla, potato, pea, yucca and plantain (Ministry of the Environment, 2015).

18. The largest intervention is found in the south-eastern zone of the PNCC, along the interoceanic route, in a route of 131 kilometers between the Chalpi Grande River-Du? River, where there are lands with possessions and properties established before the declaration of the protected area. In these places, a change in land use for agricultural uses can be observed, mainly pastures for livestock (Ministry of the Environment, 2015).

Sangay National Park:

19. The most relevant aspect of the history of this protected area, and that to this day affects its relationship with the surrounding populations, is the decision to double the area of the PA in 1992, without any prior consultation or work with the owners of those properties. With this background, in 2015 it was identified that 3.26% of the area's surface presents anthropic activities, which is equivalent to approximately 15 thousand hectares, being the southern zone or the expanded zone of the national park, the one with the highest concentration in the change of land use. These affections to nature, for the most part, have been caused by the presence of populations within the PNS, which were settled before the declaration of this part of the area.

20. The activities carried out in the intervened areas are mainly based on grasslands with 3.2%; Forest plantations; annual crops (potato); and infrastructure; The latter refers to the Daniel Palacios dam and related infrastructure of the Paute Integral project managed by the Electric Corporation of Ecuador (CELEC EP) through its Hidropaute Business Unit (Ministry of the Environment, 2015).

21. With regard to the management of natural resources, in the report carried out by the Ministry of the Environment (2015²), the communities have the custom of leaving their animals free in the *pajonal* (grasses) for around 2 years, and then selling their meat. Even wild cattle have been found for marketing purposes. It is precisely this careless practice that constitutes a problem for the conservation of natural cover and water sources (Ministry of the Environment, 2015).

22. In the lower part, due to the fact that the soil does not have agricultural aptitude, the change in land use basically responds to the presence of pastures to feed cattle, such activity is observed in a higher proportion in the Sucúa and Minda de la Cruz cantons (Ministry of the Environment, 2015). The study carried out by the Ministry of the Environment (2015), identified coordination problems between the three administrative zones (high, low and south), there is little communication, and each person in charge acts independently.

Remaining barriers

Barrier 1: Weaknesses of the SEAP governance framework due to inadequate or outdated strategies for integrated management in sustainable use zones within PAs

23. Information limitations for SEAP management: The MAATE has established the Unified Environmental Information System (SUIA) as the coordinator of the information generated by the MAATE. Art. 47 of the COA Regulations establishes that the SUIA must be kept up to date and incorporate and coordinate the records and information established in the COA and those defined by the MAATE. Likewise, it is provided that the data belonging to the National Database on Biodiversity must be administered, systematized, and managed by the Public Institute for Research on Biodiversity under the guidelines of the MAATE.

24. There is a gap between the scope determined by this legal framework and the implementation of the systems. Although they are implemented, the definition of the platforms and what has been done in the development of information systems (in some cases dispersed) do not provide a comprehensive

response to the provisions of the legal frameworks. The SUIA works mainly as a repository of information, which limits its use for management in the territory. It is not integrated to generate reports with updated data, statistics, or baseline information collected monthly by park rangers and technicians who work in protected areas. Each park ranger makes a monthly report with incidents, wildlife sightings, conflicts, among other topics, which are relevant to the management of the protected area, but that information is not entered anywhere, so it cannot be used for decision making. Currently the MAATE has a total of 37 systems and / or computer applications, as part of these are the Biodiversity Information System (SIB), Interactive Map, Portal of the National System of Protected Areas (SNAP) and the SMART monitoring and control tool (in the process of implementation), which collects and manages information from the PAs.

25. With the use of these tools, a diversity of data is collected and published in different formats, from administrative records related to tourism, cartography, spatial location for monitoring and control, technical documents, manuals and information resources. These developments, however, have occurred in a scattered way and without being correlatively coordinated. From the technological field, the structure, as well as the language under which they were designed, are not approved, which is why there is evidence of a lack of complementarity and interoperability between them. The COA specifies that the SNAP System has integrated geospatial information inputs, which at the moment are not directly available through the portal. However, they are collected and published through viewers and serve as inputs for other systems.

26. The information registration processes are currently carried out in most cases manually from the territory and the information is only accessible through written requests, which limits the availability of information in real time to allow authorities, park rangers and technicians the management and decision making. In the PA, the park rangers and technicians, for monitoring and control, make use of their own tools, through technical files and reports that record the threats present and their evolution in the territory. Despite these efforts, there are gaps in data collection due to the absence of an automated mechanism for recording these conflicts. Added to this is the fact that, in recent years, the MAATE has had budget cuts, being forced to reduce the personnel working in the PA, directly reducing its operational capacity in the territory, which in itself has suffered an impact by the restrictions that were generated by the presence of COVID-19. Although there is important work carried out in the territory to obtain information on a permanent basis, at the moment there are no defined policies and standards; that ensure that the data generated can be shared within the institution and that it can be easily accessed and used by other levels of government, both local and national.

27. Under this scenario, it is necessary to take the applications/systems developed by the MAATE and complement their development in order to consolidate an Integrated System that can function as a tool that operates in a decentralized way, carries out homogeneous and complementary activities, is updated and efficient; that prevents duplication of efforts with the proper use of human and financial resources; and avoiding an overlap of responsibilities and competences between the various stakeholders involved.

28. There are no monitoring systems for socio-environmental conflicts: The establishment of the protected areas that make up the SNAP has had different processes; their declaration and creation in many cases have been the beginning of socio-environmental conflicts that continue to this day.

Possibly little or no previous socialization with owners or possessors; decisions to evict or relocate people; or the lack of political decision that at the time did not have sufficient firmness to apply current legal provisions, have been, among others, the causes of these problems and conflicts (Ministry of the Environment, 2015).

29. Whatever the creation history of each of the protected areas in Ecuador, land tenure by private individuals, ancestral communities and settlers within them, have not been managed in the best way, generating the conditions for conflicts which are reflected in the daily work done by park rangers and the national environmental authority trying to solve them. The lack of demarcation of land boundaries, motivated by various causes such as: the existence of ambiguities in the descriptions of boundaries of the protected areas, differences in the toponymy of maps, lack of economic resources and permanent reduction of personnel, has made the situation more complex, even going so far as to prevent the consolidation of the territory of the protected areas. This situation has promoted the presence of invasions and illegal extractive uses of natural resources, with the consequent change in land use, motivated, on many occasions, by the high levels of poverty of the surrounding populations (Ministry of the Environment, 2015).

30. Within the PNCC, land holdings by the indigenous communities of Oyacachi and Cof?n de Sinango? are used mainly for subsistence farming activities. The two organizations have land use and management agreements signed with the MAATE, which have not been evaluated. In the case of the PNS, the main problem is land ownership and land use in certain sectors of the park, especially in the area over which the PNS was expanded on private and communal properties without previous consultation with landowners, among them Shuar communities and private owners (Ministry of the Environment, 2015).

31. The lack of updated information on land tenure or possession of the land and the little information and studies generated are not systematized. The MAATE also has the SIB that has been developed by modules, lacking monitoring and follow-up modules. PAs in Ecuador experience various environmental conflicts, however, their monitoring is currently limited to reports prepared by park rangers and conflicts are addressed and resolved at the local level and, if necessary, reports are sent to the MAATE headquarters. In many cases there is no formal report or information that indicates the agreement reached. These reports do not influence decision-making regarding PA management. The process is not socialized with key stakeholders and depends a lot on the historical memory of the officials. There are no tools for conflict resolution on the ground or a monitoring system that continuously generates and updates information for effective action and decision-making. Due to this lack of systematized information, it is not possible to predict socio-environmental conflicts that allow to have mechanisms of reduction and management and forms of homogeneous response, but it is resolved on a case-by-case basis, which makes auditing difficult. Access to this information would allow the MAATE to establish better guidelines for the resolution of socio-environmental conflicts.

32. Regulations and outdated and/or disjointed tools: The Environmental Organic Code (COA) and its Regulations, in its Art. 37, numeral 8, stipulate that it is necessary to respect, promote and maintain cultural manifestations, traditional and collective knowledge and ancestral wisdom of the communes, communities, peoples and nationalities and integrate them into the management of protected areas. Art. 48 mentions that the administration of the protected areas will be carried out with the participation of

all the stakeholders, and even emphasizes that those communes, communities, peoples and nationalities that are within a protected area, will be able to take advantage of the sustainable natural resources according to their traditional uses, ancestral craft activities and for subsistence purposes. Art. 59 determines that the activities carried out in the buffer zones of protected areas must contribute to the fulfillment of the objectives of the SNAP, within the framework of development planning and land use, proposing in Art. 63 the sustainable management of natural and semi-natural landscapes with environmental criteria. The aforementioned articles have not been fully complied with in practice, maintaining, on the contrary, socio-environmental conflicts within protected areas.

33. Within the secondary regulations, there are technical tools such as the Manual for the Operational Management of Protected Areas in Ecuador and the guidelines for planning protected areas, but these do not clearly mention the social function of protected areas, nor the mechanisms that should be used for a joint management that not only complies with the conservation of spaces and species, but also seeks sustainable development supported by the benefits that protected areas generate for the local population. The status of sustainable use zones within PAs, which includes entire towns, roads and plots with productive activities, is not clear in the legal framework. Therefore, it is necessary to recognize the existence of socio-environmental conflicts in the areas of sustainable use within the protected areas and in their buffer zones together with MAATE and the Decentralized Autonomous Governments (DAG), so that jointly, and in accordance with institutional competencies, adequate governance can be built, and aspects clarified that allow local populations to improve their living conditions in a sustainable way.

Barrier 2: Institutional weaknesses at the territorial level (provincial, municipal and parish) for planning and integrated management of buffer zones to prevent the loss of BD

34. Lack of regulations for management in the buffer zones of Protected Areas: The COA in its Art. 59 defines the buffer zones as areas adjacent to the areas of the SNAP. These areas can be public, private or community property and their objective is to contribute to the conservation of biodiversity and the integration of protected areas, the balance in urban-rural development and their ecosystem connectivity. The COA determines that the activities carried out in the buffer zones should contribute to the fulfillment of the objectives of the SNAP, within the framework of development planning and land use planning. For this, the DAGs will promote and encourage complementary actions and activities to guarantee conservation in these areas. Among these competences, some areas stand out in which DAGs can contribute to configure an integrated management of buffer zones. Thus, the provincial DAGs have, according to the Organic Code of Territorial Organization, Autonomy and Decentralization (COOTAD), powers to formulate the Land Use and Development Plan (LUDP) of their jurisdictions, undertake provincial environmental management and the promotion of agricultural activities (Art. 42). The parochial DAGs, for their part, are in charge of the organization of their territory, the promotion of investment and the economic development mainly of the social and solidarity economy (Art. 64); the promotion of productive community activities, the preservation of biodiversity and the protection of the environment (Art. 65). Thus, the provincial and parochial DAGs have an impact on the buffer zones, recognized by the COA as a type of special area for the conservation of biodiversity. Although the cantonal DAGs do not have different competences in productive areas, their responsibility for the provision of basic services and the environmental

management of their territories explains why some municipal governments develop various strategies aimed at conserving the natural resources of their territory, with emphasis in the protection and management of watersheds. In the buffer zones, the COA points out the importance of the DAGs promoting complementary actions to guarantee their conservation, in order to contribute to the fulfillment of the objectives of the SNAP.

35. To achieve an adequate management of the buffer zones, it is necessary to recognize weaknesses in the capacities of the DAGs and the MAATE that need to be addressed. The inclusion within the national environmental regulations of the figure of the buffer zone, as a strategic territory located around the protected areas, was achieved in 2018. On the one hand, the MAATE is responsible for the delimitation of the buffer zones, and the generation of regulations to regulate their uses and other characteristics. Although the MAATE has made progress in defining the limits in some protected areas, there is still no legal framework that defines what criteria should be used for their definition; the relationship that in these areas should be maintained between the MAATE and the DAGs at all levels of government; nor clarity regarding the scope of activities that can take place in these areas.

36. The absence of regulations has determined that, up to now, the productive activities that are developed in the buffer zones do not differ in substance from others that are carried out in non-priority areas for conservation, making it difficult for them to effectively act as spaces for transition and ecosystem connectivity. This lack of sufficient legal and technical instruments by the MAATE, and the DAGs, to create the conditions for local people to make sustainable use of biodiversity and improve their livelihoods, is among the main causes for the protected areas not fulfilling their social function.

37. It is important to mention that among the measures for adaptation to climate change in Ecuador, the Nationally Determined Contributions (NDC) (2019) propose the generation of information to strengthen the management of agroclimatic risks, to establish early warning strategies for extreme weather events, such as those that can occur in buffer zones. Likewise, the NDCs propose the creation and strengthening of capacities on climate change and natural heritage management for social stakeholders, academics, researchers and governments. These measures are categorized as conditional, that is, they will be implemented only if there are means of implementation related to financing, capacity building and technology transfer that come from developed countries (Republic of Ecuador, 2019). These situations generate negative global indicators for the country, for example, according to the Global Adaptation Index (ND-GAIN), at a global level, Ecuador is ranked 62 among the countries least prepared for climatic events (University of Notre Dame, 2018).

38. Insufficient inter-institutional and inter-sectoral coordination in the territory between the different levels of government: Almost in general, the LUDPs of the DAGs omit any mention of conservation and the presence of PAs in their territories. More than ignorance of its existence, this omission is explained by the fact that the DAGs lack sufficient technical and economic capacities to integrate conservation-related areas into their planning. The fact that the Organic Law of Territorial Ordering, Land Use and Management (LOOTUGS) stipulates that LUDPs are issued in the same ordinance as the Land Management Use Plans (the latter with a validity of 12 years), limits an adequate integration of conservation related themes.

39. The panorama becomes more complex if it is considered that the DAGs have technical and budgetary limitations to identify strategies that link their management with protected areas, reinforcing the notion that conservation objectives can, in certain contexts, limit expectations for the improvement of life and development of local populations. Something similar happens with the integration of climate change criteria, barely included in the planning of the DAGs, despite being a national policy that can generate important inputs for territorial decision-making.

40. The limitations to coordinate territorial planning to the conservation of protected areas and the management of buffer zones is amplified by the absence of joint workspaces between the MAATE, MAG and the DAGs that allow the identification and promotion of strategies and alternatives that at the same time contribute to conservation and to the well-being of local populations. Coordination with other ministries such as Urban Development and Housing, and the Technical Secretariat "Ecuador Planifica" also requires strengthening in the perspective of analyzing the feasibility of structuring multisectoral integration models contemplated in current environmental legislation (Art. 6 of the Regulation to the Environmental Organic Code).

41. The lack of inter- and intra-institutional coordination results in the absence of agreements, isolated actions, confusion in the interpretation of the existing regulations and especially in the scope of the powers of the central government and the decentralized governments.

42. Among the normative and inter-institutional spheres, are the local inhabitants, who in general suffer poverty levels higher than the national average. For example, the Gonzalo Pizarro parish in the PNCC's area of influence has poverty levels close to 87%, and the Asunción parish of the Sucumbi canton, with influence on the PNS, has poverty levels of 97%. In contrast to this reality, the national average of rural poverty in Ecuador for the year 2020 was 47.9% (INEC 2021). This situation motivates local people to seek alternative livelihoods that sometimes translate into the legal and illegal exploitation of natural resources and the expansion of the agricultural frontier beyond the limits of protected areas.

43. In the context of the health emergency caused by COVID-19 and one of the largest contractions of the Ecuadorian economy in its history, with a drop in the Gross Domestic Product (GDP) of between 7.3% and 9.6% according to estimates of the Central Bank of Ecuador, vulnerable populations face even greater restrictions to find work. This reality determines that the exploitation of natural resources is presented as the first emerging option to obtain economic income, causing changes in land use that have almost doubled in some buffer zones of protected areas since the appearance of the virus (Escandón, personal communication).

Barrier 3: Conventional production systems and limited livelihoods exert and increase pressure on PAs and their ecosystem services

44. Lack of coordination of technical assistance services at the territory level: The MAG and the provincial, municipal and parochial DAGs carry out extension activities, mainly agricultural technical assistance; Meanwhile, the MAATE's actions in the territory are limited to compliance with the Management Plan for protected areas (internal limits) and incorporates certain accompaniment and coordination activities in support of local stakeholders, far removed from productive issues; and, with a high emphasis on environmental education processes. Each institution operates within the framework

of its competences: the MAATE works within the PAs; the MAG and the different levels of government (DAG) do their work in the buffer zones. These activities in the territory are not coordinated, which represents a double effort and weakens the management of the different institutions; or in certain cases, even these activities are in opposition to each other. At this point, it is important to consolidate a comprehensive intervention strategy in the territory with clear environmental guidelines for carrying out productive activities in the PA's areas of influence in coordination with the different institutional stakeholders.

45. Low capacity to implement sustainable practices in livestock, agriculture and tourism, which are the main sources of income for the inhabitants of the PAs. Although various projects have generated experiences in good practices, for example, elaboration of Comprehensive Farm Management Plans; crop rotation; agroforestry and silvopastoral systems; seals or certifications for deforestation-free agricultural production; traceability systems; climate-smart livestock production; management and conservation of natural resources, and protection of watersheds and water sources, these have not been applied in PA's areas of influence. Therefore, there are information and knowledge gaps and insufficient experience for their implementation in these areas. At the beneficiary level, the population settled in the area of influence does not perceive any additional value or benefit in their income for being in the area of influence of the PAs, as well as they are unaware of the impacts that arise from their conventional activities that lack sustainability. At this point, it is important that the population settled in the area of influence of the PA, recognize themselves as stakeholders capable of contributing to the consolidation of the SEAP, through support to sustainable activities such as tourism and bio-enterprises and the reconversion of unsustainable production systems to help boost the economy.

46. Lack of incentives to carry out sustainable productive activities within PAs. The populations settled in the buffer and sustainable use zones of the Cayambe Coca and Sangay National Parks grow various agricultural products, which represent the basic source of food supplies for families and provide a small source of income. An important productive force linked to livestock production activities exist, especially the production of raw milk and to a lesser degree dairy by-products. Regarding value chains related to endemic species, the following have been identified: *morti?o*, porot?n and sunfo in the PNCC; and, honey, pollen, vanilla and alpaca fiber in the PNS. It is important to mention that the productive development of these species is in a state of idea or initial development. There is a strong relationship between the elaboration of handicrafts and the flow of visitors that is registered in certain parishes of influence of the PAs. Handicrafts are based on the extraction of non-timber products to obtain fibers, seeds, dyes and barks, elements that are used for the generation of popular expressions of art, which are marketed as souvenirs.

47. On the other hand, by not having legal, technical, financial or institutional conditions that allow improving the livelihoods of the local population living in the areas of sustainable use of the protected areas, the local inhabitants seek to generate income quickly, but unsustainably, which includes the illegal extraction of biodiversity in PAs and their buffer zones. Activities that have increased with the COVID-19 pandemic, since many people who migrated to the cities have returned to the countryside because they lost their jobs and, out of necessity, have incurred in such activities. In a context where an unsustainable activity is more profitable than an sustainable activity, for example the illegal sale of

wood, which is more profitable than the income obtained by a community from the Socio Bosque Program. Hence, it is necessary to be able to generate the conditions for local people to develop other alternatives that not only to improve their livelihoods, but also to contribute to the conservation of biodiversity.

48. There is an important gap to close, which is the productive-financial gap between the successful small producer, who probably belongs to a consolidated organization, and the one who is still in poverty; the latter characterized by: conflicts in land tenure, which means the lack of legalization (property titles) and other forms of recognition of rights (management and use agreements); limited technical assistance and specific training to promote alternative and sustainable production systems by the responsible ministries and the DAGs (within the framework of their respective competencies); limited financial products and services that promote investments for the transition from conventional productive activities to alternative production systems, particularly bio-enterprises; market access restrictions; due to reasons such as low levels of production and prices, little negotiation capacity, high intermediation and speculation; difficulties in accessing productive inputs, lack of infrastructure and technology for storage and transformation processes; and, a high transfer of climatic risks to the producer. This is further complicated by the weakness of the smallholder farmer organizations and associations, which in turn leads to the generation of significant trade deficits, determining the growth and development possibilities of the producers.

49. These are undoubtedly the main difficulties faced by the producer to enter the large markets individually. It is necessary to coordinate the different efforts and institutional experience of the MAATE, MAG and DAGs, related to improving the quality of production and yields, alternative marketing circuits (fairs, markets, stores), financial administrative capacities, and especially in the generation of seals, recognitions and certifications within the framework of MAG, MAATE and the private sector, for which it is necessary to include sustainability principles addressing PAs in the different seals (Smallholder Family Farming, Green Point for deforestation-free agricultural production, and local Participatory Guarantee Systems). Regarding access to financing, it is necessary to strengthen organizations to obtain greater credibility and ensure that their members may access financial support.

50. GEF and international cooperation projects have tried to promote and strengthen sustainable value chains related to the use of biodiversity under a biotrade context in the Amazon; however, serious limitations have been found. For example, after two years of work on the coast and in the Amazon, the German Agency for International Cooperation (GIZ) concluded that the inhabitants do not make use of local biodiversity for production, therefore, it is unlikely that it can directly contribute to the strengthening of value chains or the creation of new biodiversity products.

51. The aforementioned drives an economic development that is generating a change in land use in the buffer zones of the protected areas. Productive activities related to obtaining food, fiber, wood, oils or human settlements, which in many cases are also present, are degrading or destroying native ecosystems. These changes in land use, in addition to promoting climate change due to deforestation, alters flows and quality of water or increases disease vectors, and is generating an unprecedented rate of erosion of biodiversity due to the fragmentation and destruction of ecosystems (Foley et al., 20115 in

Montes and Palomo 2015). The destruction and degradation of species' habitats is now considered to be the most important direct driver of global biodiversity loss (WWF 2014 in Montes and Palomo 2015).

2) Baseline scenario and associated projects

Institutional Framework

52. In Ecuador, **MAATE** is the national authority in charge of the management of State protected areas and is the lead Ministry for environmental issues at the national level. The MAATE exercises the leading role of environmental management with the following attributions: i) issue the national environmental policy; ii) establish standards and control and monitoring mechanisms for the conservation, sustainable management and restoration of biodiversity and natural heritage; iii) grant and control environmental permits within the framework of its competences, and iv) create, promote, and implement environmental incentives. Within the MAATE, the Undersecretariat of Natural Heritage through the Directorate of Forests, the Directorate of Biodiversity, and the Directorate of Protected Areas and Other Forms of Conservation are the management units responsible for the management of protected areas and biodiversity at the national level. By Executive Decree No. 1007 of March 4, 2020, the Secretariat of Water and the Ministry of the Environment were merged, with MAATE assuming the competencies, attributions and processes corresponding to the previous Water Authority as well as the direction, planning, and management of the water resources. With the issuance of the COA and its regulation the MAATE is responsible for legalizing land tenure in PAs, a new and challenging responsibility for the institution.

53. The **MAG** is charged with governing, coordinating and regulating public policies on rural land for agricultural production and to guarantee food sovereignty. In its capacity as National Agrarian Authority, its competences and attributions include: i) controlling compliance with the social function and environmental function of rural land, ii) regulating the sustainable use of land with agricultural or forestry aptitudes, iii) elaborating national policies for agricultural development; iv) execute and promote sustainable productive projects, and productive diversification and reconversion of smallholder family farming properties; v) allocate rural lands for agricultural production purposes as part of agrarian land redistribution programs; vi) award the property titles to the lands under ancestral possession of communities, communes, peoples and indigenous nationalities, Afro-Ecuadorians and Montubians; vii) regulate and control the use of products and technologies that may affect soils; viii) establish mechanisms and incentives for the productive integration of small and medium family farmers; ix) provide technical assistance, training and technological innovation to improve productivity and facilitate access to markets. Under its mandate is the administration of the Agricultural Public Information System (SIPA) whose objective is to generate, manage and provide timely information to producers and economic agents that participate in production and in agricultural markets and services related to rural land. The MAG has several undersecretariats closely linked to the area of interest of this project: the Undersecretariat of Smallholder Family Farming, the Undersecretariat of Agricultural Production, and the Coordination of Agricultural Analysis and Studies and Policies.

54. Additionally, within the framework of decentralization efforts promoted since 1998 in the country, other fundamental responsibilities in the field of biodiversity conservation and natural resource management fall under the **DAGs**. The DAGs (provincial, cantonal and parochial) operate within the scope of their territorial units and have within their purposes: i) equitable and supportive development by strengthening the process of autonomy and decentralization; ii) the recovery and conservation of nature and the maintenance of a tenable and sustainable environment; iii) obtaining a safe and healthy habitat for citizens; the protection and promotion of cultural diversity and respect for its spaces for generation and exchange and the preservation and development of cultural heritage; iv) participatory planned development to transform reality and achieve good living; and, v) the promotion of productive activities.

55. The DAGs exercise their powers in environmental management matters within their territories. The DAGs have various functions that are complementary to those exercised by the MAATE, such as: a) promote the sustainable development of its provincial territory; b) prepare and execute the provincial land use and development plan; c) promote provincial productive and agricultural activities, in coordination with other decentralized governments; d) assume provincial environmental management. In the case of the cantonal DAGs, some of their functions make it possible to coordinate the management of these governments with the objectives of managing the buffer zones, such as: a) the preparation and execution of the cantonal development and land use planning plan, b) the promotion of local economic development processes with special attention to the social and solidarity economy sector and c) preparation of the management and land use plans. In relation to rural parish DAGs, some of the relevant functions include: a) preparation and execution of the rural parish development and territorial land use plan; b) promotion of investment and economic development, especially of the popular and solidarity economy; and, c) promotion of community productive activities, preservation of biodiversity and environmental protection. The activities of the DAGs must be coordinated with the environmental policies, programs and projects of all other levels of government and in the case of the buffer zones, the MAATE must coordinate with the DAGs to contribute to the fulfillment of the objectives of the national protected areas.

National policies and strategies on protected areas and biodiversity.

56. In Ecuador, several national policies have been developed for the conservation of biodiversity and its management. The **National Development Plan 2017-2021 ?A Lifetime?** is organized into three programmatic axes and nine national development objectives which are linked to the conservation and sustainable use of biodiversity, Axis 1: Rights for All Throughout a Lifetime, among whose objectives is to guarantee the rights of nature for current and future generations (Objective 3), and Axis 2: Economy at the Service of Society, whose Objective 6 is to develop productive capacities and the environment to achieve food sovereignty and Rural Good Living.

57. The **National Biodiversity Strategy (NBS) 2015-2030** proposes a set of measures that aim to guarantee the human right to live in a healthy, pollution-free and sustainable environment, safeguarding the rights of nature. Its four strategic objectives are: 1) Incorporate biodiversity, goods and associated ecosystem services in the management of public policies; 2) Reduce the pressures and inappropriate use of biodiversity to levels that ensure its conservation; 3) Fairly and equitably share the benefits of biodiversity and associated ecosystem services, taking into account gender and intercultural

specificities; 4) Strengthen knowledge management and national capacities that promote innovation in the sustainable use of biodiversity and ecosystem services.

58. The **Strategic Plan of the National System of Protected Areas 2019-2030** has as objectives: 1) Conserve biological diversity and genetic resources contained in the SNAP; 2) Provide alternatives for the sustainable use of natural resources and the provision of environmental goods and services; and 3) Contribute to the improvement of the quality of life of the inhabitants.

59. The **Ecuadorian Agricultural Policy: towards sustainable rural territorial development 2015-2025** for its part, seeks to reverse the structural tendencies of an exclusive agrarian model, which has exhausted the base of natural resources, to replace it with a new scheme focused on four strategic objectives: a) contribute to reducing poverty and socioeconomic inequality of rural inhabitants, particularly, improving the social inclusion of small and medium-scale farmers residing in the countryside; b) improve the contribution of agriculture to guarantee food security and sovereignty of the Ecuadorian population; c) enhance the contribution of agriculture to rural territorial development and national economic growth with social inclusion and sustainable agricultural systems; d) support the change of the national productive matrix, regarding the substitution of primary and agro-industrial imports, diversification of the exportable supply, and generation of the primary base for agro-industrial development. It pays special attention to small agricultural units, family farming, as well as associativity and community work. This policy is relevant because it allows the articulation of agricultural development, which exerts pressure on protected areas, towards an agricultural model oriented by a sustainable use of land, water, genetic resources and other natural resources used for food and fundamental agricultural production for local populations.

60. The **REDD+ Action Plan 2016-2025** provides guidelines for implementing REDD+ based on four specific objectives: 1) Support the articulation of intersectoral and governmental policies, and mainstream climate change in public policies; 2) Support the transition towards sustainable production systems free from deforestation; 3) Improve sustainable forest management and the use of non-timber forest products; 4) Contribute to the sustainability of initiatives that seek the conservation and regeneration of forest cover within the framework of the goals established in the National Development Plan and other national policies.

61. At the local level, the provinces of Napo, Sucumb?os, Pichincha, Imbabura, Chimborazo, Morona Santiago, Ca?ar, and Tungurahua where the project will intervene, have **LUDPs** which express objectives and programs to improve the quality of life of their populations, socio-economic development without undermining the environment, and respect for the socio-cultural particularities of the peoples and nationalities that inhabit the territories of the provinces.

Legal Framework

62. The **Constitution of Ecuador** approved in 2008 recognizes the rights of nature as a fundamental element. The SNAP guarantees the conservation of biodiversity and the maintenance of ecological functions. The extractive activity of non-renewable resources is prohibited in PAs and areas declared as intangible, including forestry, metal mining is prohibited in any of its phases in PAs, urban centers and intangible areas. Specific manuals, regulations and legal framework for the management of

PA have been developed. The Constitution also recognizes and guarantees communes, communities, peoples and indigenous nationalities to participate in the use, usufruct and administration and conservation of the renewable natural rights found on their lands, as well as Free, Prior and Informed consultation on nonrenewable resource plans and programs. The State will regulate the use and access to land that must comply with the social and environmental function, the inclusion of agro-biodiversity in public policy, the sustainable management of agriculture, climate-smart strategies for livestock production, the strengthening of sustainable practices that help reduce the pressure on natural resources, land use plans, among others. Likewise, the Constitution determines the exclusive competencies of the DAGs at their different levels to preserve biodiversity and protect the environment. The Constitution also determines that in case of doubt about the scope of the legal provisions on environmental matters, they will be applied in the most favorable sense to the protection of nature. In addition it declares the conservation of biodiversity to be of public interest. It also has as objectives of the fiscal policy: 1) financing of services, investment and public goods; 2) the redistribution of income through appropriate transfers, taxes and subsidies, 3) the generation of incentives for investment in the different sectors of the economy and for the production of socially desirable and environmentally responsible goods and services.

63. The **COA** entered into force in 2018 and its Regulations in 2019. These legal bodies are intended to guarantee the right of people to live in a healthy and ecologically balanced environment; it regulates the environmental rights, duties and guarantees contained in the Constitution. Among others, the COA addresses issues such as climate change, protected areas, wildlife, forest heritage, environmental quality, waste management, environmental incentives, marine-coastal zone, mangroves, access to genetic resources, biosecurity and biotrade. The COA defines new scenarios for the management of PAs and the communities within them, including aspects such as the PA's vision of contribution to development and their integration into LUDPs; the regularization of land tenure within PAs, thus recognizing the importance for the conservation of biodiversity, including environmental buffer zones and the provisions under which they will be developed. In accordance with the the PA zoning, the activities in the buffer zones will be carried out in accordance with the regulations issued by the National Environmental Authority and will be subject to the guidelines established to minimize or eliminate impacts or threats on the protected areas.

64. The National Environmental Authority will coordinate with the DAGs the integration of the buffer zones in their development plans and land use planning. The COA also establishes the objectives of the natural areas incorporated into the SNAP.

65. The **COOTAD** establishes the regime of the different levels of decentralized autonomous governments and the special regimes. It also provides for the exercise of environmental management competencies, the exercise of state protection over the environment, the co-responsibility of citizens in its preservation, and the coordination through a decentralized national environmental management system. The provincial DAGs have the competence to govern, direct, order, arrange, or organize environmental management, and the defense of the environment and nature within their territory. The rural parish DAGs will promote activities for the preservation of biodiversity and environmental protection, for which they will promote programs and/or projects for the sustainable management of natural resources and the recovery of fragile ecosystems in their territory; protection of water sources

and courses; prevention and recovery of soils degraded by pollution, desertification and erosion; afforestation and reforestation with the preferential use of native species adapted to the area; and, environmental education, organization and citizen oversight of environmental and nature rights. These activities will be coordinated with the environmental policies, programs and projects of all other levels of government, on conservation and sustainable use of natural resources.

66. The **Organic Law of Territorial Ordering, Land Use and Management** (LOOTUGS) determines the general principles and rules that govern the exercise of the powers of territorial ordering, use and management of urban and rural land in accordance with the responsibilities of the different levels of government. In this sense, the Law promotes the rational and sustainable use of the territory's resources, the protection of the natural and cultural heritage, and the regulation of interventions in the territory, proposing and implementing norms that guide the formulation and execution of public policies.

67. The **Organic Law of Rural Lands and Ancestral Territories** establishes as a national priority the protection and use of rural production land and the safeguarding of its environmental function. It regulates the relations of the State with natural and legal persons, national and foreign, in matters of rural lands; and of communes and communities, peoples and nationalities in terms of the recognition and awarding of territories that are in ancestral possession, free of charge^[3]; and to the protection and legal security of the lands and territories they own. The MAATE and the MAG are responsible for defining the sole procedure for the delimitation and award to communes, communities, peoples and nationalities, of lands and territories in ancestral possession in PAs, State forest heritage or public protective forests and vegetation.

68. The purpose of the **Organic Law of Citizen Participation and Social Control** is to promote, encourage and guarantee the exercise of the rights of participation of citizens in public management decision-making, the establishment of instances, mechanisms, instruments and procedures for public deliberation between the State, at its different levels of government, and society. It includes aspects such as the creation of advisory councils by the DAGs as advisory mechanisms made up of citizens, or by civil organizations that are constituted in consultation spaces and systems. It establishes that the State will recognize and guarantee to the communes, communities, indigenous peoples and nationalities, Afro-Ecuadorian and Montubian peoples, the collective right to Free, Prior and Informed consultation, regarding plans and programs for the prospecting, exploitation and commercialization of non-renewable resources in their territories and lands, as well as the participation in the benefits that these projects will deliver. In the case of decisions or state authorization that may affect the environment, the community should be consulted, for which it will be informed widely and in a timely manner.

69. The **Organic Code of Production, Trade and Investments** regulates the production process in the stages of production, distribution, exchange, trade, consumption, management of externalities and productive investments aimed at achieving Good Living. It promotes investment in sustainable initiatives in priority economic sectors: production of fresh, frozen and industrialized food; the forestry

and agroforestry chain and its processed products. It also establishes tax incentives for productive investments, especially for clean and sustainable production, and promotes the community socio-productive model. It emphasizes production with an environmentally responsible conscience.

70. The **Organic Law for Productive Development, Investment Attraction, Employment Generation, and Fiscal Stability and Balance**: The Law seeks to stimulate the economy, promote investment and employment, as well as long-term fiscal sustainability, and establishes specific incentives to attract private investment, including the agro-industrial and agro-associative sectors, such as exemption from income tax.

Baseline Initiatives

Strengthening and management of Protected Areas

71. The **Amazon without Fire Program (PAF)** was created in 2017 to face the challenges related to mitigating and reducing the harmful effects of fire in the PAs of Ecuador. The objective of this program is to reduce the incidence of forest fires, through the implementation of alternative practices to the use of fire in rural areas, helping to protect the environment and improve the living conditions of communities (FIAS 2021). The strategic lines include the development of national and subnational planning tools; the strengthening of capacities in fire management; construction of public policy regarding integral fire management; communication, environmental education and awareness; promotion of alternatives to the use of fire and agroforestry extension (FIAS 2021). It is implemented in the provinces of Pichincha and Imbabura in the PNCC's area of influence.

72. The **Protected Areas Fund (FAP)** is a financial sustainability mechanism, which is part of the Sustainable Environmental Investment Fund (FIAS) created in 2002 to support SNAP in the protection, conservation and sustainable management of natural resources and the environment, to cover basic operating expenses of the PAs, strengthen the SNAP and support the self-sustainable development of the communities (FIAS 2021). It has a net worth of USD 29,035,179, and in 2019 it included 43 PAs. For the year 2021, the FAP plans to invest USD 70,000 for the PNCC and USD 75,000 for the PNS to cover operating expenses such as maintenance of infrastructure, vehicles and purchasing some items.

73. The MAATE, through the National Directorate of Protected Areas, is producing a study **Development of instruments and protocols for the implementation of the Biodiversity Management Program of the National System of Protected Areas**. Through this study, the guidelines will be established to implement in a coordinated manner the Biodiversity Management program proposed in the PA management plans. This study will determine the most appropriate strategies so that the research carried out in each of the PAs can prioritize conservation values. This will include defining the phases of the research process, which includes, among other things, advance planning, data collection, information processing, and knowledge transfer to support decision-making.

74. Likewise, the MAATE is conducting with GIZ support the study **Preparation of the technical standard that defines the methodology and guidelines for the establishment and management of buffer zones of protected areas**, which includes the definition of the methodology to establish the buffer zones of the PAs and the proposal of guidelines for their management, in a coordinated way with

processes of land use planning, use and management of the land of the DAGs. This study will clarify the legal gaps in the management of these areas, which, although important for the conservation of PAs, are under the legal competence of local DAGs (parochial, municipal and provincial). This national level standard is complementary to those proposed to be developed under this project.

75. The MAATE manages the **SUIA** that provides public information on protected areas, deforestation, ecosystems, land use systems, national environmental indicators, and others. The SUIA is interconnected with the National Information System (SNI), which is the national information platform for planning and public investment administered by the Technical Planning Secretariat of Ecuador Plans. Under SUIA, in the area of PAs, the **SIB** permanently collects administrative records of tour operators and guides, as well as the entry of visitors, with details of origin, demographic groups (ages), if the entry is individual or with an operator. The data is generated in the field under the responsibility of the technicians and park rangers, for the purpose of building statistics, on a daily and monthly basis. This information contributes both at the level of MAATE Central, as well as in each PA in making decisions that facilitate the administration of PAs. For the management of the PAs at the national level, the MAATE uses the Spatial Monitoring and Reporting Tool (**SMART**) that is in the process of being implemented in the PNCC and PNS. This provides for an improvement in the coordination of patrols, in planning operations and activities of the PA, monitoring the daily activities of the checkpoints, obtaining trends of illegal activities. Field training in the use of SMART is being conducted by the Wildlife Conservation Society (WCS).

76. The MAATE implements the **“Aula Verde” (Green Classroom) Program** through which it has trained about 800 people who work in PAs on issues related to planning, finance, environmental legislation, communication, among others. In addition, the MAATE has implemented a competitive grant mechanism to finance community projects in buffer zones of the PAs.

77. **The Associative Microenterprise of Environmental Promoters CUTIN** is a park rangers’ community company whose financing comes from FONAPA. The park rangers are mainly young men and women from the local communities and through this micro-enterprise they not only have a job, but also the possibility of receiving training on issues related to conservation. CUTIN’s experience could be replicated in other PAs and in other sectors of the same PNS as an alternative of income and employment for young people.

Conservation and sustainable management of BD and natural resources

78. The **Natural Heritage Conservation and Sustainable Use Program** funded by the Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by GIZ supports the protection and sustainable use of biodiversity in the Amazon and the Ecuadorian Coast. The objective of the program is to improve the conditions for the conservation of PAs and conservation and sustainable use of biodiversity. The target group of the program is the local population living within the protected areas as well as in the surrounding buffer zones, with special emphasis on the poor and disadvantaged population (GIZ 2021). Its components include strengthening the management model of the protected areas system; advice on the consolidation and replication of bio-enterprises based on the sustainable use of biodiversity; promotion of the implementation of land use planning and planning guidelines and tools; and strengthening of the MAATE to exercise its coordinating role in the areas of

protected areas and the bioeconomy (GIZ 2021). The province of Morona Santiago in the PNS's area of influence is among the intervention areas of this program. Among the most important achievements are: support to the guayusa (*Ilex guayusa*), vanilla and sustainable tourism value chains; support for DAGs; creation and strengthening of the bioeconomy pact, jointly with the MAATE, Ministry of Production and the MAG. At the end of the project, there will be access to manuals for productive chains of native species, a participatory management standard, a baseline of environmental services focused on benefits for local people, a standard on non-timber forest products, among others.

79. The **Sustainable Valuation of Biodiversity in the Amazon and the Coast - BioValor** Program funded by GIZ and MAATE will start in 2022 and aims to work in certain coastal and Amazonian landscapes, with key stakeholders from local and indigenous communities, the private sector, local governments, the academia and the central government to implement economic development strategies that conserve biodiversity. The target group for this program are agricultural and aquaculture producers and fishermen and their organizations on the Pacific coast as well as agricultural producers and indigenous communities and their organizations in the Ecuadorian Amazon region.

80. The **REDD+ Pay for Results** Project funded by the Green Climate Fund has a national scope and seeks to contribute to forest restoration efforts, implement climate change mitigation measures with the DAGs, regularize lands within protected areas and protective forests and strengthen the capacities of the MAATE. It will implement mechanisms aimed at strengthening forest governance, developing sustainable productive alternatives, restoring forests, and strengthening REDD+ in indigenous territories.

81. The **Prepare financial and land use planning instruments to reduce emissions from deforestation** Project financed by the Green Climate Fund is executed by the MAATE and seeks to implement the policies and priority measures identified in the country's REDD + Action Plan. This initiative contributes to reducing CO2 emissions generated by the Land Use, Land Use Change and Forestry sector, including the control of agricultural expansion in forested areas and agricultural production practices to reduce deforestation; land use plans aligned with national climate change goals; restoration, conservation and sustainable production in vulnerable watersheds; support for credit lines for sustainable production; and strengthening practices for the acquisition of deforestation-free products. The project develops activities in the buffer zones of the PNCC and the PNS.

82. The **Conservation and Sustainable Use of Mountain Ecosystems Program ?Mountains Program?** is implemented by the MAATE with financial support from BMZ. Its objective is to improve the restoration of Andean high mountain ecosystems impaired by climate change and includes Tungurahua, Chimborazo and Cañar among the provinces where it will intervene. The program is aimed especially at small farmers with an indigenous and mestizo population who apply territorial management practices and seek to use ecosystems in a sustainable way to improve and strengthen the livelihoods of the target groups, the restoration of degraded areas with high ecosystem value and the strengthening of governance and technical exchange spaces.

83. The **Nature and Culture International** (NCI) Corporation is dedicated to the conservation of biological and cultural diversity, developing activities in several municipalities in the Morona Santiago

province that are part of the PNS buffer zone, including Palora, Pablo Sexto, Morona, Santiago de M?ndez and Huamboya. Among its main work strategies are the creation and strengthening of Areas for the Conservation and Sustainable Use of Biodiversity (ACUS); promoting conservation agreements with farm owners; and training local DAG technicians for proper management of ACUS through its School of Water program.

84. The **Socio-Bosque Program (PSB)** arose in 2008 with the objective of conserving native forests, moors and other native plant formations of Ecuador through granting and economic compensation to the landowners who commit to their conservation and protection. The PSB is a compensation mechanism for conservation that allows, through incentives, to grant a direct monetary transfer to rural and local families and indigenous communities and, in this way, contribute to the reduction of poverty. In the provinces of Napo, Sucumb?os and Pichincha in the PNCC's area of influence, there are 497 agreements benefiting 15,283 beneficiaries and covering 201,858 hectares, reaching more than USD 1.8 million. In the provinces of Ca?ar, Chimborazo and Morona Santiago in the area of influence of the PNS there are 378 agreements with 23,183 beneficiaries covering 194,675 hectares, reaching more than USD 2 million in incentives.

85. The **REDD Early Movers (REM) Program** is implemented by the MAATE jointly with the MAG and financed by the KfW Development Bank and the International Climate and Forest Initiative (NICFI) of Norway and the funds are managed by the Fund for Sustainable Environmental Investment (FIAS). It is a results-based payments program for reducing emissions from deforestation and forest degradation (REDD). The program will work on conservation projects with communities, peoples and nationalities, productive systems and deforestation-free production, and forest management, including in the provinces of Chimborazo, Morona Santiago, and Napo.

86. Water funds are sustainable financial mechanisms that emerged as a local response to water security problems, based on the conservation of watersheds and water sources. Water funds finance activities that promote conservation and ensure the provision of water-related ecosystem goods and services. The water funds that operate in the areas of influence of the PNCC and PNS are the **Fund for the Protection of Water (FONAG)** and the **Water Fund for the Conservation of the Rio Paute Watershed (FONAPA)**. FONAG in the city of Quito (DMQ) has five programs: 1) Water Conservation and Sustainability, 2) Water Management, 3) Recovery of Vegetation Cover, 4) Communication and 5) Environmental Education. Part of the water sources of the DMQ are found in the foothills of the PNCC (for example the Chalpi Grande river basin); therefore, FONAG works directly with the MAATE to support actions of common interest that promote the conservation of water sources for human consumption, mainly in the Papalla, Cayambe, Pifo, Yaruqu?, Oyacachi, Cuyuja and Chalpi parishes. The Cerro Las Puntas Wetlands Protection Area is one of the most relevant areas where FONAG works; it is located in the DMQ, between the eastern rural parishes of El Quinde, Checa, Yaruqu?, and Pifo. FONAPA in the city of Cuenca aims to contribute to the conservation, protection, preservation and recovery of the water resource and ecological environment in the Paute river basin, part of which is located in the area of influence of the PNS. FONAPA supports the aforementioned CUTIN park rangers?micro-enterprise, who work in patrolling, education and environmental awareness within the PNS.

87. The **Life Fund** of the province of Chimborazo has recently been formed in 2020 and the **Napo Water Conservation and Sustainable Development Fund** (FODESNA) in 2021. The former will operate as a trust funded by various local governments in the province, including the prefecture, the Chimborazo Power Company and the irrigation boards. The latter is conceived as a trust fund that promotes innovative financing schemes for the conservation of biodiversity and the sustainable management of natural resources.

88. The municipal DAG of Morona has supported the consolidation of tourism ventures in the buffer zone of the PNS as it has identified that tourism generates greater environmental awareness. In addition, it implements the **Governance Strengthening Program in Cantonal Water Sources** aimed at strengthening the Alto Upano ACUS and the creation and strengthening of the R?o Quebrada ACUS, for the protection of nine water sources in the canton. The Provincial DAG of Pichincha in its LUDP 2013-2019 includes strategies for the conservation and management of moors among which the establishment of conservation corridors between the PANE protected areas and those that belong to the province, private owners and communities. The Municipal DAG El Chaco, based on its tourist potential, has obtained the support of the Ministry of Tourism to become a **“Pueblo M?gico”** (Magic Town), a characterization that will allow it to strengthen its role as a tourist destination. The Municipal DAG Gonzalo Pizarro supports restoration and conservation of water sources in the La Libertad River basin for the provision of water to the city. It has a nursery for the production of plants and supports local productive and reforestation initiatives.

89. Several NGOs have developed and are developing activities in the proposed areas of intervention. **The Center for Development, Diffusion and Social Research (CEDIS)** has worked in Chimborazo for more than 20 years and, therefore, has extensive knowledge of its reality. It has concentrated its work with indigenous populations in the rural sector, promoting environmental management, organizational strengthening and participatory planning. Additionally, it has promoted community tourism initiatives in areas such as Ozogochi in the PNS. The **Rikcharina Foundation** worked until 2018 in the area of influence of the PNS focused on conflict management, especially in Ca?ar where a series of cooperatives are present that began processes of land divisions. The lessons learned after more than 10 years of work in the area warn of the need to support the organizational strengthening of the communities to stop the fragmentation of the land, as well as to work in coordination with the local DAG in order to link smallholder farmer production with intermediate cities. **Ecominga** carries out the purchase of land and environmental monitoring actions. They also have lines of support for local communities in promoting tourism ventures.

Livelihood improvement: sustainable production, incentives, value chains and markets

90. The MAG implements the **Smallholder Farmer Family Agriculture Program** that seeks to strengthen the social fabric within and between the organizations of producers of smallholder farmer family agriculture, through a systemic approach aimed at working on the productive chain, on the factors or means that allow the production and development of the economy of rural family farmers.

91. The Project **Andean Landscapes: Promotion of Integrated Landscape Management for Sustainable Livelihoods in the Ecuadorian Andes** is implemented by FAO, MAATE and MAG with financial support from the European Union (EU) and includes Pichincha among the intervention provinces. It seeks to promote sustainable and efficient production systems, through integrated landscape management to help reduce the rural poverty rate. This will be done through the pillars: 1) strengthening national and local governance and policy instruments for sustainable land management; 2) conservation, restoration and SLM mechanisms in forest and productive landscapes; and 3) increasing productivity in sustainable value chains, through the improvement of rural extension, marketing and financial services.

92. The municipal DAG of Cayambe implements the **Popular Solidarity Economy and Food Sovereignty Programs** aimed at supporting agroecological marketing with vulnerable groups, the protection of water sources, the reduction of the agricultural frontier and the generation of an ordinance for agroecological certification. This is a work coordinated with the Cantonal Movement of Women that brings together 800 producers. The Parish Board of Cebadas in the buffer zone of the PNS has a **Life Plan** which main strategies aim to reconcile the improvement of the living conditions of the five communities that make up Cebadas and the management of 809 ha of moors and 30 water sources, under the premise that protection activities should be rewarded with works and services by the authorities (DAG Parroquial Cebadas, 2021). The Provincial DAG of Napo within the framework of its **LUDP 2020-2023** will implement some policies, including: 1) training program on good practices for sustainable production; 2) School of Environmental Leadership; 3) strengthening of family agriculture, especially the farm as a traditional productive system of the province; 4) promotion of biotrade through five products (vanilla, orchids, broom fiber palm, guayusa, tikaso ? *Plukenetia volubilis*); and conservation tourism.

93. There are numerous producer associations and unions in the areas of influence of the PNCC and PNS that have initiatives for the production of goods and services. In the PNCC, more than 1,000 producers carry out activities in the tourism value chain, trout and tilapia cultivation, extraction of morti?o, processed poroton, production of raw milk, dairy by-products, forest plantations (cane-bamboo), family gardens (tomato, babaco or mountain papaya - *Carica pentagona*, pepper, blackberry, guava, naranjilla - *Solanum quitoense*, leaf or stem vegetables) and cocoa. The production is destined for both local, national and international markets in the case of tourism. In the PNS there are more than 1,600 producers who are dedicated to tourism, production of cereals, beef and sheep meat, raw milk, dairy products, extraction of wood, vegetables, alpaca fiber, vanilla, honey and pollen, coffee and cocoa. The production is destined for the local, national and international markets (tourism, alpaca fiber and coffee).

94. Although there are no incentives specifically developed to support the conservation and sustainable use of protected areas, both the public and private sectors have developed legal, technical and procedural instruments or mechanisms that can be applied in sustainable use zones and buffer zones of the PA and contribute directly and indirectly to an adequate management of biodiversity. In terms of tax incentives of national application, there are benefits, deductions and exemption from taxes related to the sales of agricultural, livestock, forestry and aquaculture products; purchase of machinery for clean production; exemption from income tax as part of a strategy to promote tourism activities; and

in a general way, the exemption of rural land tax that have moorland or are destined to the protection or ecological reserve, belonging to communes, indigenous peoples, cooperatives, unions, federations and confederations of cooperatives and other associations of small farmers that are legally recognized; wetland areas and natural forests duly qualified by the environmental authority, among others. In general, the State, through the MAATE and MAG, and with the support of international cooperation have been developing guidelines and tools to promote bio-enterprises, agro-ecological production, climate-smart livestock farming; organic agricultural production; and they promote voluntary independent certification processes, namely Green Point for Deforestation-Free Agricultural Production, Chakra Seal and Smallholder Farmer Family Agriculture Seal. At the national level there are at least 67 DAGs that have issued ordinances that promote economic instruments for the conservation, sustainable use of biodiversity, as well as environmental quality, which together add up to about 91 initiatives, of which 63 correspond to economic initiatives that have a monetary transfer and 28 to non-monetary ones (Lascano and Mosquera, 2018).

95. Ecuador has made important advances in the conservation of global biodiversity in its territory, including the development of manuals, regulations and specific legal framework for the management of PAs, the inclusion of agro-biodiversity in public policy, sustainable agricultural production strategies and practices that help reduce pressure on natural resources, and land use plans, among others. Likewise, the country has proposed to have an efficient SEAP management model that meets the conservation objectives, takes into account social participation and ensures the sustainable use of environmental goods and services, as well as through the identification of opportunities, generation of capacities and promotion of conditions to ensure stable and long-term financing. In this sense, the MAATE has made important efforts, among others, the creation of PAs (33% of PAs were created in the last 12 years), the decentralization of responsibilities in the field of biodiversity conservation and natural resource management to the DAGs, the training of nearly 800 people who work in PA, and the implementation of a competitive fund mechanism to finance community projects in PA buffer zones.

96. Despite these advances, in the business-as-usual scenario, these efforts are still not sufficient to remove the identified challenges. Without the intervention of the Global Environment Facility (GEF), the weaknesses identified and described in detail in Section 1 Project Description - Remaining Barriers will persist. The institutional weaknesses for intersectoral and multilevel coordination; outdated regulations and loopholes for PA buffer zone management; lack of access to capital, adequate knowledge and appropriate incentives for sustainable production; and unfavorable market conditions are barriers to the scaling up and broad adoption of sustainable practices to reduce pressures on PAs. Under these conditions, the baseline initiatives will then not have enough momentum to generate transformational and learning change, with adequate upscaling and replication to reduce and reverse deforestation and forest degradation processes to promote the sustainable development of rural communities, ensuring the provision of ecosystem services and food sovereignty. This is the GEF entry point.

3) The proposed alternate scenario with a brief description of the expected results and components of the project and the Theory of Change of the project.

Project intervention strategy

97. The Ecuadorian State has proposed to have an efficient management model of the SEAP that meets the conservation objectives, takes into account social participation and ensures the sustainable use of environmental goods and services, as well as through the identification of opportunities, generation of capacities and promotion of conditions to ensure stable and long-term financing.

98. In this sense, the Government of Ecuador is requesting the support of the GEF to consolidate the conservation and sustainable and resilient use of the ecosystems of global importance represented in the SEAP, in its **sustainable use zones (within the PAs)** and its **buffer zones (surrounding areas)**, to maintain their biological integrity and ecosystem services for current and future generations. Based on the current legal framework, the two zones are defined as follows:

? Sustainable use zones: They are part of the management zones of the PAs that make up the SNAP (Art. 142 of the COA Regulation). They are areas where there is a presence of human activities, in many cases having a close relationship of use or exploitation of natural resources. These zones generally present degrees of alteration by human activities, especially by human settlements, agriculture, housing infrastructure, maritime navigation, artisanal fishing, services, etc. The main objective of this area is that these existing practices are managed and applied sustainably and avoiding their expansion. In these areas, development projects can also be proposed that generate alternatives uses by the population and provide income for local development, while at the same time reducing the pressure on the natural resources of the PA and maintained within the limits of the agricultural frontier, without the need to expand in the future and taking into account the established regulations (EC 2020 - Agreement No. MAAE-2020-10 Official Registry N° 875, 2020).

? Buffer zones: Buffer zones are the areas adjacent to the PA, in which the use of the land should be partially restricted so that it can fulfill its function of generating an additional layer of protection to the PA, but that can also provide benefits to surrounding communities. The COA Regulation, in its Art. 163, literal c, indicates that these zones will be defined by the National Environmental Authority and will be established in the management plan or the zoning of the PA. Art. 166 mentions that the activities carried out in the buffer zone will be developed in accordance with the regulations issued by the National Environmental Authority and will be subject to the guidelines established to minimize or eliminate impacts or threats on PAs (EC 2019 - Executive Decree 752 Official Registry Supplement 207, 2019).

99. The intervention strategy rests on three fundamental and interrelated axes, which are not currently being adequately covered by the baseline activities, with systemic interventions at the institutional level and interventions at the field level in the PNCC and the PNS (see the description of these intervention areas in Section 1.b), and that underlie the project's Theory of Change (see Figure 2 below).

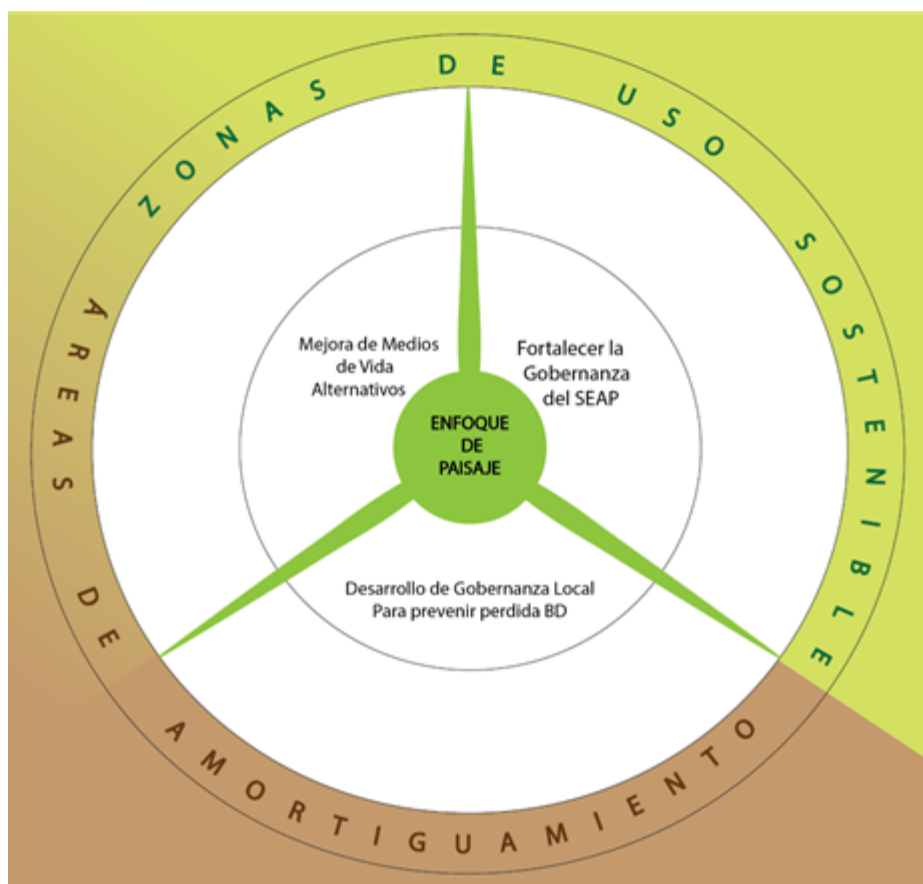
100. A first axis comprises the **strengthening of governance at the national level** for the management of protected areas with an emphasis on their sustainable use zones. At this level, an improved and integrated management of PAs and their sustainable use zones will be sought through the integration of information systems, standards and technical, operational and legal tools mainstreaming

a gender and intercultural approach, to address the management of sustainable use zones; and capacity building to implement, monitor and evaluate the application of regulations and instruments for the management of the sustainable use zones.

101. The second axis includes the **development of governance at the local territorial level** to prevent the loss of biodiversity in the buffer zones of the PAs. This will include enhancing the capacity of DAGs to implement integrated landscape management in PA buffer zones through legal and technical tools for the conservation and sustainable use of biodiversity and landscapes in buffer zones, the strengthening of dialogue, the coordination and exchange of information, and training to implement and monitor the regulations and tools developed.

102. The third axis includes **interventions in the field** encouraging the adoption and upscaling of environmentally friendly practices in the sustainable use and buffer zones of the PNCC and PNS; promoting sustainable management of forests and soils that are key to sustainable agricultural production, and access to markets for sustainable products produced in SEAP; and increasing income and improving livelihoods. To this end, several approaches will be implemented, including the coordination and strengthening of the technical assistance and rural extension services of the MAATE, the MAG and the DAGs to promote associativity initiatives and foster practices for BD conservation and sustainable use; the dissemination of such practices as well as incentives that promote the conservation and sustainable use of the BD.

103. The project seeks to incorporate the social function of protected areas and extending it beyond their administrative boundaries, promoting a balance between economic growth and conservation policies; it seeks to conserve vulnerable ecosystems and species, while at the same time, encourage the improvement of the livelihoods of the local population, supported by the benefits generated by the PAs.



Source: Own Elaboration.

Figure 1: Scheme of territorial intervention of the project, in relation to protected areas

104. The project strategy is characterized by: 1) promoting the creation of conditions for the implementation of various components of the COA and its regulations within the SEAP; 2) incorporating experiences and lessons learned from other GEF projects to implement previously tested local approaches that enable landscape restoration, biodiversity conservation, enhancement of people's livelihoods and maintenance of ecosystem services (see Section 8 below where the lessons learned and their contributions to the design of this project are detailed); 3) incorporating representatives of the different levels of local government; other public and private stakeholders; and the inhabitants living in and around PAs, for a joint management of the PAs, generating areas of ecological and socio-economic interaction, and reducing conflicts within PAs (sustainable use zones) and in their buffer zones.

105. This differentiates this project from the previous ones and makes it the first at the PA level that combines BD conservation and community participation in buffer zones and sustainable use zones. The inhabitants of the PAs and buffer zones and their families are in vulnerable conditions, so the project

will contribute to the reduction of poverty; to food security; to the cultural identity and preservation of traditional and local knowledge; to the valuation of the natural heritage; and, to mitigation and adaptation to climate change.

106. Project implementation will take into account the evolution of the global COVID-19 pandemic and its trajectories at the local level. Given the impacts on local livelihoods derived from the health emergency, the project will channel efforts that contribute to the food security of small 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 both direct participants (including project staff) and rural communities.

Project objectives, outcomes and outputs

107. The objective of the project *is to promote the conservation, sustainable use of biodiversity and the strengthening of capacities in sustainable use zones and buffer zones within the State Subsystem of Protected Areas (SEAP).*

108. To that end, the project has been organized into four components:

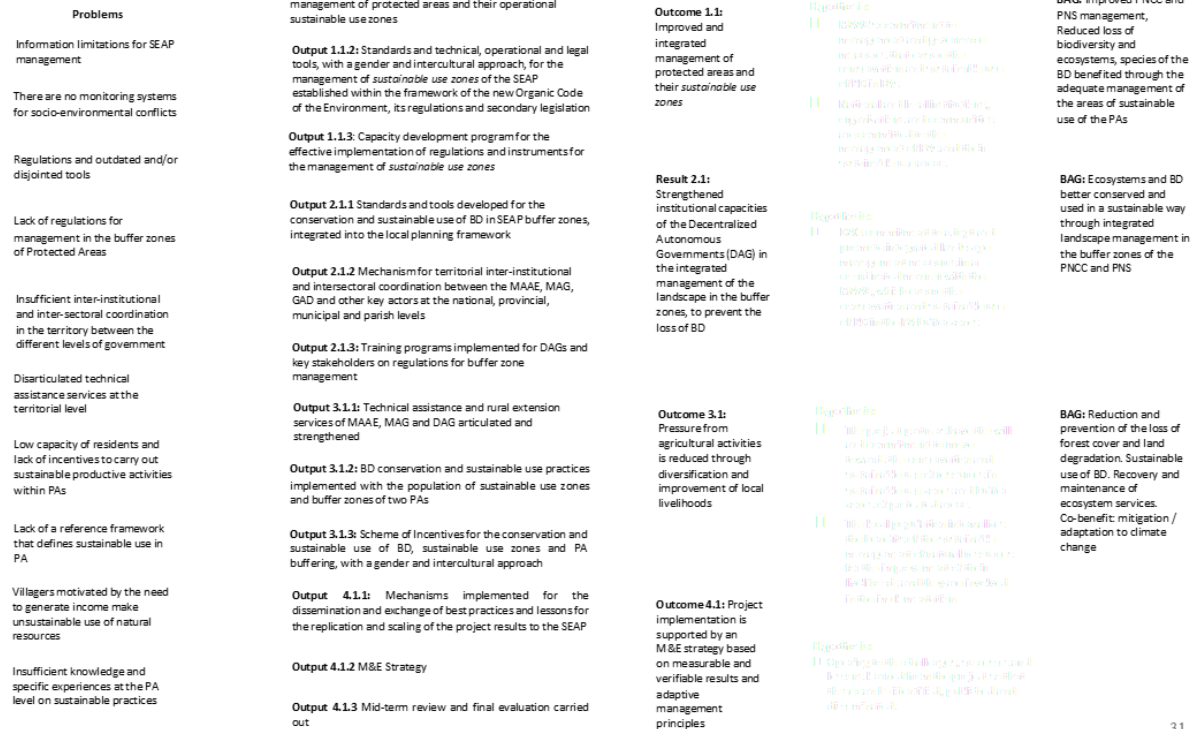
1. Strengthening the national governance of SEAP for the management of protected areas with an emphasis on their sustainable use zones;
2. Development of local territorial governance to prevent the loss of biodiversity (BD) in the buffer zones of Protected Areas;
3. Improvement of alternative livelihoods to reduce pressure on ecosystem services and BD in the Cayambe Coca and Sangay NPs;
4. Knowledge management and Monitoring and Evaluation (M&E) based on the principles of adaptive management, and the delivery of measurable and objectively verifiable results.

109. The project will contribute to developing an enabling environment to develop an efficient SEAP management model that meets conservation objectives, takes into account social participation, ensures the sustainable use of environmental goods and services, as well as their financial sustainability. In this way, it will comply with the provisions of the COA, which establishes the objectives of the natural areas incorporated into the SNAP^[4] as well as new scenarios for the management of PAs and the communities within them, including aspects such as the vision of PA contribution to development and improvement of the livelihoods of the population; the incorporation of PAs in territorial planning; the regularization of land tenure within PAs, buffer zones and the provisions under which they will be developed; zoning of PAs, the development of activities in the buffer zones that must be subject to guidelines to minimize or eliminate impacts or threats to PAs.

110. For this, the project design recognizes that the achievement of the objective depends to a great extent on the will, cooperation and participation of institutions, communities and local organizations, producers and civil society, which are key to overcoming the identified barriers. In this way, the project will generate socio-cultural, environmental and economic benefits for local interest groups, thereby guaranteeing the sustainability and upscaling of the project results, while simultaneously generating benefits on a national and global scale. Figure 2 below shows the project's Theory of Change to address the challenges related to the management of PAs and their sustainable use zones and buffer zones.

OBJECTIVE: Promote conservation, sustainable use of biodiversity and capacity building in sustainable use zones and buffer zones within the State Sub-system of Protected Areas (SEAP).

Figure 2: Theory of Change



Component 1: Strengthening of SEAP's national governance for the management of PAs, with an emphasis on their sustainable use zones

111. The purpose of this component is to establish the enabling conditions to optimize the management of the SEAP and regarding the integrated management of the sustainable use zones, to deliver global environmental benefits. This will include the development of a SEAP Integrated Information System, which integrates standardized and consolidated data on the status and management of the PAs. In coordination with the MAATE this component will support the elaboration of protocols and guidelines for the generation, analysis, systematization, and publication of information, thus contributing to the improvement of planning and decision making. This component will also facilitate the participatory development of technical regulations for the management of sustainable use zones of the SEAP within the framework of the provisions of the Environmental Organic Code, its regulations, and the corresponding secondary legislation; with the participation of MAATE and the local population of the intervention areas. To strengthen the capacities of Ministry technicians, both in the use of the tools and application of the secondary regulations delivered by this component, a capacity building program will be developed aimed at technicians, park rangers and population of the PNCC and the PNS, and including approaches to gender, social inclusion, cultural relevance, and resilience.

Outcome 1.1: Improved and integrated management of protected areas and their sustainable use zones

GEF Core Indicator #1.2: Increase in the management effectiveness score of two protected areas measured by the GEF Management Effectiveness Tracking Tool (METT)[5]⁵ prioritizing the intervention within the Communication, Education and Environmental Participation (CEPA) and UPyT program of the Management Plan and METT: a) Cayambe Coca National Park (486,612 has); b) Sangay National Park (403,103 has)

Baseline:

a) Cayambe Coca National Park: METT: 45

b) Sangay National Park: METT: 43

Target:

a) Cayambe Coca National Park: METT: 65

b) Sangay National Park: METT: 55

Output 1.1.1. SEAP Integrated Information Management System for the management of protected areas and their sustainable use zones, including a module for monitoring socio-environmental conflicts, implemented in the Cayambe Coca and Sangay NPs, and validated by the communities, technical teams and park rangers

112. This product seeks to strengthen information management, facilitating mechanisms to reduce the dispersion of data in different technological tools, and ensure alignment in the development of information systems to the objectives and goals of management of the PA both at the national and local levels. To develop the SEAP Integrated Information Management System (SEAP System), the project will take into account the policies and standards that guarantee the interoperability of existing systems, ensuring that the information generated can be shared within the MAATE and its publication is easily accessible and used by different users.

113. The SEAP System will be based on the technological advances already implemented as well as those underway and will complement these developments with the components of Spatial Data Infrastructure. Likewise, it will take into account the institutional regulations that are being applied

permanently in the institution regarding the use of *Open-Source* software for the importation of data, management and online publication, including national standards.

114. Thus, the SEAP System will be developed as an organized tool that meets the following characteristics: (1) *Open Source*: it will be developed in open source, languages, libraries and other requirements; (2) Database: free, and integrated type that allows it to store the spatial or geographic component and related alphanumeric component; (3) Multiplatform: that allows the implementation in different types of operating systems; (4) Web Type: Web-oriented architecture, and (5) Interoperability: with the ability to interconnect with platforms and systems previously implemented in municipal DAGs.

115. A Committee will be established whose function will be to design the tool, taking into account the previous characteristics, and will define the scope of the system, as well as the institutional framework with details of: (1) stakeholders and timing in obtaining information under the responsibility of each PA; (2) responsibilities for entering the information into the SEAP System; (3) areas in charge of reviewing the information entered by the technicians; (4) definition of the actions based on the evaluation, shared by the technicians and the head of the area; y (5) responsibility for supervision to ensure the proper functioning of the entire system.

116. With the roles and responsibilities established and having an initial diagnosis of the systems previously developed by the MAATE, the project will work on the technological implementation of the tool aligned with the needs and priorities of the Ministry, through:

? Development of the architecture and programming language: that considers the entry and administration of geospatial and alphanumeric information; that will be visible, accessible and editable by various users grouped in different profiles, according to their role as part of the system.

? Software development: that allows the administration of a geoportal, the incorporation of a conflict and reporting module; the latter being the link between the database collected in the PA territory and the national database; defining levels for the validation of what is generated and the approval of what is subject to publication.

? Preparation of technical and user manuals: for the administration of the different modules regarding the entry and publication of information; as well as those information resources for visualization and download in various formats.

117. For the correct operation of the System, the project will also undertake the identification of needs for the appropriate technological equipment. This will entail defining the equipment requirements for collection of information, as well as the survey of the complete architecture made up of several servers in different environments, where users can connect from a data source and carry out a number of analyses and reports up to their publication. The SEAP System interface will be designed with a simple language and content with easy-to-use modules considering that the technicians and park rangers are the ones who will have the responsibility of keeping the system updated.

118. Upon completion of the development of the System, a pilot plan for its implementation will be launched in the PNCC and the PNS. For this, socialization workshops will be held with the stakeholders in the territory who are involved in data generation, processing and evaluation for publication; and who will be responsible for the permanent update. Likewise, the training of technicians and park rangers from both PAs, both for the field test to validate the tool, as well as for the preparation of the baseline of information at a local scale of 1: 25,000, in order to develop a model of structured data that will constitute the structure under which the System will be fed. The training will be carried out by project extension agents who will coach the park rangers seeking to guarantee adequate learning both in the collection of information in the field trips, and in its incorporation into the SEAP system. The monitoring will be carried out above all to identify and systematize socio-environmental conflicts in the areas of sustainable use of the PAs, which are part of the project's areas of interest. As the implementation process advances, there will be feedback from the MAATE authorities to establish improvements and adjustments to the tool, so that the generation of information is carried out in an orderly manner and appropriately feeds the SEAP System.

119. Finally, with the System in operation, the increase in the availability of data at the local scale will be sought. For this, work will be carried out to develop reports and technical accounts to disseminate the information that is being collected by the system; contributing to the strengthening of municipal environmental management, improving response times and making decisions on a more solid basis; thus, contributing to local environmental governance.

120. The implementation of the pilot plan in the PNCC and PNS will take into consideration the seasonal climatic characteristics of each one, due to natural hazards that could potentially generate unnecessary risks. For example, in the PNCC there is a greater threat of landslides between May and July and a greater threat of fires (especially in the upper zone) between October and January; and, in the PNS there is a greater threat of landslides between March and June and a greater threat of fires (especially in the upper zone) between November and January. Based on the data collected with the SMART tool that is being piloted in the PAs, the project will generate a climate baseline for at least one of these PAs that will be incorporated into the SEAP System to raise awareness on the importance of having this type of information for decision-making, taking into account a context of moderate climate risk and low level of reaction to extreme events.

121. To support the strengthening of information management and the sustainability of the SEAP System, work will be carried out in parallel to strengthen spaces that facilitate the exchange between information generators and users to identify needs and improvements to help improve the system for the appropriate and timely access and exchange of information, as well as developing the capacities of all stakeholders in the territory, including data generators, MAATE-Central technicians, and personnel dedicated to the processing and evaluation of information for publication and who will be responsible for the permanent update.

Output 1.1.2: Technical, operational, and legal standards and tools with a gender and cultural relevance perspective for the management of sustainable use zones of the SEAP established within the framework of the new Environmental Organic Code, its regulations and secondary legislation

122. Strengthening the national governance of PAs also includes the development and/or updating of technical, operational and legal standards and tools for the management of SEAP's sustainable use zones. For this, a technical-legal diagnosis of the existing legal instruments will be undertaken to assess the situation of the project's intervention areas and the needs of the National Environmental Authority, identify information gaps, ambiguities, and legal contradictions (antinomies), and elaborate a proposal for adjustments.

123. The proposal must include, among other things, the creation of new legislation (if necessary) and/or updating of the existing ones. For instance, the Operational Manual for Management of Ecuador's PAs is outdated (it was elaborated in 2013) so it needs to be adjusted to comply with current environmental regulations, in addition to incorporating new elements such as, for example, the social function of protected areas from an operational approach to their management. The components and structure of the management plans will be analyzed and more integrated approaches for managing socio-environmental systems within the sustainable use zones of the PAs will be proposed, incorporating a gender and intercultural approach and taking into account a context of climate change.

124. Among the relevant issues that are identified based on the initial analysis by the project, are the following: (1) promotion and regulation of the conservation and sustainable uses of biodiversity in sustainable use zones in natural and intervened landscapes; (2) management of connectivity and interconnection corridors outside the boundaries of the protected area; (3) guidelines for the preparation of farm management plans mainstreaming cross-cutting approaches to gender, interculturality and resilience and/or the formulation or updating of life plans in the case of indigenous communities whose territory is part of the sustainable use zones; (4) protocols for biodiversity monitoring; (5) protocols for the implementation of the Communication, Education and Environmental Participation (CEPA) program; (6) feasibility for the establishment of a land fund for the management of sustainable use zones for sustainability of the process of resolving existing socio-environmental conflicts in the PAs.

125. This product also considers a pilot for the implementation of these new standards and technical, operational and legal tools that are generated or updated in the project. For instance, having a guideline for the preparation of Property Management Plans for properties or their equivalent in community properties within protected areas will enable to begin their implementation in the sustainable use zones of the PNCC and PNS.

Output 1.1.3: Capacity development program for the effective implementation of regulations and instruments for the management of sustainable use zones in the Cayambe Coca and Sangay NPs, aimed at the staff of MAATE and the local population.

126. This output will seek to strengthen environmental governance in matters of biodiversity conservation, for which it will design and implement a capacity development program for MAATE staff and the local population for the use and management of the SEAP System (Output 1.1.1) and for the application of the new or updated secondary regulations for the management of sustainable use zones developed with the support of the project (Output 1.1.2).

127. The design of the program will take into account the experiences of the Green School Program of the MAATE and the ongoing training for the use of the SMART [6]⁶ tool, incorporating a comprehensive PA management approach, mainstreaming gender, interculturality and climate change issues. The training methodology will take into account the development of theoretical and practical activities both in the classroom and in the field. The project will identify the existing needs and interests of the PA personnel and the appropriate content and tools will be developed, also taking into account the current health emergency. Training in both the MAATE and PAs will be structured in different training levels, and compliance and effectiveness will be permanently evaluated and monitored. Training in the use of the SEAP System, especially the module of socio-environmental conflicts, will include the accompaniment of the personnel in the territory. If the need arises, additional equipment will be acquired for the collection of information (for example, computer tablets; GPS, or similar) which at the end of the project, will be transferred to the technical offices of the MAATE's PAs.

Component 2: Development of local territorial governance to prevent the loss of biodiversity (BD) in the buffer zones of Protected Areas

128. This component focuses on building capacities to improve the management of buffer zones, where the provincial, municipal and territorial DAGs have jurisdiction. GEF support in this component will be aimed at implementing various strategies. The first will include technical assistance to develop technical standards and tools to improve the management of PA's buffer zones and that are integrated into territorial planning instruments, particularly the LUDP and PUGS. These strategies may include the establishment of ACUS, as well as ordinances and regulations issued by the provincial DAGs to regulate the management of the buffer zones and by the municipal DAGs to regulate and/or regularize the rural cadaster of the buffer zones. The second approach will be the strengthening and / or creation of spaces for shared governance and inter-institutional coordination in which the DAG, the MAATE, the MAG and the representative social and community organizations that operate in each area participate in. This will seek to improve inter-institutional and inter-sector coordination for the implementation of coordinated actions on the ground by the institutions that have roles and responsibilities at the territorial level. The third approach will be aimed at strengthening the capacities of DAGs and local stakeholders on regulations for the management of buffer zones. This will allow these stakeholders to increase their knowledge and understanding of the importance of PA conservation and sustainable management of buffer zones, as well as to identify the benefits of buffer zones for local development, territorial planning and other aspects.

Outcome 2.1: Strengthened institutional capacities of the Decentralized Autonomous Governments (DAG) in the integrated management of the landscape in the buffer zones, to prevent the loss of BD

Indicator: Level of improvement in the capacities of at least 8 DAGs (in their different levels of government) to implement integrated landscape management in PA buffer zones to prevent the loss of BD.

Baseline: Few DAGs in the intervention area are developing an integrated management to prevent the loss of biodiversity to the extent that the buffer zones do not have a particular management. Buffer zones lack specific local policies for their management.

Target: 8 DAGs have strengthened their capacities for integrated landscape management in buffer zones and participate in local governance to prevent the loss of BD, as measured by the GEF capacity monitoring tool (baseline scores and goals to be defined in year 1. A 20% increase goal is preliminarily estimated with respect to the baseline)

Output 2.1.1: Standards and tools developed for the conservation and sustainable use of BD in the buffer zones of SEAP, integrated into the local planning framework

129. This product seeks to generate and implement various tools for the conservation and sustainable use of biodiversity in the buffer zones of the prioritized PAs. These tools could include, but are not limited to, the establishment of ACUS; institutional legal strengthening for decision makers to develop BD conservation and sustainable use tools; ordinances and regulations issued by the provincial DAGs aimed at regulating the management of the buffer zones and by the municipal DAGs aimed at regulating and/or regularizing the rural cadastre of the buffer zones. In all cases, the alternatives generated will involve close coordination with the MAATE and the use of participatory methodologies that allow incorporating the demands of local populations.

130. For this, a study of the secondary regulations that apply to the buffer zones will be carried out considering the contents of the COA and its regulations^[7]. A baseline study will also be carried out in the specific context of the project's intervention sites. This requires, on the one hand, a detailed study of land use patterns, the knowledge of the existing social and cultural dynamics and the analysis of the main threats and pressures on local biodiversity and protected areas, combining quantitative and qualitative methods. In this way, the starting point will be a reference framework on the vulnerability of ecosystems and ways of life that will support decision-making to prevent and reverse, when necessary, the processes that threaten the loss of biodiversity in the buffer zones. The baseline study will be the fundamental input to: 1) define the productive practices to be used in the transition to sustainable management in the buffer zone, 2) analyze the most appropriate management model according to social, cultural and productive characteristics, 3) predict the expected impacts over a time horizon, 4) carry out a gap analysis regarding existing capacities (technical and economic) in the DAG and those that need to be strengthened, 5) establish agreements in which the roles and commitments of the DAG, the MAATE, the MAG and the different stakeholders involved are made explicit, 6) define the monitoring mechanisms that will be used. Considering that the process described will be based on participatory processes with local communities and main stakeholders settled in the buffer zones, the decisions reached will be converted into documents that summarize the agreements identified to promote sustainable management of the buffer zones.

131. Based on the results of the previous studies, the project will support the following interventions: 1) analysis of the feasibility and relevance of promoting the establishment of ACUS[8]⁸, under a co-responsibility approach, in which the DAGs, communities and/or private owners participate to contribute to reinforce the role of the buffer zones, and that fulfill a role as corridors of connectivity with the protected areas; 2) the integration of definitions on the management of buffer zones in local planning instruments in order to achieve comprehensive management of the territory under a logic of complementarity with BD conservation and sustainable use, and the role of adjacent protected areas. This will be done with the development of a guide for the incorporation of buffer zones in the LUDP and PUGS of the DAGs, and a proposal for an ordinance for the preparation of plans and instruments for the conservation and management of fragile ecosystems in the buffer zones; and a 3) proposal for an interministerial agreement to define the limit of the agricultural frontier in buffer zones.

132. It is expected that these tools will serve to implement the provisions of the COA and its Regulations, in addition to creating a legal framework that guarantees legal security for the inhabitants of the PA's buffer zones. The described process will be systematized in order to have a record that allows its analysis and replicability in other scenarios. The systematization will consider critical factors that affect the adoption and maintenance of sustainable practices, as well as the analysis of institutional and organizational roles to favor new governance models of the buffer zones.

Output 2.1.2: Mechanism for shared governance and inter-institutional and inter-sectoral coordination at the territorial level between the MAATE, MAG, DAG and other key stakeholders for dialogue, coordination, and information exchange between the national, provincial, municipal and parish levels

133. Seeking to encourage buffer zones to fulfill the role of transition areas and ecosystem connectivity with respect to adjacent PAs, this product will strengthen existing local governance spaces, or establish new spaces when necessary. These spaces will contribute to the coordination between the MAATE, the MAG, the DAG, social and community organizations, NGOs and cooperation organizations that operate in a specific area. Experience has shown that coordination and dialogue between various stakeholders allow reaching agreements, organizing actions and joining forces toward a common goal.

134. In this sense, in the project intervention area there are some coordination spaces where various social and institutional stakeholders are coordinated around the protection of a particular ecosystem or a specific geographic area. These spaces include, for example, the worktable that operates in the buffer zone of the PNCC (El Chalpi sector); water funds (FONAG in Quito or FONAPA in the Paute river basin in Azuay province), and local DAG associations and consortiums such as the Commonwealth of the Ca'ari People. These existing inter-institutional and intersectoral arrangements are complemented by processes carried out by provincial, municipal, and parochial DAGs interested in protecting their environment and sustainably managing the resources of their territory, taking care of water sources and preventing the expansion of the agricultural frontier.

135. The project will carry out a diagnosis of the state of the art of these governance spaces in the intervention sites to assess the existing viability and openness from the perspective of integrating the

concerns and approaches of the proposed project. Given the geographic breadth of the intervention area, and in the parishes selected for intervention (see Section 1b with the characterization of the intervention sites), at least four geographic areas will be prioritized where the strategies to strengthen these coordination spaces will be concentrated, along with the identification of alternatives to improve the management of the buffer zones, based on the local reality and needs. Some of the selection criteria could include in the first instance: 1) interest of parishes, municipalities and provinces to participate; 2) that they have ongoing projects on issues related to the project's objective; 3) that they are located in priority areas of interest. The strategies related to the conservation of biodiversity that are underway, such as the creation of provincial, municipal or parochial reserves in the buffer zones of the protected areas, would also be of interest for the implementation of the project.

136. The strengthening of these governance spaces supposes, among other aspects, positioning the need to undertake a sustainable management of the buffer zones, including addressing aspects related to the improvement of local production, tools for the management of the territory and its resources and the conservation of biodiversity. To that extent, these local governance spaces will have as one of their fundamental objectives the coordination of actions, sharing responsibilities, and follow-up of the management plans for the buffer zones formulated within the framework of Output 2.1.1. The MAG and the Planning Secretariat, which have an impact on the territorial zoning, and representative social organizations of the people living in the buffer zones will be incorporated in these spaces.

137. The project will promote under a rights approach, the participation of the social sectors under a logic of promoting parity criteria in the representation of women and men and indigenous peoples, in recognition of the increasingly active role of women in agricultural activities and in food security and sovereignty, as well as of indigenous peoples in the conservation of biodiversity.

Output 2.1.3: Training programs implemented for DAGs and key stakeholders on regulations for buffer zone management

138. The project will develop a training program to strengthen the capacities of DAGs and local populations for integrated landscape management and prevention of biodiversity loss in buffer zones. In the case of the DAG, it will be necessary to strengthen the capacities, especially of the provincial and parochial governments with responsibilities for economic reactivation and the management of biodiversity, and municipal governments with responsibilities in rural cadastre, ensuring that their technical teams recognize the importance of buffer zones in the conservation of ecosystems and biodiversity.

139. The design of this program will start with a gap analysis based on the different target groups (DAG, local populations, women, indigenous peoples) that could potentially be trained. In addition, the places where these training activities will be implemented will be identified and prioritized jointly with the DAGs, for which criteria will be defined that will support the decision, such as locations where work is being done on similar issues from the local level; DAG's interest in participating; environmental services or habitats that must be integrated to the PA to ensure its operation, among others. Based on this analysis, the contents and training materials will be developed in a modular format. Taking into account the health emergency scenario, the training programs should consider the use of virtual media to undertake the training programs, as well as alternatives that consider the

capacity limitations that may exist in the use of digital tools by the beneficiary population, to avoid potential exclusion and ensure access to such programs; as well as different pedagogical support tools that facilitate the learning process and the use of an inclusive language that is respectful of local cultural dynamics.

140. Special attention will be paid to the development of training content for women and indigenous peoples. These two social sectors will be recipients of specific training programs that meet their particular demands. In the case of women, for example, the PPG identified their demand for training in organizational issues, associativity and leadership, hand in hand with awareness campaigns aimed at the population as a whole, with the purpose of helping to modify the existing stereotypes, which generally devalue the capacities of women.

141. For the implementation of these programs, the relevance of establishing alliances with universities and local training centers will be analyzed, guaranteeing the development of more day-to-day training and monitoring processes, as well as the optimization of environmental education and training tools available to the MAATE, such as Green Classroom and CEPA. Additionally, as a strategy to strengthen the sense of identity and local belonging with respect to PAs and the importance of biodiversity, the project will promote dissemination and awareness campaigns aimed at the population as a whole. These campaigns will be coordinated with the MAATE's CEPA Program, they will explore the use of recreational and participatory tools and will highlight the role of women and indigenous peoples in the conservation of local biodiversity.

Component 3: Improvement of alternative livelihoods to reduce pressure on ecosystem services and BD in the Cayambe Coca and Sangay NPs

142. This component seeks to implement the conservation and sustainable use of biodiversity and encourage sustainable livelihoods in sustainable use zones and in the buffer zones of the PNCC and PNS, to discourage unsustainable uses of the forest, reduce deforestation and land degradation, conserving and restoring natural resources and ecosystem functions at selected sites. It will be executed in the field at the farm and / or community level, seeking to incorporate sustainability criteria mainly in agricultural activities that generate pressure in the PA's sustainable use and buffer zones; contribute to income diversification by integrating new activities such as sustainable tourism or bio-enterprises; promote restoration processes serving mainly areas of water importance, and conserve the remaining native vegetation cover, with a focus on avoiding the expansion of the agricultural frontier.

143. GEF assistance under this component will enable the implementation of various strategies that help reduce the pressures of agricultural activities through diversification and improvement of local livelihoods. This includes a coordinated rural extension and technical assistance program between the MAATE, MAG and the DAGs and the promotion of BD conservation and sustainable use practices in buffer zones and sustainable use zones, mainstreaming a gender, intercultural and climate change approaches. This will contribute to the improvement of knowledge and understanding by local inhabitants about the value and benefits of ecosystem services, and the impacts of their economic activities on them, and also promoting the implementation of conservation and sustainable use practices of the BD. To support the adoption and eventual scaling of good practices, with the support of the

GEF, incentive mechanisms will be strengthened that promote the conservation and sustainable use of BD, and that incorporate a gender and intercultural approach.

Outcome 3.1: Pressure from agricultural activities is reduced through diversification and improvement of local livelihoods

GEF Core Indicator BD #4.1: Area in hectares in sustainable use zones and buffer zones of the Cayambe Coca and Sangay NPs where conservation practices and sustainable use of the BD are implemented (sustainable production, tourism, restoration and conservation)

Baseline: 0

Targets: a) 2,000 hectares in sustainable use zones; b) 4,000 hectares in buffer zones. Total: 6,000 hectares

GEF Core Indicator #11: Number of direct beneficiaries of the project that participate in the implementation of gender-sensitive BD conservation and sustainable use practices in the sustainable use and buffer zones of the Cayambe Coca and Sangay NP

Baseline: 0

Targets: 3,000 people (at least 40% are women)

Output 3.1.1: Technical assistance and rural extension services of the MAATE, MAG and DAGs coordinated and strengthened to promote associativity initiatives and foster practices of conservation and sustainable use of the BD, in buffer zones and areas of sustainable use, with a gender and intercultural approach

144. This output seeks to build a bridge between the institutional stakeholders MAATE, MAG and the DAG (at different levels) to achieve a coordinated assistance service that works in harmony with the ecological characteristics of the PA's areas of influence. For this, a Technical Coordination Table will be established between the MAATE, the MAG and the DAGs to design, in a coordinated and participatory way, a rural extension and technical assistance program that responds to a landscape management approach, considering the following axes: i) Reconversion of agricultural systems into sustainable systems; ii) Diversification of income through the promotion of unconventional activities (i.e tourism and bio-enterprises); iii) Restoration of degraded areas; and, iv) Conservation in private lands and establishment of ACUS, as part of the management of the Provincial and Municipal DAGs.

145. The process will start from the existing information regarding land use, local capacities and the demands of the target groups, as well as the existing local initiatives and the institutional stakeholders in the field that must be coordinated; and incorporating elements such as a gender approach, participation, cultural relevance, conservation and use of biodiversity. The potential aspects of the

extension services and technical assistance of the institutions at the territorial level that need coordination will be identified, and agreements and guidelines will be generated for a coordinated work in terms of andragogy methods, tools and techniques, as well as topics, and the scope of the practices applicable to the areas of influence of AP, to allow the technicians to develop their field activities with soundness.

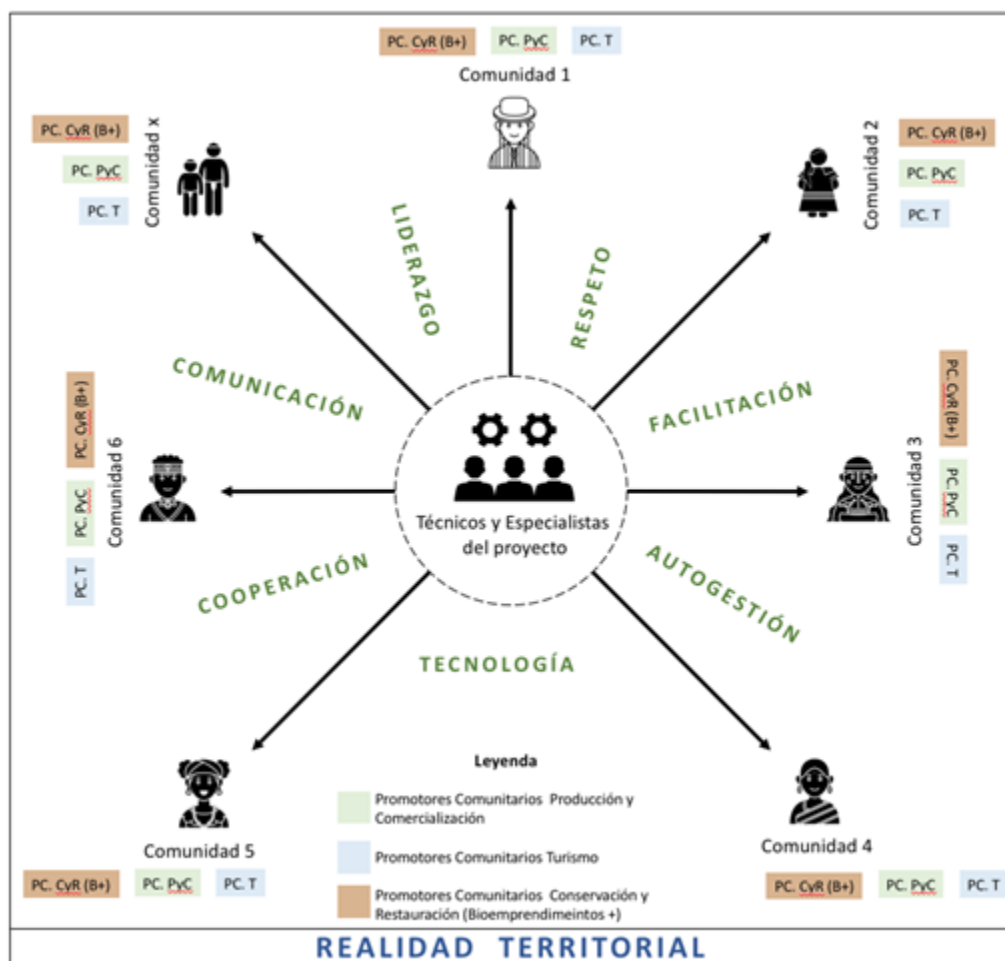
146. Capacity building programs aimed at producers will be developed, including learning tools for the target groups, based on their interests, needs and problems at field level. These programs will establish specific training curricula to be executed throughout the project. The work methodologies and the coordination of actions will depend on the particularities of each area, according to the local availability of institutional resources and the productive context. All capacity-building programs for producers will be required to consider sustainable production, conservation of natural resources and use of biodiversity, gender, intercultural and climate change issues.

147. Participation of women in agricultural, livestock and tourism activities, as well as their availability of time, will be an important aspect considered in order to establish adequate times for trainings and make sure that the topics are related to their interests and needs. The work approach will be to address knowledge management and skills development, which implies designing participatory learning activities that take into account people's previous experience, their interests and motivate an adequate dialogue of knowledge and participatory technological innovation. Andragogical tools should be developed to facilitate the learning of the various topics to be dealt with in the capacity-building programs, together with didactic material and audiovisual resources that are considered necessary.

148. The experience of previous initiatives with farmer field schools (FFS) and learning communities will be taken into account as methodologies for working with producers. The most appropriate methodology will be defined according to the existing conditions in each zone. Processes for monitoring and evaluating the results of the training will be implemented, defining quantitative indicators such as: improved productivity, increased income from productive activities, and diversification of products and markets, among others. On the other hand, local intervention plans may identify other stakeholders that need to strengthen their capacities, for which the project will consider additional training actions, according to local demand and needs.

149. For the implementation of priority actions of the rural extension and technical assistance program in each project intervention area, there will be the leadership of the MAATE technical teams and coordination with the MAG and DAG personnel according to the availability and defined implementation arrangement. On a specific basis, training workshops for rural extension workers, observation tours and exchanges of experiences will be scheduled to promote the adoption of sustainable management practices, as well as motivating producers to innovate and take advantage of existing biodiversity, promoting the diversification of sustainable livelihoods and family income. The process will be coordinated by the technicians hired under the project; and, considering the limitations of mobilization due to the COVID health emergency, work will be undertaken through alliances and networking through community promoters (i.e community leaders and volunteer producers who have the endorsement of the assembly or the organization, especially young people and women) who will receive training and will be provided with elements to replicate the lessons with neighboring producers. The above, in addition to ensuring the continuity of the project's actions under the current mobilization

limitations of the health emergency, represents a mechanism to facilitate community self-management and sustain the activities implemented by the project once support finalizes. Figure 3 below summarizes the networking model with community promoters in the territory.



Source: Own Elaboration.

Figure 3 - Community Promoters in Territory Model (networking)

150. At the same time, the output seeks to contribute to improve institutional competencies, therefore, an expected result of the implementation of the project is to develop experiences, methodologies, tools and work approaches that allow the upscaling of sustainable practices, favoring replication in other contexts and similar initiatives that will be executed in the future. Finally, there will be a participatory evaluation of the impact of the capacity-building programs at different levels and the systematization of the entire process and the lessons learned, preparing a methodological reference document that may be useful for scaling up actions or replication in other initiatives and contexts.

Output 3.1.2: Conservation and sustainable use practices of the BD implemented with the population of the sustainable use zones and buffer zones of two PAs, within the framework of the PA zoning, related legislation and specific technical guidelines for each practice.

151. This output seeks to promote the transition of production systems towards sustainable schemes that prioritize the conservation of natural resources and the use of existing biodiversity in the intervention areas. Likewise, it will promote diversification of productive activities and family income through the establishment of new sustainable economic models based on the potentialities that are present in the territory.

152. The implementation of this output will be led by the local MAATE technical teams supported by the MAG technical teams and the DAGs that have been strengthened within the framework of the coordinated extension and technical assistance program developed under Output 3.1.1. The implementation of the sustainable practices to be promoted will be coordinated with the capacity-building programs developed in Output 3.1.1, which will seek to promote in the target population the knowledge, abilities, skills and attitudes necessary to do so. The technical assistance will provide the required support to producers so that they can implement the practices on their farms.

153. Within the PNCC and PNS areas of influence, a number of parishes where the field interventions will be carried out have been prioritized (see Section 1b with the characterization of intervention areas). These pre-defined areas will be validated at project outset in order to assess the interest and commitment of local populations and family farmers and community producers to undertake sustainable productive alternatives. In the case of areas belonging to indigenous peoples and nationalities, the project will first undertake consultation processes aimed at obtaining their consent. In this direction, their particular forms of organization and representation, as well as the procedures usually used for consultation, will be considered. Once the steps to be followed have been agreed, and the project information is delivered in a culturally appropriate way (which in certain contexts may mean translating project content into local languages or using graphic information), a document will be signed that specifies the community's consent to act in its territory. The consent document will detail the responsibilities of the project and the community, define the monitoring and evaluation procedures, establish the coordination/dialogue channels and the grievance mechanisms for submitting complaints as per the project's safeguard policies. Support to communities and producers will address the elaboration of Property Management Plans (PMP) in the sustainable use areas and in the buffer zones the elaboration or updating of Comprehensive Farm Management Plans (PMIF) the latter in coordination with the DAGs. These plans will specify the steps to follow to improve livelihoods and reconvert unsustainable production systems.

154. The project will carry out the participatory identification and prioritization of good practices carried out in the project's intervention areas, which will allow for a wide range of technological alternatives available in the field. This will be done based on the already existing experience in the country in the fields of: Good Agricultural Practices, climate-smart livestock production; agroecology; sustainable tourism; restoration; conservation; bio-enterprises (sustainable use of BD); and protection of water sources. The feasibility of the selected practices will be analyzed from several points of view: economic, cultural relevance, technical requirements, materials and supplies, implementation timelines until results are seen, required technical support through project technical-financial evaluation

methodologies, among other factors that provide elements for the participatory prioritization of practices. In this process, the contributions of the population will be valued, taking advantage of their traditional knowledge and previous experiences that enrich the intervention. This activity will be dynamic throughout the life of the project. In a context of climate change, which implies high uncertainty, good environmental and sustainable management practices will be promoted, such as crop rotation, agroforestry and silvopastoral systems; seals or certifications for good practices in agricultural production and deforestation-free production; traceability systems; climate-smart livestock production; conservation of natural resources; and, restoration and protection of watersheds and water sources; sustainable tourism, sustainable use of biodiversity (bio-enterprises); among other practices, that facilitate the transition towards sustainable production systems.

155. In accordance with the training methodology defined in Output 3.1.1 (farmer field schools/learning communities or others), practices will be implemented in farms of producers previously selected as training locations. The learning sessions (workshops/meetings) will allow addressing the themes defined in the capacity building program and implementing the practices in an experiential way. This work methodology will allow the generation of live training and demonstration scenarios, which will serve for the learning and dissemination of technological alternatives at the community level. The exchange of local experiences will also be promoted, where producers will be able to observe the real results and effects of the implementation of sustainable practices in contexts similar to the areas where they work.

156. As part of the assistance, the project will facilitate the delivery of supplies, materials and equipment to complement the counterpart of the beneficiaries. In this way, joint responsibility is generated in investments and work, promoting the sustainability of the practices, their expansion and dissemination. In addition, strategic alliances and commitments with various local stakeholders will be promoted to promote the implementation of the practices. This articulation will increase the availability of supplies, materials, equipment, economic resources and technical support personnel, allowing to increase the surface area under sustainable management practices, favoring a greater number of people and promoting the sustainability of actions after the project ends.

157. Special attention will be paid to women producers, who mainly undertake activities in gardens and farms, as part of their cultural patterns related to family food security and recognizing their role in land management. The implementation of sustainable practices under a gender perspective will be prioritized to solve the gaps identified in the studies on gender relations. There are successful experiences in the implementation of practices that facilitate the work carried out by women, saving time and providing security, which is highly valued by rural producers (i.e the use of electric fences for livestock management, implementation of irrigation systems in agriculture, adequate agricultural machinery, among others). As a complement to the promotion of good gender-sensitive production practices, the project will promote, in coordination with the DAGs, the recognition of traditional production systems, mainly "chacras", which will be promoted through local fairs, mainly gastronomic, which allow the recovery and revaluation of ancestral culinary knowledge, as a strategy to bring consumers closer to products generated with sustainability criteria and cultural content. At the same time, capacity-building activities will be favored so that women become promoters of those good practices that contribute to increasing the productivity of their farms, as part of a strategy to identify

women leaders within the communities, who will be trained and prepared to pass on the knowledge acquired to their circle of women as a network.

158. Activities related to tours, training, among others that require field trips to sustainable use zones and buffer zones will consider the seasonal climatic characteristics of each PA due to natural hazards that could potentially generate unnecessary risks. For example, in the PNCC there is a greater threat of landslides between May and July and a greater threat to fires (especially in the upper zone) between October and January; and in the PNS there is a greater threat of landslides between March and June and a greater threat to fires (especially in the upper zone) between November and January.

159. A baseline will be drawn up regarding family income, jobs, and self-employment in order to assess and monitor the impacts derived from the project, taking into account the socio-economic recovery and resilience agendas against COVID19. In the framework of the plans prepared (PMP, PMIF) the level of adoption of the practices will be evaluated, identifying gaps that limit adoption, providing additional technical support if required. The impact of sustainable management practices on livelihoods and the conservation of biodiversity and ecosystem services will also be evaluated, for which quantifiable indicators will be established that allow an adequate measurement of the progress and results achieved. Indicators such as: conserved area, liberation of areas for conservation, reforested areas, improvements in productivity, increased income, generated ventures, among others, should be considered. At the end of the activities, a systematization of the implemented processes, lessons learned and a technical guide containing detailed information on the practices implemented will be carried out. This document will be a contribution to the project for the dissemination of practices, favoring scaling up and replication in different areas and initiatives.

Output 3.1.3: Incentives? scheme that promotes the conservation and sustainable use of BD, in sustainable use zones and buffer zones of PAs, with a gender and intercultural approach

160. In the PNCC and PNS there is an important livestock production activity which is the basis of different production chains related to dairy and meat by-products; a minimum agricultural activity by smallholder family farmers, and traditional production systems (chacras); economic activities related to tourist services, mainly at community level; some bio-enterprises that are in their initial phase, and areas destined for conservation through the PSB and other potential areas for restoration (see Annex N with additional information on the productive activities and value chains present in the intervention areas).

161. In this context, this output will seek to implement monetary and non-monetary incentive mechanisms that help reduce pressure mainly from agricultural activities and promote the adoption of sustainable practices; in addition to actions that allow optimizing livelihoods so that producers improve their income and are part of inclusive processes. These incentive mechanisms will be aimed at supporting the priority axes of the extension and technical assistance program (Output 3.1.1): i) Reconversion of agricultural systems into sustainable systems; ii) Diversification of income through the promotion of unconventional activities (i.e tourism and bio-enterprises, among others); iii) Restoration of degraded areas; and iv) Promotion of conservation in private properties and through ACUS.

162. The main requirement of the different incentive programs is that they aim at titled, clean, and conflict-free land. In this sense, the improvement of coordination between the MAG and the MAATE will be supported (for example, through the coordination mechanisms under Output 2.1.2) for the allocation of lands in areas adjacent to PA which contribute to landscape management, especially where the deforestation rate is highest. Incentive mechanisms will be promoted with the communities and/or producers that have been validated based on land tenure and that have PMP and PMIF (prepared under Output 3.1.2). In addition, the ACUS of the DAGs and the Co-management Plans (i.e, Cascales, El Chaco) are considered as potential areas for the implementation of incentives.

163. The main incentive mechanisms to be promoted under this output include:

? Access to capital through the National Financial System (public and private banks) and the Popular and Solidarity Financial Sector (savings banks and community banks), as well as public-private partnerships and creation of risk capital as an alternative to access capital. In addition, it is proposed as a strategic action to hold negotiations with BanEcuador B.P., for the inclusion of sustainability criteria in the credit lines and financial services that are currently placed in the area. In this sense, in the development of such criteria, aspects that could be considered include existing certified projects (i.e. Family Farmer Agriculture Seal (AFC), Participatory Guarantee System (PGS), Green Point (PV) among other national and international sustainability certifications) that could add value in the assessment process; and projects that require seed money for start-up and implementation.

? Extension services and technical assistance are coordinated that allow the generation of new knowledge and the recovery of ancestral knowledge linked to aspects of sustainable production (good practices), restoration and conservation, within the framework of the different attributions of each institutional stakeholder. It will also be complemented with the provision of equipment, supplies and materials for organizations to promote conservation and sustainable use.

? Market access developed through four elements:

- *Associativity and coordination between producers*, for which it will work on financial solutions for the design of these business and improvement models for organizations. The intervention modality will be used: Comprehensive Organizational Diagnostic Analysis - Design and Implementation of Business Plans or improvement - Organizational planning and legal documents.

- *Certifications and traceability* through the strengthening of the current PV scheme for deforestation-free production, with a specific chapter for PAs (sustainable use zones and buffer zones); and within the framework the AFC and PGS Seals, a distinction for the stakeholders who are in the areas of influence of the PAs.

- *Marketing and promotion channels* aimed at consumers, in the sense that it is made known that buying products with a seal or distinction (AFC, SPG, PV) means paying not only for the product, but also for the way it has been produced and the environmental benefits that it generates. In addition, strengthening of the different local marketing circuits (direct supply, agrotourism, basket, fair, hotels, restaurants and cafeterias, point of sale, smallholder farmer market and at-the-farm sales).

- *Responsible public procurement* based on DAG procurements to source food for local school meal systems from certified smallholder production (AFC, SPG, and PV). Under this scheme, the demand from public institutions is expected to coincide with the supply from small producers and producer associations. This approach complements other forms of support established to improve market access conditions for the most vulnerable farming communities, established in areas of greater ecological importance.

164. The incentive scheme will be coordinated with a training and organizational strengthening program to improve capacities so that they can participate and access the different incentives. Within the framework of the implementation of the mechanisms, constant monitoring of the areas under incentives will be carried out to evaluate their compliance. This could be done through the Productive Development Directorates of the Municipalities, MAG and provincial DAGs in the case of buffer zones and by the MAATE in the sustainable use zones. Finally, the participatory evaluation of the impact of the incentives will be carried out at the different levels and the systematization of the entire process and the lessons learned, preparing a methodological reference document that may be useful for scaling up actions or replicating other successful initiatives.

Component 4. Knowledge management and Monitoring and Evaluation (M&E) based on the principles of adaptive management, and the delivery of measurable and objectively verifiable results

165. The objective of Component 4 is to monitor and evaluate project progress, compliance with indicators, supervise risk mitigation measures and identify new measures to address unforeseen risks, and extract the lessons learned (including success and failure) resulting from the implementation of the project that will be disseminated throughout Ecuador, the region and the rest of the world, and helping projects implemented in similar regions. GEF support will be used for M&E activities, including monitoring of project progress and compliance with indicators, intermediate and final external evaluations, development of a communication strategy and advocacy plan for sustainability of project results, systematization of projects, the preparation and dissemination of knowledge products integrating the gender and cultural relevance approach into the project.

Outcome 4.1: Knowledge Management and Monitoring and Evaluation (M&E) Strategy based on adaptive management and delivery of measurable and verifiable results

Indicator: Project results achieved and demonstrating sustainability

Baseline: N/A

Target: 100% scope in achieving results. Proven sustainability

Output 4.1.1: Mechanisms implemented for the dissemination and exchange of best practices and lessons for the replication and upscaling of project results to the SEAP

166. The project will prepare a knowledge management plan, which will be implemented through dissemination products (audiovisuals, printed materials, website) together with knowledge and

communication products to disseminate the lessons learned from the project. The knowledge products will be produced in appropriate formats and in a language adapted to the different audiences of the project, such as decision makers, technicians and communities, and will be oriented towards contributing to advocacy in public policies and other private and local initiatives that promote sustainability, replicability and upscaling of the project's experiences and results.

167. The project website will be linked to the web platforms of FAO, MAATE, MAG and other partner organizations with the aim of providing continuous and updated information on the progress of the project to the various stakeholders and partners, as well as the public. It will be updated periodically to continuously share experiences, disseminate information, develop policies and highlight results and progress and facilitate the replication of processes throughout the entire project.

168. The gender approach will be an important part of the knowledge products generated by the project, encompassing, for example, experiences in gender mainstreaming; successful cases of women implementing gender-sensitive agricultural practices, women benefiting from incentives, and organizations led by women that have market access; tools used for gender mainstreaming throughout the project cycle, and others identified during implementation. Additionally, a plan of visits to exchange experiences between MAATE, MAG and DAG personnel, and landowners and producers in buffer zones will be prepared and implemented, as well as events to disseminate results and exchange experiences among the different stakeholders.

169. The communication strategy for the dissemination of the project, its results and good practices, with a gender and intercultural approach, will include, among other things: 1) design of the project's graphic line, logo, icons, etc.; 2) development of the communication strategy; 3) media management; 4) elaboration of informative and testimonial videos from different approaches; 5) development of thematic training and awareness videos.

Output 4.1.2: M&E strategy developed with relevant stakeholders, clearly defining expected results, the expected time periods for their completion, and their confirmation through objectively verifiable indicators and means of verification.

170. The project's M&E strategy will be designed with the relevant stakeholders, clearly defining the expected results, the expected time frames for their achievements and their confirmation by means of objective indicators and means of verification. Annual work plans and corresponding budgets will also be developed based on expected results and their respective progress, including progress and milestones required for measurable achievements. To help in this process, the annual work plans will be coordinated with annual progress indicators for each result.

171. The M&E System will record data disaggregated by gender, which may include, for example, the number of women trained and their satisfaction with the methodology and quality of the training; the number of women participating in the planning, consultation and validation processes of on-the-ground interventions; number of women who participate in the implementation of participatory plans and the adoption of agricultural practices, who participate in activities for the exchange of experiences; enterprises run by women beneficiaries; level of improvement of women's income and livelihoods;

level of acceptance by women of the proposals and results of the projects, as well as the level of fulfillment of the activities and the budget allocated for the incorporation of women.

172. The Project Implementation Unit will be responsible for the implementation of the M&E plan, including the Inception Workshop; annual progress review workshops and preparation of the annual work plan and budget; monitor activities and project results and indicators; risk mitigation and supervision measures; completion of the GEF Core Indicator Worksheet at mid-term and end of the project; monitoring of the gender action plan and the stakeholder participation plan.

173. The Project's Chief Technical Advisor (CTA) will prepare the Project Progress Report (PPR) every six months. The PPR includes the project results framework with relevant outcome and output indicators, benchmarks and six-month targets, risk matrix monitoring, and will identify potential risks and mitigation measures to reduce unforeseen risks. At the end of each year, the CTA will provide inputs to the FAO Lead Technical Officer (LTO) to prepare the Project Implementation Review (PIR). The PIR includes the project results framework with relevant outcome and output indicators, baseline and annual targets, risk matrix monitoring, and will identify potential risks and mitigation measures to reduce unforeseen risks.

Output 4.1.3: Mid-term review and final evaluation conducted to constructively inform and guide project implementation, sustainability considerations, and the application of adaptive measures when necessary.

174. When project implementation reaches 50% an external consultant will conduct a Mid-Term Review, who will work in consultation with the project team, including the FAO-GEF Coordination Unit, FAO-LTO and other partners. It will include field visits to selected sites and consultations with local stakeholders and national project partners to allow for any necessary adjustments to the results framework or planned activities. In accordance with FAO's evaluation policy, the FAO Office of Evaluation (OED) will carry out a Final Evaluation of the project, which will begin within six months of the project closing date. Its objective will be to identify the achievements of the project, its sustainability and its real or potential effects. It is also intended to indicate the future measures necessary to guarantee the continuity of the process developed through the project. The FAO OED will carry out the evaluation in consultation with project stakeholders and the donor, and share with them the evaluation report, which is a public document.

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

175. The project will contribute to developing an enabling environment to consolidate the conservation and sustainable and resilient use of globally important biodiversity under a landscape approach in the sustainable use zones and buffer zones of the SEAP, promoting the balance between economic growth and conservation policies to maintain their biological integrity and ecosystem services for current and future generations while improving the quality of life of the local population. Therefore, it is consistent with the GEF criteria and is aligned with the Biodiversity Focal Area and its objectives and entry points.

176. In particular, Component 1 *Strengthening the national governance of SEAP for the management of protected areas with an emphasis on their sustainable use zones* and its Outcome 1.1: *Improved and integrated management of protected areas and their sustainable use zones* are aligned with the Objective BD 1-1: *Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors* and the Objective BD 2-7: *Address direct drivers to protect habitats and species and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate*.

177. Component 2: *Development of local territorial governance to prevent the loss of biodiversity (BD) in the buffer zones of Protected Areas* and its Outcome 2.1: *Strengthened institutional capacities of the Decentralized Autonomous Governments (DAG) in the integrated management of the landscape in the buffer zones, to prevent the loss of BD* are aligned with the Objective BD 1-1: *Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors* and the Objective BD 2-7: *Address direct drivers to protect habitats and species and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate*.

178. Component 3: *Improvement of alternative livelihoods to reduce pressure on ecosystem services and BD in the Cayambe Coca and Sangay NPs* and its Outcome 3.1: *Pressure from agricultural activities is reduced through diversification and improvement of local livelihoods* are aligned with the Objective BD 2-7: *Address direct drivers to protect habitats and species and improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate*.

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

179. Through the incremental support of the GEF, the project will support Ecuador in the removal of the identified barriers promoting an environment conducive to efficient management of the SEAP for the conservation and sustainable use of biodiversity and ecosystems, in compliance with the provisions of the COA. This will be done along the following lines: 1) strengthening of national capacities for the management of SEAP's sustainable use zones; 2) strengthening capacities at the local territorial level for the management of buffer zones; and 3) diversification and improvement of local livelihoods.

180. The COA establishes new scenarios for the management of PAs and the communities within them, which represents a new and complex objective that requires the support of the GEF. These lines of action are not being sufficiently addressed by the baseline initiatives and will contribute to removing significant barriers. Without the project, the actions of the MAATE, the MAG and the DAGs would be dispersed and, in some cases, would be contradictory at the local level. The management of sustainable use zones and buffer zones requires a landscape approach that considers productive lands and conservation zones to obtain adequate results. This project is the first at the PA level that combines biodiversity conservation and community participation in buffer zones and sustainable use zones.

181. Component 1 will address barrier 1. For this, the incremental financing of the GEF will serve for the integration of the information systems for the management of the PAs, which will allow the MAATE both at the central and local levels to have information and data updated continuously and in real time to support the management and decision making; to develop technical, operational and legal tools for the management of sustainable use zones of the SEAP prepared with the participation of the local population; and to strengthen capacities to implement, monitor and evaluate the application of regulations and instruments for the management of sustainable use zones.

182. Component 2 will contribute to removing barrier 2 by strengthening the institutional capacities of the DAGs for integrated landscape management in the buffer zones. This includes the development of standards and tools for the conservation and sustainable use of biodiversity in buffer zones and their incorporation into territorial planning instruments; the strengthening of inter-institutional and inter-sector coordination mechanisms at the territorial level; and capacity building of the DAGs to implement the regulations developed for the management of the buffer zones.

183. Component 3 will address barrier 3, with GEF incremental financing aimed at strengthening agricultural extension services to promote associativity and foster the adoption of practices for the conservation and sustainable use of biodiversity in buffer zones and sustainable use zones by the population that lives in these areas with the aim of generating global environmental benefits.

184. In Component 4, incremental financing will be directed to the performance of midterm and final evaluations, the monitoring of global environmental benefits, the development and dissemination of knowledge management products; and the development of a strategy for communication and information dissemination, in order to share experiences and promote the use of successful lessons at the local, regional and national levels.

185. The co-financing resources total USD 37,533,244 comprising in-kind contributions by national, provincial and municipal governments; private sector, civil society, and FAO as GEF Agency. Considering the significant contributions of the co-financing partners of the project, the GEF resources, for a total value of USD 4,416,210, will be used, as planned, to develop the enabling environment that allows progress towards adequate management of sustainable use zones and buffer zones, thereby generating significant global environmental benefits. The financial resources of the GEF will be added to the investments currently underway by the project partners, and therefore the project is considered as fully incremental.

6) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

186. The project will generate benefits for the global environment, consistent with national development priorities and sustained in the long term by the local and regional benefits that it will generate in terms of better livelihoods, cultural reaffirmation and environmental sustainability. These multiple benefits at various levels will be achieved through the improvement of national and local capacities for the management of PAs? sustainable use zones and buffer zones, the promotion of good practices that contribute to the transformation and sustainability of agricultural systems and the

conservation and sustainable use of biodiversity, and incentives that support the implementation of sustainable practices.

187. In particular, the main expected benefits for the global environment to be delivered by the project are:

? Improved management of the PNCC and PNS expressed in the increase in the management effectiveness score of the GEF METT tool: a) PNCC (486,612 has) from 45 to 65; b) PNS (403,103 has): from 43 to 55 (GEF Core Indicator # 1.2).

? 6,000 hectares in sustainable use zones and buffer zones of the Cayambe Coca and Sangay NPs where conservation practices and sustainable use of BD (sustainable production, tourism, restoration and conservation) are implemented (GEF Core Indicator # 4.1)

? Improved capacities of: 1) 60 technical officials and park rangers of the MAATE at the national level for the operation and maintenance of the integrated information system; 2) 80 technicians and park rangers from the PNCC and PNS for the use of the integrated information generation system and new or updated secondary regulations for this project; 3) 1,200 residents (30% women) living in the sustainable use zones in the PNCC and PNS, including women, youth and indigenous people, who know and understand the regulations and instruments for the management of sustainable use zones in the PNCC and PNS; 4) at least 600 people (30% women, 30% youth) to implement and monitor the regulations and tools for the conservation and sustainable use of biodiversity developed by the project; 5) 120 technicians and extension workers from the MAATE, MAG and DAG trained to implement good practices for the conservation and sustainable use of the BD (of which 40% are women); 6) 3,000 people (at least 40% are women) to implement practices for the conservation and sustainable use of biodiversity (GEF Core Indicator # 11).

? The project interventions will benefit the biodiversity of the PNCC and the PNS, which are home to numerous species, many of which are of global importance, through the reduction of pressure on natural resources and the consequent change in land use, maintaining ecological niches and species that are currently in danger of extinction, and ensuring the complex functioning of the ecological processes existing in the Andean and Amazonian forests. Similarly, its conservation will avoid the emission of CO₂ into the atmosphere, reducing the concentration of GHGs that are precursors of global climate change.

188. Likewise, the project will contribute to the Sustainable Development Goals (SDGs), especially Goal 15: *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 targets:

? *15.1 Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements;*

? 15.2 Promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally;

? 15.3 Combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world;

? 15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species extinction;

? 15.9 Integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts;

189. Complementarily, the project will contribute to Goal 5 *Achieve gender equality and empower all women and girls* and its target 5.5 *Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life*; and the Goal 13: *Take urgent action to combat climate change and its impacts* and its target 13.1 *Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries*.

7) Innovation, sustainability, potential for expansion and capacity building [10]⁹. ?

190. The project has been designed to remove the identified barriers, facilitating an environment conducive to advancing towards the efficient management of the SEAP. In this way, socio-cultural, environmental and economic benefits will be generated for local and regional stakeholders, thus guaranteeing the sustainability of the results and the replication of experiences and lessons learned, while reducing and reversing the degradation of forests and loss of biodiversity in the PAs of Ecuador. It is expected that, as of the fifth year of the project, the institutions, communities and stakeholders involved will be in a position to give continuity to the activities undertaken by the project. The factors that will favor sustainability in its social, environmental, economic and capacity development dimensions are detailed below.

7.1 Social sustainability

191. The social sustainability of the project results will be achieved through the management with a landscape approach of the sustainable use zones and buffer zones of the PAs that allow preventing, mitigating and reversing threats to biodiversity, and whose benefits will lay the foundations for social sustainability through the sustainable and resilient management of the territory. The implementation of the project will include defining factors that ensure social sustainability. In the project preparation phase, a gender analysis was carried out that made it possible to identify the degree of participation and roles of women in agricultural work and natural resource management, as well as gender gaps and barriers to participation. It was identified that although women play an active role in agricultural production, they continue to face barriers in access and control of land, in decision-making, in access to

benefits (credit, training) and to work in decent conditions (remuneration, social security). This diagnosis served as the basis for the preparation of a Gender Action Plan, which contains the specific strategies to remove the identified barriers, and which will be the instrument to mainstream gender issues through all project components (see details in Section 3 and in Annex J).

192. The project will promote the participation of women in all its activities, while promoting greater sensitivity in relation to the problems that affect women farmers in the field, among national and local public institutions, social organizations and various entities that will be linked to its implementation. The project will pay special attention to: i) promoting the participation and representation of women in decision-making related to the project (interest groups, community assemblies, etc.); ii) ensure that the training / dissemination and information materials prepared by the project include a gender perspective; iii) ensure that the activities carried out do not result in an increase in the workload of women, which implies promoting the use of labor-saving technologies and tools, as well as the consideration of the distribution of women's time; iv) equal access for women and men in the adoption of new skills, knowledge and abilities, anticipating at least 40% participation by women; v) promotion of direct participation of women in the development of productive activities; vi) promote access to incentives and the market both for women producers and organizations led by women; vii) in the monitoring and evaluation processes, special care will be taken in the compilation of sex-disaggregated information, in order to monitor the participation of women and men; and viii) the process of documenting the project's lessons will pay special attention to recording and informing on the contribution and role of women in the activities implemented.

193. Indigenous peoples are present in the project's intervention area and will also be beneficiaries of the project's execution. To this end, the project will select together with the representative indigenous organizations of the parishes where the project will focus its actions (councils, parish councils, communities or communes), themes of interest to build their capacities to enable them to implement sustainable land management practices. In all cases, FPIC processes will be undertaken before starting the implementation of activities to guarantee the respect for the collective rights of indigenous peoples and the signing of agreements for the project execution (see Annex J with the description of the FPIC strategy).

194. The Results Framework in Annex A1 includes gender-sensitive indicators. Gender and cultural relevance considerations were reviewed in the project's Environmental and Social Analysis.

195. The project will contribute to food security, considering that the actions proposed in favor of the conservation and sustainable use of biodiversity in PAs such as good practices for sustainable production, financial and non-financial incentive mechanisms to promote good practices, associativity and productive enterprises, and the improvement of access to markets, will allow to improve the supply of food with what will be contributing to local and national food security, since the population will improve the conditions of physical, social and economic access to safe and nutritious food and the availability of agricultural and forest products, to meet their nutritional requirements and food preferences.

7.2 Environmental sustainability

196. Environmental sustainability (including adaptation and resilience to the effects of climate change as a co-benefit) will be ensured through the development of standards, regulations and technical tools for the management of sustainable use zones and for the conservation and sustainable use of biodiversity in buffer zones. Likewise, the promotion of good environmental and sustainable management practices such as crop rotation, agroforestry and silvopastoral systems; seals or certifications for good practices in agricultural production and deforestation-free production; traceability systems; climate-smart livestock production; conservation of natural resources; and, restoration and protection of watersheds and water sources; sustainable tourism, bio-enterprises; among other practices, that facilitate the transition towards sustainable production systems.

197. One of the elements that will help environmental sustainability will be to underpin previous experiences and successes in terms of good practices, and demonstrate those that generate greater synergies and co-benefits, which will serve to promote the adherence of stakeholders under common objectives such as conservation of biodiversity, water sources, reduction of land degradation and mitigation and adaptation to climate change.

198. Increasing capacities in terms of good practices will help to empower institutional and local stakeholders (land users, producers, communities) so that they can support the activities to be implemented in the PNCC and the PNS, which will provide continuity to these actions and guarantee long-term sustainability. The incorporation of good practices and incentives under approaches to biodiversity conservation, territorial sustainability and resilience will result in an increase in the sustainability of ecosystem services and the stability of the income of agricultural producers. The communication strategy will serve to raise awareness about the importance of proper management of PAs and their sustainable use zones and buffer zones. All this will contribute to environmental sustainability, for the maintenance or improvement of livelihoods, productive means and other sources of income.

7.3 Financial and economic sustainability

199. The financial and economic sustainability of the project activities will be achieved to the extent that these activities are financially and economically viable for the stakeholders involved, including the producers and their families, organizations and communities. The project recognizes the existence of economic activities that are carried out in the buffer zones and sustainable use zones of the PAs, such as livestock and agriculture, with their more particular derivations, such as family gardens and chacras (in the Amazon area); and proposes a subsequent approach under a progressive strategy to reconcile elements of sustainability in their development. The approach is not to eliminate the conventional productive activities, but to achieve their conversion towards more sustainable systems through the promotion of production and articulation with markets and the search for differentiated prices for products from PA/buffer zones that improve the sustainability of landscapes, and that in turn contributes to improving the income and livelihoods of the population. Through the incentives? strategy, the project proposes to increase local interest in the inclusive conservation of PAs and buffer zones, recognizing and making visible the role of the population in the management of these areas. Dialogue mechanisms, such as territorial tables with the participation of the beneficiaries, will contribute to raise awareness about the need for sustainable interventions in the PA and its buffer zones. Awareness raising and training of beneficiaries to improve their understanding of the importance

of ecosystem services, the need to adopt sustainable uses and practices and how this can improve their livelihoods will contribute to ownership.

200. The economic viability of the project in the short term is based mainly on the selection of stakeholders and organizations that identify with the vision and main objective of the project. In the buffer zone, the stakeholders that have PMIF will be analyzed, in order to coordinate with the territorial actions carried out by other stakeholders. In the long term, the impact on important aspects such as market access and commercialization of the products and services generated in the areas of influence of the PA is estimated to improve the income of the population, therefore, the activities will be maintained after the end of the project; furthermore, given that the processes built will form part of the public policy for the management of protected areas, the activities will be maintained in the medium and long term.

7.4 Sustainability of developed capacities

201. Capacity development represents one of the essential pillars to guarantee the sustainability of the project both at the level of the intervention areas and in the institutional environment. It was conceived as a cross-cutting axis to the components of the Project, as it is an integral part of their respective results. The project will address two dimensions of capacity development according to the approach developed by FAO regarding sustainability: i) individuals (men and women producers, members of their families and communities, women and indigenous peoples); and, ii) institutions (public and private, national and subnational). The interaction between local stakeholders and national and subnational government institutions, and between institutions, will also be addressed.

202. Capacity development will reinforce the management and technical skills of project partners to enhance their capacities for integrated planning, implementation and monitoring of the sustainable use of biodiversity, and to facilitate coordination among multiple stakeholders. By strengthening and updating the existing policy, regulatory framework and building institutional capacities, the project will generate a much more cohesive and adequately financed governance framework, with better capacities to efficiently and effectively conserve biodiversity of global significance.

203. The SEAP System will build on the existing capacities in the MAATE in terms of technology and information generation. The MAATE has defined activities, roles and stakeholders around the current information systems and data collection that feed them, all of which will contribute to their appropriation. Sustainability of the SEAP System once in operation will be guaranteed by the already existing capacities of the technicians and park rangers, which will be strengthened with the training to be developed during the implementation. With the internal institutional processes clarified, and the stakeholders and their responsibilities identified, a management cycle of the SEAP system will be ensured in the long term. These actions will strengthen the appropriate and timely updating of the PAs' information.

204. Dialogue and partnership building will be essential tools for consensus building, allowing coordinated planning and regulatory oversight, and fostering sustainable forms of investment through the incentives? program. The establishment of inter-institutional coordination mechanisms in the territory will contribute to the sustainability of the project results. The project will work to involve

public and private stakeholders so that governance spaces constitute, in the long term, platforms where the public and private sectors can align, appropriate and develop joint concrete actions to strengthen planning in PAs sustainable use zones and buffer zones. Various factors will contribute to the sustainability of governance spaces, namely: they will be established on the basis of existing initiatives as well as the principles on which governance spaces are based: neutrality, empowerment and social inclusion, multiple stakeholders, strong facilitation and conflict resolution.

205. At the beneficiary level, the project will strengthen capacities through i) training, dissemination and exchange of experiences under modalities such as farmer field schools, and ii) strengthening of associativity, strengthening capacities to develop/consolidate market access mechanisms for existing sustainable value chains in the intervention PAs.

206. The communication strategy of the project will support the development of capacities across the entire project through awareness raising and helping to spread the key messages of the project in relation to the conservation and sustainable use of biodiversity in PA sustainable use zones and buffer zones. The systematization of lessons learned will also contribute to the sustainability of the capacities to be installed.

7.5 Appropriate and cost-efficient technology

207. The project design is cost-efficient, as it is based on baseline initiatives, as well as policies and regulations, especially the COA, national and sub-national competencies and infrastructures. The technical viability is based on the presence in the intervention areas of entities with sufficient technical capacity for the transfer of technologies and innovations, among them, the MAATE, the MAG, the DAG and other stakeholders. There are many methodologies and strategies to reduce the pressure on the conservation of natural resources, for example, the purchase of land for conservation, or the placement of physical obstacles that prevent undue access to protected areas; but, in the Ecuadorian context, the chosen strategies fulfill a similar function, for a much lower cost, which is why the proposals are cost-efficient.

208. During project preparation, a series of complementary and synergistic strategies and methodologies have been identified that constitute a cost-efficient way to remove barriers and address threats to global environmental benefits. These strategies and methodologies are detailed below:

? Support for producers with technical assistance and culturally appropriate and gender-sensitive rural extension, accompanied by the creation or strengthening of local associations, which will also promote local sustainability and improve the prospects for sustainable livelihoods. The participation of young people, peoples and nationalities and women will be maximized, social organization and associativity will be promoted as a sustainability mechanism, and decent work and employment will be promoted.

? The promotion of practices for the conservation and sustainable use of biodiversity (i.e diversification, crop rotation, integrated pest management, soil conservation, protection of water sources, agroforestry, restoration) that are known and proven, and that will be validated with the residents in the intervention PAs. Environmentally friendly practices accompanied by strengthened and

coordinated incentives such as, for example, clarity in land tenure, access to credit, among others that will ensure success and also potential for replication to promote changes in the behavior of landowners or users.

? The promotion and support of alternative sustainable strategies that promote economic income in vulnerable groups living in or near PAs will ensure that pressure on land use change decreases. The work with value chains, support in the identification of markets and strengthening in the production regulated with green seals or certifications, will serve to impose an environment of sustainability.

? The training and technical assistance methodologies currently in use by FAO will be used (farmer field schools, exchanges of experiences), methodologies that are known and accepted by both technicians and producers, and that will contribute to the appropriation of good practices as well as the results of the project in the field.

? Strengthening the coordination and collaboration of multiple stakeholders at the national and subnational levels, through existing spaces, which will improve synergies, avoid duplication of efforts, and reduce implementation costs. The participation of key stakeholders will ensure that decision-making and project execution will be aligned with development priorities and national and sub-national planning tools.

? The training and awareness of the beneficiaries will contribute to sustainable use, the application of appropriate technologies, and an increase in the sustainability of production and income stability. The training of technical personnel from the institutions and the sensitization of national and sub-national authorities will help to ensure the continuity of direct assistance to beneficiaries.

? The exchange and dissemination of experiences between intervention sites will contribute to the dissemination of good practices, incentives, and value chains, guaranteeing their cost-efficient scaling. The systematization of experiences and lessons learned at the disposal of the project partners and the different stakeholders will also contribute to a cost-efficient replication of the project results throughout the country.

7.6 Innovation and replicability

209. The project is innovative in several aspects: 1) The approach to natural heritage conservation by providing local communities with alternative and complementary livelihoods seeking inclusive conservation; 2) The inclusion of local stakeholders in the governance of natural resources and biodiversity conservation; 3) The promotion and support of alternative sustainable strategies that promote economic income in vulnerable groups living in or near PAs, which will ensure that pressure on land use change decreases, and 4) Environmentally friendly practices accompanied by strengthened and coordinated incentives such as, for example, clarity in land tenure, access to credit, among others, ensures success and potential for replication. These aspects differentiate this project from previous ones and make it the first at the PA level that combines BD conservation and community participation in buffer zones and sustainable use zones, contributing to the implementation of the COA. These aspects will also allow the generation of replicable lessons to the entire SNAP.

210. The potential for replication of the project is high, given its complementarity with policies and regulations, in particular the COA, as described in Section 1.a. Project Description - Baseline Scenario. The PNCC and PNS are representative of the problems that the SEAP experiences in terms of threats to PAs from economic activities carried out in sustainable use zones and buffer zones, and reflect the diversity of biophysical characteristics, socioeconomic and cultural conditions present in the SEAP. These aspects constitute an opportunity to draw lessons on the potentialities and challenges for an adequate management of PAs and their scaling up at the national level.

211. The SEAP System, after the pilot implementation in the PNCC and PNS and the feedback to improve its design and operation, will be applied in the management of the SEAP as a whole. The actions of the project in terms of capacity building, mechanisms for the coordination and articulation of stakeholders, conservation practices and sustainable use of biodiversity will contribute to reduce threats and the sustainability of results, and may be replicated in other PAs. The technical and legal tools developed for the management of sustainable use zones and buffer zones may be extended to the other PAs. The experiences generated under the rural extension and technical assistance program coordinated between the MAATE, the MAG and the DAGs may be replicated in other PAs. Joint work with institutions for the development of incentive mechanisms and market access will contribute to making the experience available for replication to other areas of the intervention zones as well as to other PAs in the country.

212. The project will promote the dissemination of experiences through exchange activities to facilitate the introduction and replication of cost-efficient approaches and practices for PA management and the conservation and sustainable use of biodiversity. The systematization of experiences and lessons learned will serve to promote the replication of the project results at the national and international level. The FAO Representation in Ecuador will disseminate information on the results and lessons learned with other FAO projects in the country, and through the Regional Office for Latin America and the Caribbean, with other countries in the region with similar characteristics and problems.

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

Changes	PIF (Project Identification Form)	Project Document
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<p>Drafting of the objective, components, outcomes and outputs, taking into account comments from the STAP and in order to better clarify the aspects that make up the intervention logic.</p> <p>Outputs 1.1.1 and 1.1.4 have been merged under</p>	<p>Objective: Promote the conservation and sustainable use of biodiversity and optimize the livelihoods of local inhabitants, through the application of the integral landscape management approach within the <i>sustainable use zones</i> of the State Subsystem of Protected Areas (SEAP) and its buffer zones and create capacities in decision makers for scaling throughout the National System of Protected Areas (SNAP).</p>	<p>Objective: Promote conservation, sustainable use of biodiversity and capacity building in sustainable use zones and buffer zones within the State Sub-system of Protected Areas (SEAP).</p>
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<p>Output 1.1.1.</p> <p>Outcome 3.2 was eliminated, and Outcome 3.2.1 incorporated as Outcome 3.1.3 of Outcome 3.1</p>	<p>Component 1: Strengthening the Governance of SEAP and its <i>sustainable use zones</i> (inside boundary)</p> <p>Outcome 1.1: Integrated and improved management of protected areas and their <i>sustainable use zones</i></p> <p>Output 1.1.1: SEAP's Integrated Information Management System for the management of <i>sustainable use zones</i>^{[11]¹⁰}, with a module for monitoring socio-environmental conflicts.</p> <p>Output 1.1.2: Technical, operational and legal standards and tools for the management of SEAP's <i>sustainable use zones</i>, within the framework of the new Environmental Organic Code and its regulations.</p> <p>Output 1.1.3: Training program for MAE personnel in the effective application of regulations and instruments for the management of <i>sustainable use zones</i> in the Cayambe Coca and Sangay PAs.</p>	<p>Component 1: Strengthening the national governance of SEAP for the management of protected areas with emphasis on their <i>sustainable use zones</i></p> <p>Outcome 1.1. Improved and integrated management of protected areas and their <i>sustainable use zones</i></p> <p>Output 1.1.1: SEAP's Integrated Information System for the management of protected areas and their <i>sustainable use zones</i>, including a module for monitoring socio-environmental conflicts, and implemented in the Cayambe Coca and Sangay NPs, and validated by the communities, technical teams and park rangers</p> <p>Output 1.1.2: Technical, operational and legal standards and tools, with a gender and intercultural approach, for the management of <i>sustainable use zones</i> of SEAP established within the framework of the new Organic Environmental Code, its regulations and secondary legislation</p> <p>Output 1.1.3: Capacity development program for the effective implementation of regulations and instruments for the management of <i>sustainable use zones</i> in the Cayambe Coca and Sangay NPs, aimed at the staff of the MAATE and the local population.</p>
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	<p>Component 2. Strengthening capacities to prevent the loss of BD in buffer zones (outside boundary)</p> <p>Outcome 2.1: Capacities of Decentralized Autonomous Governments (DAGs) and local stakeholders strengthened for the integrated management of landscapes in the buffer zones, to prevent the loss of BD</p> <p>Output 2.1.1: Regulations and tools developed for the conservation and sustainable use of BD in SEAP buffer zones, within the framework of local planning.</p> <p>Output 2.1.2: Inter-institutional and inter-sectoral coordination mechanism at the territorial level between the MAE, MAG, DAGs and other key stakeholders for dialogue, coordination and information exchange between the national, provincial, municipal and parish levels.</p> <p>Output 2.1.3: Training program for DAGs and key stakeholders in the regulations created in 2.1.1, for the management of buffer zones.</p>	<p>Component 2: Development of local territorial governance to prevent the loss of biodiversity (BD) in the <i>buffer zones</i> of Protected Areas</p> <p>Outcome 2.1: Strengthened institutional capacities of Decentralized Autonomous Governments (DAG) in integrated landscape management in buffer zones, to prevent the loss of BD</p> <p>Output 2.1.1: Standards and tools developed for the conservation and sustainable use of BD in SEAP buffer zones, integrated into the local planning framework.</p> <p>Output 2.1.2: Mechanism for shared governance and inter-institutional and intersectoral coordination at the territorial level between the MAATE, the Ministry of Agriculture (MAG), DAG and other key stakeholders at the national, provincial, municipal and parish levels</p> <p>Output 2.1.3: Training programs implemented for DAGs and key stakeholders on regulations for buffer zone management</p>
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	<p>Outcome 3.1 Agricultural pressures on the Sangay and Cayambe Coca Parks are reduced, conserving and restoring natural resources and ecosystem functions</p> <p>Output 3.1.1: Technical assistance and rural extension services of the MAE, MAG and DAGs, strengthened and coordinated to promote conservation and sustainable use practices of the BD, in buffer zones and sustainable use</p> <p>Output 3.1.2: Environmentally friendly practices implemented with the communities and inhabitants of the zones of sustainable use and buffering of 2 PAs, in accordance with the approved norms for different types of uses (for example: farm management plans, climate-smart agriculture, agroecology)</p> <p>Outcome 3.2: Livelihoods of the inhabitants of Sangay and Cayambe Coca in <i>sustainable use zones</i> and buffer zones improve and are more sustainable</p> <p>Output 3.2.1: Strengthened and coordinated incentives for the conservation and use of biodiversity at the local level (including: exemption from local tax payments, non-monetary incentives such as technical assistance, green seals, certification of origin or collective mark for access to markets)</p>	<p>Outcome 3.1: Pressure from agricultural activities is reduced through diversification and improvement of local livelihoods</p> <p>Output 3.1.1: Technical assistance and rural extension services of the MAATE, MAG and DAG coordinated and strengthened to promote associativity initiatives and foster practices of conservation and sustainable use of the BD, in buffer zones and sustainable use zones, with a gender and intercultural approach</p> <p>Output 3.1.2: Conservation and sustainable use practices of the BD implemented with the population of the sustainable use zones and buffer zones of two PAs, within the framework of the PA zoning, related legislation and specific technical guidelines for each practice.</p> <p>Output 3.1.3: Incentives? scheme that promotes the conservation and sustainable use of BD, in sustainable use zones and buffer zones of PAs, with a gender and intercultural approach</p>
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	<p>Outcome 4.1: Project implementation is supported by an M&E strategy based on measurable and verifiable results and adaptive management principles.</p> <p>Output 4.1.1: Mechanism of dissemination and exchange of best practices and lessons for the replication and scaling of results to SEAP: communication and information strategy; visits and exchange tours for staff of the MAE, DAG, MAG, owners and producers of buffer zones; media management; project website.</p> <p>Output 4.1.2: M&E strategy developed with relevant stakeholders, clearly defining expected results, the expected time periods for their completion, and their confirmation through objectively verifiable indicators and means of verification</p> <p>Output 4.1.3: Mid-Term Review and Final Evaluation to constructively inform and advise the implementation of the project, sustainability considerations, and the application of adaptive measures when necessary.</p>	<p>Outcome 4.1: Knowledge Management and Monitoring and Evaluation (M&E) strategy based on adaptive management and delivery of measurable and verifiable results</p> <p>Output 4.1.1: Mechanisms implemented for the dissemination and exchange of best practices and lessons for the replication and escalation of the project results to the SEAP</p> <p>Output 4.1.2: Monitoring and Evaluation strategy developed with relevant stakeholders, clearly defining expected results, the expected time periods for their completion, and their confirmation through objectively verifiable indicators and means of verification.</p> <p>Output 4.1.3: Mid-term review and final evaluation conducted to constructively inform and guide project implementation, sustainability considerations, and the application of adaptive measures when necessary.</p>
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[1] Ecuador. Carbon, biodiversity and ecosystem services: exploring the multiple benefits. MAE-UNEP-WCMC. 2011

[2] This information was provided by the AICCA project team interviewed during the design phase.

[3] The law defines land and territory in ancestral possession and property, the physical space on which a community, commune, town or nationality of ancestral origin, has historically generated an identity from the social, cultural and spiritual construction, developing economic activities and their own forms of production in a current and uninterrupted way. The ownership of these lands and territories is imprescriptible, inalienable, unattachable and indivisible, its adjudication is free and it is exempt from the payment of fees and taxes.

[4] 1. Conserve and sustainably use biodiversity at the level of ecosystems, species and genetic resources and their derivatives, as well as ecological functions and environmental services; 2. Protect representative samples with singular, complementary and vulnerable values of terrestrial, island, freshwater, marine and marine-coastal ecosystems; 3. Protect wildlife species and wild varieties of cultivated species, as well as promote their recovery, with special emphasis on native, endemic, threatened and migratory ones; 4. Establish conservation values on which its management will be prioritized; 5. Maintain the hydrological dynamics of the hydrographic basins and protect the bodies of surface and underground waters; 6. Guarantee the generation of environmental goods and services

provided by ecosystems and integrate them into the territorial models defined by the Decentralized Autonomous Governments; 7. Protect scenic and landscape beauties, sites of historical, archaeological or paleontological importance, as well as geological formations; 8. Respect, promote and maintain cultural manifestations, traditional, collective and ancestral knowledge of the communes, communities, peoples and nationalities and integrate them into the management of protected areas; 9. Promote bio-knowledge and the valuation of ecosystem services coordinated with human talent, research, technology and innovation, for which the participation of the public, private, mixed and community academic sector will be stimulated; 10. Promote alternatives for recreation and sustainable tourism, as well as environmental education and interpretation; 11. Guarantee the functional connectivity of ecosystems in terrestrial, marine and marine-coastal landscapes; and, 12. Contribute to the adaptation and mitigation of climate change through the mechanisms provided in this Code.

[5] Through the project monitoring and evaluation strategy, the GEF METT will receive feedback from the Methodological Evaluation for the Evaluation of Management Effectiveness of the Heritage of Natural Areas of the State - EEM-PANE, which is an adapted version of the METT in Ecuador (<http://extwprlegs1.fao.org/docs/pdf/ecu162628.pdf>)

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[6] The trainings in the SMART tool are oriented to control and vigilance. With the Green School Program, PA personnel have also been trained on issues related to planning, finance, legislation, communication, gender and interculturality. Although they are important advances in the generation of capacities, the training activities are oriented to specific topics and those concerning comprehensive management are rare.

[7] The COA determines in Art. 59 that the activities carried out in the buffer zones must contribute to the fulfillment of the objectives of the National System of Protected Areas, within the framework of development planning and land use and that the Decentralized Autonomous Governments will promote and encourage complementary actions and activities to guarantee conservation in these areas.

[8] The purpose of the ACUS is to conserve biodiversity and develop sustainable activities to guarantee the maintenance of ecosystem benefits that benefit human life (Art. 7 of Ministerial Agreement N° 83).

[9] Ecuador has an adapted version of the METT <http://extwprlegs1.fao.org/docs/pdf/ecu162628.pdf>, which is called Methodological Evaluation for the Evaluation of Management Effectiveness of the Heritage of Natural Areas of the State - EEM-PANE

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[10] System-wide capacity development (CD) is essential to achieve more sustainable, country-driven and transformational results at scale as deepening country ownership, commitment and mutually accountability. Incorporating system-wide CD means empowering people, strengthening organizations

and institutions as well as enhancing the enabling policy environment interdependently and based on inclusive assessment of country needs and priorities.

? Country ownership, commitment and mutual accountability: Explain how the policy environment and the capacities of organizations, institutions and individuals involved will contribute to an enabling environment to achieve sustainable change

? Based on a participatory capacity assessment across people, organizations, institutions and the enabling policy environment, describe what system-wide capacities are likely to exist (within project, project partners and project context) to implement the project and contribute to effective management for results and mitigation of risks.

? Describe the project's exit/sustainability strategy and related handover mechanism as appropriate.

[11] Information on the state of biodiversity, tenure, land use, among others.

1b. Project Map and Coordinates

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

213. The project will intervene in the Sangay and Cayambe Coca National Parks and their buffer zones, both of which, due to their geographical location, share territory between the Andean region and the Amazon. These two regions cover 41% and 33% of the country's total surface area respectively and are home to about 50% of the country's forests, mainly evergreen forests of the Amazon, the Andean foothills and the Andes[1] and they provide important ecosystem services. The main cities of Ecuador are supplied with the water generated in the moorlands and montane forests, while the Amazon region, for its part, contains the largest water resources in the country, covering eight hydrographic basins that include the Napo, Putumayo, Tigre, Pastaza, Morona, Santiago, Blanco and Zamora rivers. Additionally, they constitute an important carbon sink, with the Andean region storing 28% of the total carbon in biomass and 46% of the total carbon, and the Amazon region with 58% of the total carbon in biomass and 36% of the total carbon[2]. These two NPs have suffered more accelerated degradation processes than other PAs in Ecuador, mainly due to the increase in agricultural areas, such as the agricultural mosaic of annual, permanent and semi-permanent crops in sustainable use zones within PAs with an increase in agricultural area between 1990 and 2014 of 71%, going from 22,533 hectares in 1990 to 38,640 hectares in 2014, which represents a change in use on 4.3% of the total area within both protected areas. Table 1 below summarizes the main threats to BD in both PAs:

Table 1 ? Summary of the main threats to BD in the Cayambe Coca and Sangay NP

Intervention sites	Threats (BD)	Effects	Consequences of non-removal of threats on BD/ecosystem services
Sangay	<p>Unsustainable productive practices:</p> <ul style="list-style-type: none"> - Intensive livestock grazing - Use of pesticides and fertilizers, etc. - Agricultural frontier expansion - Crop burning 	Biodiversity loss	<p>The destruction and degradation of species' habitats is the most important direct driver of global biodiversity loss (WWF 2014 in Montes y Palomo 2015)</p> <p>The loss of native vegetation cover contributes to climate change. For example, Ecuador's, third communication on climate change determines that the "Land Use, Land Use Change and Forestry - LULUCF" sector contributes 25.35% of net emissions of Gg of CO₂ eq, being the second most significant activity in the country, after the Energy sector (MAE 2017).</p> <p>Between the years 2001-2019, the loss of tree cover calculated in the PNS is 1,550 ha, which is equivalent to a 0.44% decrease in tree cover since 2000, in relation to an increase of 98 ha due to natural recovery (Global Forest Watch, 2021). The losses found, calculated in terms of CO₂ emissions released into the atmosphere, are equivalent to 30,300t per year (Global Forest Watch, 2021).</p>
	Climate	Biodiversity loss	Some climatic scenarios in Ecuador determine that in the Sangay National Park the loss of biodiversity would range from 5.36% to 8.6% (Cuesta, and others 2015).
	Land-use change	Loss of forest cover	<p>The estimated loss of tree cover is 1,550 ha, which is equivalent to a 0.44% decrease in tree cover since 2000, in relation to an increase of 98 ha due to natural recovery⁰) (Global Forest Watch, 2021). The losses found, calculated in terms of CO₂ emissions released into the atmosphere, are equivalent to 30,300t per year (Global Forest Watch, 2021).</p> <p>According to cartography of the area, coverage and land use, between the years 2016 - 2018; there has been a considerable increase in the populated area and as well as that destined to forest plantations; which has led to the decline of the native forest (1034.8 ha) for this period</p>

	Natural threats due to the geographical location of the PA	Volcanic threat	<p>Tunguragua Volcano: in a state of eruption, with recent activities of strombolian and vulcanic explosions, sub-continuous emissions of gas and ash, pyroclastic flows, fumaroles, hydrothermal activity (EPL 2021). Since 1999 it has maintained intermittent activity episodes lasting a few days to weeks.</p> <p>Sangay Volcano: in an active state, with the presence of strombolian explosions, ash columns, generation of pyroclastic flows, lava flows and fumarolic activity. Although there are not many studies, the generation of pyroclastic flows, lava flows and lahars is common (EPL 2021).</p>
		Threat of mass movement and susceptibility to forest fires	<p>Mass movement: more than 50% of the PA surface has medium vulnerability to mass movement, especially between the months of March, April, May and June; fires: 33% of the Sangay surface has high and medium vulnerability to fires, especially in the upper area, and between the months of November, December and January (MAE 2015)³</p>
	Infrastructure		<p>The presence of the Paute Dam, with part of the infrastructure within the PNS, has negative implications on the protected area, with a network of roads and noise from the powerhouse located inside. Its expansion, through the so-called Paute Integral Hydroelectric Project, involves the operation of the Sopladora Dam on the limits of the Azuay and Morona Santiago provinces and the construction of the Mazar-Dudas Dam, currently stopped. The operation of these two new projects represents an additional pressure on the PNS in terms of the use of flows and processes of contamination and erosion that could take place (Macancela, 2018; Washima Tola, 2011) and that would alter the ecology of the area. In the upper area, the greatest risk is the use of the Guamote-Macas highway for the passage of hydrocarbons.</p>

Cayambe Coca	Unsustainable productive practices:	Biodiversity loss	<p>The destruction and degradation of species' habitats is the most important direct driver of global biodiversity loss (WWF 2014 in Montes y Palomo 2015)</p> <p>The loss of native vegetation cover contributes to climate change. For example, in Ecuador, in its third communication on climate change, it determines that the category "Land Use, Land Use Change and Forestry - USCUS" contributes 25.35% of net emissions of Gg of CO₂ eq, being the second most significant activity in the country, after the Energy sector (MAE 2017).</p> <p>Between the years 2001-2019, the loss of tree cover calculated in the PNS is 1,720 ha, which is equivalent to a 0.53% decrease in tree cover since 2000, in relation to an increase of 143 ha due to natural recovery (Global Forest Watch, 2021). The losses found, calculated in terms of CO₂ emissions released into the atmosphere, are equivalent to 35,800t per year (Global Forest Watch, 2021).</p>
	<ul style="list-style-type: none"> - Livestock grazing - Use of pesticides and fertilizers, etc. - Agricultural frontier expansion - Crop burning 		
	Climate	Biodiversity loss	Some climatic scenarios in Ecuador determine that in the Cayambe Coca National Park the loss of biodiversity would range from 4.04% to 8.18% (Cuesta, and others 2015).
	Land-use change	Loss of forest cover	<p>According to Global Forest Watch, between the years 2001-2019, Cayambe Coca has suffered a loss of tree cover of 1,720 ha, which is equivalent to a decrease of 0.53% of tree cover since 2000, in relation to a 143 ha increase) (Global Forest Watch, 2021). These losses, in terms of CO₂ emissions released into the atmosphere, are equivalent to 35,800t per year.</p> <p>According to the existing cartography of the area, coverage and land use, between the years 2016 -2018, there is mainly an increase in the populated area and agricultural land; which has led to a significant reduction in herbaceous vegetation (345.6 ha) in the AP, for this period.</p>
	Natural threats due to the geographical location of the PA	Volcanic threat	<p>Cayambe volcano is active, with recent activities of fumaroles and volcanic earthquakes. It is one of the largest volcanic complexes in the country (EPL 2021).</p> <p>El Reventador volcano is erupting, with recent activities of explosions, gas and ash emissions, lava flows and lahars. The current eruption began in 2002 with an explosive phase, accompanied by pyroclastic flows (EPL 2021).</p> <p>Antisana volcano, potentially active, with hydrothermal activities and volcanic earthquakes. Currently no type of fumarolic activity is observed, however, a sulfurous odor has been reported in the upper parts (EPL 2021).</p>

		Threat of mass movement and susceptibility to forest fires	<p>Mass movement: PNCC was identified as the most representative protected area for mass movement. It has 75% of its territory with medium and high vulnerability, especially in May, June and July;</p> <p>Fires: PNCC was identified as the most representative fire protected area. It has 37% of its territory with medium and high vulnerability especially in the high zone, and between the months of October, November, December and January (MAE 2015)³</p>
		Undermining of the Coca River	<p>The undermining has caused, among others, a loss of approximately 120 linear meters of the State road network at kilometer 66 (via Baeza-Lago Agrio). Because the GEF project includes as part of its area of influence, populations from the provinces of Napo (Quijos and El Chaco cantons) and Sucumbos (Gonzalo Pizarro canton); and, that the State road network that is affected by the described event is the only access, if the aforementioned impacts are maintained or worsened, this would cause serious problems in the execution phase of the project (SNGRE 2021).</p>

214. Specifically, the work area within these PAs will be focused on **sustainable use zones** (inside PAs) and **buffer zones** (outside PA boundaries).

Table 2: Details of the sustainable use zones and buffer zones of the Cayambe Coca and Sangay National Parks

Protected Areas	Sustainable Use Zone	Buffer Zone
	Area (ha)	Area (ha)
Cayambe Coca National Park	13,413	363,927
Sangay National Park	12,344	508,355*
TOTAL	25,757	872,282

* Of the area identified as a buffer zone in the Sangay National Park, only 187,691.83 ha correspond to areas with a productive matrix, this is equivalent to 36.92% of the total

Sources: (Ministry of the Environment, 2014) (Ministry of the Environment, 2019)

Elaboration: FAO, 2021

215. In this context, a prioritization of intervention sites was carried out within the PNCC and PNS based on a multicriteria analysis, using the parishes as the minimum territorial unit. Eleven criteria were identified that were characterized at that territorial level and weighted: 1) Deforestation in parishes, 2) Sustainable use zones, 3) Deforestation in buffer zones, 4) Population density, 5) Presence of producer associations, 6) Unsatisfied Basic Needs, 7) Forest fires, 8) Fragility of ecosystems, 9) Water permits, 10) Percentage of the parish in the PANE, 11) Governance. Ten criteria were weighted based on an analysis based on secondary information; and the last criterion was weighted by MAATE technicians who work in the respective protected areas. Annex O includes the detailed prioritization methodology.

216. As a result of this exercise, the potentially most suitable parishes were prioritized for project intervention at the farm level. However, in the execution phase of the project, the specific sites will be defined, which will depend on aspects that are more appropriate to the local and territorial reality and whose validation will be carried out with the most representative territorial stakeholders. Validation with local stakeholders could not be completed due to restrictions caused by the Covid-19 pandemic and will be undertaken at project outset.

Table 3 ? Potential prioritized intervention parishes

Protected Area	Province	Canton	Parish
Cayambe Coca National Park	Napó	El Chaco	El Chaco
			Oyacachi
			Sardinas
			Santa Rosa
			G.D?az de Pineda
			Linares
			Cuyuja
		Quijos	Borja
			Papalla
			Baeza
	Sucumb?os	Gonzalo Pizarro	Gonzalo Pizarro
			El Reventador
			Lumbaqui
			Puerto Libre
	Pichincha	Cayambe	Cayambe
			Olmedo
			Cangahua
Sangay National Park	Ca?ar	El Tambo	El Tambo
			Ingapirca
		Ca?ar	Juncal
			Rivera
	Chimborazo	Alaus?	Achupallas

	Morona Santiago	Santiago de M?ndez	M?ndez
			Tayuya
			Asunci?n
		Suc?a	Suc?a
		Palora	Cumand?
		Pablo sexto	Pablo Sexto
		Morona	Macas
			Zu?a
			R?o Blanco

Location of prioritized Project areas:

Site	North	South	East	West
Cayambe Coca buffer zone	0? 28' 41" N, 77? 36' 10" W	0? 36' 35" S, 77? 52' 1" W	0? 3' 24" S, 77? 15' 2" W	0? 12.7867' S, 78? 22.1919' W
Cayambe Coca National Park	0? 19' 29" N, 77? 49' 28" W	0? 19' 29" N, 77? 49' 28" W	0? 4' 27" N, 77? 22' 35" W	0? 7' 29" S, 78? 15' 0" W
Sangay buffer zone	1? 23' 49" S, 78? 22' 54" W	2? 46' 46" S, 78? 25' 30" W	1? 50' 47" S, 77? 52' 18" W	2? 30' 4" S, 79? 3' 40" W
Sangay National Park	1? 26' 40" S, 78? 26' 29" W	2? 39' 21" S, 78? 23' 18" W	1? 37' 42" S, 78? 3' 42" W	2? 26' 23" S, 78? 57' 8" W

Figures 4 and 5 below include the PNCC and PNS location maps. Annex E includes maps with additional information from both PAs.

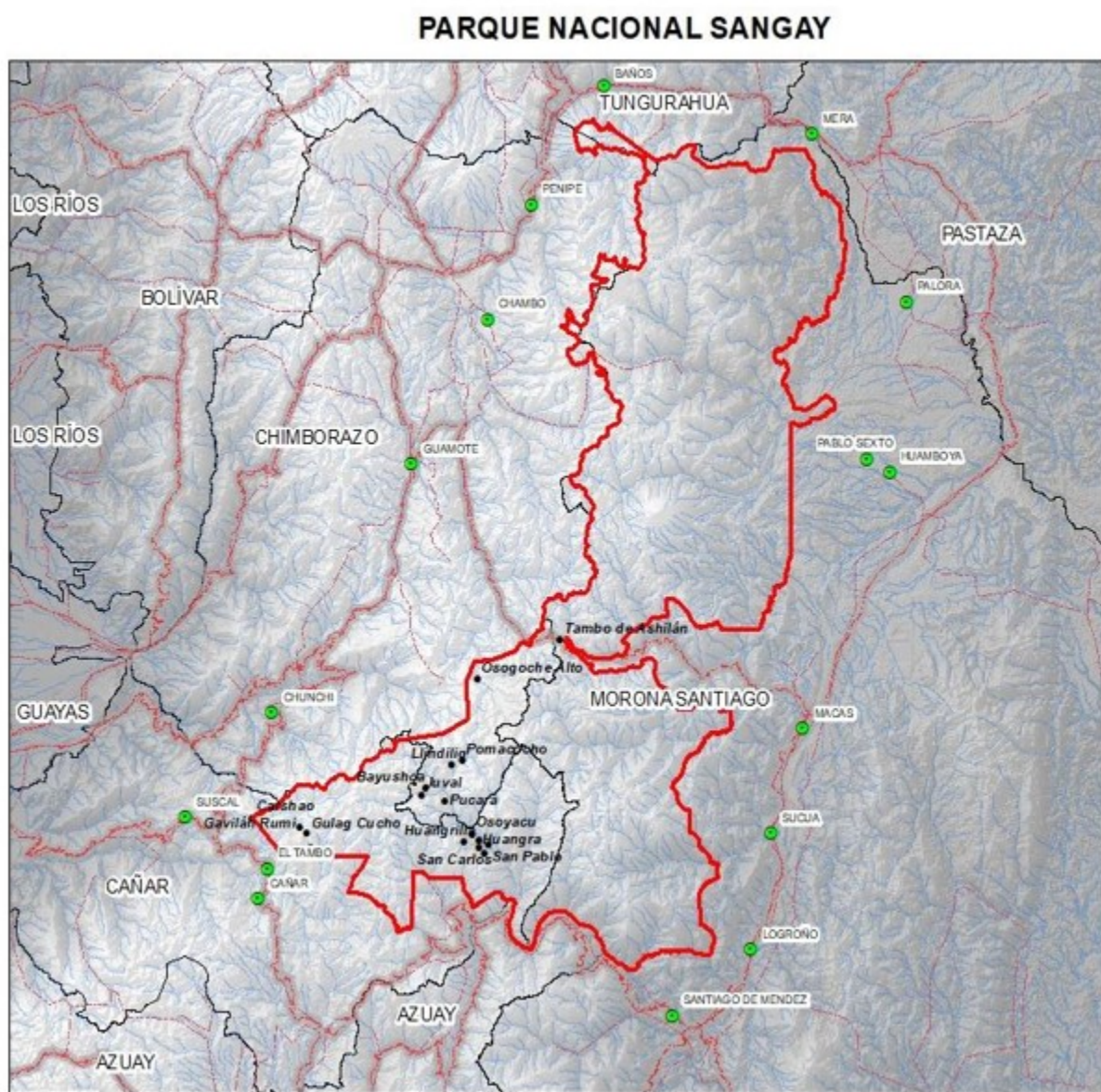


Figure 5 - Sangay National Park

Source: Base Cartography IGM (), Territorial Organization of the State - Provincial Level ? CONALI (2019)

217. Table 4 presents the main characteristics of the prioritized intervention sites.

Table 4 ? Characterization of the Prioritized Intervention Sites

	Sangay National Park	Cayambe Coca National Park
Location (provinces, cantons, etc).	Provinces: Ca?ar, Chimborazo, Morona Santiago and Tungurahua 4 cantons, 17 communities	Provinces: Imbabura, Napo, Pichincha y Sucumb?os 8 cantons, 14 communities
Study Area	Size of Protected Area: 408,287 ha Size of Buffer Zone: 508,355 ha	Size of Protected Area: 502,105 ha Size of Buffer Zone: 363,927 ha

<p>Environmental Characteristics</p>	<p>This is the third largest continental protected area in the country, with an altitudinal range from 5,320 meters above sea level (Tungurahua volcano) to 600 meters above sea level. It includes sectors with perpetual snow such as Sangay and Tungurahua, moors, wetlands, eastern foothill forests and the lowland valleys of the Amazon region (Ministry of the Environment, 2014). It has 19 ecosystems, of which 6 are herbaceous and occupy 26.9% of the park's surface, 3 are shrub lands which occupy 5.79% of the area and 10 are arboreal ecosystems that occupy 60.39% of the park (Ministry of the Environment, 2014).</p> <p>This park has the largest number of ecosystems nationwide, containing endemic and endangered flora species. For example, the montane evergreen forest ecosystem in the south of the Eastern Mountain range of the Andes, which has a vegetative coverage of 15% and hosts up to 2,769 species, of which 513 are endemic species and 335 are threatened species, according to the IUCN classification (Ministry of the Environment, 2018).</p> <p>In the biodiversity diagnosis carried out in the draft of the PA management plan (2014), it is estimated that there are more than 500 species of vertebrates. The document reports 107 species of mammals, 400 species of birds, 90 species of amphibians, 26 species of reptiles and 17 species of fish (MAE, 2004; Brito, J and Almendra, A, 2013; Ron, SR (ed.). 2013; Cordillera Tropical Foundation, 2010 in (Ministry of the Environment, 2014)). It was declared a Natural World Heritage Site by UNESCO in 1983. The PA is part of two important connectivity corridors: Sangay - Podocarpus (Lower Southern Zone) and Llanganates - Sangay (Upper Zone).</p>	<p>This area includes part of the moors in the Andes Royal Mountain Range and extends towards the eastern foothills through the foothills of the Sub-Andean Mountain and the Amazon plain, in a territory that includes 10 life-zones (Ministry of the Environment, 2015). The western zone begins at 3,100 meters above sea level and reaches the maximum altitude of 5,790 meters above sea level, which corresponds to the perpetual snows of Cayambe, presenting moors and cloud forest characteristics. The eastern zone extends from the foothills to the Amazon region at 600 meters above sea level (Ministry of the Environment, 2019)</p> <p>This national park is one of the PAs with the largest number of ecosystems (Ministry of the Environment, 2018), and contributes to the conservation of a significant number of flora species and endemic or threatened flora species. For example: The Northern Evergreen Foothills Forest of the Eastern Andes is the ecosystem with the highest number (3,725) of flora species nationwide; the moor has up to 2,769 species of flora, of which 463 are endemic and 273 species are under threat according to the IUCN categories (Ministry of the Environment, 2018).</p> <p>Regarding fauna, according to the Management Plan of the PA (2019), Cayambe Coca has registered 395 species of birds; 42 species of large mammals; 18 species of amphibians; and around 140 species of reptiles (Ministry of the Environment, 2019).</p>
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General population (men and women)	<p>The total population that benefits directly or indirectly from the PNS's ecological services amounts to 647,739 people. Of this total, 198,806 live in the rural area of the parishes in their area of influence (96,140 men and 102,666 women.)</p> <p>The population linked to the PNS is eminently young (60% of the total): 90,626 people are between 15 and 29 years old and 108,180 people are under 15 years of age.</p> <p>Of the total population in the PNS area of influence, 116,285 people self-identify as part of indigenous peoples and nationalities (58.49%). More than 61,000 are women and 56,980 are men. The indigenous communities in the upper mountainous region are the Ozogoché, Jubal, Huangras and Pomacocha; and the Shuar people are in the Amazonian region.</p>	<p>The population that lives in the parishes located within or on the borders of the CCNP amounts to 111,771 inhabitants, with a similar distribution between women and men (50.3% and 49.7%, respectively) and with a variable population density: between 3 and 20 inhabitants per km² in the upper zone and more than 160 inhabitants per km² in the lower zone. The indigenous population of this territory represents 31.9% of the total population, with 35,688 inhabitants: 51.5% women and 48.5% men. The population is mostly young: 33% of the population is between the ages of 0 and 14 years old; 61% between the ages of 15 and 64, and 6% are over 65.</p> <p>Within the limits of the CCNP are four indigenous settlements: Oyacachi, Chuskuyaku and San Pedro del Chaco, all made up of Kichwa populations, and the Sinango community of the A'í Cof'n population.</p>
Demographic and sociocultural characteristics	<p>Poverty affects the entire population of the area of influence with rates that in most cases exceed 60% of the cantonal population, being more acute at the rural level and in several of the parishes. The parishes with the highest levels of poverty are Guamote and Huamboya, both with rates of 95%.</p> <p>Education opportunities, for example, are limited, which explains that in most cases the population has only completed primary education (35.35%) and that a high percentage of the population does not have any level of education (8.22%).</p> <p>The illiteracy rate in the population linked to the SNP is higher than the national average of 6.8%: a quarter of the total population and a third of women are illiterate in parishes such as Pungalo, Achupallas, Chunchi, General Morales and Zhud.</p>	<p>The living conditions of this population are generally deficient, with high poverty rates that average 69% and poor access to basic services.</p> <p>More than 38% of the homes in the PNCC's area of influence lack access to the public drinking water network, which explains the prevalence of diseases linked to intestinal and respiratory infections, as well as high infant mortality rates.</p> <p>In terms of education, statistics indicate that although 90% of the population living around the PNCC can read and write, most residents have barely completed basic education and very few have access to high school and university education. Illiteracy continues to be a problem in the area. All the parishes, with the exception of Papalla, have illiteracy rates above the national average of 6.8%, and in some cases reaching levels of 20%, as in Cangahua and Mariano Acosta.</p>

Main land uses and (% area of each type of use)	<p>According to the cartography of the area for the year 2018, the coverage and land use in the SNP is made up of 12 main categories: native forest (57.6%), moor (34.1%), agricultural mosaic (3.3%), Shrub-covered areas (2.5%), terrestrial barren land (1.2%), inland water bodies (1.1%), glacier (0.3%), forest plantation (0.1%), herbaceous vegetation (0.01%), populated area (0.01%), artificial water bodies (0.02%), infrastructure (0.004%).</p>	<p>According to the cartography of the area for the year 2018, a total of 11 categories are identified in the CCNP: native forest (63.8%), moor (27.3%), agricultural mosaic (6.3%), inland water bodies (0.9%), terrestrial barren land (0.8%), shrub-covered areas (0.4%), glacier (0.3%), herbaceous vegetation (0.3%), populated area (0.1%), infrastructure (0.04%), forest plantation (0.01%).</p>
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Local livelihoods /characterization of productive activities/land tenure/data on agricultural production and others	<p>The main sources of employment in the SNP area of influence are agriculture, livestock, forestry and fishing, which account for three-quarters of the population. Next in order of importance are the manufacturing industry and construction, employment linked to the public sector, trade, transportation and storage.</p> <p>Women work mainly in agriculture and are self-employed, similar to the indigenous population, which implies a job without stability, fixed income or social security. The production generated by women is primarily for family consumption and a part for sale. This affects their ability to work with a stable remuneration, receive social benefits and access social security.</p> <p>Of the approximately 1400 producers who are grouped in unions, cooperatives and associations, 67% correspond to livestock activities, mainly cattle; 29% correspond to mixed farming systems made up mostly of cultivated pastures with the presence of trees: and the remaining 4% correspond to purely agricultural systems, with a total distribution in small plots. In addition, informal aquaculture activities are identified in four parishes (Papalla, Oyacachi, El Reventador and Gonzalo Pizarro). For some associations related to tourism, the PNS may represent an opportunity for the natural wealth and cultural heritage that it contains (Inca Trail).</p>	<p>Agriculture and livestock are the main sources of work for the economically active population in the area of influence of the CCNP (51,162 people), making up the main source of work and income for 41.12% of the EAP without significant differences between men and women. Those who work in these activities are self-employed, without access to social security or a stable income. This is particularly severe for women, whose opportunities are limited by their lower level of education, their societal designation as caretakers, and the persistence of stereotypes that relegate their activities to the interior of the family unit. Various studies carried out in the area concur those agricultural systems despite being the most important economic activity, are not very sustainable with the conditions of the surrounding environment and that they lack planning and management (MAE, 2019).</p> <p>Employment in the industrial sector is linked to temporary jobs in oil, drinking water and hydroelectric generation companies: Heavy Crude Oil Pipeline, Petroecuador, Coca Codo Sinclair Hydroelectric Project, private hydroelectric companies, Public Metropolitan Company of Potable Water and Sanitation of Quito, Quito Hydroelectric Company, Tabacundo Irrigation Project, among others (Mont?far et al., 2015: 11).</p> <p>The agricultural use of the land, which threatens the conservation of the moor and the cloud forest, is located mainly in the sectors of Papalla, Cuyuja, Cascabel, El Chaco, El Reventador, Gonzalo D?az de Pineda, Chuscuyaku, Due and Cabeno (MA, 2019: 7)). Overgrazing, which also threatens these two ecosystems, is concentrated in Oyacachi, Papalla, San Francisco de Sigsipamba, Piemonte, Mariano Acosta, Nueva Am?rica and Pimampiro. The practice of burning to create pastures takes place in the sectors of Piemonte, Pesillo, La Chimba, Pimampiro, Olmedo and Mariano Acosta (Ibid: 73).</p> <p>Of the approximately 4,870 producers grouped in unions, cooperatives and associations, 73% correspond to livestock activities, mainly cattle; and 24% to mixed farming systems made up mostly of cultivated pastures with the presence of trees and some species of cereals. The remaining 3% is distributed among agricultural systems, totally distributed in small plots: and forest plantations of</p>
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Stakeholders present at the site/ Strengths	<ul style="list-style-type: none"> - Associative Microenterprise of Environmental Promoters CUTIN, whose work is concentrated in Cutin. - Private entities dedicated to conservation and research. - The MAATE has some inter-institutional coordination initiatives, such as the Chimborazo Water Fund for Life and the Paute (FONAPA, the Southern Zone Water Fund (Paute), which support conservation strategies. - 4 provincial DAGs, 17 cantonal DAGs and 61 parochial DAGs. - The MAG has offices in the provincial capitals and some intermediate cities. - NGOs and collaborative projects that promote productive, social and environmental activities. - Regional organizations that represent the interests of peoples and nationalities such as the indigenous movements of Tungurahua and Chimborazo or the Interprovincial Federation of Shuar Centers (FICSH) in Morona Santiago, which interact with community organizations and producer associations. - The PSB works in and around the SNP. Currently, there are 183 contracts signed between private or community beneficiaries and Socio Bosque. - The NCI Corporation: project for the conservation of natural resources and water sources in several municipalities of influence of the PA, creation and strengthening of Conservation Areas and Sustainable Use of biodiversity (ACUS) in the buffer zone of SNP. - FIAS, through the fund for protected areas for operational activities in the PA. - Commonwealth of the Cañari people, which promotes agro-ecological activities and protection of water sources, especially in the province of Cañar. - The program "Conservation and Sustainable Use of Natural Heritage" carried out by GIZ in Morona Santiago (and other provinces), contributes to the strengthening of the management model 	<ul style="list-style-type: none"> - The AICAA Project implements the training of technicians and park rangers of this protected area. - FONAG with financing from the Metropolitan Drinking Water and Sanitation Public Enterprise carries out activities for the conservation of water sources of water for human consumption and acquisition of land for conservation in and around the PA. - Resource use and management agreements between the MAATE and the communities that live within the PA, over an area of 15,000 ha, regulate the uses and activities within the park and acknowledge the shared responsibility for the protection of resources. - Elaboration of handicrafts with non-timber products to obtain fibers, seeds, dyes, barks and resins. - PSB has 149 contracts signed between private or community beneficiaries with a forest partner in the PA and its buffer zone. - The PNCC is a beneficiary of the FIAS fund through the fund for PAs, for operational activities. - In the DAG of Cayambe there is a project of popular and solidarity economy and food sovereignty, which promotes agro-ecological commercialization and protection of water sources - The PASF is being carried out in Pichincha and Imbabura. - The MAG is present throughout the area through provincial directorates. - NGOs and cooperative projects work in the buffer zone or within the PNCC, promoting various themes: environmental, productive, social, cultural and territorial management. - The Fund for the Protection of WATER (FONAG) that operates in the provinces of Pichincha and Napo - Productive associations and community groups. Indigenous communities are linked to regional organizations. Among the most representative, the Federation of Organizations of the Kichwa Nationality of Napo (FONAKIN) and the Federation of Organizations of the Kichwa Nationality of Sucumbios stand out.
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<p>Weaknesses (e.g., capacity limitations of institutions or organizations, access problems, etc.)</p>	<ul style="list-style-type: none"> - Low level of participation of social and institutional stakeholders in the management of PAs, as there is still no official policy of social participation in the management of the SNAP (MAE, 2018) - Conflicts in land tenure, which means the lack of legalization (property titles) and other forms of recognition of rights (management and use agreements). - Lack of data updated in real time for management and decision making. - Lack of clear tools in the PA management that integrate the local population, with a focus on improving quality of life for those living in the area. - Lack of regulations for the delimitation of PAs, to harmonize conservation and development. - Lack of inter-institutional coordination. - Lack of specific regulations and guidelines for sustainable productive activities in the sustainable use zone and PA buffer zones. - Limited technical assistance and specific training to promote alternative and sustainable production systems. - Lack of products and financial services that promote investments to achieve the transition from conventional productive activities to more sustainable activities; as well as a lack of the implementation of alternative production systems, particularly bio-enterprises. - Lack of accessibility to formal markets for producers in sustainable use zones and AP buffer zones. - Weakness of rural worker organizations and associations, which causes significant trade deficits, which in turn diminishes producers' growth and development possibilities. - It is very difficult to have a comprehensive vision of the Sangay National Park area due to the fact that it has three very distinct management zones (Highland Zone, Southern Zone and Lowland Zone).
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Conflict within PAs	<p>The most acute conflicts occur with indigenous organizations, especially due to the declaration and expansion processes of the PA without consultations by the State. The Shuar population, for example, who have global deeds, make claim to the management of their territories that are within park boundaries. The same reality is present in Ozogoché (3,000-4,000 ha) Jubal (15,000 - 20,000 ha), Huangras (15,000 ha) and Pomacocha (15,000 -20,000 ha) where indigenous communities and private owners were established before the park's creation (ADAMAFOREST Consortium, 2015: 192). Ingapirca's social organizations, which have been in possession of deeds since 1981, also maintain a tense relationship with the SNP due to the absorption of their territories into the PA.</p> <p>The relationship is also highly conflictive with various productive associations, who claim that the establishment and subsequent expansion of the SNP represents an obstacle to their activities. For example, this occurred in the Achupallas-Alausí sector.</p> <p>In the lower zone of the SNP, the main problems are related to the lack of clarity in the limits of community territories and private properties caused by differences in the delimitation of the PA. This is the case of the Cumandí parish, Palora canton; of private owners in the Lushí River sector and of the Shuar communities and private owners who lived in the cantons of Sucúa and Santiago de Muzón prior to the declaration of the expansion of the park.</p> <p>The southern zone of the PNS is the most complex because land ownerships existed prior to the declaration of the area as well as ownerships who have been established after the construction of roads. This area includes several communities: Monay, San José de Guarumales, San Antonio de Jubal, Huangras, Cebada, Gaurapungo and San José de Culebrillas.</p> <p>The conflicts mentioned and other economic practices and activities such as forest plantations with exotic species, forest fires, the extension of the agricultural frontier, and the opening of roads and highways, have determined that a total of 29,764 ha present some type of affliction, which represents 6.2% of the surface of the SNP, compromising 15 different ecosystems of the 10</p>	<p>The growth and consolidation of settlements such as Oyacachi, Cuyuja, Baeza, Borja, Sardinás, El Chaco, Santa Rosa, El Reventador (MAE, 2019: 50) is due to a set of interrelated processes that have increased the pressure on the Park. There is limited access and high levels of inequality in land tenure that influence the colonization and settlement processes in PAs. These processes are facilitated by infrastructure works, among them the Quito-Baeza-Lago Agrio highway crossing, the operation of the OCP and SOTE pumping stations responsible for some oil spills over the years; the construction and operation of the Coca-Codo-Sinclair hydroelectric plant; the Tabacundo and Pesillo projects (Imbabura province); irrigation and water projects for human consumption in the Puruhanta Lagoon, Pie Monte, Angascocha Lagoon, and the Papalla Project. The implementation of these activities has meant the construction of a network of roads, canals and catchment works that, in addition to threatening wetlands and paramos, constitute entry routes for hunters.</p> <p>As hydroelectric projects and crude transportation grows, so grows demand for services and sources of income from local populations with the consequent increase and expansion of urban centers. This has meant that some parishes are experiencing higher population growth rates than the national average (as in El Chaco and Quijos) and that portions of the settlements (as in El Chaco) are within the PA.</p> <p>Although no current conflicts exist in the upper zone, in the communal lands of the parishes of Cangahua and Olmedo, in the Cayambe canton, adjacent to the PA, (MAE, 2019), there are private properties that represent a threat to the PNCC by the pressure they exert on the environment. In the study "Territorial characterization and analysis of land use of the National System of Protected Areas of the State" (2015), 6 private properties are identified in this area, involving a total of 17,400 hectares.</p> <p>Throughout this sector, conflicts arise from the internal delimitation of the so-called "Manga de Aguirre" [3] that is assumed by the communities and populated settlements as the limit of the Cayambe Coca National Park. The conflict associated with this internal border has led to at least three occasions in which the MAATE has contracted studies to clarify the limits and land</p>
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[1] Ecuador. Carbon, biodiversity and ecosystem services: exploring the multiple benefits. MAE-UNEP-WCMC. 2011

[2] *Ibid*

[3] The 'Manga de Aguirre' or Limit of the Expansion of the Agricultural Frontier was a technical-administrative action adopted in 1987 to limit the advance of the agricultural frontier and the change in land use along 160 km within the protected area.

1c. Child Project?

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

2. Stakeholders

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

Civil Society Organizations

Indigenous Peoples and Local Communities

Private Sector Entities

If none of the above, please explain why:

2.1 Stakeholder participation during the project design phase

218. During the design phase of this project, various consultation processes were carried out with institutional, social and organizational stakeholders related to the project's intervention area and scope. In the first weeks of November 2020, an inception workshop was held with the MAATE, marking the beginning of a coordinated work with the ministerial technical teams to agree on the focus, scope, and contents of the project. From that date until March 2021, interviews and work meetings were held with various stakeholders to learn about the interventions they carry out, identify the possibility of complementing efforts and to validate the needs of local populations.

219. Given the occurrence of the COVID-19 pandemic and the consequent impossibility of carrying out on-site visits, contacts with the various stakeholders were made through virtual meetings and telephone conferences. This was possible based on the availability of databases of social and productive organizations, as well as the identification of the most representative institutional, social, and organizational stakeholders in the project's intervention area. In all cases, the scope and structure of the project was socialized, the priorities present in each jurisdiction in relation to biodiversity conservation and sustainable livelihoods, the presence of other complementary interventions, the results achieved, and the characteristics of the social fabric were analyzed.

220. Annex I2 includes the FAO matrix with details of participation during the design phase. These participatory processes served as the basis for defining the mechanisms for stakeholder participation in the implementation phase, which are described below.

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
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Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Ministry of the Environment and Water, MAAE	Partner	National Government Institution body	Bilateral meetings	<p>The Constitution of Ecuador (art. 261, 7) makes it explicit that the central government exercises control over protected natural areas and that those communes, communities, peoples and nationalities have the right to participate in the use, usufruct, administration and conservation of renewable natural resources that are within their territories. In this context, the MAAE is responsible for the National System of Protected Areas to guarantee the conservation of biodiversity and the maintenance of its ecological functions (Art. 405 of the Constitution) through the Directorate of Protected Areas and Other Forms of Conservation under the coordination of the Undersecretary of Natural Heritage. To carry out this responsibility, the MAAE has been promoting a set of policies to strengthen the National System of Protected Areas (SNAP) made up of 60 areas and consequently favor the conservation of biodiversity and the maintenance of ecological functions. It has a National</p>	Between October 2020 and April 2021	<p>The numerous information systems available to the MAAE (Biodiversity Information System -SIB-, Early Alert System -SATA-, Unique Environmental Information System -SUIA-) need to be articulated and become more friendly tools capable of generating reports.</p>

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Ministry of Agriculture and Livestock, MAG	Partner	National Government Institution body	Bilateral meetings	<p>The MAG is the governing body of the agricultural sector. It is in charge of formulating policies and services to promote commercial agriculture and peasant family farming. The MAG promotes marketing, innovation and associative policies to improve the performance of the sector and guarantee the food security of the Ecuadorian population. Through its provincial directorates, the MAG implements extension services and technical assistance activities to improve agricultural production. The Smallholder Farmer Family Production Directorate works throughout the country to promote sustainable agricultural practices and has developed training modules to motivate the adoption of these practices. The MAG also has a Public Agricultural Information System-SIPA, where spatial and statistical information is gathered on various topics, with a dynamic reporting module.</p>	March 16 and 23, 2021	<p>The MAG will be integrated throughout the execution of the project, through its integration into the planned coordination mechanisms and the delivery of technical assistance and extension services. The policies of the Rural Family Production Directorate can be strengthened for their implementation in the buffer zones of the protected areas and in the zones of sustainable use. On the other hand, the experience of the SIPA can be a reference framework for the definition of the integration strategy of the MAAE systems and information, and its consolidation in the development of the SEAP System.</p>

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
National Institute of Cultural Heritage, INPC	Other	National Government Institution body	Bilateral meetings	The Qhapaq ñan or Inca Trail, a World Heritage Site, is an Andean road system more than 30 thousand km long that crosses six countries in South America. In Ecuador, it covers 108.8 km through 8 provinces, among which are areas of the PNS. The INPC, the Technical Secretariat of Qhapaq ñan (Ecuador chapter) and the GADs through which this path crosses, make up the Management Committee of Qhapac ñan and a network to promote investigation processes.	March 27, 2021	In the eventual identification of cultural tourism ventures, the INPC has the competencies to support with technical assistance and training processes.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Provincial Decentralized Autonomous Government Ca'ar	Indirect Beneficiary	Local community	Secondary information query	The province does not have an updated PDOT. Its work is based on the "Equitable and supportive management model of the province of Ca'ar" where it emphasizes the promotion of strategies for the conservation of ecosystems and biodiversity, the fight against poverty and the promotion of social participation as axes of its intervention. These principles coincide with the focus of the SEAP project.		Based on an analysis in the territory, the interest and feasibility of the Provincial GAD of Ca'ar promoting actions linked to the objective of the project will be explored. In any case, the participation of its technical teams in the training processes is foreseen.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Provincial Decentralized Autonomous Government Chimborazo	Indirect Beneficiary	Local Government Institution/body	Secondary information query	<p>The PNS is present in six cantons of the province, covering 12.32% of the provincial surface. In Penipe, Guamote and Alausí, there is evidence of fragmentation of habitats within the protected area, while erosion affects the cantons of Guamote and Alausí. This is due to the fact that colonization constitutes the main threat to the conservation of the park. Hence, the PNS, as well as its buffer zone, constitute, from the vision of the provincial GAD, part of the macro conservation zone that the province is interested in managing. For this purpose, among the priorities defined by the GAD of Chimborazo for the coming years, the recovery of soils and the conservation of natural resources stand out.</p>		There are potentialities to establish coordinated actions with the GAD of Chimborazo due to the policies it promotes.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Provincial Decentralized Autonomous Government Morona Santiago	Indirect Beneficiary	Local Government Institution/body	Secondary information query	The province of Morona Santiago has a PDOT for the period 2015-2019 and is in the process of updating a new plan. This instrument recognizes the importance of the Sangay National Park within the province, since 21.60% of its territory is part of the protected area. Along the access roads, the plan warns of invasions to the PNS through the sowing of pastures.		Based on the interest and commitment of the Provincial GAD of Morona Santiago, it will be possible to identify the scope of joint actions.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Provincial Decentralized Autonomous Government Napo	Indirect Beneficiary	Local Government Institution/body	Secondary information query	<p>The Cayambe National Park has 181,376 hectares within the Napo province, which represents 14.47% of the total provincial area. 62.28% of the PNCC area is considered as a water recharge zone for the province. Given this importance, the provincial GAD has developed some strategies aimed at strengthening its conservation which, according to its planning, will deepen in the following years. This is even more necessary insofar as it recognizes the existence of some threats within the protected area (mining, agricultural and livestock activities, roads and growth of urban areas), as well as conflicts due to lack of clarity in land tenure. To address this problem, within the Territorial Development and Planning Plan that covers the 2020-2023 period, the GAD will implement some policies, including the training program on good practices for sustainable production, the School of Environmental Leadership; the strengthening of family agriculture,</p>		The experience and installed capacities of the Provincial GAD Napo make it a strategic ally of the project.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Provincial Decentralized Autonomous Government Pichincha	Indirect Beneficiary	Local Government Institution/body	Secondary information query	The Pichincha Development and Territorial Planning Plan 2013-2019 includes some strategies for the conservation and management of p?ramos, among which the establishment of conservation corridors among the protected areas that are within the National Heritage of the State (PANE) stands out and those that belong to the province, private owners and communities, without specifically mentioning any strategy for the PNCC. The province of Pichincha contains 12.71% of the PNCC surface, which corresponds to 51,824.54 hectares.		The participation of the Provincial GAD of Pichincha in the project implies both the establishment of coordination channels and the inclusion of its technical teams in the training program that will be promoted during execution.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Provincial Decentralized Autonomous Government Sucumbos	Indirect Beneficiary	Local Government Institution/body	Secondary information query	The provincial PDOT is in the process of being updated with the support of the PROAmazona program. The diagnosis carried out in 2020 recognizes that within the PNCC there are areas of agricultural use, as well as strong pressure in the buffer zones, which accentuates the need to manage these territories. At the same time, the diagnosis highlights that the presence of protected areas within its territory is an advantage for the provision of environmental services to the province and a potential that could be optimized in conjunction with the MAAE. The project will help solidify these opportunities and improve coordination with the MAAE.		Based on the interest and commitment of the Provincial GAD of Morona Santiago, it will be possible to identify the scope of joint actions.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Municipal GAD Azogues	Indirect Beneficiary	Local Government Institution/body	Bilateral meeting	The GAD of Azogues recognizes the importance of incorporating in its planning, strategies that contribute to the conservation of the Sangay National Park and working in parallel to improve the living conditions of the populations that live within this protected area such as Huangras, that supports very high levels of poverty. However, they lack a budget.	March 3, 2021	There is the perception that the MAAE imposes limitations to provide the populations living in the sustainable use zones, within the protected areas, basic services that allow them to improve their living conditions.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Municipal GAD El Chaco	Indirect Beneficiary	Local Government Institution/body	Bilateral meeting	The GAD of El Chaco borders the Cayambe Coca National Park and part of its populated area is within this protected area. The natural and scenic wealth of this municipality has determined that it becomes a site of interest for nature tourism. These potentialities have given way for the Ministry of Tourism to advise that El Chaco become a Magic Town, a characterization that will allow it to strengthen its role as a tourist destination. In addition to tourism, the GAD El Chaco is recognized for its livestock production and dairy production.	March 3, 2021	There is interest from GAD El Chaco to improve livestock raising methods and stop the expansion of the agricultural frontier.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Municipal GAD Gonzalo Pizarro	Indirect Beneficiary	Local Government Institution/body	Bilateral meeting	71% of the territory of this canton intersects with the Cayambe Coca National Park. At the moment the GAD is updating the PDOT and the PGUS. The GAD supports restoration and conservation works of water sources in the La Libertad river basin for the provision of water to the cantonal head. It has a nursery for the production of plants and supports local productive and reforestation initiatives.	March 5, 2021	This GAD exhibits high levels of poverty and is affected by illegal mining that takes place in the Puerto Libre parish.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Municipal GAD Morona	Indirect Beneficiary	Local Government Institution/body	Bilateral meeting	The city of Macas, capital of this municipality, is a tourist destination and the GAD has supported the consolidation of other tourism ventures in the PNS buffer zone as it has identified that tourism generates greater environmental awareness. It also has an interest in promoting enterprises linked to biodiversity such as vanilla. The GAD has an interest in the protection of water sources. In this direction, it is in the process of declaring Alto Upano a municipal protected area and has started a similar process for Río Quebrada.	March 16, 2021	The GAD recognizes the importance of promoting the adoption of sustainable production practices, as well as the need to support organizations in improving their levels of associativity. The biggest problem is the lack of clarity in land tenure.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Municipal GAD Cayambe	Other	Local Government Institution/body	Bilateral meeting	<p>Since 2014 the GAD of Cayambe issued an ordinance that supports agroecological commercialization. Behind this ordinance there is a policy aimed at protecting the paramos and water sources, stopping the expansion of the agricultural frontier, and direct support to the cantonal organization of rural women who have mostly ventured into the cultivation of agro-ecological products. These activities are carried out hand in hand with campaigns in urban areas aimed at generating awareness among the population regarding responsible consumption. The ordinance also contemplates the creation of a technical table where producers, academia and local NGOs participate, which acts as an oversight, as well as a micro-enterprise that certifies production practices. Those farmers who maintain an agroecological production have access to tax exemption.</p>	March 17, 2021	The work of the Cayambe GAD could provide guidelines for its replicability in other areas. It would be convenient to think about a systematization of this experience, as well as consider it as a reference for observation tour.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Universities of the provinces of the intervention area	Other	Other Instituciones académicas	Secondary information query/reuniones bilaterales	Universities try to coordinate with the demand for services in the geographic areas in which they have an impact. That is why some universities in the project intervention area execute rural extension programs in support of local government policies and the needs of rural producers.	April 7, 2021	In the capacity building processes aimed at smallholder farmer family producers, on the one hand, as well as women and indigenous peoples, it will be important to establish alliances with universities in order to increase the prospects for replication and sustainability of the project once its execution period has concluded.
Center for Studies and Social Diffusion, CEDIS	Other	Non-Governmental Organization	Bilateral meeting	The themes in which CEDIS works are close to the strategies considered for the SEAP project. In addition, it is an entity that maintains a close relationship with indigenous social organizations. Both for its knowledge of the province and for its work with social organizations, CEDIS can be a strategic ally in Chimborazo.	November 26, 2020	This NGO has been working in Chimborazo for more than 20 years and, therefore, has extensive knowledge of its reality. It has concentrated its work with indigenous populations in the rural sector, promoting environmental management, organizational strengthening and participatory planning. Additionally, it has promoted community tourism initiatives in areas such as Ozogoché, in the Sangay National Park.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Rikcharina Foundation	Other	Non-Governmental Organization	Bilateral meeting	The lessons learned after more than 10 years of work in the area warn of the need to support the organizational strengthening of the communities to stop the division of the land, as well as working in coordination with local GADs in order to link peasant production with intermediate cities. An additional pending task is the strengthening of spaces for participation that convene local populations and the MAAE in the face of the conservation of protected areas.	February 2, 2021	This organization worked until 2018 in the area of influence of the Sangay National Park. Its work focused on conflict management, especially in Cañar where a series of cooperatives are present that began processes of division of the land.
Ecominga	Other	Non-Governmental Organization	Bilateral meeting	The conservation work of this NGO is based on the purchase of land and the performance of environmental monitoring actions. They also have lines of support for local communities in promoting tourism ventures.	March 9, 2021	

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
ECOLEX	Other	Non-Governmental Organization	Bilateral meeting	ECOLEX worked in the area of the Cayambe Coca National Park until 2015 through an agreement with the MAAE to clarify land tenure. The most outstanding conflicts within the PNCC are related to the "Manga de Aguirre", an imaginary strip established within the protected area through administrative resolutions of the MAAE. The conflicts associated with this limit and other additional ones, on the margins of the park.	March 16, 2021	The agreements reached with the local populations were not formalized due to a lack of political decision. This has generated an environment of mistrust among local populations.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Wildlife Conservation Society, WCS	Other	Non-Governmental Organization	Bilateral meeting	In the Cayambe Coca and Sangay National Parks, in addition to 14 other protected areas, WCS is in a process of pilot implementation of the SMART monitoring and control tool (Spatial Monitoring and Reporting Tool). This work began in December 2020 and will conclude in May 2021. From its experience, this tool works under certain conditions: the availability of a management plan and certain favorable productive conditions for local populations.	February 23 and March 16, 2021	By having the SMART tool in the pilot phase in the intervention areas and by having a climate change axis in the Cayambe Coca National Park, the project will be able to ensure, as part of the strengthening of SEAP's governance, the generation of a climatic baseline for at least one protected area to form part of the Integrated Information System. In addition, the experience developed by WCS can facilitate the replicability and staging of information monitoring and recording technologies that involve MAAE personnel in protected areas and communities.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Nature and Culture International, NCI	Other	Non-Governmental Organization	Bilateral meeting	NCI's objective is to conserve water sources and natural resources located in buffer zones of protected areas, working in coordination with the GADs. To achieve this objective, NCI advises on the creation of local mechanisms for financial sustainability and the formulation of ordinances for the creation of environmental charges. In addition, it offers training to technical teams of local governments through the School of Water.		The experience developed by AICCA can provide feedback on components 1, 2 and 3.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
PROAmazon?a	Other	Other	Bilateral meeting	<p>This is a MAG and MAAE project that is financed with contributions from the GEF and the Green Climate Fund. More it is structured into five components: political and institutional; transition to sustainable production systems; sustainable forest management, conservation and restoration and REDD + and financing. As of 2021, PROAmazon?a also executes the PPR (Payment for Results) project, which will allow it to broaden the geographic spectrum of its intervention. PROAmazon?a is developing two systems that are part of the Subsecretariat of Climate Change of the MAAE: Red + Action Measures Management System and Safeguards Information System. Both systems are applied in all areas where REDD + intervenes, including protected areas. The systems have helped to monitor the actions, manage the implementation, as well as have a broader vision of the actors in the intervention area.</p>	December 9, 2020 and March 09, 2021	<p>Although the areas defined by PROAmazon?a do not correspond to those prioritized by SEAP, the contents and scope of this project are points of common interest, opening potential for joint and coordinated work. Among the components that PROAmazon?a has, there are three with which SEAP could establish synergies. This is the case of the policy component from which the MAAE is being supported in defining a strategy to legalize land within protected areas and protective forests and thereby contribute to mitigating conflicts. The decision to venture into this issue is due to the fact that there is no ministerial agreement to regulate the situation of land tenure within protected areas. This component additionally supported 28 GADs in the preparation and updating of the PDOTs. These plans, which will begin to be implemented from 2021, were worked under a conservation and</p>

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
German Corporation for International Cooperation (GIZ)	Other	Other Cooperaci?n internacional	Bilateral meeting	The German Corporation for International Cooperation (GIZ) implements the program "Conservation and Sustainable Use of Natural Heritage" with funding from The Federal Ministry for Economic Cooperation and Development of Germany (BMZ). This program, which began in 2018, will conclude in October 2021. The objective of this program is to contribute to the strengthening of the National System of Protected Areas and the implementation of the National Bioeconomy Policy, through the strengthening of value chains and bio-enterprises promoted by smallholder farmer and agricultural associations living within protected areas and their buffer zones.		The Sangay National Park is part of the coverage area of the "Conservation and Sustainable Use of Natural Heritage" program. The SEAP project could contribute to consolidating the process developed in order to optimize resources and strengthen the sustainability of the results.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
CUTIN	Other	Local community	Bilateral meeting	It is a community park ranger company whose financing comes from FONAPA. The park rangers, mainly young men and women from the local communities, have through this micro-enterprise not only a job, but also the possibility of receiving training on issues related to conservation.	March 8, 2021	CUTIN's experience could be replicated in other protected areas and in other sectors of the Sangay National Park itself as an alternative income and employment for young people.
Papallacta women's organization	Other	Local community	Bilateral meeting	The economic crisis and the pandemic have exacerbated migration patterns, mainly of men, who are engaged in tertiary sector activities in Quito. This determined that women began to organize to demand a series of rights that were not taken care of.	March 26, 2021	The project plans to develop a training program aimed at women in which, among other topics, it will develop content related to the importance of associativity and to disseminate women's rights.
Cebadas women's organization	Other	Local community	Bilateral meeting	Women have faced difficulties organizing due to limited support from their families. It has been a slow and complex process. The formulation of the Cebadas Life Plan was the opportunity for women to make their needs and interests explicit.	March 27, 2021	The formulation of land plans and other territorial planning tools should be done from a gender perspective.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Coordinator of Kichwa Women of Chimborazo	Other	Local community	Bilateral meeting	Thanks to the work of this Coordinator, there are women's organizations in almost all the communities in which it has an impact in the province of Chimborazo. Although their level of development is diverse, one of the elements that has contributed to strengthening the organization of women is the achievement of food security and sovereignty from agroecological production.	March 28, 2021	The learnings of the Coordinator of Kichwa Women of Chimborazo are key when promoting productive practices.
Fund for the Protection of Water, FONAG	Other	Other	Bilateral meeting	This fund, active since 2000, is intended to contribute to the protection of the water supply basins for the Metropolitan District of Quito. It promotes actions aimed at improving the quality of life of families living in the moorlands and in the areas of the supplying basins (Guayllabamba River). FONAG has become a national benchmark on the management and conservation of ecosystems.	March 1, 2021	It is an actor with whom it will be necessary to coordinate in the area of influence of the Cayambe Coca National Park.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Water Fund for the Conservation of the Rio Paute Watershed, FONAPA	Other	Other	Bilateral meeting	FONAPA was created to protect the Paute river basin, one of the most important in the country. It operates as an autonomous commercial trust that collects and channels resources for the protection of water resources and its ecological environment: the El Cajas and Sangay national parks. It supports the development of conservation and protection initiatives such as CUTIN, a micro-enterprise of community park ranger.	March 3, 2021	It is an actor to take into account in the area of influence of the Cayambe Coca Sangay? National Park.
Life Fund	Other	Other	Secondary information query	The Life Fund of the province of Chimborazo was established in 2020 by the provincial GAD. It will operate as a trust fed by several local governments of the province, including the Prefecture, the Chimborazo electricity company and the irrigation boards.		It is an actor to take into account in the area of influence of the Sangay National Park.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Napo Water Conservation and Sustainable Development Fund, FODESNA	Other	Other	Secondary information query	This Fund was newly established in April 2021. It is conceived as a trust fund that promotes innovative financing schemes for the conservation of biodiversity and the sustainable management of natural resources.		He is an actor with whom it will be necessary to coordinate actions around the Cayambe Coca National Park.
Sustainable Environmental Investment Fund, FIAS	Other	Civil Society Organization	Bilateral meeting	FIAS is a private law entity with its own legal status that operates as the financial mechanism for environmental management in Ecuador. Through the operation of a competitive fund, FIAS finances initiatives of up to \$ 20,000 for communities living in protected areas that come from a proposal prepared jointly with the Head of the Area. It recognizes that one of the main problems affecting protected areas is the lack of clarity in land tenure and the legal and economic limitations to advance in the regularization of tenure.	April 9, 2021	In a coordinated manner with this fund, it was agreed to promote a study to analyze the viability of setting up a land fund to address the problems derived from the lack of clarity in tenure.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Producer associations	Direct beneficiary	Local community	Bilateral meetings, review of secondary information	<p>Limitations to carry out sustainable production due to lack of resources and training. Difficulties in accessing incentives due to lack of clarity in land tenure. Low articulation with national and regional markets. Little social appreciation of its production and of the role of communities, especially those who live within national parks, in the conservation of biodiversity. This general characterization has particularities according to the provinces, thus:</p> <p>? In Napo, the producer associations require training to achieve modernization and added value of their products; marketing and marketing advice for direct sales (sales networks and fairs); provision of equipment such as industrial coolers to store milk and reduce losses; improve their access to capital and subsidies from the State; Financial support for modernization and equipment; technical advice on pastures to improve livestock performance.</p> <p>? In Sucumbos,</p>	January-february, 2021	<p>The health emergency caused by COVID-19 prevented on-site visits. However, through databases of the SEPS (Ministry of Economic and Social Inclusion) and the MAAE, 135 producer organizations were identified in the cantons prioritized for the project intervention. In total, 30 interviews were carried out in which the main needs, the characteristics of production and marketing systems were identified. The organizations contacted were in Napo: San Pedro Agricultural Workers Association, Cooperativa de Produccion Agropecuaria Lactea Narvez COOPNARV, Association of Sardine Cattlemen, San Agustín Agricultural Processing and Ecotourism Association; Cattle Ranchers Association of Santa Rosa del Chaco ASOGANSAN; Cuyuja Ranchers Association; Tourism Services Association Papallacta Allpatur Land of Tourism</p>

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Indigenous communities in the sustainable use zones and in the buffer zones of the Cayambe Coca and Sangay protected areas	Direct beneficiary	Local community	Secondary information review	Indigenous populations live within the two protected areas on which the project will affect. The communities of Oyacachi, Sinango?, Chuskuyaku and San Pedro del Chaco in the Cayambe Coca National Park, as well as Ozogoche, Jubal, Huangras and Pomacocho in the high, mountainous part, and the Shuar people, in the Amazonian part of the Sangay National Park. These communities are in many cases ancestral populations with legally recognized collective territories.		The incorporation of these communities as the beneficiary population of the project will mean setting up free, prior and informed consent processes, respecting their particular forms of organization and representation.

Stakeholder	Role in the Project	Profile	Consultation Methodology	Findings from the Queries	Date	Comments
Indigenous communities in the buffer zones of the Cayambe Coca and Sangay protected areas	Direct beneficiary	Local community	Bilateral meetings, review of secondary information	Indigenous communities live on the outer limits of the two protected areas on which the project will work. Although they do not have land titles, they define themselves as part of the peoples and nationalities and maintain their own forms of organization. This is the case of the communities of Cebadas and Ingapirca in the buffer area of the PNS or of Cayambe, Lumbaqui and Baez in the PNCC:	January 17, 2021 and March 18, 2021	Prior to the start of project activities, it will be necessary to coordinate with the representative indigenous organizations of the buffer area (generally the parish councils), to carry out CPLI processes.:

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

2.2 Participation during the implementation phase of the project

221. Stakeholder involvement in the implementation of the project will be ensured through various instances and mechanisms that are proposed to ensure full and meaningful participation of the stakeholders and avoid negative impacts on human rights, and which are summarized below:

222. ***Project governance mechanisms:*** At the executive level, stakeholder participation and representation will be driven by governance structures for project management, specifically the Project Steering Committee (PSC) and the Project Implementation Unit (PIU). The project will promote inter-institutional coordination and the articulation and participation of stakeholders at the political and technical level; the PSC will make decisions regarding overall management and will ensure that the Project is executed within the agreed strategic framework. The PSC will be convened twice a year, in the months of January and July. Its functions will include, among others: (i) carry out general supervision of the Project's progress and achievement of the expected results through the Project Progress Reports (PPR); (ii) make decisions regarding the organization, coordination, and execution of the Project, while the PIU will be in charge of executing the project activities with a participatory

approach. The technical staff of the project will be responsible for leading and guiding the stakeholder participation processes under the supervision of the Chief Technical Advisor.

223. ***Inter-institutional and intersectoral coordination mechanisms:*** The project will promote inter-institutional and inter-sector coordination through various strategies, including: i) strengthening institutional arrangements and facilitate inter-institutional coordination at the national level to promote collaboration between stakeholders at different levels for national policies and spatial planning instruments; and ii) working with existing coordination mechanisms or promote new ones at the national and subnational levels (see Section 1.a - Project objectives, results and outputs for a detailed description of these strategies).

224. ***Project communication and information strategy:*** At the beginning of the project implementation, a communication strategy will be prepared with specific elements for the key stakeholders and for the intervention areas. The communication strategy will aim to develop effective communication management to inspire the involvement and commitment of key stakeholders in the management of the sustainable use zones of the intervention areas and their buffer zones. The communication strategy will seek to increase relevant information with a scientific / technical basis for decision-making in a language that is understandable to all stakeholders, sensitize local and national stakeholders by raising awareness about the value of protected areas and the urgent need to act to ensure the well-being of local populations; and, strengthen capacities to influence the management and responsible use of resources in protected areas and their sustainable use zones and buffer zones. The strategy will be implemented together with the communication teams of the project partners. The design of the strategy will take into account criteria and actions to promote participation and dialogue, as well as considerations of cultural sensitivity, social inclusion and gender.

225. ***Workshops and trainings:*** The project will launch capacity-building programs aimed at three target groups: (1) national government technicians linked to PA information generation, management and monitoring processes, (2) local technicians from the DAGs and local organizations with responsibilities in landscape management, and particularly in the PAs, and (3) owners and users of the land for the adoption of good practices for the conservation and sustainable use of biodiversity. This will give wide dissemination of the project at the national and sub-national levels. These programs will include in their design considerations aimed at promoting stakeholder participation: i) they will be prepared with a gender and cultural relevance approach; ii) they will be aimed at a broad audience that includes national and sub-national technicians, land users, producers and their organizations who will acquire new skills, which will help stimulate ownership and participation; iii) it will have pedagogical tools aimed at differentiated target audiences with the idea of encouraging their participation; iv) will include participatory learning methodologies such as farmer field schools, exchanges of experiences and participatory evaluations.

226. The project will use a participatory approach in working with the beneficiary populations in all phases, seeking their empowerment, with an emphasis on women, indigenous peoples and nationalities. Participation will involve the joint identification of their requirements and needs to close gaps that make it difficult for them to implement sustainable production practices, make sustainable use of biodiversity or access markets; planning for organization of communal properties or lands, the decision of land use alternatives and productive practices according to their own visions and interests, within a

framework of compliance with the legal provisions on what is and is not possible in each territory (inside and outside protected areas); the definition of incentives for the conservation and sustainable use of biodiversity; and monitoring to analyze progress, discuss difficulties that may arise, and collectively decide on timely and adequate corrections, fostering ownership of the management practices implemented.

227. ***Gender Action Plan and FPIC Strategy for Indigenous Peoples:*** Likewise, the project includes a Gender Action Plan and a strategy for the implementation of FPIC (see Annex J) to ensure the proper participation of women and indigenous communities present in the intervention areas. These plans include the definition of criteria and conditions for participation in the different instances of the project and their activities, in order that their participation and incidence can be carried out considering the conditions in which women and indigenous people operate in the intervention areas, as well as the different knowledge, needs and roles, so that these are recognized and addressed in the intervention. In the case of indigenous peoples, the FPIC processes proposed are in correspondence with the FAO guidelines contained in "Free, prior and informed consent. A right of Indigenous Peoples and a good practice for local communities" (2016) and the FAO Policy on Indigenous and Tribal Peoples (2011).

228. ***M&E system and Knowledge Management Plan:*** The project's M&E system will include consultation with the stakeholders, such as to collect their testimonies regarding the Project and their participation and contribution in it, in order to disseminate the results and establish a knowledge transfer strategy that contributes to the replication and upscaling of the lessons learned (see section 9 Monitoring and Evaluation).

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

230. Annex I2 includes FAO matrices with details of the expected participation during the implementation phase. Table 5 below summarizes the key stakeholders and their role in the implementation of the project.

2.3 Stakeholder mapping and roles foreseen in project implementation

Table 5 ? Stakeholder mapping and their roles in the project implementation

Actor	Role in project implementation
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MAATE	The executing partner of the project and co-financier of this initiative. They will participate as a member of the Project Steering Committee. The MAATE will be the entity responsible for the implementation of the integrated information system (Component 1); will have an active participation in the territorial inter-institutional coordination mechanisms (Component 2). Will participate in the design of capacity-building programs, in the identification of environmentally friendly practices (Component 3), the prioritization of the territory for the implementation of sustainable productive activities in properties that are part of the Sociobosque Program (or Socioprogramo), as incentives to the population that has included their territory for conservation activities in the Cayambe Coca and Sangay National Parks and their buffer zones. They will participate in M&E and in the systematization of lessons learned (Component 4).
MAG	Project Partner. Will participate in the processes for development of technical and normative tools for the buffer zones according to its institutional role and in the inter-institutional and inter-sector coordination mechanisms (Component 2). Will participate in the strengthening and articulation of extension services and technical assistance, development of extension activities and field technical assistance of the Project, particularly the promotion of good productive practices, access to financial and non-financial incentives and the market (Component 3).
Ministry of Tourism	The MINTUR is the entity responsible for granting permits for the development of tourist activities, at the same time that they can channel technical assistance to consolidate the initiatives that are carried out and link them to broader tourist circuits. On the other hand, the MINTUR Magic Towns program is designed to promote the tourist development of populations that have the basic conditions necessary for the development of tourist activities to which the DAGs of the project intervention area could apply (Component 3).

<p>DAGs</p> <ul style="list-style-type: none"> ? Provincial ? Cantonal (Municipal) ? Parochial 	<p>The project will be carried out in the Provinces of Napo, Sucumbos, Chimborazo, Cañar and Morona. The DAGs of these provinces implement actions aimed at the conservation of protected areas, as well as development in the buffer zones, with which the project will coordinate.</p> <p>The cantonal DAGs have responsibilities in environmental management, mainly water, and can provide support on issues that each local government considers a priority, according to the context of each jurisdiction. There are 24 cantonal DAGs present in the project intervention area (17 in the PNS and 7 in the PNCC). Of this total, the project has prioritized its implementation in 12 cantons (8 in the PNS and 4 in the PNCC). Within this framework, the project's intervention will contribute to strengthening capacities and improving its institutional performance.</p> <p>The parish DAGs are in charge of, in addition to the development plan of their jurisdiction, the promotion of productive activities, the conservation of biodiversity and the protection of the environment. There are 85 parish DAGs operating in the project's area of influence (61 in the PNS and 24 in the PNCC). 31 parish DAGs (14 in the PNS and 17 in the PNCC) have been prioritized for project intervention. The project will play an important role in helping to strengthen existing capacities, as well as helping parish DAGs to execute the objectives and goals defined in their local plans.</p> <p>The DAGs will participate in various activities of Components 2 (capacity building, and development of standards and instruments for the management of buffer zones, and in the inter-institutional coordination mechanisms at the territorial level) and 3 (coordination of extension services and technical assistance and capacity building of local technicians and beneficiaries, implementation of good practices for the conservation and sustainable use of biodiversity, and development of incentives).</p>
Civil Society Organizations / Non-Governmental Organizations	
CONDESAN	<p>Executing Entity. Member of the Project Steering Committee. They will provide their technical expertise for the execution of the technical components of the project, as well as knowledge management and M&E. For the purposes of project implementation, CONDESAN will establish alliances with various local partners that have experience and presence in the territories where the actions will be implemented.</p>
Nature and Culture International ? NCI	<p>Works in the conservation of biological and cultural diversity. Their function is to protect threatened and highly biologically diverse ecosystems through actions with local personnel. Their link with the project will be through Component 2, with the support of the biodiversity conservation strategies that they carry out and jointly with the municipal DAGs of Morona Santiago and Napo, in the buffer zones of the Sangay National Park.</p>
Private sector	

<p>Financial Institutions</p> <p>? Sustainable Investment Fund (FIAS)</p> <p>? Water Funds</p> <p>? Savings and Credit Cooperatives</p> <p>? Banks and Community Banks</p>	<p>FIAS is a financial sustainability mechanism that was created, among other things, to support and strengthen SNAP. Co-financier. Their connection to the project includes Component 1, with the creation of secondary regulations and/or procedures to correct socio-environmental conflicts related to land tenure and limits of protected areas. With their Protected Areas Fund (FAP), they will also support the implementation of some operational activities related to the project's objectives. In Component 1, they would provide advice to determine the feasibility of creating a land fund to sustain over time the implementation of activities related to the regulation of land tenure.</p> <p>Water funds: they are sustainable financial mechanisms focused on the conservation of watersheds and water sources. FONAG will support Component 2 with their experience in the development and strengthening of local governance for the conservation of biodiversity and Component 3 with their strategy of conservation agreements, environmental education that work with local people in the PNCC and its buffer zone. FONAPA will directly support Component 3 of the project with their experience in strengthening the Associative Microenterprise of Environmental Promoters that works in the southern zone of the PNS.</p> <p>Savings and Credit Cooperatives: There are 20 cooperatives in the prioritized parishes of the six provinces in the PNCC and PNS area that finance productive activities, mainly agricultural, livestock, forestry and aquaculture.</p> <p>Banks and Community Banks: There are 38 savings banks and community banks in the prioritized parishes of the provinces in the PA area. They constitute modalities of financial intermediation, supported by organizational strengthening, the full participation of borrowers and social stakeholders. They provide microcredits under solidarity guarantees. These entities are expected to participate through the financing of practices for the conservation and sustainable use of biodiversity, support for value chains and access to markets (Component 3).</p>
Companies (distributors, exporters, specialized stores)	They will be invited to participate in the interventions of Component 3 related to the coordination of production and markets, development of market recognition schemes, strengthening of value chains. Locally, the associations of producers and enterprises inside and outside the protected areas will be identified, and these local stakeholders will be linked with the private sector to promote the strengthening of value chains in the PAs, seals, and market access to contribute to the improvement of livelihoods and sustainability of results.
Project Beneficiaries	
Smallholder farmer communities and family economies, indigenous communities and their organizations	Beneficiaries of the project. Indigenous communities, as well as small / medium farmers and women's groups will be beneficiaries of technical assistance and capacity building, and will participate in the implementation of practices for the conservation and sustainable use of biodiversity and access to incentives for the adoption of practices and diversification of income (Component 3)
International cooperation	

FAO	GEF Implementing Agency. Co-financier. Member of the Project Steering Committee. FAO will maintain close coordination with the MAATE as the GEF National Focal Point and with the national partner entities to ensure that its implementation represents a priority in terms of decisions and policies to be adopted by the national partners and the compliance of the financial counterparts. In addition, FAO will provide technical assistance to help strengthen the development of the activities contemplated in the project, carry out the planned evaluation processes and provide support in methodologies according to international standards.
Italian Agency for Development Cooperation (AICS); Brazilian Cooperation Agency (ABC) and Development Bank of Latin America (CAF)	These organizations finance the Amazonia without Fire (PAF) program to face the challenges of mitigating and reducing the harmful effects of fire in Ecuador's protected areas. Their participation in the project is linked to the implementation of Component 1, with the creation of national and subnational planning tools and capacity building in fire management; and with Component 3, promoting alternatives to the use of fire and agroforestry extension. The activities will be located in the PNCC and its buffer zone
Federal Ministry for Economic Cooperation and Development (BMZ) and the implementation of GIZ	Starting in 2022, a new 'Biovalor' program will start that will be directly related to Component 3 of the project, on issues of bioeconomy, strengthening of value chains for sustainable production of biodiversity and incentives for the local population.

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;

Executor or co-executor;

Other (Please explain) Yes

231. Civil society organizations (NGOs, organizations of smallholder family farmers, indigenous nationalities, women's groups) will be invited to get involved in participatory processes in the project components. Component 1 provides for the participatory development of regulations and instruments for the management of sustainable use zones in which they will be invited to participate. Likewise, the residents who live in these areas (and their organizations) will be trained in these tools.

232. In Component 2, there are civil society organizations that participate in existing coordination spaces and that will be strengthened through the project. The possibility of creating new spaces in

areas where they do not yet exist is also envisaged, in that case, civil society organizations will be invited to join. These spaces will be a key element to promote links between the objectives of the management plans of the PNCC and PNS with the LUDPs of the DAGs. The operation of these spaces is expected to contribute to strengthening the governance of these two national parks.

233. In Component 3, according to their nature and link with agricultural production and value chains of PA products, they will participate in the preparation of property management plans and comprehensive farm management plans, in the identification and validation of practices for the conservation and sustainable use of biodiversity and in the impact evaluations of the use of the practices. The project will coordinate with NGOs that work in the PNCC and PNS areas to generate synergies and work agreements, exchange information and experiences. In this same component, the organizations will be beneficiaries of training in incentive mechanisms, value chains and market access; They will participate in the implementation of incentives and market access.

234. The participatory approach will be present in all phases. The producer families and/or the communities and their organizations will participate in the planning of the organization of their property or of their communal lands and it will be these same stakeholders that decide the alternatives of land use and the productive practices that will be introduced or modified, according to their own visions and interests, within a framework of compliance with the legal provisions on what is and is not possible to do in each territory (inside and outside protected areas). In this way, management plans will be based on the needs, interests and capacities of local populations. Likewise, the producer communities and families will participate periodically in monitoring exercises to analyze the progress, discuss the difficulties that may arise and collectively decide on the opportune and adequate corrections, promoting the appropriation of the implemented management practices. The participation of local populations will be equally important in defining the incentives that promote the conservation and sustainable use of biodiversity. It is the local populations who must express their requirements to face the gaps that make it difficult for them to implement sustainable productive practices, take advantage of biodiversity or insert themselves in the marketing and market channels, while specialized technical support will identify the most appropriate tools for these incentives to materialize. Capacity building will help consolidate the involvement of organizations and associations. With these strategies, the empowerment of the population is pursued, with emphasis on women, indigenous peoples, and nationalities.

235. Indigenous populations live within the two protected areas, in particular the communities of Oyacachi, Sinango?, Chuskuyaku and San Pedro del Chaco in the PNCC, and in the PNS Ozogoché, Jubal, Huangras and Pomacocha in the high, mountainous part, and the Shuar people, in the Amazonian part. The project will implement an FPIC procedure. For this, it will coordinate with the second-degree organizations, or the community or parochial leaderships, as appropriate, to define the scope and dynamics for the development of FPIC. With the leaders of the selected communities, the FPIC process will be planned taking into account their particular forms of organization and representation, seeking to obtain a signed document that specifies the consent of the community to act in its territory and that also sets out the responsibilities of the project and the community, defines the monitoring and evaluation procedures and the coordination/dialogue channels, and clearly establishes the grievance mechanisms and, eventually, for the withdrawal of consent. To carry out the FPIC

workshops, the project will prepare culturally appropriate and gender-sensitive information materials and will make them available to organizations, communities/communes and the general population to complement the direct dialogue that will be established with the communities (see a detailed description of the FPIC strategy in Annex J).

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assessment.

236. During the design phase of the project, a gender analysis was carried out (see Annex J for detailed analysis).

237. The project intervention area is characterized by an important presence of women, most of them from indigenous peoples and nationalities according to their ethnic self-identification. Their situation in many cases is precarious. Women face physical barriers to their empowerment. Not only do they access fewer health services, but they also endure high rates of gender-based violence and adolescent pregnancies. These indicators, although indirectly related to the project, should be considered insofar as they affect the comprehensive exercise of women's rights.

238. Regarding economic empowerment, the main gaps are associated with the precarious work of women, mainly linked to agriculture and self-employment; to the high load of working hours; unequal access to stable work and social security; the limitations that women face in accessing credit and the higher illiteracy rate. These barriers affect the promotion of gender equality, the right of access and ownership of land and resources, the right to decent work and the protection of ancestral knowledge, knowledge and practices.

239. Ignorance of property rights, and in general of women's rights, as well as the persistence of practices that favor patrimonial violence against women, consolidate a panorama of lack of protection that affects women within the project's intervention area and that is exacerbated by a scenario characterized by a lack of clarity in land tenure both within and in the buffer zones of protected areas.

240. In terms of socio-political empowerment, women face various gender barriers. Their participation in public and community spaces is still minimum due to the persistence of cultural barriers, as well as the unevenness in the workload, which could affect the participation of women in the actions planned by the project. If it does not affect the cycle of reproduction of inequalities, it is likely that there will be limitations to comply with social and environmental safeguards.

241. In a context of economic slowdown, increased food insecurity and risks associated with climate change, the rural population of Ecuador has had to endure a deterioration in their living conditions. This reality has fundamentally affected women, accentuating the feminization of existing rights violations. According to interviews conducted, insufficient food in rural households has meant that women only have access to two meals a day (Interview with women leaders, March 2021).

242. In general, women face a set of barriers to their empowerment, which cost their lives and limit their opportunities to fully exercise their rights. This reality, especially critical among women in the Amazonian provinces and those belonging to indigenous peoples and nationalities, has tended to become more acute in the context of the COVID-19 pandemic and the deterioration of the country's social and economic indicators. In this context, they have been exposed to higher levels of violence, have fewer amounts of food and work increasingly long hours. These problems have extended, in turn, to girls and boys who in many cases have had to drop out of school, with impacts on the resurgence of child labor, especially of girls.

243. In contrast to these limitations, the information gathered during project design allowed to identify some opportunities to strengthen equity processes. In this direction, a greater participation of women in leadership positions within their communities stands out, motivated by the need to improve the living conditions of families and influence the deficit of basic services that affect the workload of women, such as the lack of water for human consumption, or the lack of technical assistance and markets for the production generated by women (raising small livestock, guinea pigs and chickens, especially, as well as a variety of vegetables).

244. An active role for women in the defense of food security and sovereignty in the face of the emergence of new eating practices based on the consumption of processed foods. Women recognize that the changes introduced in eating patterns not only affect the health of the family, but also undermine identity and cultural processes that unite the community.

245. There are some initiatives underway that have contributed to reducing women's working time and carrying it out in better conditions, such as greenhouses for growing vegetables or water supply solutions close to homes, that could be replicated by the project from the perspective of contributing to overcoming some of the barriers that women endure. There are also enterprises led by women (from the collection of forest products and the raising of small livestock, through agro-ecological crops, to their incorporation as community park rangers or the production of certain products with added value) that deserve to be consolidated in the perspective of contributing to strengthen their levels of autonomy.

246. Faced with this scenario, the gender strategies to face some of the identified gaps are synthesized in the following points:

247. Organizational efforts being promoted by women in different areas of the project's intervention area need to be strengthened. In the interviews carried out, one of the most significant constants was the demand for organizational strengthening through training processes and talks aimed at all the communities in order to contribute to modifying existing stereotypes. Hence, the project contemplates a training program aimed at women in which their demands are met and their knowledge of the rights, of which they are bearers, is strengthened. This effort will be especially important for women living within protected areas, who surely have fewer training options and access to information.

248. It is important to promote a greater balance of women's participation in public decision-making spaces, as well as in local organizations. This will imply promoting equal representation in all discussion and decision-making spaces promoted by the project, which will be stated in the corresponding regulations and agreements.

249. In planning activities in the field, it will be necessary for technical teams to know and apply the gender approach in order to lead to farm management plans that incorporate the opinion of women. This is all the more necessary since the gender analysis showed that it is women who are increasingly actively in charge of productive activities in the communities.

250. In the productive sphere, it is imperative to promote gender-sensitive technologies that help alleviate the workload borne by women. The adoption of drip irrigation systems to combat frost, the construction of water supply wells close to homes, the establishment of greenhouses, the provision of technical assistance to improve livestock management, including the construction of stables. These are some of the initiatives that are underway and that will be replicated and consolidated through the project.

251. The role of women in the conservation of agrobiodiversity has been little recognized. At present and given the appearance of health problems because of the consumption of processed foods, women are determined to promote more strongly the consumption of local foods, which would redound in their efforts to maintain local agrobiodiversity. This invisible work will be supported by the project in alliance with local DAGs through seed and agrobiodiversity fairs, gastronomic festivals, and the preparation of informative material in various formats, as well as through the implementation of affirmative action policies such as tax exemption for agroecological farms managed by women due to their contribution to nature and the population.

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

Yes

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

4. Private sector engagement

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

252. The involvement of the private sector will be based on various work approaches, mainly within the framework of Component 3. A first approach will be to invite the private sector to participate in the adaptation of market recognition incentive schemes for products from PAs and buffer zones. This will include analyzing the potential of including criteria related to PAs in the current certifications and seals: Green Point for Agricultural Deforestation-free Production; Smallholder Family Agriculture: Participation and Guarantee Systems; Denomination of Origin and Collective Brand, and Chakra Seal.

253. A second approach will be the search for strategies that boost livelihoods and improve access to economic benefits for local stakeholders, for example, rural entrepreneurship and the opening of markets and channels or circuits[1]. This will be done in conjunction with producers and their organizations in the intervention areas, and with private sector entities that facilitate access to markets, which could include local suppliers, stakeholders of the popular and solidarity economy, community associations, collection centers, and supermarkets, among others. The private sector will be a key stakeholder in the different links of the value chains identified and prioritized for work, participating in the: a) analysis and identification of market needs, b) design and definition of the offer of products and services from PA and buffer zones, c) development of business models for bio-enterprises as well as inclusive businesses with indigenous communities; and d) development of commercial alliances to advance the value chain towards a differentiated market that recognizes BD conservation efforts and sustainable production.

254. The third approach will include working with banks and financial institutions to reduce the access gap to financial services, through specific products that allow the development of micro-enterprises and rural enterprises, by reducing rates, financial costs, and facilitation of paperwork. Considering the annual potential placement of around USD 25 million through public banks, which are mainly used for agricultural activities, forestry and aquaculture, it is proposed as a strategic action to maintain negotiations with BanEcuador B.P., for the inclusion of sustainability criteria in the credit lines and financial services that are currently placed in the area; basically the proposal is to link the credit to some sustainability certification (AFC Seal, SPG, Green Point, among other international sustainability certifications). In addition, in the intervention areas there are savings and credit cooperatives and banks and community banks[2], entities with which alliances could be established to finance conservation practices and sustainable use of biodiversity, support for value chains and access to markets.

255. These aspects that make the involvement of the private sector will be developed in coordination with the GEF/FAO Project #10184 "LDN Target Setting and Restoration of Degraded Landscapes in Western Andes and Coastal areas" which includes similar interventions for their respective intervention zones (see subsection 6.b for more details on coordinating with this and other projects).

[1] In the project preparation phase, 135 producer associations in the cantons prioritized for intervention were identified through databases of the MAAE and the Ministry of Economic and Social Inclusion (The complete list is included in the stakeholder participation matrix in the project design phase in Annex I2).

[2] During the preparation phase, 20 savings and credit cooperatives and 38 savings banks and community banks were identified in the parishes prioritized for intervention.

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

256. Risks to the project have been identified and analyzed during the project preparation phase and mitigation measures have been incorporated into the Project design (see Table 6 below). With the support and supervision of FAO, the Project Implementation Unit (PIU) will be responsible for managing these risks as well as for the effective implementation of mitigation measures. The M&E system will serve to monitor outcome and output indicators, project risks, and mitigation measures. The PIU will also be responsible for monitoring the effectiveness of mitigation measures and adjusting mitigation strategies as necessary as well as to identify and manage any new risk that has not been identified during the preparation of the Project, in collaboration with its partners.

257. The six-monthly Project Progress Reports (PPR) constitute the main instrument for monitoring and risk management. The PPRs include a section that covers the systematic monitoring of risks and mitigation actions that were identified in the previous PPRs. The PPRs also include a section for the identification of eventual new risks or risks that still need to be addressed, their qualification and mitigation actions, as well as those responsible for monitoring such actions and their estimated deadlines. FAO will monitor the risk management of the project closely and follow up as necessary, providing support for the adjustment and implementation of mitigation strategies. The preparation of reports on risk monitoring and their rating will also be part of the Project Implementation Report (PIR) prepared by FAO and submitted to the GEF Secretariat.

Table 6 ? Risks and mitigation measures

Description of Risk	Impact	Probability of occurrence	Mitigation measures	Responsible party
<p><u>Institutional</u></p> <p>Insufficient will and commitment of institutional stakeholders for inter-institutional and inter-sectoral coordination (MAE, MAG, DAGs, others). A lack of clarity persists in roles and responsibilities, the problems of duplication of efforts, lack of coordination and complementarity. Fiscal restrictions, budgetary and human resources cuts in public institutions. Delay in the implementation of project activities</p>	Medium	Medium	<p>The signing of inter-institutional coordination agreements between the institutions participating in the implementation of the project will be promoted with an adequate identification and definition of responsibilities among the institutions. The project will support the institutions in developing an environment conducive to inter-institutional and inter-sector coordination through: a) mechanisms for dialogue, coordination and information exchange; b) stakeholder participation at all levels; and c) the development of capacities on issues such as integrated land management within the SNAP will serve to reinforce coordination since the implementation of the approach in the field requires optimizing collaboration; d) continuous follow-up with the PSC to ensure adequate allocation of co-financing.</p>	PIU

Description of Risk	Impact	Probability of occurrence	Mitigation measures	Responsible party
<p><u>Political-institutional</u></p> <p>Changes in national and local administrations and local organizations can affect decision-making, project continuity, as well as the appropriate upscaling of experiences and lessons.</p>	Medium	Medium	<p>The project will prioritize capacity development processes aimed at permanent DAG and Ministries officials and members of local communities. Various organizations will be selected at each site to ensure active participation. The mechanisms for multi-level inter-institutional coordination and cooperation (national and sub-national) will be strengthened, and the authorities that are incorporated will be kept informed during the execution of the project. The project will promote institutional arrangement agreements between the MAATE and local partners so that the implementation of activities does not stop during the transition periods of government authorities at different levels.</p>	PIU

Description of Risk	Impact	Probability of occurrence	Mitigation measures	Responsible party
<p><u>Socioeconomic</u></p> <p>The zoning and classification of land use in PAs could lead to restrictions on current land uses and economic activities, giving rise to opportunity costs for small producers and indigenous communities and/or conflicts with them.</p>	Medium	Medium	<p>The zoning will be implemented with the participation of the MAE, DAG and beneficiaries and from the beginning participatory and inclusive tools and methodologies will be used; and throughout the process the participating entities will be informed of the progress, and the results will be widely publicized. It will seek to initiate an adequate transition process of activities according to the results of the zoning, provide alternatives to land use that support the conservation of BD and the reduction of land degradation as well as promote new economic activities that improve the livelihoods of the population living in PAs and buffer zones. To support this process, the project will provide assistance for capacity development, development of technical regulations for sustainable use, guides and manuals for BD conservation and/or sustainable use and sustainable land management, technical assistance for the implementation of alternatives with less impact and good practices. Incentives such as technical assistance and training, supply of inputs, market access and promotion schemes will be developed; and access to credits through BanEcuador B.P. and the banks and community banks of the Popular and Solidarity Financial System that will be disseminated among the beneficiaries to facilitate access to them and promote the transition towards sustainable practices within the framework of the zoning adopted.</p>	UIP

Description of Risk	Impact	Probability of occurrence	Mitigation measures	Responsible party
<p><u>Socioeconomic</u></p> <p>Financial institutions could not be interested in providing loans or developing credit lines in benefit of stakeholders working in the sustainable use areas or buffer zones of the national parks</p>	Medium	Low	<p>The Project will promote activities to reduce this risk and support the local communities. In this order, the Project will support a risk mitigation strategy with integral approach, as follows:</p> <p>1) The strategy will not only include financial incentives, but non-financial ones, i.e. the joint program of rural extension and technical assistance that will be designed and implemented by MAATE, MAG and the DAGs. The joint program will be the first effort of this type which include protected areas and buffer zones in Ecuador. The local communities in these PAs have low diversification of production, face productive risks, and have limited access to markets ? being all these factors of financial exclusion. The joint program will address these problems.</p> <p>2) The strategy will not only target private financial institutions, but also development, solidarity and community banks. This is an inclusive strategy that seeks to articulate local people with entities/schemes that have traditionally offered financial services at local level (e.g. cooperatives. saving and credit unions) and can, therefore, adapt and respond to needs and contexts of these areas and populations.</p>	IUP

Description of Risk	Impact	Probability of occurrence	Mitigation measures	Responsible party
<p><u>Social:</u></p> <p>The problems in the regularization of land tenure within the PAs may cause local inhabitants not to want to participate in the project activities promoted by the MAATE.</p>	High	Medium	<p>The project seeks to improve local governance inside and outside the PAs, thereby facilitating the processes that the MAATE will carry out to regularize land tenure. The SEAP Integrated Information System to be developed will include a module on socio-environmental conflicts in the SEAP that will help identify, document, and improve follow-up of all land tenure related conflicts. It will provide local inhabitants with information on how to access these regularization processes. The participation of local inhabitants in the project's activities related to the implementation of good practices, will not be conditioned to them having formal regularized land tenure. Yet, in this process, care will be taken to select as best as possible the legitimate inhabitants of the land in accordance with the principles of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT). Drawing historical memories of land tenure to support management and follow-up of this subject will be of advantage. To increase the possibilities of access to capital for stakeholders who do not have property titles, support will be provided for them to access capital from the Popular and Solidarity Financial System.</p>	UIP

Description of Risk	Impact	Probability of occurrence	Mitigation measures	Responsible party
<u>Social:</u> Resistance of landowners, producers and communities to adopt good environmentally friendly practices and sustainable land management	Low	Low	Dialogue mechanisms with the participation of beneficiaries will help raise awareness about the need for sustainable interventions in the PA and its buffer zones. Awareness and training of beneficiaries to improve their understanding of the importance of ecosystem services, the need to adopt sustainable uses and practices and how this can improve their livelihoods will contribute to ownership. The promotion of production and links with markets and the search for differentiated prices for products from PA/buffer zones will help to interest producers through an improvement in income and livelihoods. Support will be provided for the project to increase local interest in the inclusive conservation of PAs and buffer zones, recognizing and making visible their role in the management of these areas.	UIP

Description of Risk	Impact	Probability of occurrence	Mitigation measures	Responsible party
<p><u>Environmental:</u></p> <p>Risks due to the effects of climate change on key ecosystems in PA/buffer zones and on agricultural production.</p>	Medium	Medium	<p>The development of capacities at the national and local level aimed at both institutional technicians and inhabitants of PAs/buffer zones will include the theme of the effects of climate change on PAs and their ecosystems to improve understanding of vulnerability and risks. In this way, the integration of these issues in various project activities will be facilitated, such as the development of technical standards for sustainable use, the updating of LUDP, and the selection of sustainable production practices that will include climate-smart practices that favor adaptation to climate change. The adoption in the field of sustainable practices (i.e climate-smart livestock production, agroecology, agroforestry, efficient water management, forest restoration, tourism, etc.) will contribute to adaptation to climate variability.</p> <p>Additionally, an annual calendar will be drawn up that identifies the most frequent times when extreme weather events (fires or heavy rains) occur that may affect project activities. A more detailed analysis of this risk is included in the next subsection.</p>	UIP

Description of Risk	Impact	Probability of occurrence	Mitigation measures	Responsible party
<p>COVID-19 health crisis and implications in the implementation of project activities and achievement of results. Government restrictions/reduction of stakeholder participation in project activities (e.g., trainings, workshops)</p>	<p>High</p>	<p>High</p>	<p>The COVID-19 pandemic requires that its risks be taken into account and that have an impact in the design and implementation phases of the project. In general, during the design phase, the consultations were undertaken virtually. Therefore, coordination and articulation activities at the local level, especially regarding these stakeholders (organizations of small producers, women and indigenous communities that are going to participate in the project), should be developed at the beginning of the project.</p> <p>During the implementation phase, the following aspects will be taken into account: i) Continuous risk analysis and identification of response measures; ii) Implementation of government regulations and protocols in coordination with MAATE as the leading national authority for the project; iii) Continuous monitoring of the official information on the epidemiological curve in each of the intervention sites and the restrictions that may be imposed by the national or local authorities in the areas selected for intervention; iv) The Project Implementation Unit will develop biosafety protocols for both project staff and participants in project activities and will be responsible for broad dissemination to all stakeholders; v) Digital media will be used as an alternative mechanism for organizing workshops and meetings with national and sub-national partners, and looking for a way to effectively incorporate groups of beneficiaries; vi) Opportunities and concrete mechanisms will be identified in which the project can participate in coordination with the national institutions in the intervention areas to face the health situation.</p> <p>Project interventions could help create opportunities to support COVID-19 response measures, such as: i) trainings; ii) improvement in agricultural and livestock</p>	<p>UIP</p>

Climate change risks

258. At PIF stage the climate risk rating for the project was **substantial**. The analysis carried out in this study was based on climatic modeling from the World Bank that determined temperature increases for the year 2050. During project preparation a more detailed climate risk analysis was carried out for the two intervention areas with a climate risk rated as **moderate** (on a scale of low, moderate, high and very high). However, its score is very close to being a substantial risk, due to, among other things, existing and projected climate threats. Annex O includes the detailed climate risk screening.

259. Various sources have been consulted to understand the climatic dynamics of the project areas, including hydrometeorological stations, climate risk studies, and scientific bibliographic review. In both areas, it is recognized that in the past they were very rainy with the presence of landslides in some places. The change in perceived precipitation is possibly due to the increase in temperature, especially in the Andean mountainous area and the north of the Ecuadorian Amazon. A trend was found for a greater number of consecutive dry days per year, increasing vulnerability to forest fires in both protected areas (Ministry of the Environment, 2019).

260. For the Amazon area, the trend differs according to the location of the protected area. In the southern area of Ecuador, there is currently greater risk of drought than in the northern area, probably due to the trend of behavior change in the Amazon regional precipitation, which apparently is the result of other more regional level processes, such as the loss of 17% of the native vegetation of the Amazon River basin, which, according to authors such as Thomas Lovejoy and Carlos Nobre, could be leading the Amazon to a tipping point, or turning point, which once overcome would unleash irreversible changes, transforming the ecosystems that are characteristic of this basin to something similar to a savanna (Steffen, and others, 2018).

261. Figure 6 below shows the drought risks in the two protected areas. The historical information (a), and the projection of two future climate scenarios until the year 2040[1]: RCP4.5 (b) and RCP8.5 (c), indicate that there is a tendency to drought in both areas, but located in different zones. In the Cayambe Coca National Park, the trend in the RCP4.5 scenario is evident above all in the Amazon area; in Sangay National Park, the evidence is clearer in the mountainous part of the area. For instance, in the RCP 4.5 scenario for Sangay, 7 parishes out of 20 analyzed (35%) would have a moderate vulnerability to drought, and 2 parishes would have a high vulnerability.

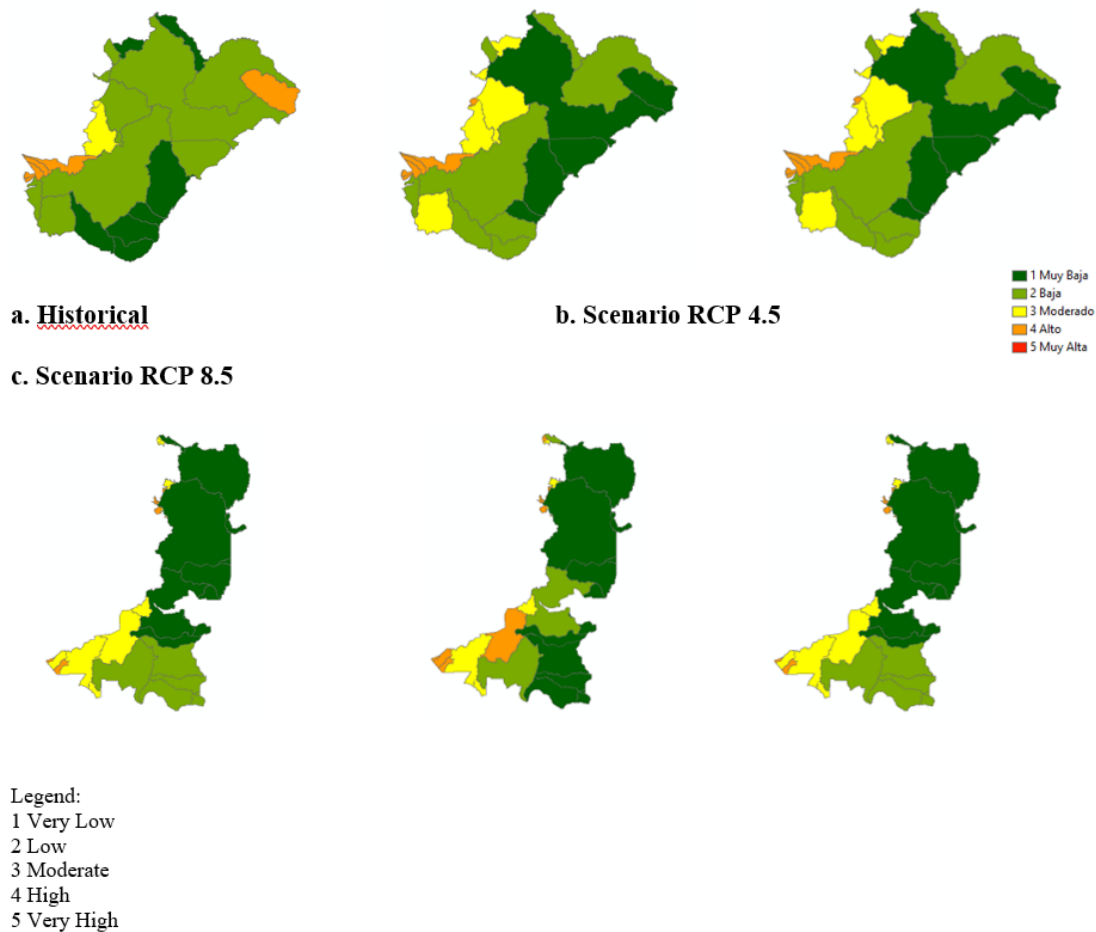


Figure 6: Drought climate threat for the historical scenario - a (1981-2015) and future (2016-2040 RCP4.5 - b and 2016-2040 RCP8.5 - c) for the Cayambe Coca and Sangay National Park

262. Figure 7 below shows the climatic risk of intense rains in both areas, with different trends according to the protected area. In the Cayambe Coca National Park, in general, a tendency to the decrease of intense rains can be observed in the parishes of interest to the project. However, when analyzing in more detail, the trend is more pronounced in the mountainous area of the protected area to such an extent that if only trends in eastern parishes are analyzed, the result is that in that area there is a trend to more rain in the future.

263. In the Sangay National Park, on the contrary, there is a general tendency of an increase in intense rains in the future. Similarly, when an analysis is made by region within the protected area, a trend towards greater precipitation in the future can be identified in the Sangay parishes that correspond to the sierra, and an opposite scenario, in the parishes that are part of the protected area in the Amazon region. It is important to understand the differences in climate behavior between regions of the country, so that in the implementation phase of the project, appropriate proposals can be generated for the local context.

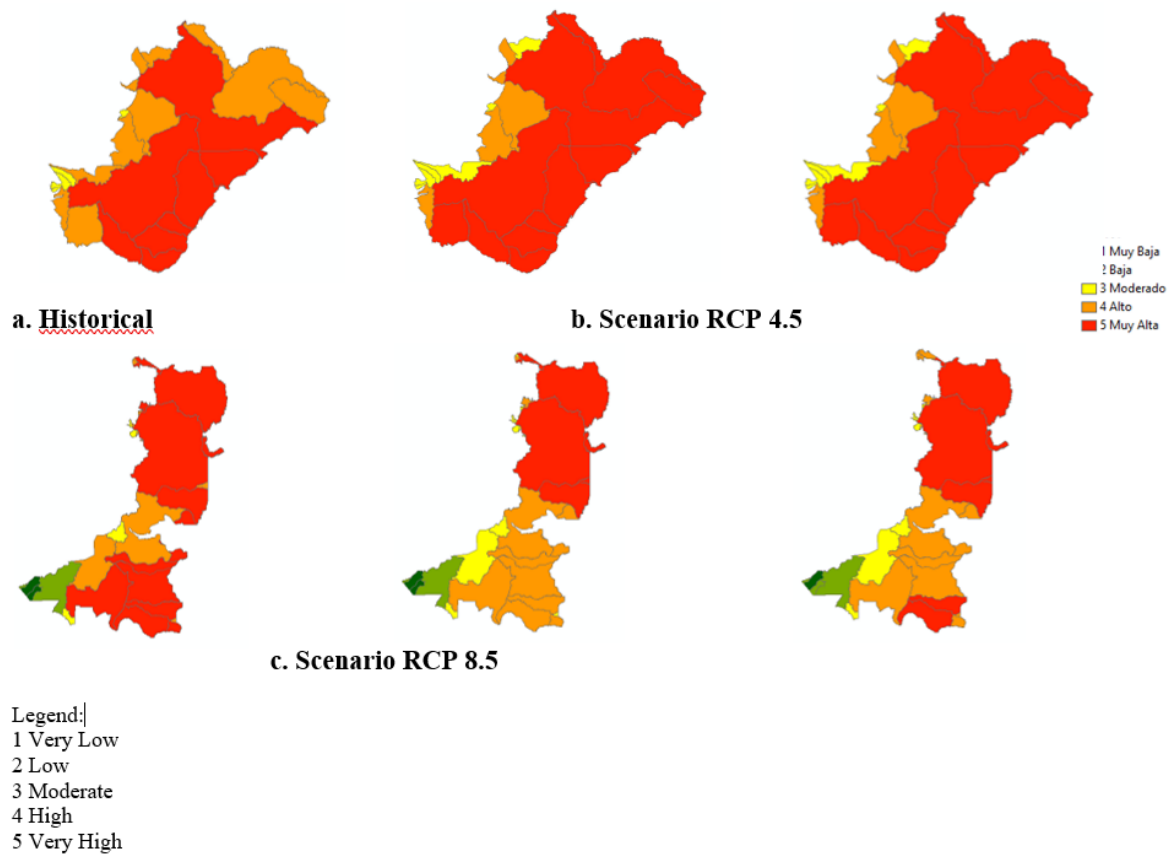


Figure 7: Climate threat intense rain for the historical scenario- a (1981-2015) and future (2016-2040 RCP4.5 - b and 2016-2040 RCP8.5 - c) for the Cayambe Coca and Sangay National Park s

264. At the national level, Ecuador is ranked 161 among 192 countries with vulnerability of natural capital to climate change (University of Notre Dame, 2018). The study areas are exposed to various natural hazards. In 2015, the Ministry of the Environment (now the Ministry of Environment and Water) developed a vulnerability analysis to natural hydrometeorological risks in the protected areas of Continental Ecuador. In this study, the Cayambe Coca National Park was identified as the most representative for the threats of mass movement and fires. Three-quarters of its surface is classified as high and medium mass movement vulnerabilities; An example is the landslide that seriously affected the population of Oyacachi on June 26, 2015 (Ministry of the Environment, 2015). Forest fires, on the other hand, are related to the altitudinal range of the areas, the susceptibility to fires is greater the higher the altitude, positioning the moors and high Andean forests as the most vulnerable to this phenomenon (Ministry of the Environment, 2015).

265. The enormous biodiversity found in the project areas is also threatened by climatic events. For example, the changes observed in tropical regions and in the Southern Hemisphere, show that between 20% to 30% of plant and animal species have a high risk of extinction if the average global temperature increase exceeds 20°C to 3°C above the pre-industrial level (IPCC, 2014); Andean biomes will show upward vertical displacement, with the moor being the biome that suffers the greatest loss in its current area of distribution (República del Ecuador, 2019). Some climatic scenarios in Ecuador determine that in the Cayambe Coca National Park there will be a loss of biodiversity that can range from 4.04% to 8.18% and in the Sangay National Park the loss would range from 5.36% to 8.6% (Cuesta, and others, 2015).

266. Social vulnerability is also a relevant issue when doing the analysis. Climate change is something that is affecting everyone, but it is getting worse in the case of the most vulnerable groups, who face the greatest risk of more extreme weather events. The condition is especially serious in the rural population living in poverty, which is already vulnerable (Fundación CODESPA, 2016). An average of 77% of the population that live near or within the Cayambe Coca National Park are poor, with some extreme cases such as Gonzalo Pizarro parish, with 87% of its population in poverty (INEC, 2019). In the case of the Sangay National Park, it is more serious, on average, 83% of the population is poor, with parishes such as Achupallas of the Alausí canton and Asunción of the Sucua canton where more than 97% of the population is poor. In both cases, these percentages are much higher than the rural national average, which by 2019 was over 40% (INEC, 2019)[2]

267. The most vulnerable local populations, who are in the buffer zones and within the protected areas that are part of the project, will also be exposed to health problems due to the anticipated climate changes. Seventy percent of the Ecuadorian territory is located in tropical and subtropical areas, so it has favorable habitats for the development and spread of vectors that transmit diseases such as dengue fever, malaria and leishmaniasis (the presence of *Aedes aegypti* has been detected up to 1,650 masl in the eastern mountain range). The populations that live on the Ecuadorian coast and Amazon are especially vulnerable to this type of climate change, as well as the areas located in the foothills of the Ecuadorian Andes, which cross the country from north to south (Republic of Ecuador, 2019). The foregoing is confirmed at the international level; according to the ND-Index (2018), Ecuador has a rating of medium vulnerability to climate change (ranked 108th out of 191 countries); however, the country is considered one of the most exposed to climate change with a rating of 173 out of 192 countries (University of Notre Dame, 2018).

268. The moderate risk in the project areas, based on an analysis of threats, exposure, vulnerability and adaptive capacity of the Cayambe Coca National Park and Sangay National Park, requires that the project undertake a more detailed assessment of climate risks and impacts at the local level and in a participatory manner. For this, support should be provided to the strengthening of the processes of generation and use of climate information. Similarly, it is important to mention that due to the health emergency work with local stakeholders was not carried; therefore, the identification and prioritization of specific measures that reduce the climatic risks found, should be reviewed in the implementation phase of the project. Being a pilot project that can be replicated at the national level in all protected areas of Ecuador, it will be important for the project to generate the conditions so that the existing climate information can be available for decision-making in the territory, as well as adjusting the role of protected natural areas, as a climate change mitigation strategy, in the current context of the country and the world.

269. Because the project areas are among the largest in the country, and it covers a large number of ecosystems that are a refuge for an enormous biodiversity (natural and cultural); when implementing the project, this should be taken as a unique advantage against climate change. The generation of information to determine the importance of Amazonian forests and Andean Mountain ecosystems in a context of climatic uncertainty and the role played by local populations and their biodiversity, should be a relevant issue in the implementation of this project. The regulations generated by the Environmental Authority on the function, competences and use of the land in the buffer zones of the National System of Protected Areas, will be essential to achieve the expected results, in terms of improving resilience and reducing the vulnerability of local people to extreme weather events.

[1] RCP - Representative Concentration Pathways for its acronym in English, represents specific GHG emission scenarios as possible radiative forcing paths identified by the world scientific community. RCP 4.5 represents a radiative forcing path of ~ 4.5 W/m² from 2100 (with a concentration of ~ 650 CO₂ -eq that stabilizes from year 2100) and 8.5 represents a radiative forcing path of > 8.5 W/m² in 2100 (with a concentration of $> \sim 1.370$ CO₂ -eq in 2100).

[2] For September 2019, in Ecuador a person is considered poor by income if they receive a family income of less than USD 84.99 per capita per month (INEC, 2019)

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 the implementation of the project.

271. The **Consortium for the Sustainable Development of the Andean Ecoregion (CONDESAN)** will have overall technical and implementation responsibility for the project, and FAO will provide oversight, as the GEF agency, as described below. CONDESAN will act as the Operating Partner (OP) and will be responsible for the daily management and achievement of results in full compliance with all the terms and conditions of the Operating Partnership Agreement (OPA) signed with FAO. As the OP of the project, CONDESAN is responsible and accountable to FAO for the timely implementation of the project's expected results, the operational supervision of the implementation activities, timely reporting and effective use of GEF resources for their intended purposes and in line with FAO and GEF policy requirements.

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

272. The organizational structure of the Project is as follows:

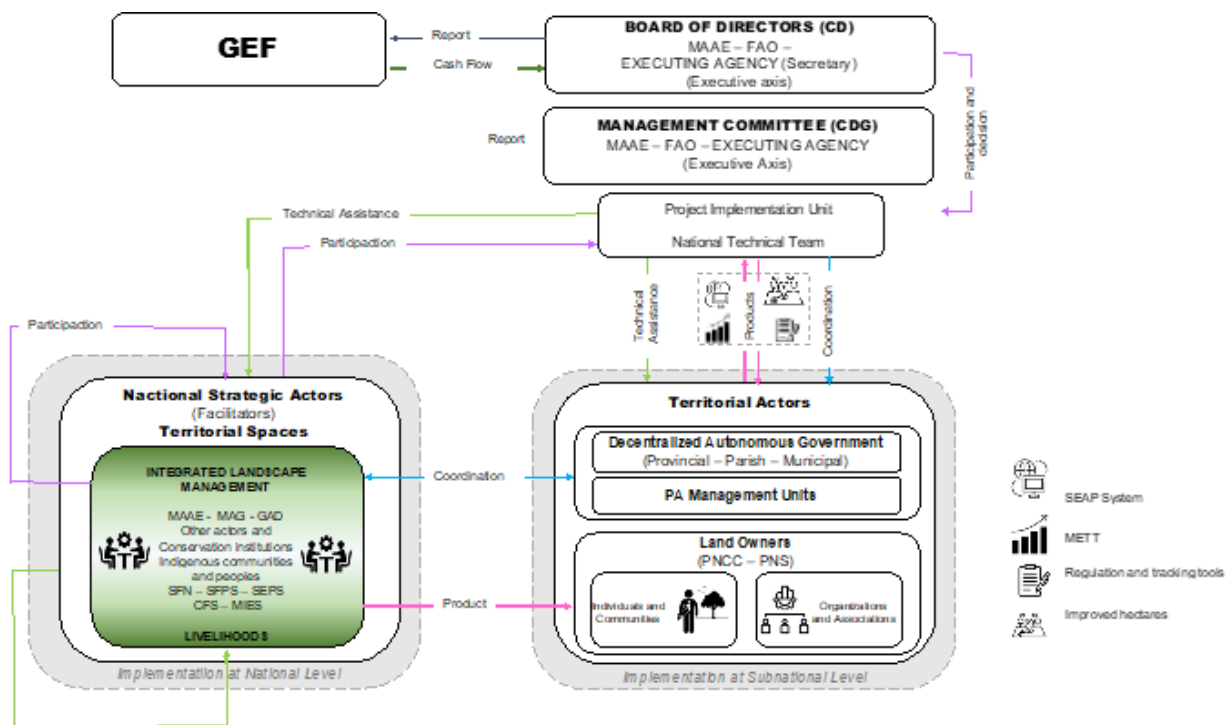


Figure 8 ? Organizational structure of the Project

273. The Food and Agriculture Organization of the United Nations (FAO) will be the GEF agency responsible for oversight and provision of technical advice during project implementation. The roles and responsibilities of FAO are described in Annex K.

274. A representative of the MAATE (Minister or his/her delegate), as the country's GEF Operational Focal Point will preside over the Project Steering Committee (PSC), which will be the main governing body of the project. The PSC will approve Annual Work Plans and Budgets (AWP/Bs) and provide strategic guidance to the project management team and all implementing partners. The PSC will be made up of representatives from MAATE (1 vote), FAO (1 vote), and CONDESAN (only with the right to speak). Each of the members of the PSC will ensure the role of technical and political counterpart for the project in their respective agencies. As focal points of their agency PSC members will: (i) technically supervise activities in their sector; (ii) ensure a fluid exchange of information and knowledge between their agency and the project; (iii) facilitate coordination and linkages between project activities and their agency's work plan; and (iv) facilitate the provision of co-financing to the project. The Chief Technical Advisor (CTA) of the project will act as Secretary of the PSC. The PSC will meet at least twice a year to ensure: i) Supervision and assurance of the technical quality of the products; ii) Close links between the project and other ongoing projects and programs relevant to the project; iii) Availability and timely effectiveness of co-financing support; iv) Sustainability of key project results, including scaling up and replication; v) Effective coordination of the work of government partners in this project; vi) Approval of the Six-monthly Project Progress and Financial Reports, Annual Work Plan and Budget; vii) Take

management decisions by consensus when guidance is required by the Chief Technical Advisor of the Project.

275. The government will designate a focal point in the MAATE, who will be responsible for coordinating activities with all national agencies related to the different components of the project, as well as with the project partners. He/she will also be responsible for supervising and guiding the CTA (see below) on government policies and priorities.

276. Additionally, a Project Management Committee (PMC) will be established as a technical support body, which will be responsible for: (i) supporting the planning of project activities, advising, and accompanying the PSC; (ii) provide technical advice to the project; (iii) advise PSC on other ongoing and planned activities, facilitate cooperation between the project and other programs, projects, and initiatives. The PMC may also be involved in the technical evaluation of the progress of the project and its products, and in the eventual development of an agreed adjustment plan in accordance with project execution, if necessary. The PMC will be comprised of the focal points of the MAATE, technical counterparts of the competent National Authorities, and with the accompaniment of the FAO (GEF Project Officer), the CTA and the thematic specialists of the project. The PMC will meet at least on a quarterly basis and its members will ensure that project management is coordinated with national priorities and with national and local inter-institutional coordination spaces.

277. The Project Implementation Unit (PIU) will be co-financed by the GEF and will be established in CONDESAN. The main functions of the PIU, following the guidance of the PSC, are to ensure the overall and efficient management, coordination, implementation and monitoring of the project through the effective implementation of the annual work plans and budgets (AWP/B). The PIU will be comprised by a CTA who will work full time during the life of the project. In addition, the PIU will include the following technical specialists (TS): TS1: Legal and Conflict Management Specialist; TS2: Sustainable Agricultural Production Specialist; TS3: Conservation, Restoration and PA Management Specialist; TS4: Social, Environmental and Governance Safeguards Specialist; TS5: M&E Specialist; TS6: Communication and Knowledge Management Specialist; LTA: Local Technical Assistants (5), and Administrative Assistance. The PIU will work in coordination with the PMC and with the national and sub-national strategic partners in the intervention sites, in line with the territorial implementation model proposed for the project.

278. The Chief Technical Advisor of the Project (CTA) will be in charge of the technical implementation, management, and oversight of the project, on behalf of the Operating Partner (OP) and within the framework outlined in the Project Results Framework (Annex 1), and approved Project Budget (Annex 2). He/she will work under the technical supervision of the FAO Project Task Force, particularly the FAO Lead Technical Officer (LTO). The TORs of the CTA are detailed in Annex L. The CTA will be responsible, among others, for:

- i. Lead the technical planning, coordinate and monitor the technical delivery of project outcomes, outputs and activities;

ii. Provide technical guidance to the executing partner(s) and experts to ensure that the activities are implemented using relevant approaches, tools and methodologies and best practices.

iii. Provide technical guidance, assess, review and approve the deliverables of the GEF-financed national technical specialists (TS), and the technical outputs of the executing partner(s), short-time consultants, and other technical teams financed by projects funds, in close consultation with FAO and the Operational Partner.

iv. Ensure technical alignment of this GEF project's objectives and the programs implemented by partner institutions and organizations at national and local levels. Promote technical synergies with REDD+, related GEF and non-GEF initiatives, IFAD programmes, and other connected initiatives financed by the international cooperation in the project intervention area.

v. Ensure a high level of collaboration between participating institutions and organizations at the national and local levels;

vi. Supervise the project's M&E and communications plans.

279. FAO will be the GEF Implementing Agency (IA) for the project, providing 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 Ecuador, will supervise the execution of the project;

? The Lead Technical Officer(s) (LTO), from all over FAO, 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.

280. The responsibilities of FAO, as GEF agency, will include:

? Oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers, Operational Partners Agreement(s) and other rules and procedures of FAO;

? Provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned;

- ? Conduct at least one supervision mission per year; and
- ? Reporting to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, the Mid Term Review, the Terminal Evaluation and the Project Closure Report on project progress;
- ? Financial reporting to the GEF Trustee

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

281. Table 8 below summarizes the opportunities for synergies and collaboration identified during the project design phase, as well as the resources that will be required for coordination.

Table 8 ? Synergies and coordination with other GEF projects and non-GEF projects

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
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Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
GEF #14345 (CAF): Adaptation to Climate Change in the Water Resources of the Andes, AICCA	Links between Conventions . Co-benefits related to climate change, biodiversity, ecosystem services	<p>Methodologies and tools designed by AICCA (determination of vulnerability, risks, and threats to climate change; identification of gaps for adaptation; inclusion of climate change measures in land use plans)</p> <p>Participatory territorial management tools and governance models at the watershed scale</p> <p>Experiences of good practices implemented (e.g., restoration of hydrological services through adaptation measures based on SLM/SFM practices)</p> <p>Governance experiences at the watershed level for territorial management including climate change criteria</p> <p>Experiences of scaling up local</p>	<p>Capacity building at the local level (content and pedagogical tools)</p> <p>Strengthening mechanisms for intersectoral coordination and territorial management</p> <p>Participatory evaluation of good practices</p> <p>Incentive and market access mechanisms</p>	<p>Experience exchange meetings</p> <p>Participation in seminars and workshops</p> <p>Meeting of the national coordinators of the projects</p>	<p>Systematization of implemented measures</p> <p>Travel costs of stakeholders/beneficiaries to seminars/workshops/exchanges to transfer practices and lessons learned</p> <p>Facilitation of regional workshops on SLM practices and climate resilience</p> <p>Time of the CTA and/or thematic specialists to attend coordination meetings and other activities</p> <p>Participation in workshops on lessons learned</p> <p>Distribution of communication materials</p>

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
GEF #9055 (UNDP) Sustainable Development of the Ecuadorian Amazon: Integrated Management of Multiple Use Landscapes and High Conservation Value Forests	<p>Landscape approach</p> <p>Good production practices, SFM, access to markets, incentives</p> <p>Multi-level governance spaces</p>	<p>Experiences of integration of the landscape approach in planning instruments</p> <p>Extension methodologies and technical assistance</p> <p>Capacity building at the local level</p> <p>Good production practices, SFM, access to markets, incentives</p> <p>Experiences of inter-institutional and inter-sector coordination in platforms</p>	<p>Capacity building at the local level (content and pedagogical tools)</p> <p>Good practices for the conservation of biodiversity</p> <p>Participatory evaluation of good practice practices</p> <p>Incentive and market access mechanisms</p>	<p>Information exchange meetings</p> <p>Meeting of the national coordinators of the projects and local partners</p> <p>Exchanges of experiences between producers and organizations</p>	<p>Time of the CTA and/or thematic specialists to attend coordination meetings and other activities</p> <p>Travel costs of stakeholders/beneficiaries to seminars/workshops/exchanges to transfer practices and lessons learned</p> <p>Distribution of communication materials and knowledge management tools</p>

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
<p>GEF #10219 (CAF) Development of an environment conductive to sustainable businesses based on the native biodiversity of Ecuador</p> <p>(in design phase)</p>	<p>Sustainable use of biodiversity</p> <p>Bio- enterprises</p> <p>Sustainable financing</p>	<p>Business development methodologies based on the sustainable use of biodiversity</p> <p>Capacity building at the local level</p> <p>Sustainable financing lines/markets</p>	<p>Capacity building at the local level (pedagogical content and tools)</p> <p>Good practices for the conservation and sustainable use of biodiversity</p> <p>Incentive and market access mechanisms</p>	<p>Information exchange meetings</p> <p>Coordination of intervention approaches</p> <p>Meeting of the national coordinators of the projects and local partners</p> <p>Exchanges of experiences between producers and organizations</p>	<p>Time of the CTA and/or thematic specialists to attend coordination meetings and other activities</p> <p>Travel costs of stakeholders/beneficiaries to seminars/workshops/exchan ges to transfer practices and lessons learned</p> <p>Distribution of communication materials and knowledge management tools</p>

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
GEF #10184 (FAO) LDN Target Setting and restoration of degraded landscapes in the Western Andes and Coastal Areas	<p>Participatory territorial management and local governance</p> <p>Capacity building at the local level</p> <p>Good production practices, SLM, SFM, BD conservation</p> <p>Incentives and value chains</p>	<p>Capacity building at the local level (content and pedagogical tools)</p> <p>Strengthening mechanisms for intersectoral coordination and territorial management</p> <p>Good SLM/SFM practices</p> <p>Incentive and market access mechanisms</p>	<p>Capacity building at the local level (content and pedagogical tools)</p> <p>Good practices for the conservation and sustainable use of biodiversity</p> <p>Incentive and market access mechanisms</p>	<p>Information exchange meetings</p> <p>Meeting of the national coordinators of the projects and local partners</p> <p>Exchanges of experiences between producers and organizations</p>	<p>Time of the CTA and/or thematic specialists to attend coordination meetings and other activities</p> <p>Travel costs of stakeholders/beneficiaries to seminars/workshops/exchanges to transfer practices and lessons learned</p> <p>Distribution of communication materials and knowledge management tools</p>

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
Project to Strengthen the Network of Biosphere Reserves of Ecuador as a Strategy for Conservation and Sustainable Development (GEF / UNDP)	Participatory territorial management and local governance Good practices Sustainable value chains	Participatory territorial management tools Methodologies to be developed (e.g., sustainability indicators in value chains) Evidence on good practices Mechanisms for linking value chains at the local level	Capacity building at the local level (content and pedagogical tools) Strengthening mechanisms for intersectoral coordination and territorial management Participatory evaluation of good practices Incentive and market access mechanisms	Information exchange meetings Meeting of the national coordinators of the projects Seminars and workshops Exchanges of experiences between producers and organizations Development of methodologies (e.g., participatory evaluation of practices)	Time of the CTA to attend coordination meetings and other activities Travel costs of stakeholders/beneficiaries to seminars/workshops/exchanges to transfer practices and lessons learned Participation in workshops on lessons learned Distribution of communication materials

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
GEF (UNDP): Small Grants Program (PPD)	<p>Capacity building at the subnational level</p> <p>Incentives and value chains</p>	<p>Successful experiences of associativity and products with territorial identity</p> <p>Articulation to local processes and territorial coordination initiatives</p> <p>Agrobiodiversity management and conservation practices</p>	<p>Capacity building at the local level (content and pedagogical tools)</p> <p>Incentive and market access mechanisms</p> <p>Organizational strengthening</p>	<p>Generate a common work agenda in the project intervention sites</p> <p>Information exchange meetings</p> <p>Meeting of the national coordinators of the projects and local partners</p> <p>Exchanges of experiences between producers and organizations</p>	<p>Time of the CTA and/or thematic specialists to attend coordination meetings and other activities</p> <p>Travel costs of stakeholders/beneficiaries to seminars/workshops/exchanges to transfer practices and lessons learned</p> <p>Distribution of communication materials and knowledge management tools</p>

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
REDD + Payment for Results Project (GCF)	Sustainable production Restoration of deforested and degraded areas	Development of local capacities for zoning and land use planning Public-private partnerships for the commercialization of sustainable products Sustainable forest management, conservation and restoration, NWFP	Capacity building at the local level (content and pedagogical tools) Incentive mechanisms for sustainable production and access to markets Good practices for the conservation and sustainable use of biodiversity	Information exchange meetings Meeting of the national coordinators of the projects and local partners Exchanges of experiences between producers and organizations	Time of the CTA and/or thematic specialists to attend coordination meetings and other activities Travel costs of stakeholders/beneficiaries to seminars/workshops/exchanges to transfer practices and lessons learned Distribution of communication materials and knowledge management tools

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
Prepare financial and land use planning instruments to reduce emissions from deforestation (GCF/MAAT E)	<p>Sustainable production</p> <p>Restoration of deforested and degraded areas</p> <p>Incentives, financing and value chains</p> <p>Land use planning</p>	<p>Development of local capacities for zoning and land use planning</p> <p>Credit lines for sustainable production</p> <p>Land use planning aligned with climate change goals</p> <p>Access to markets, certification and traceability for deforestation-free products</p>	<p>Capacity building at the local level (content and pedagogical tools)</p> <p>Incentive mechanisms for sustainable production and access to markets</p> <p>Good practices for the conservation and sustainable use of biodiversity</p>	<p>Information exchange meetings</p> <p>Meeting of the national coordinators of the projects and local partners</p> <p>Exchanges of experiences between producers and organizations</p>	<p>Time of the CTA and/or thematic specialists to attend coordination meetings and other activities</p> <p>Travel costs of stakeholders/beneficiaries to seminars/workshops/exchanges to transfer practices and lessons learned</p> <p>Participation in workshops on lessons learned</p> <p>Distribution of communication materials</p>

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
REDD Early Movers (REM) Program - Germany, Norway	SLM Value chains and market access	Restoration experiences Experiences in value chains and market access	Capacity building at the local level (content and pedagogical tools) Good BD conservation practices Incentive and market access mechanisms	Information exchange meetings Harmonization of methodologies Meeting of the national coordinators of the projects Joint seminars and workshops Exchanges of experiences between producers and organizations	Time of the CTA and/or thematic specialists to attend coordination meetings and other activities Transfer of stakeholders/beneficiaries to seminars/workshops/exchanges to transfer practices and lessons learned Participation in workshops on lessons learned

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
Nature and Culture International (NCI)	<p>Conservation of natural resources and protection of water sources</p> <p>Creation and strengthening of ACUS</p>	<p>Conservation experiences of natural resources and water sources</p> <p>Creation and strengthening of ACUS</p> <p>Conservation agreements with owners</p> <p>Training for local DAGs to manage ACUS</p>	<p>Capacity building at the local level (content and pedagogical tools)</p> <p>Extension methodologies and technical assistance</p> <p>Good BD conservation practices</p> <p>Incentive and market access mechanisms</p>	<p>Information exchange meetings</p> <p>Meeting of the national coordinators of the projects</p> <p>Joint seminars and workshops</p> <p>Exchanges of experiences between producers and organizations</p>	<p>Time of the CTA and/or thematic specialists to attend coordination meetings and other activities</p> <p>Travel costs of stakeholders/beneficiaries to seminars/workshops/exchanges to transfer practices and lessons learned</p> <p>Participation in workshops on lessons learned</p>

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
Bilateral Program: Sustainable valorization of biodiversity in the Amazon and the Coast - BioValor (GIZ)	Conservation and sustainable use of biodiversity	<p>Economic strategies that conserve biodiversity</p> <p>Stakeholder coordination (DAGs, private sector, academia, beneficiaries)</p> <p>Strengthening of agricultural producers, indigenous communities and their organizations</p>	<p>Capacity building at the local level (content and pedagogical tools)</p> <p>Extension methodologies and technical assistance</p> <p>Good BD conservation practices</p>	<p>Information exchange meetings</p> <p>Meeting of the national coordinators of the projects</p> <p>Joint seminars and workshops</p> <p>Exchanges of experiences between producers and organizations</p>	<p>Time of the CTA and/or thematic specialists to attend coordination meetings and other activities</p> <p>Travel costs of stakeholders/beneficiaries to seminars/workshops/exchanges to transfer practices and lessons learned</p> <p>Participation in workshops on lessons learned</p>

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
Conservation and sustainable use of mountain ecosystems (GIZ)	<p>Strengthening of local capacities</p> <p>SLM best practices</p> <p>Local stakeholder coordination</p>	<p>Capacity building at the local level (content and pedagogical tools)</p> <p>Good practices</p> <p>Stakeholder coordination</p> <p>■</p> <p>■</p>	<p>Capacity building at the local level (content and pedagogical tools)</p> <p>Extension methodologies and technical assistance</p> <p>Strengthened local coordination mechanisms</p> <p>Good practices</p> <p>■</p> <p>■</p>	<p>Joint construction of reference frames. Harmonization of methodologies</p> <p>Information exchange meetings</p> <p>Meeting of the national coordinators of the projects</p> <p>Joint seminars and workshops</p> <p>Exchanges of experiences between producers and organizations</p>	<p>Time of the CTA and/or thematic specialists to attend coordination meetings and other activities</p> <p>Travel costs of stakeholders/beneficiaries to seminars/workshops/exchanges to transfer practices and lessons learned</p> <p>Participation in workshops on lessons learned</p> <p>■</p>

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
Andean Landscapes Project ?FAO/EU	<p>Strengthening of local capacities</p> <p>Good practices</p> <p>Value chains and market access</p> <p>Local stakeholder coordination</p> <p>Ecosystem restoration and conservation</p>	<p>Capacity building at the local level (content and pedagogical tools)</p> <p>Good practices</p> <p>Coordination with MAATE and MAG</p>	<p>Capacity building at the local level (content and pedagogical tools)</p> <p>Strengthened local coordination mechanisms</p> <p>Good practices</p> <p>Extension methodologies and technical assistance</p>	<p>Joint construction of reference frames</p> <p>Harmonization of methodologies</p> <p>Information exchange meetings</p> <p>Meeting of the national coordinators</p> <p>Joint seminars and workshops</p> <p>Exchanges of experiences between producers and organizations</p>	<p>Time of the CTA and/or thematic specialists to attend coordination meetings and other activities</p> <p>Travel costs of stakeholders/beneficiaries to seminars/workshops/exchanges to transfer practices and lessons learned</p> <p>Participation in workshops on lessons learned</p>

Projects	Actions (indicative) where there are synergies	What the project can contribute	What the GEF SEAP can contribute	Coordination activities	Resources needed for coordination
Resilient Andes Project - Ecuador (SDC)	Local stakeholder coordination	Capacity building at the local level (content and pedagogical tools)	Capacity building at the local level (content and pedagogical tools) Strengthened local coordination mechanisms	Information exchange meetings Meeting of the national coordinators of the projects for the validation of LDN goals	Time of the CTA and/or thematic specialists to attend coordination meetings and other activities

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.

7.1 Consistency with national development objectives and policies

282. The project is aligned with the **National Development Plan 2017-2021 ?A Lifetime?**, in particular with Axis 1: Rights for All Throughout Life whose Objective 3 is to guarantee the rights of nature for current and future generations, and Axis 2: Economy at the Service of Society, whose Objective 6 is to develop capacities production and the environment to achieve food sovereignty and rural Good Living. The project is aligned with the **Environmental Organic Code**, which aims to guarantee the right of people to live in a healthy and ecologically balanced environment, as well as to protect the rights of nature for the achievement of good living.

283. The project is consistent with the **National Biodiversity Strategy 2015-2030**, in particular with its strategic objectives 1: Incorporate biodiversity, goods and associated ecosystem services, in the management of public policies; 2: Reduce the pressures and inappropriate use of biodiversity to levels that ensure its conservation; 3: Fairly and equitably distribute the benefits of biodiversity and associated ecosystem services, taking into account gender and intercultural specificities; and 4: Strengthen knowledge

management and national capacities that promote innovation in the sustainable use of biodiversity and ecosystem services.

284. The project is aligned with the objectives of the **Strategic Plan of the National System of Protected Areas 2019-2030**, which aims to: 1) Conserve biological diversity and genetic resources contained in the SNAP; 2) Provide alternatives for the sustainable use of natural resources and the provision of environmental goods and services; and 3) Contribute to the improvement of the quality of life of the inhabitants.

285. Likewise, it is aligned with the **National Climate Change Strategy**, specifically with Objective 5 of the Strategic Line for Adaptation to Climate Change: Conserve and sustainably manage the natural heritage and its terrestrial and marine ecosystems, to improve its response capacity to the impacts of climate change.

286. At the local level, the project is aligned with the **Land Use and Development Plans** of the provinces of Napo, Sucumbos, Pichincha, Imbabura, Chimborazo, Morona Santiago, Cañar, and Tungurahua, which express objectives and programs to improve the quality of life of their populations, socio-economic development without undermining the environment, and respect for the socio-cultural particularities of the peoples and nationalities that inhabit the territories of the provinces.

7.2 Consistency with FAO's Strategic Framework and Objectives

287. This project is in line with FAO's Medium-Term Plan 2018-2021 and two of its strategic objectives. Strategic Objective 2 (SO 2): *Make agriculture, forestry, and fishing more productive and sustainable*, and its achievements and accomplishments, in particular:

? Outcome 2.1: *Countries adopted practices to increase productivity sustainably while addressing climate change and environmental degradation in agriculture, forestry and fisheries* and its outputs: Output 2.1.1: *Innovative practices and technologies piloted, tested or scaled up by producers, to sustainably increase productivity, address climate change and environmental degradation 40%* and Output 2.1.2: *Capacities of institutions are strengthened to promote the adoption of more integrated and cross-sectoral practices that sustainably increase productivity and production, address climate change and environmental degradation 40%*

? Outcome 2.3: *Countries improved implementation of policies and international instruments for sustainable agriculture, fisheries and forestry* and its Output 2.3.2: *Capacities of institutions strengthened to implement policies and international instruments that foster sustainable production and address climate change and environmental degradation*

288. Likewise, the project is consistent with FAO's Regional Initiative 2 for Latin America and the Caribbean: *Family farming and inclusive food systems for sustainable rural development*.

289. Finally, the project is aligned with the 2018-2021 Country Programming Framework with Ecuador, in particular with Priority 3 *Sustainable management of natural resources and resilience against risk, through the consolidation of environmental policy related to the conservation and sustainable management of biodiversity, ensuring ecosystem services and in the development of mitigation and adaptation strategies to climate change*, and its respective expected outcome 3.3: *Technical assistance for the implementation of integrated and multisectoral strategies for the conservation and management of natural resources (landscapes, forests, lands, water and eco-systemic services), incorporating approaches to mitigation and adaptation to climate change that reduce GHG emissions and the vulnerability of the population.*

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.

8.1 Knowledge management

290. Knowledge management will be a cross-cutting activity throughout the project, to develop institutional memory, promote continuous learning, produce documentation to support scaling-up of project results and visibility strategies for capacity development and political advocacy.

291. Knowledge management will be aligned with the principles defined in the FAO Knowledge Management Strategy[1] aimed at government stakeholders, project beneficiaries and their partners, it will take into account cultural appreciations and will incorporate the following guidelines in its design and implementation: a) participatory and gender approach, b) support ongoing processes of high acceptance and focused on finding solutions to local problems, c) differentiated training for different target groups at multiple scales, and d) implement a mechanism for monitoring and evaluating the results and impact of the capacity-building program.

292. The project will prepare documents to support knowledge management that highlight the role of protected areas for conservation, and the provision of ecosystem services, especially to improve the knowledge of local stakeholders in the buffer zones of protected areas. The knowledge documents will include information on: i) the role of buffer zones in the conservation of protected areas; ii) local inter-institutional coordination mechanisms; iii) Sustainable Land Management practices and sustainable use of biodiversity; iv) locally applicable standards and guides on sustainable use and buffer zones; v) guidelines for the development of management plans for properties within protected areas; vi) alternatives for the sustainable management of local biodiversity; vii) Operational and procedural guides and manuals on the use of the SEAP Integrated Information System. A guide will also be published on experiences and lessons learned from the implementation of sustainable use and buffer zones for scaling up to other protected areas.

293. The knowledge products will be prepared in appropriate formats and in language adapted to the different audiences of the project, such as authorities, technicians, and communities. The project will have a website that will be linked to the web platforms of FAO, MAATE and other partner organizations of the project in order to provide permanent and updated information on the progress of the project to the various stakeholders and partners of the project, as well as to the general public. It will be updated periodically to

share experiences on an ongoing basis, disseminate information, develop policies and integration, highlight the results and progress and facilitate the replication of the processes during the duration of the project.

294. A special emphasis will be placed on preparing information that includes a gender approach in the knowledge products generated by the project, which highlight the experiences of women's work and participation in the implementation of initiatives for the sustainable use of biodiversity, spaces for local planning, design of sustainable management practices, and clearly recording the participation of women in the various workspaces of the project.

8.2 Communication Strategy

295. The project will also implement a communication strategy to support positioning of the project, its results and activities; it will target the executing partners and institutional and community stakeholders at the national and subnational levels that participate in the project and are its beneficiaries. This strategy will include the development of a logo, emblematic images, and campaigns or events at the national and local level to position the important concepts and ideas on the management of PAs and their sustainable use zones and buffer zones, aimed at national and local stakeholders, producers, and consumers, especially in the project intervention areas. The strategy will take into account criteria and actions to promote participation and dialogue, as well as cultural sensitivity, social inclusion and gender considerations.

296. Many of the project activities will address the high visibility of the project, and the communication strategy will ensure that the project activities and messages are effective and contribute to such visibility. Capacity development will be implemented across all components and will be directed at the following target groups: (1) national government technicians linked to PA information generation, management and monitoring processes, (2) local technicians from the DAGs and local organizations with responsibilities in landscape management, and particularly in the PAs, and (3) owners and users of the land for the adoption of good practices for the conservation and sustainable use of biodiversity will be widely disseminated to the project at the national and sub-national levels. In Component 1, the Integrated Information System of the SEAP will become the key management tool of the PAs, which will give visibility to the project both at the national and local levels in the PAs where it will be implemented, and in the medium and long term in all the PAs in Ecuador. Similarly, the standards and tools that will be developed in a participatory manner for the management of sustainable use zones. The key messages under this component include, among others, the importance of adequate institutional management of the sustainable use zones of PAs and with the participation of the populations living in the PAs to ensure the conservation of biodiversity and ecosystem services.

297. In Component 2, the institutional capacities of local DAGs and the population for integrated landscape management in buffer zones will be promoted. The regulations and/or tools for the conservation and sustainable use of the BD, the proposed definition of the limit of the agricultural frontier of the buffer zones, the creation of ACUS as a support strategy, all developed with the participation of local stakeholders and residents, will give visibility to the project. The participatory coordination mechanisms under this component will constitute spaces where stakeholders from the public, private, community, and civil society sectors will be involved, which will give wide dissemination to the project. The information and training materials will support the communication of the key messages of the project in this

component, including, among others, the importance of the management of the buffer zones combining the conservation of biodiversity and the economic activities of the people.

298. Component 3 will promote the adoption of practices for the conservation and sustainable use of biodiversity, using methodologies and processes based on farmer-to-farmer extension, field schools, promoting the exchange of experiences, lessons learned, and practice at the farm level. In this way, capacities will be generated for the beneficiaries to support the project's interventions, in addition to expanding the capacities of their peers and other local stakeholders to reproduce and multiply the experiences, which will help to give visibility to the project. The component will also contribute to the visibility of the project by promoting the empowerment of producers and their organizations and facilitating and encouraging the implementation and replication of sustainable practices, as well as improving local capacities for value chain management. The availability of incentive mechanisms to promote the adoption of good practices and access by the beneficiaries to them, as well as the projected increase in the income of the beneficiaries through better market access for their products will contribute to a high visibility.

299. In Component 4, the M&E System of the project will serve to measure its progress and its impacts in terms of global environmental benefits, social and economic benefits, which will be made known through the systematization of experiences and lessons learned, which will be published and disseminated. The project will ensure the mechanisms to give maximum dissemination to the documentation generated by the project, including the Terminal Report, the technical reports and the reports of the midterm and final evaluations. The websites of the project and partner institutions will disseminate information to a wide audience to raise awareness among the population about the importance of PAs for the conservation of biodiversity and their role in development.

8.3 Lessons learned

300. Table 9 below summarizes the lessons learned identified from previous GEF-funded projects that supported PAs in Ecuador, and how they have been incorporated into the design of this project.

Table 9 ? Lessons Learned from Previous GEF Projects and Contributions to the Design of the GEF SEAP

Project	Lessons learned relevant to this project [2]	How these lessons contribute to the proposal
<p># 3829 ? Sustainable financing of Ecuador?s National System of Protected Areas</p> <p>The project focused on protected areas and buffer zones, seeking to improve SNAP's financial sustainability and livelihoods.</p>	<p>The competitive process that rewards the best sustainable productive initiatives proposed by the communities settled in or around the Protected Areas</p>	<p>The lesson obtained will be capitalized through the mechanism of competitive funds to finance productive initiatives in conservation areas, presentation formats for project profiles, technical sheets and a toolbox. These lessons will be adapted to Component 3 <i>Improvement of alternative livelihoods to reduce pressure on ecosystem services and BD in Cayambe Coca and Sangay National Parks and their buffer zones.</i></p>
<p>#3266 - Management of Chimborazo?s Natural Resources</p> <p>The objective of the project was to ?Conserve and sustainably manage the Chimborazo paramos and the biodiversity of mountain ecosystems, and improve livelihoods by strengthening a political, legal and institutional framework, of local awareness, capacities and incentives for participation in planning and management in the sustainable</p>	<p>The identification of elements of high concern and interest to the institutions, executors and participants, is an opportunity to bring together different stakeholders in the development of a vision of comprehensive management of the landscape that includes the conservation of biodiversity</p>	<p>The project will capitalize on this lesson by incorporating elements of local planning and territorial ordering, as an articulating axis of high interest for the different local stakeholders, in the management of the buffer zones of the PAs. This lesson will be implemented in the actions corresponding to Output 2.1.2. <i>coordination mechanism for shared governance and inter-institutional and intersectoral at the territorial level between the MAE, MAG, DAGs and other key stakeholders for dialogue, coordination and information exchange between the national, provincial, municipal and parish levels.</i></p>

Project	Lessons learned relevant to this project [2]	How these lessons contribute to the proposal
management of natural resources?.	The OPIM represents a viable opportunity to decentralize the management and implementation of GEF projects. To improve its efficiency and effectiveness, it is essential to clarify the role and responsibilities during the design phase of each new project. In addition, it is important to ensure that the authorities involved participate in this process jointly with FAO in order to be aware of the GEF policies and principles and how they can be implemented within the political-legal framework of the country (and/or the spaces within this framework).	This lesson has been capitalized in all the stages of formulation of the project proposal, holding multiple meetings with the stakeholders involved, providing information on the OPIM management model. Otherwise, the management model has been developed in conjunction with the most relevant partners of the project and periodic actions of socialization of this model will be proposed during the operation of the project to the corresponding authorities.
<p>#4777 ? Mainstreaming of the Use and Conservation of Agrobiodiversity in Public Policies through Integrated Strategies and In situ Implementation in three Provinces in the Andean Highlands</p> <p>This project focused on the integration of agro-biodiversity practices in policies, agricultural systems and capacity building, resulting in experiences in agro-biodiversity and its conservation and sustainable use.</p>	In the promotion and production of agro-ecological crops for fairs, include the training of promoters and farmers to calculate the economic, social and environmental returns of agro-biodiversity. This would be important for farmers to be able to make informed decisions and foster learning at the family and inter-family level.	This lesson will be capitalized by incorporating the strengthening of the technical assistance and rural extension services of the MAE, MAG and DAGs. Likewise, the incorporation of the production of agroecological crops as an environmentally friendly practice to be implemented with the communities and inhabitants of the areas of sustainable use and buffer zones of the two PAs, in accordance with the standards approved for different types of uses.
	The production of agro-diverse plots under agroecological practices can generate net benefits of up to USD 100/week (with the use of drip / sprinkler irrigation), which shows that the smallholding can generate economic income higher than the country's minimum wage.	As cultural practices in agroecological production, agro-diverse plots will be promoted, linked with marketing incentives in such a way that it contributes to increasing the income of participating families.

Project	Lessons learned relevant to this project [2]	How these lessons contribute to the proposal
	<p>The duration of projects that seek to promote the conservation and sustainable use of agrobiodiversity and improve income through the development of short marketing circuits and the promotion of micro-enterprises requires a period appropriate to the needs of the beneficiaries. A detailed analysis of these needs before project design can help determine the duration and the most appropriate approaches to the project context.</p>	<p>The promotion of productive initiatives linked to the proposed incentives will strictly observe the horizons of implementation of ventures or escalation of productive initiatives in their various stages. According to the horizon of this project and the proposed business line, support for productive initiatives can be developed from the incubation stage of the microenterprise or support the consolidation of the enterprise. Alliances will be developed between the project and other public and private productive development agencies so that support can continue after the project is completed.</p>
	<p>Projects financed by the GEF and executed by FAO require that the coordinators establish processes of dialogue and constant reflection on the effectiveness, efficiency and sustainability of the main activities of the project.</p>	<p>A Management Model is developed and implemented under the OPIM modality with several spaces for articulation of the project partners as well as an Operational Manual that includes dialogue procedures between the technical managers that allow constantly analyzing the effectiveness and efficiency of the main project activities. Likewise, the structure of the project will have an M&E unit that will contribute with the management of information and methodologies to measure the efficiency and effectiveness of the technical intervention.</p>
#4731 ? Advancing Landscape Approaches in Ecuador's National Protected Area System to Improve Conservation of Globally Endangered Wildlife	<p>Parish DAGs associate more quickly with a project than others at ?higher? levels of government, because they have a more direct closeness with people, local producers, and field practices and, there are shorter lines of communication, agreements, management and decision-making</p>	<p>This lesson is capitalized through the creation of local coordination spaces where the parish DAGs and other levels of government will be integrated, as well as representatives of civil society.</p>

Project	Lessons learned relevant to this project [2]	How these lessons contribute to the proposal
<p>The objective of this project is to get Ecuador's PA system to apply landscape approaches to increase its effectiveness in conserving wildlife of global importance.</p>	<p>Managing conflicts between people and wildlife is more effective and yields more co-benefits (economic, social and environmental) when the solution is sought in a change in human behavior (good production practices) linked to direct benefits, rather than wildlife control. Effective collaboration between environmental and agricultural authorities helps to generate these multiple environmental and social benefits.</p>	<p>This lesson is capitalized through the formation of local coordination spaces in which the possible present socio-environmental conflicts and their management will be discussed together between local authorities and civil society, as well as the implementation of productive practices and strategies.</p>
	<p>Considering the gender dimension in the selection of diverse agricultural practices, can create more social and environmental co-benefits</p>	<p>This lesson is capitalized according to the proposed structure of the project and its alternative livelihoods model to reduce pressure on ecosystem services and BD in PNCC and PNS</p>
<p>4775 ? Promotion of Climate-smart Livestock Management Integrating Reversion of Land Degradation and Reduction of Desertification Risks in Vulnerable Provinces</p> <p>Works to improve livelihoods related to livestock production, implementation of the methodology for zoning livestock spaces in the project</p>	<p>For the development of a project aligned to national policies and priorities, the continuous monitoring of this relationship makes it possible to directly contribute to solving problems that arise during implementation and to solve the needs of the interested parties. This also allows precise adaptive measures to be taken, which becomes more relevant in times of crisis and socio-political instability.</p>	<p>This lesson is capitalized according to the proposed structure of the project and its management model by incorporating a follow-up and monitoring unit that will contribute with the management of information and that allows the taking of measures to prevent and correct difficulties in the project implementation stage</p>

Project	Lessons learned relevant to this project [2]	How these lessons contribute to the proposal
intervention areas and is developing practices for climate-smart livestock that can be replicated in the zones of intervention of this project.	For projects implemented by two or more ministries, with different objectives and competencies, in many cases, it is very useful to have a neutral third party with a high technical level and an active role in inter-institutional coordination. The project shows that, for future actions, the technical role and support from the FAO National Office allows to minimize negative impacts related to changes of authorities and technical personnel, conflicting objectives between ministries, etc., focusing on the activities and results of the project.	The OPIM management model allows all partners to know their different roles; in the same way coordination spaces through the Steering Committee and Management Committee. FAO's role as the implementing agency will be inter-institutional coordination and technical contribution to the implementation of the project.
	The M&E and knowledge management systems, including the use of online applications to store and exchange project documentation, coupled with the implementation modality by the project technical team (without contracting external services), made it possible to generate a database of project documentation, stored online in the project's knowledge management platform, very useful when giving sustainability to the actions implemented or promoting their replication. The portal stores technical documents, technical recommendation packages, field manuals, videos of good practices, infographics and training methodologies, among others.	This lesson is capitalized within the project by incorporating in the output 4.1.1, communication and information strategy; visits and exchange tours for staff of the MAATE, DAG, MAG, landowners and producers of buffer zones; media management; project website, which is linked to the respective monitoring and follow-up processes

Project	Lessons learned relevant to this project [2]	How these lessons contribute to the proposal
	The permanent presence of the technical staff of the project in the provinces allowed the constant accompaniment of the producers, achieving their empowerment and commitment.	The capitalization of this lesson is embodied in the proposed management model by incorporating the presence in the territory of extension agents who, in coordination with field staff of the implementing partners, will generate a direct and permanent presence and link with the beneficiaries
	One lesson learned is the need to integrate the commercial approach, value chains, market access and the relationship with the private sector within the dynamics of FAO projects, as it would provide incentives and help ensure better income to producers who adopted the climate-smart livestock approach.	This lesson is taken into consideration when incorporating in the project various incentives strategies and public-private partnerships in the two protected areas, the value chain approach will be one of the main strategies to be developed in component 3 as a mechanism to improve the livelihoods of local people
<p>#1918 ? Conservation of the Biodiversity of the Paramo in the Northern and Central Andes</p> <p>The project implemented actions to promote plans for the management and sustainable use of paramos and the implementation of the necessary initiatives to create an environment conducive to improving the livelihoods of the inhabitants of the paramo based on the conservation and sustainable use of the natural resources of the ecosystem.</p>	Participatory plans must be the results of collective construction and be expressed in languages suitable for the community. They also have to be embedded in land use planning tools to achieve implementation and sustainability.	In component 2 ?Strengthening capacities to prevent loss of BD in buffer zones?, this lesson is included through the planned participatory processes to. Additionally, linked to component 3, ?Improvement of alternative livelihoods to reduce the pressure on ecosystem services and BD in the Cayambe Coca and Sangay National Parks?, the elaboration of farm management and land plans will be promoted, which will consider highly participatory rural methodologies adapted to the local culture.
	It was effective to create a favorable information environment on the strategic value of the paramo available to citizens and institutions: this transformed the relationship between political stakeholders and the paramo.	The project contemplates a permanent communication strategy, developed in component 4, at different levels: political, technical, institutional and social, with the aim of actively involving all stakeholders.

Project	Lessons learned relevant to this project [2]	How these lessons contribute to the proposal
	It was a mistake to lack a better process for the formation of institutional alliances at the local level to implement the project	The creation of local coordination spaces will allow the development of solid and dynamic alliances for the implementation of the project. These alliances will be consolidated through the development and implementation of work plans.
	Local municipalities had to be incorporated from the design or at least initial steps, as well as inter-municipal cooperation strategies.	A close work is proposed with different levels of the DAGs and an intense process of political incidence to achieve active involvement in all the actions of the project with a view to generating synergies and consolidating sustainability
	Development alternatives should be provided as productive projects	This lesson is capitalized by incorporating in component 3 ?Improvement of alternative livelihoods to reduce the pressure on ecosystem services and BD in Cayambe Coca and Sangay National Parks? of different incentives to production.
	Our communities must be linked with local and regional governments for the best management of water attention	The local coordination committees will be the space for articulation and reflection between the community and the DAGs at different levels.
	Inter-institutional linkage and all the stakeholders involved and interested in the issue is necessary	The local coordination committees will fulfill the role of linking direct and indirect stakeholders and maintaining an intervention plan within the framework of the project.
	Community and women's participation in representation and decision-making should be promoted	The capitalization of this lesson is reflected in the actions proposed in the project components and there will be a special emphasis on component 3 ?Improvement of alternative livelihoods to reduce the pressure on ecosystem services and BD in the Cayambe Coca and Sangay National Parks?.

Project	Lessons learned relevant to this project [2]	How these lessons contribute to the proposal
	The exchange of experiences was a strategy to promote agroecological practices, restoration and conservation and social organization	This learning is capitalized through Output 4.1.1 which includes a communication and information strategy; visits and exchange trips for staff of the MAE, DAG, MAG, landowners and producers of buffer zones; information materials; project website and others, which are linked to the respective monitoring and follow-up processes
	It is necessary to emphasize the political formation of the communities to intervene in decision-making in their territory	This lesson is capitalized by proposing processes of socio-organizational strengthening to the social fabric of the areas of intervention. Said process will include issues of political training and management with the aim of achieving greater involvement of social stakeholders in local decision-making.
	(The incentives) are necessary and effective as long as: 1) they are generated within a framework of sovereignty and social justice, 2) they do not generate paternalism, 3) they do not fall into 'protecting for the sake of protecting?' and 4) they are adequately socialized.	Within component 3, special care will be taken when granting the incentives to the beneficiaries. The application mechanisms will be developed ensuring incentives are complementary to their activities.
	Socio-political contexts are too changeable to focus on awareness at any one time. Something more constant and profound is needed.	A close work is proposed with different levels of the DAGs and an intense process of political incidence to achieve active involvement in all the actions of the project with a view to generating synergies and consolidating sustainability
	The absence of an institutional network limits the sustainability of conservation of the paramo by the community	The local coordination committees will be the space that allow the link between the institutional and the social to generate the sustainability of the conservation of the sustainable use and buffer zones of the PAs.

Project	Lessons learned relevant to this project [2]	How these lessons contribute to the proposal
#5797 ? Securing Tenure Rights for Forest Landscape Dependent Communities: Linking Science with Policy to Advance Tenure Security, Sustainable Forest Management and People's Livelihoods	The project provided ethnographic information relevant to regional and context-dependent processes. This helped avoid conflict and poor implementation practices during land tenure reform. As stated in interviews with public officials, there is a new opening of some national organizations to receive foundational data (ethnographic and otherwise) to improve the implementation of policies related to tenure.	The project contemplates multiple research actions considering multicultural approaches, actions to support the MAATE in matters of regulation for the legalization of lands within the PAs will be strictly governed by the processes foreseen for the issuance of new regulations where a high social and institutional participation is expected.
	Before a project carries out land tenure reform activities, it is important to conduct due diligence on factors that could hinder successful implementation.	Consultative processes, prior to the issuance of standards, is of vital importance, in these spaces the limitations and factors that could hinder their implementation are identified and actions are proposed to overcome them
	The use of participatory tools and the deliberate participation of stakeholders requires flexibility and adaptation of research methods and strategies.	The proposed methodologies are highly participatory, inclusive and coordinated with local stakeholders through different mechanisms.
	Having good policies, laws and regulations in place is not enough to improve security of tenure. Communities and governments also need to have adequate budgets to implement reforms (including funds for rigorous and participatory approaches) and to monitor	A close work is proposed with different levels of the DAGs and an intense process of political incidence to achieve active involvement in all the actions of the project with a view to generating synergies and consolidating sustainability

Project	Lessons learned relevant to this project [2]	How these lessons contribute to the proposal
# 4774 Conservation and Sustainable Use of Biodiversity, Forests, Soil and Water to Achieve the Good Living (Good Living / Sumac Kasay) in the Napo Province	The project proposed to remove the following barriers that prevent obtaining environmental benefits: 1) institutional weakness at the local level; 2) unsustainable agricultural and livestock production systems and forestry that exert pressure on the protected areas of the province; and 3) the limited livelihoods for the local population generate pressure on natural resources	The implementation strategy was based largely on inter-institutional coordination (MAATE-MAG-DAG and the project). Through its intervention in the province of Napo, it has bases to give continuity to processes related to Sustainable Tourism.

[1] http://www.fao.org/fileadmin/user_upload/capacity_building/KM_Strategy.pdf

[2] Taken from the final evaluation reports of the projects in question

9. Monitoring and Evaluation

Describe the budgeted M and E plan

301. The monitoring and evaluation (M&E) of progress in achieving the project's results and objectives will be carried out based on the goals and indicators established in the Project Results Framework (Annex A1) and their description in Section 1.a. Project monitoring and evaluation activities have been budgeted for compliance. Monitoring and evaluation activities will follow FAO and GEF monitoring and evaluation policies and guidelines. The monitoring and evaluation system will also facilitate learning and replication of project results and lessons in relation to the management of protected areas and natural resources.

9.1 Supervisory and monitoring responsibilities

302. The monitoring and evaluation functions and responsibilities specifically described in the monitoring and evaluation table will be carried out through: (i) missions to monitor and supervise the progress of the project on a day-to-day basis by the Project Implementation Unit (PIU) ; (ii) technical monitoring of indicators to measure improvements in biodiversity conservation and sustainable use (PIU and LTO in coordination with partners); (iii) mid-term review and final evaluation (independent consultants and FAO-OED Evaluation Office); and (v) monitoring and supervision missions (FAO).

303. At the beginning of the GEF project implementation, the PIU will establish a system to monitor the progress of the project. Participatory mechanisms and methodologies will be developed to support the monitoring and evaluation of performance indicators and outputs. During the project inception workshop (see section 9.3 below), monitoring and evaluation tasks will include: (i) presentation and explanation (if necessary) of the project's Results Framework with all project stakeholders; (ii) review of the monitoring and evaluation indicators and their baselines; (iii) preparation of draft clauses that will be required for their inclusion in consulting contracts, to ensure compliance with the monitoring and evaluation reporting functions (if applicable); and (iv) clarification of the division of monitoring and evaluation tasks among the different project stakeholders. The CTA together with the PIU, will prepare a draft of the monitoring and evaluation matrix that will be implemented during the execution of the project. The M&E matrix will be a management tool for the CTA and the Project Partners to: i) semi-annually monitor the achievement of the output indicators; ii) annually monitor the achievement of the outcome indicators; iii) clearly define responsibilities and means of verification; iv) select a method to process the indicators and data.

304. The M&E Plan will be prepared by the CTA and the M&E Specialist together with the project partners in the first three months of year 1 and validated with the PSC. The M&E Plan will be based on

Table 10 M&E and the M&E Matrix and will include: i) the updated results framework, with clear indicators per year; ii) updated baseline, if necessary, and selected tools for data collection; iii) description of the monitoring strategy, including data collection and processing roles and responsibilities, reporting flows, monitoring matrix, and a brief discussion of who, when and how each indicator will be measured. Responsibility for project activities may or may not coincide with responsibility for data collection; iv) updated implementation arrangements, if necessary; v) inclusion of the indicators of the monitoring tool, data collection and monitoring strategy to be included in the mid-term review and final evaluation; vi) schedule of evaluation workshops, including self-evaluation techniques.

305. The daily monitoring of the project implementation will be the responsibility of the CTA and will be driven by the preparation and implementation of an AWPB with follow-up through six-monthly PPR reports. The preparation of the AWPB and the biannual PPRs will represent the product of a unified planning process among the main project stakeholders. As tools for results-based management (RBM), the AWPB will identify the actions proposed for the next year of the project and will provide the necessary details on the goals of outputs and outcomes to be achieved, and the PPRs will report on the follow-up of the implementation of actions and achievement of goals for outputs and outcomes. Specific inputs to the AWPB and PPRs will be prepared based on participatory planning and progress review with all stakeholders and will be coordinated and facilitated through project planning workshops and progress review in management committees. These contributions will be consolidated by the CTA in the draft AWPB and the PPRs.

306. An annual project progress planning and review meeting will be held with the participation of project partners to finalize the AWPB and PPRs. Upon completion, the AWPB and PPRs will be submitted to the FAO LTO for technical approval and to the Project Steering Committee for review and approval. The AWPB will be developed in a manner consistent with the Project Results Framework to ensure proper compliance and monitoring of project outputs and outcomes. After Project approval, the Year 1 AWPB will be adjusted (either reduced or extended in time) to synchronize it with the annual reporting calendar. In subsequent years, AWPBs will follow an annual cycle of preparation and reporting as specified in section 9.3 below.

9.2 Indicators and Information Sources

307. To monitor project outputs and outcomes, including contributions to global environmental benefits, a set of indicators is established in the Results Framework (Annex A1). The indicators and means of verification of the Results Framework will be applied to monitor both the performance of the project and its impact. Following FAO's monitoring procedures and progress report formats, the data collected should be detailed enough to allow monitoring of specific outputs and outcomes, and to determine risks to the project in advance. The output indicators will be monitored every six months and the outcome indicators will be monitored annually when possible or at a minimum in the midterm and final evaluations.

308. The main sources of information to support the M&E plan include: i) participatory progress review workshops with stakeholders and beneficiaries; ii) in-situ monitoring of the implementation of interventions in the field; iii) progress reports prepared by the CTA with input from partners, project specialists and other stakeholders; iv) consulting reports; v) training reports; vi) mid-term review and final

evaluation; vii) financial reports and budget reviews; viii) Project Implementation Reports prepared by the FAO LTO with the support of the FAO Representation in Ecuador; and ix) FAO oversight mission reports.

9.3 Reporting Plan

309. The reports that will be specifically prepared within the framework of the monitoring and evaluation program are: (i) the project inception report, (ii) the Annual Work Plans and Budget (AWPB), (iii) the Project Progress Reports (PPR), (iv) the Annual Project Implementation Reviews (PIR), (v) the technical reports, (vi) the Co-financing Reports, and (vii) the Terminal Report. In addition, in relation to the Mid-Term Review and the Final Evaluation of the project, the GEF Core Indicators Worksheet will be completed to be able to compare progress with the baseline established during project preparation.

310. **Project Inception Report.** After project approval by FAO, a project Inception Workshop will be held at the national level. Immediately after the workshop, the CTA will prepare a project Inception Report in consultation with PSC and the FAO Representation in Ecuador. The report will include a description of the institutional functions and responsibilities and the coordination action of the project stakeholders, the progress made in its establishment and start-up activities, as well as an update of any changes in external conditions that may affect the execution of the project. It will also include a detailed AWPB for the first year and the Monitoring matrix, a detailed monitoring plan based on the M&E plan presented below. The draft Inception Report will be distributed to FAO and PSC for their review and comments prior to completion, no later than three months after the start of the project. The report must be approved by the BH, the LTO and the FAO-GEF Coordination Unit. The BH will integrate the report into FPMIS.

311. **Annual Work Plan and Budget (AWPB).** The CTA will present to the PSC a draft AWPB no later than December 10 of each year. This should include the detailed activities to be executed monthly for each output and outcome and the dates in which the targets and milestones of the outputs and outcomes will be achieved throughout the year. A detailed budget of the project activities to be carried out during the year will also be included, along with all necessary monitoring and supervision activities during the year. The FAO Representation in Ecuador will distribute the draft AWPB to the FAO Project Task Force (PTF) and will consolidate and submit FAO comments. The PSC will review the AWPB and PIU will incorporate any comments. The final AWPB will be sent to PSC for approval and to FAO for final no objection. The BH will integrate the AWPB into FPMIS.

312. **Project Progress Reports (PPR).** PPRs are used to identify limitations, problems, or bottlenecks that prevent timely implementation, and to take appropriate corrective action. The PPRs will be prepared based on the systematic monitoring of the output and outcome indicators identified in the Project Results Framework (Annex A1), the AWPB, and the Monitoring Plan. Each semester, the CTA will prepare a draft PPR and collect and consolidate FAO PTF comments. The CTA will present the final PPRs to the FAO Representative in Ecuador every six months, before July 10 (covering the period between January and June) and before December 15 (covering the period between July and December). The report covering the July-December period must be accompanied by the updated AWPB for the following year for its review and no objection by the FAO PTF. The BH is responsible for coordinating the preparation and finalization of the PPR, in consultation with the Project Implementation Unit, LTO, and Funding Liaison Officer (FLO). Following LTO, BH, and FLO approval, the FLO will ensure that project progress reports are uploaded to FPMIS in a timely manner.

313. **Annual Project Implementation Review (PIR).** The CTA, under the supervision of the LTO and the BH and in coordination with the national partners of the project, will prepare a draft PIR corresponding to the period of July (of the previous year) and June (current year) no later than 15 June of each year. The LTO will finalize the PIR and submit it to the FAO-GEF Coordination Unit for review by July 2. The FAO-GEF Coordination Unit, the LTO and the BH will discuss the PIR and qualifications. The LTO is responsible for conducting the final review of the PIR and providing technical approval. The BH will present the final version of the PIR to the FAO-GEF Coordination Unit for final approval. The FAO-GEF Coordination Unit will present the PIR to the GEF Secretariat and the GEF Independent Evaluation Office as part of the Annual Monitoring Review of the FAO-GEF portfolio. The PIR will be uploaded to FPMIS by the FAO-GEF Coordination Unit.

314. **Technical reports.** The technical reports will be prepared as part of the project outputs and will serve to document and disseminate the lessons learned. The CTA must present the drafts of all technical reports to the PSC and the FAO Representation in Ecuador, which in turn will share them with the LTO for their review and approval and with the FAO-GEF Coordination Unit for their information and eventual comments, before finalization and publication. Copies of the technical reports will be distributed to PSC and other project stakeholders, as appropriate. These reports will be uploaded to FPMIS by the BH.

315. **Co-financing reports.** The CTA will be responsible for compiling the necessary information on the co-financing in kind and in cash provided by all the co-financiers of the project, both those contemplated in this document and those not foreseen (new). Each year, the CTA will present these reports to the FAO Representation in Ecuador before June 15, covering the period from July of the previous year to June of the year of the Report. This information will be included in the PIRs.

316. **GEF Core Indicator Worksheet.** In compliance with GEF policies and procedures, the GEF Core Indicator Worksheet will be sent to the GEF Secretariat at three times: (i) together with the Project Document for approval by the GEF Executive Director; (ii) together with the mid-term review of the project; and (iii) together with the final evaluation of the project. It will be filled out by the CTA of the project.

317. **Terminal report.** Within two months prior to the project completion date, the CTA will present a draft Terminal Report to the PSC and the FAO Representation in Ecuador. The main purpose of the Terminal Report is to offer guidance at the authority level on the policy decisions necessary to monitor the Project and present the donor with information on the use of funds. Therefore, the Terminal Report will consist of a brief summary of the main products, results, conclusions and recommendations of the Project. The report will be aimed at people who are not necessarily technical specialists and who must understand the policy implications of the findings and technical needs to ensure the sustainability of the project results. The Terminal Report will evaluate the activities, summarize the lessons and express the recommendations in terms of their application to conservation and sustainable use of biodiversity in the intervention areas, in the context of development priorities at the national and provincial levels, as well as in terms of practical application. This report will specifically include the findings of the final evaluation as described below in section 9.5. An evaluation meeting of the project should be held in order to discuss the draft Terminal Report with the PSC before its completion by the CTA of the Project and its approval by the BH, LTO and the FAO-GEF Coordination Unit.

9.4 Monitoring and Evaluation Plan

318. Table 10 presents a summary of the main monitoring and evaluation reports, those responsible for each one, and the deadlines.

Table 10 - Summary of the main monitoring and evaluation activities

M&E activity	Responsible Party	Time frame / Periodicity	Budgeted costs (USD)
Inception workshop	CTA; FAO-Ecuador (with support from LTO, and the FAO-GEF Unit)	Two months after starting the project	USD 2,500
Project inception report	CTA, M&E Expert and FAO-Ecuador with the approval of the LTO, BH and the FAO-GEF Unit	Immediately after the inception workshop	--
Impact monitoring "on the ground"	CTA; project partners, local organizations	Continuous	USD 91,200
Monitoring visits and assessment of progress in PPR and PIR	CTA; FAO (FAO-Ecuador, LTO). The FAO-GEF Unit can participate in the visits if necessary.	Annual, or as required	FAO visits will be covered by GEF agency fees. Project coordination visits will be borne by the project travel budget
Project Progress Reports (PPR)	CTA, with contributions from stakeholders and other participating institutions	Biannual	-
Annual Project Execution Review Reports (PIR)	Prepared by the CTA, with the supervision of the LTO and BH. Approved and submitted to the GEF by the FAO-GEF Coordination Unit	Annual	FAO staff time is funded by GEF agency fees. PIU time covered by the project budget.

Meetings: National Steering Committee and Project Management Committee	CTA with contributions from other co-financiers	Annual or more	--
Co-financing reports	CTA, FAO (LTO, FAO-Ecuador)	Annual	--
Technical reports	FAO-Ecuador, External Consultant, consultations with the project team, including the FAO-GEF Unit and others.	As required	PIU time covered by the project budget.
Mid-term review (MTR)	FAO Evaluation Office in consultation with the project team, including the FAO-GEF Unit and others.	Midway through project implementation	USD 35,000 for an external consultancy, managed by the BH at FAO Ecuador.
Final Evaluation	The 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.	To be launched 6 months prior to terminal review meeting	USD 45,000 for an external evaluation team. FAO staff time and travel expenses will be funded from GEF agency fees.
Terminal report	CTA; FAO-Ecuador (with support from LTO, and the FAO-GEF Unit)	Two months before the project completion date	--
Total budget			USD 173,700

9.5 Evaluation Provisions

319. When the project implementation reaches 50%, an external consultancy will carry out the Mid-Term Review (MTR). The Budget Holder (BH) will organize the MTR in consultation with the PSC, PIU, LTO and the FAO GEF Coordination Unit. The MTR will be carried out in order to review the progress and effectiveness of the project implementation, in terms of achievement of objectives, outcomes and outputs. The MTR will allow the implementation of corrective actions, if necessary. The MTR will provide a systematic analysis of the information included in the Monitoring Plan (see above), with emphasis on the progress in achieving the targets of the expected outcomes and outputs compared to expenditures. The MTR will refer to the Project Budget and the AWPB approved for years 1 and 2. The MTR will contribute to highlighting replicable good practices and the main problems faced during project execution and will suggest mitigation measures to be discussed by the PSC, LTO and the FAO-GEF Coordination Unit.

320. 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.

321. The 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.

322. After the completion of the terminal evaluation, the BH will be responsible to prepare the management response to the evaluation within 4 weeks and share it with national partners, GEF OFP, OED and the FAO-GEF CU.

9.6 Disclosure of information

323. The project will ensure transparency in the preparation, conduction, reporting and evaluation of its activities. This includes the full disclosure of all non-confidential information, and consultations with major groups and representatives of local communities. Information disclosure will be ensured through publication on websites and dissemination of findings through knowledge products and events. Project reports will be widely and freely disseminated, and findings and lessons learned will be made available.

10. Benefits

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

323. The main benefit of the project will be the improvement of the capacities of local stakeholders in the sustainable use zones and buffer zones of the PNCC and the PNS that constitute the areas of intervention of the project, to deal with the socio-environmental conflicts generated by agricultural activity. In this sense, the project will contribute to the enhanced capacities of:

? 60 technical officials and park rangers of the MAATE at the national level for the operation and maintenance of the SEAP Integrated Information System;

? 80 technicians and park rangers from the PNCC and PNS for the use of the SEAP Integrated Information System and the new or updated secondary regulations developed by the project;

? 1,200 residents (30% women) living in the sustainable use zones in the PNCC and PNS, including women, youth and indigenous people, who know and understand the regulations and instruments for the management of sustainable use zones in both PAs;

? 600 people (30% women, 30% youth) to implement and monitor the regulations and tools for the conservation and sustainable use of biodiversity developed by the project;

? 120 technicians and extension workers from MAATE, MAG and DAG trained to implement good practices for the conservation and sustainable use of the BD (of which 40% are women); and

? 3,000 people (at least 40% are women) to adopt biodiversity conservation and sustainable use practices that help reduce pressures and recover and increase agricultural production and productivity, contributing to improved livelihoods. Likewise, of this number, 900 people are expected to diversify their productive activities by practicing the sustainable use of natural resources and have better access to markets as an improvement in their livelihoods.

324. A greater capacity for adaptation will also be possible by working in coordination with local institutions and organizations to strengthen local spaces for discussion and decision-making to efficiently manage the resources of a given territory, improve the living conditions of its inhabitants and implement actions to reduce risks. This benefit implies, therefore, the strengthening of governance mechanisms where multiple stakeholders converge in the implementation of intersectoral policies.

325. Through project interventions and increased capacities of beneficiaries, local and regional benefits will be seen in terms of improved livelihoods, cultural assertiveness and environmental sustainability and will help support the long-term maintenance of global environmental benefits. These benefits will be:

? Benefits for the local economy through the strengthening of value chains and better access to markets that help create new sources of diversification, income and better livelihoods and social benefits in terms of

strengthened partnerships. The skills acquired in the implementation of sustainable value chains and access to markets will contribute to the improvement of the income and livelihoods of 900 people, men and women, involved in the production of milk and dairy products, fruits and vegetables, cocoa and coffee value chains and biodiversity products.

? Social benefits in terms of fostering strategic partnerships and empowering local stakeholders (including women and indigenous peoples).

? Improvement of food security and the quality of life and well-being of the population through the long-term sustainability of agricultural production, increased yields, and the availability of food products for the local population.

? Promotion of Decent Rural Employment^[1] through project actions that are inserted under the four pillars of decent employment, namely:

Table 11 - Contribution of the project to the pillars of Decent Rural Employment

Pillar	Topics under the Pillars related to the project intervention	Project specific actions
Pillar 1 <i>Job creation and business development</i>	<p>? Women and men small producers supported to access markets and value chains</p> <p>? Job creation in rural areas, particularly for youth and women</p> <p>? Vocational and educational programs for technical and business skills for rural population</p>	<p>? Rural extension program and technical assistance. Capacity development (Output 3.1.1)</p> <p>? Incentive mechanisms and improved market access (Output 3.1.3)</p>
Pillar 2 <i>Social protection</i>	<p>? Improvement of working conditions in rural areas, including effective protection of maternity and income</p>	<p>? Capacity development (Output 3.1.1)</p> <p>? Improved livelihoods of beneficiaries including reducing the income gap between men and women (Outputs 3.1.2 and 3.1.3)</p>
Pillar 3 <i>Standards and rights at work</i>	<p>? Socially responsible production, specifically to reduce discrimination based on gender and age</p>	<p>? Biodiversity conservation practices (Output 3.1.2)</p> <p>? Incentive mechanisms (Output 3.1.3)</p>
Pillar 4 <i>Governance and social dialogue</i>	<p>? Participation of the rural poor in decision-making and governance mechanisms</p> <p>? Rural women and young people empowered to participate in these processes from the beginning</p>	<p>? Inter-institutional and intersectoral coordination mechanisms (Output 2.1.2)</p> <p>? Development of standards, regulations and technical tools for PA management (Outputs 1.1.2 and 2.1.1)</p>

[1] In the definition applied by FAO, decent rural employment refers to any activity, occupation, job, business or service performed by women and men, adults and youth, in exchange for compensation or benefits, in rural areas, which: 1) respects the fundamental labor standards as defined in the ILO Conventions; 2) provides an adequate living income; 3) implies an adequate degree of security and stability in employment; 4) adopts basic occupational health and safety measures; 5) avoid excessive working hours and allow enough time for rest; 6) promotes access to technical and professional training.

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.

270. The project was classified as of moderate risk. Table 7 below summarizes the risks identified and the measures proposed for their mitigation.

Table 7 ? Environmental and social risks of the project

Identified risk	Risk Classification	Mitigation measure(s)	Indicator/Means of Verification	Progress in mitigation actions

<p>2.1 - Would this project be implemented within a legally designated protected area or its buffer zone?</p>	<p>High</p>	<p>The project proposes to carry out activities in a coordinated manner with the MAATE, DAG, MAG and other related entities, to promote sustainable productive activities within the sustainable use zones of the protected areas, that is, those places where there is presence of human activities, therefore, where there has already been a change in land use and impact on ecosystems. The proposed actions will help to improve the livelihoods of local people, while reducing the pressure on existing biodiversity.</p> <p>In the buffer zones, support will be given to promoting sustainable productive activities in degraded areas and to supporting local biodiversity conservation strategies in conserved areas.</p>	<p>2,000 hectares in sustainable use zones (inside PA limits) and 4,000 hectares in buffer zones (around protected areas) where conservation practices and sustainable use of biodiversity will be implemented.</p>	
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2.5 - Would this project imply access to genetic resources for their use and/or access to traditional knowledge associated with genetic resources owned by local indigenous communities and/or farmers?	Moderate	<p>The activities planned in this matter will be agreed jointly with the local stakeholders. In the case of indigenous communities, the relevant legal processes (free, prior and informed consent process) will be followed in a transparent and participatory manner. For the implementation of bioenterprises and sustainable use of biodiversity activities, these should be carried out directly with local populations or indigenous peoples and nationalities that contributed with their traditional knowledge, so that the benefits obtained are delivered to their owners. The processes will be carried out in compliance with all current Ecuadorian regulations and the FAO policies and standards.</p>	<p>At least 9 practices for the conservation and/or sustainable use of biodiversity under a landscape, gender, interculturality and resilience approach agreed, implemented and monitored with local stakeholders</p>	
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9.1.1 Do project activities influence indigenous peoples living outside the project area?	Moderate	<p>Among the sustainability strategies proposed by the project, the creation and / or strengthening of local associations mainstreaming gender and cultural relevance is included so that activities such as bio-enterprises and sustainable use of biodiversity are maintained over time, when the project ends. Associativity processes can include indigenous peoples and communities that live outside the project area, but that are interested in working on new economic alternatives that, in turn, would reduce the pressure to change land use. This always in coordination with MAATE, MAG, DAG and related entities</p>	Lessons learned for scaling up incentive mechanisms, including successful cases of incentives targeting women	
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9.2 - Are there indigenous peoples living in the project area where the activities will take place?	Moderate	The activities planned in the project will be agreed jointly with the local stakeholders. In the case of indigenous communities, the relevant legal processes (free, prior and informed consent process) will be followed in a transparent and participatory manner. For the implementation of activities aimed at bioenterprises and sustainable use of biodiversity, these must be carried out directly with local populations or indigenous peoples and nationalities, so that the benefits obtained are delivered to their owners. The processes will be carried out in compliance with all current Ecuadorian regulations and the FAO policies and standards.	At least 9 practices for the conservation and/or sustainable use of biodiversity under a landscape, gender, interculturality and resilience approach agreed, implemented and monitored with local stakeholders	
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Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Anexo I1_Riesgos_ESM_Jun_English	CEO Endorsement ESS	

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

Chain of Results	Indicators	Base line	Mid-term targets	End of project targets	Means of verification	Assumptions
<p>Objective: Promote conservation, sustainable use of biodiversity and capacity building in sustainable use zones and buffer zones within the State Sub-system of Protected Areas (SEAP).</p>						
<p>Component 1: Strengthening the national governance of SEAP for the management of protected areas with emphasis on their <i>sustainable use zones</i></p>						

<u>Outcome 1.1:</u> Improved and integrated management of protected areas and their <i>sustainable use zones</i>	<u>GEF Core Indicator #1.2:</u> Increase in the management effectiveness score of two protected areas (PA) measured by the GEF Management Effectiveness Tracking Tool (METT) (prioritizing the intervention in the CEPA and UPyT program of the Management Plan and METT).	a) Cayambe Coca National Park: METT: 45	a) Cayambe Coca National Park: METT: 55	a) Cayambe Coca National Park: METT: 65	METT Spreadsheets Annual reports EEM-PANE Executing partner reports Annual Project Implementation Review (PIR) Six-monthly Project Progress Reports (PPR) Mid-Term Review (MTR) and Final Evaluation (FE) Reports	Commitment of the MAATE to adopt and promote management and governance measures that ensure the conservation and sustainable use of biodiversity in PAs National and local institutions, organizations and communities are committed and participate in the management of PAs and their sustainable use zones
	a) Cayambe Coca National Park (408.287 has) b) Sangay National Park (502.105 has)	b) Sangay National Park: METT: 43	b) Sangay National Park: METT: 47	b) Sangay National Park: METT: 55		

Output 1.1.1:	Project Indicator #1:	Through the Unified Environmental Information System - SUIA, the MAATE manages the different systems and platforms. There are a total of 6 systems/tools related to the generation, use and publication of PA information: (I) Interactive Map, (II) National System of Environmental Indicators, (III) National System of Protected Areas of Ecuador, (IV) Biodiversity Information System, (V) Forest Management System Early Warning System and (VI) SMART - Spatial Monitoring and Reporting Tool. These systems have been developed in a scattered way and without being correctly coordinated and do not have modules to integrate information on land tenure or local conflicts.	SEAP Integrated Information System, coordinating the information generated by the systems and tools already available, designed and validated, including: basic structured information for the Cayambe Coca and Sangay NPs; data model created, approved and made official; defined categories, subcategories and attributes; and with a module for monitoring and managing socio- environmenta l conflicts	SEAP Integrated Information System integrated and coordinated with SUIA, and implemented in the field under the leadership of technical teams and park rangers, and with the communities. Reports generated and uploaded to the System in support of decision- making and providing feedback for its improvement and updating the Spatial Data Infrastructure of the MAATE.	Design of the information system, improvements in the tools built by the MAATE and implementatio n of computer modules	Commitment of the MAATE in the development of the SEAP information system. MAATE staff are trained and make use of the information system, generating the necessary information for management and decision- making
SEAP Integrated Information System for the management of protected areas and their operational <i>sustainable use zones</i> , including a module for monitoring socio- environmenta l conflicts and implemented in the Cayambe Coca and Sangay NPs, and validated by the communities, technical teams and park rangers	An integrated information system of the SEAP for the management of protected areas and their sustainable use zones designed and implemented in the Cayambe Coca and Sangay NPs, and validated by the communities , technical teams and park rangers				System design and implementatio n report	
					Protocols for data loading and report generation	
					MAATE staff training reports for the use of the information system	The community gets involved and supports the efforts of the MAATE staff
					PPR / PIR	
				60 technical officials and park rangers of the MAATE at the national level with improved capacities for the operation and maintenance of the integrated information system.	Reports generated locally and uploaded to the Information System	
					Institutional reports of the MAATE	
		There is a Biodiversity Information System - SIB, with tourism information in				

Output 1.1.2:	<u>Project Indicator #2:</u>	<p>There is a legal tool for zoning in protected areas that identifies sustainable use zones.</p>	<p>a) Legal diagnosis document of the legal instruments necessary to implement the provisions of the COA on the management of <i>sustainable use zones</i> (ZUS) as a basis for updating the Operational Management Manual of Ecuador's PAs and for the formulation of the required technical standards.</p>	<p>a) Updated Manual for the Operational Management of Ecuador's Protected Areas in accordance with the COA and its regulations, to encourage the participation of local stakeholders and reduce conflicts</p> <p>b) 3 technical standards for ZUS implemented and monitored. Lessons learned on enforcement and compliance identified.</p>	<p>Proposals for technical standards</p> <p>Ministerial Agreements for the approval of the MAATE</p> <p>Property management plans</p> <p>PPR / PIR</p> <p>Attendance records</p>	<p>National authorities are willing to advance in the definition of standards and tools, both technical and legal.</p> <p>The technical and operational units are actively involved and participate in the development of standards and tools</p> <p>Local populations show commitment to the conservation and management of PAs</p>
<p>Technical, operational and legal standards and tools, with a gender and intercultural approach, for the management of SEAP <i>sustainable use zones</i> established within the framework of the new Environmental Organic Code, its regulations and secondary legislation</p>	<p>Number and types of technical, operational and legal standards and tools, with a gender and intercultural approach, for the management of sustainable use zones of the SEAP updated or prepared with the participation of the local population</p>	<p>There are no standards, regulations and guidelines for the management of these areas under the new COA.</p>	<p>There is an outdated regulation applicable to sustainable use zones with regulatory gaps; its legal and technical adaptation is necessary based on the lessons learned from its application and in line with the provisions of the COA and its regulations.</p> <p>b) 3 technical standards developed for Sustainable Use Zones (ZUS) (1.- Normative instrument that allows the promotion and regulation of the sustainable use of biodiversity in Protected Areas, with emphasis on the ZUS; 2.- Management of connectivity corridors; and 3.- Guide for preparing land management</p>	<p>c) 20 land management plans implemented by the inhabitants of the ZUS and monitored. Lessons on implementation identified.</p>	<p>d) Land Fund for the management of the ZUS created</p>	
<p>-</p>	<p>-</p>					

Output 1.1.3: Capacity development program for the effective implementation of regulations and instruments for the management of sustainable use zones in the Cayambe Coca and Sangay NPs, aimed at the staff of the Ministry of the Environment (MAATE) and the local population.	<u>Project Indicator # 3:</u> Number of officials trained to implement, monitor and evaluate the application of regulations and instruments for the management of sustainable use zones in the Cayambe Coca and Sangay NP	The MAATE has the Green Classroom Program that has trained nearly 800 people who work in the PAs in planning, finance, legislation, communication, gender and intercultural issues. The MAATE has an Environmental Communication, Education and Participation Program (CEPA) of the National System of Protected Areas.	1 education and training program designed mainstreaming approaches to gender, social inclusion, interculturality and resilience. 50 technicians and park rangers from the Cayambe Coca and Sangay NPs have been trained to implement, monitor and evaluate the application of the standards and instruments for the management of sustainable use zones in the Cayambe Coca and Sangay NP	80 technicians and park rangers from the Cayambe Coca and Sangay NPs have been trained in the use of the SEAP integrated information system and new or updated secondary regulations for this project	Training and education program documents Training materials, including workshop and course programs Register of people trained by year and locality/PA disaggregated by sex Photographic record and attendance lists PPR / PIR	Human resources of the MAATE interested in training; actively participate in education and training programs; and apply the knowledge acquired Communities show interest in being trained in the use of tools and regulations for the management of sustainable use zones
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	<p><u>GEF Core Indicator #11:</u></p> <p>Number of local people trained to implement the regulations and instruments for the management of sustainable use zones in the Cayambe Coca and Sangay NPs (including percentage of women and indigenous population)</p>		<p>500 residents living in sustainable use zones in the Cayambe Coca and Sangay NPs, including women and indigenous people, have been trained in the regulations and instruments for the management of sustainable use zones of both PAs (30% women)</p>	<p>1,200 residents living in sustainable use zones in the Cayambe Coca and Sangay NP, including women, youth and indigenous people, have been trained in the regulations and instruments for the management of sustainable use zones of both PAs (30% women)</p>		
<p>Component 2: Development of local territorial governance to prevent the loss of biodiversity (BD) in the <i>buffer zones</i> of Protected Areas</p>						

<u>Outcome 2.1:</u>	<u>Project Indicator #5:</u>	Few DAGs in the intervention area are developing an integrated management to prevent the loss of biodiversity to the extent that the buffer zones do not have a particular management. Buffer zones lack specific local policies for their management.	4 DAGs have strengthened their capacities for integrated landscape management in buffer zones and participate in local governance to prevent the loss of BD, as measured by the GEF capacity monitoring tool (baseline scores and goals to be defined in year 1. A goal of 20% increase with respect to the baseline is preliminarily estimated)	8 DAGs have strengthened their capacities for integrated landscape management in buffer zones and participate in local governance to prevent the loss of BD, as measured by the GEF capacity monitoring tool (baseline scores and goals to be defined in year 1. A 20% increase goal is preliminarily estimated with respect to the baseline)	Institutional reports of executing partners MTR and FE reports PIR Ordinances and other local regulations	DAG commitment to adopt and promote integrated landscape management measures in a coordinated manner with the MAATE, which ensure the conservation and sustainable use of BD in the PA buffer zones
Strengthened institutional capacities of the Decentralized Autonomous Governments (DAG) in the integrated management of the landscape in the buffer zones, to prevent the loss of BD	Level of improvement in the capacities of at least 8 DAGs (in their different levels of government) involved to implement integrated landscape management in PA buffer zones to prevent the loss of BD					

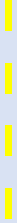
<p>Output 2.1.1:</p> <p>Standards and tools developed for the conservation and sustainable use of BD in the buffer zones of SEAP, integrated into the local planning framework</p>	<p><u>Project Indicator #7:</u></p> <p>Number of legal and technical tools for the conservation and sustainable use of Biodiversity and landscapes in the buffer zones of the SEAP, integrated into the local planning framework</p>	<p>The COA incorporates since 2018 the figure of buffer zones. There are no regulations for conservation and local development. The LUDPs do not incorporate the role of the buffer zones and there are no tools to complement the LUDPs and the Land Use and Management Plans for the management of buffer zones.</p>	<p>a) A legal diagnosis that allows the identification of secondary regulations that allow the application of the COA and its Regulation on buffer zones.</p> <p>b) At least 2 regulations and tools that incorporate the conservation and sustainable use of the BD in accordance with the zoning of the PA</p> <p>(1.- Guide for the incorporation of the buffer zones in the LUDP and PUGS of the DAG; 2.- Proposal of an ordinance for the elaboration of plans and instruments for the conservation and management of fragile ecosystems in the buffer zones)</p>	<p>a) At least 3 regulations and/or tools that incorporate the conservation and sustainable use of the BD in accordance with the buffer zone of the PA implemented and monitored; lessons from their app identified</p> <p>b) Proposed agreement to define the limit of the agricultural frontier in buffer zones.</p> <p>-</p>	<p>Approval resolutions</p> <p>Ordinance proposal</p> <p>IPP/IRAEP</p>	<p>The DAGs actively participate and facilitate the processes of formulation of local regulations</p> <p>Communities and their organizations recognize the importance of the sustainable use of resources and ecosystems, participate in the design of actions and adopt the practices and technologies</p>
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<p>Output 2.1.2:</p> <p>Mechanism for shared governance and inter-institutional and intersectoral coordination at the territorial level between the MAATE, the Ministry of Agriculture (MAG), DAG and other key stakeholders at the national, provincial, municipal and parish levels</p>	<p><u>Project Indicator #8:</u> Territorial coordination spaces in the Cayambe Coca NP and Sangay NP to promote dialogue, coordination and exchange of information, ensuring the participation of women and indigenous peoples in the buffer zones of the Cayambe Coca and Sangay National Parks</p> <p>-</p>	<p>Several institutions have roles at the territorial level (MAATE, MAG, DAG) and coordination is insufficient to implement actions on the ground.</p> <p>There are experiences in the establishment and operation of work committee, such as the case of the PA committee in the province of Napo.</p>	<p>a) Two territorial governance spaces for technical coordination (1 in Cayambe Coca and 1 in Sangay) established under the leadership of the MAATE and with the participation of the DAGs of the 8 involved provinces and representative local organizations, with objectives, functions and agreed operating regulations in which gender and intercultural parity is encouraged in their representation</p>	<p>a) Four territorial governance spaces for technical coordination, 2 in Cayambe Coca and 2 in Sangay, operating with the participation of the MAATE and at least 8 DAG, with approved work plans, achievement of goals, and lessons learned from the joint work identified.</p> <p>Sustainability of the Spaces of territorial governance assured.</p> <p>-</p>	<p>Agreements for the creation of coordination spaces</p> <p>Regulations, work plans of the coordination spaces, meeting minutes</p> <p>Executing partner reports</p> <p>IPP/IRAEP</p>	<p>Institutions and local populations interested in promoting coordination and collaboration and actively participating in the establishment and operation of coordination spaces</p>
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<p>Output 2.1.3:</p> <p>Training programs implemented for DAGs and key stakeholders on regulations for buffer zone management</p>	<p><u>Project Indicator #9:</u></p> <p>Number of people trained to implement and monitor regulations and tools for the conservation and sustainable use of BD (developed in 2.1.1)</p> <p>(Including percentage of women and of peoples and nationalities)</p>	<p>DAGs have responsibilities in land use planning. There are no capacity building processes that allow DAGs and other local stakeholders to understand the importance of PA conservation and sustainable management of buffer zones.</p> <p>Local capacities are limited in identifying the benefits of buffer zones for local development, territorial planning and other aspects.</p>	<p>1 training program focused on DAGs with the participation of at least 40% of women designed and in implementation</p> <p>1 training program focused on the role of women in the management of buffer zones designed and in implementation</p> <p>1 training program focused on communes, communities, towns and nationalities designed and under implementation</p> <p>At least 300 people with strengthened capacities (30% women, 30% youth)</p>	<p>1 training program focused on DAGs with the participation of at least 40% of women implemented and monitored</p> <p>1 training program focused on the role of women in the management of buffer zones implemented and monitored</p> <p>1 training program focused on communes, communities, towns and nationalities implemented and monitored</p> <p>At least 600 people with strengthened capacities (30% women, 30% youth)</p>	<p>Training and education program documents</p> <p>Training materials, including workshop and course programs</p> <p>Register of people trained by year and locality disaggregated by sex</p> <p>Photographic record and attendance lists</p> <p>Evaluation of the impact of each training program.</p> <p>IPP/IRAEP</p>	<p>Human resources of the DAGs and other stakeholders interested in training; actively participate in education and training programs</p> <p>DAG and other stakeholders are zoning the territory and are interested in knowing and recognizing the socio-ecological functions that the buffer zones of the protected areas fulfill.</p>
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Component 3. Improvement of alternative livelihoods to reduce pressure on ecosystem services and BD in the Cayambe Coca and Sangay NPs

<p><u>Outcome 3.1:</u></p> <p>Pressure from agricultural activities is reduced through diversification and improvement of local livelihoods</p>	<p><u>GEF Core Indicator BD #4.1:</u></p> <p>Surface in hectares in sustainable use zones and buffer zones of the Cayambe Coca and Sangay NPs where conservation practices and sustainable use of the BD are implemented (sustainable production, tourism, restoration and conservation)</p>	0	<p>a) 500 hectares in sustainable use zones</p> <p>b) 1500 hectares in buffer zones</p> <p>Total: 2,000</p>	<p>a) 2000 hectares in sustainable use zones</p> <p>b) 4000 hectares in buffer zones</p> <p>Total: 6,000</p>	<p>On-site surveys (project M&E)</p> <p>Data/reports from SEAP MAATE, MAG, DAG</p> <p>PIR</p> <p>MTR/FE reports</p> <p>Registration of attendance at training and technical assistance</p>	<p>The project partners have the will and commitment to advance towards the conservation and sustainable use of resources in sustainable use zones and buffer zones of protected areas.</p> <p>The local population internalizes the benefits of the sustainable management of natural</p>
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	<u>GEF Core Indicator #11:</u> Number of direct beneficiaries of the project who participate in the implementation of gender-sensitive BD conservation and sustainable use practices in the sustainable use and buffer zones of the Cayambe Coca and Sangay NP	0	1,500 people	3,000 people	events	resources for the improvement of their livelihoods and they are involved in the implementation
			At least 700 women	(at least 40% are women) 		

Output 3.1.1: Technical assistance and rural extension services of the MAATE, MAG and DAG coordinated and strengthened to promote associativity initiatives and promote conservation and sustainable use practices of the BD, in buffer zones and sustainable use zones, with a gender and intercultural approach	<u>Project Indicator #10:</u> A program of rural extension and technical assistance, which promote practices of conservation and sustainable use of BD, in buffer zones and zones of sustainable use, with a gender and intercultural approach, developed and implemented .	MAATE, MAG and DAG provide extension services. The MAATE operates in the PAs providing training on reforestation, wildlife management, conservation in sustainable use zones; MAG works directly in the buffer zones. Currently there is no joint extension and training effort. There are MAG and AGROCALID AD good practice manuals (guidelines for bio-enterprises), and cooperation projects; and protocols between the MAATE and MAG such as those of the Climate-Smart Livestock project.	Rural extension and technical assistance program, which promotes conservation practices and sustainable use of BD, in buffer zones and sustainable use zones, with a gender, intercultural and resilience approach, developed and implemented by the MAATE, the MAG and the DAGs (program led by the MAATE with support in the implementation of the MAG and the local DAGs) At least 120 technicians and extension workers from MAATE, MAG and DAG trained to implement good practices for the conservation and sustainable use of the BD (of which 40% are women)	A rural extension and technical assistance program, which promotes BD conservation and sustainable use practices in buffer zones and sustainable use zones, with a gender, intercultural and resilience approach, implemented, developed and monitored in the prioritized intervention areas.	Validated Rural Extension Program document Training plans and transfer of practices PPR / PIR Training event log	Human resources from MAATE, MAG and DAG are interested in receiving training and actively participate in education and training programs There is institutional support and commitment to implement the extension and technical assistance program in the intervention areas Local population, especially women, with an interest in strengthening their level of associativity
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<u>Outcome 4.1:</u> Knowledge Management and Monitoring and Evaluation (M&E) strategy based on adaptive management and delivery of measurable and verifiable results	<u>Project Indicator #12:</u> Project results achieved and demonstrating sustainability		100% of mid-term results achieved	100% of project results achieved. Sustainability demonstrated .	PIR MTR and FE reports	The project partners have the political will to advance towards the sustainable use of natural resources, they take ownership of the project and ensure its sustainability .
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Output 4.1.1: Mechanisms implemented for the dissemination and exchange of best practices and lessons for the replication and scaling of project results to SEAP	<u>Project Indicator #13:</u> Number and type of mechanisms for the dissemination and exchange of best practices and lessons for the replication and scaling of project results to SEAP -	a) Knowledge management plan identifying knowledge products to be generated, with a gender and intercultural approach, developed and validated with key stakeholders b) Communication and information strategy, with a gender and intercultural approach, developed and validated with key stakeholders c) Plan for exchange of experiences between MAATE, MAG and DAG personnel, and owners and producers in buffer zones, developed and validated with key stakeholders d) 3 documents and publications systematizing experiences and lessons disseminated	a) 6 documents and publications systematizing experiences and lessons disseminated (incorporating the gender and cultural relevance approach) b) Communication and advocacy strategy implemented through community radio, digital media and printed materials c) At least 6 visits to exchange experiences carried out and documented at least 40% of participants are women or including visits to women's initiatives d) Advocacy plan for the sustainability of results and lessons learned from the project e) A regional event on governance	Knowledge management plan documents; communication strategy; and exchange visits Monitoring and Evaluation of the impact of the implementation of the management plan and communication and advocacy strategy Publications Photographic records, press releases, social media, website Exchange visit reports (with data disaggregated by gender) PPR / PIR	Los socios del proyecto están abiertos a los desafíos, éxitos y lecciones aprendidas del proyecto para que estas puedan ser identificadas, publicadas y difundidas.
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Output 4.1.2: M&E strategy developed with relevant stakeholders, clearly defining expected results, the expected time periods for their completion, and their confirmation through objectively verifiable indicators and means of verification.	<u>Project Indicator #14:</u> Project results framework with results and output indicators, baseline and targets Gender perspective incorporated in project management and actions		9 progress reports (6 PPR and 3 PIR), including analysis of the situation of women and of peoples and nationalities in relation to the project	15 progress reports (10 PPR and 5 PIR), including analysis of the situation of women and of peoples and nationalities in relation to the project	PPR / PIR	M&E system designed for the project, including the monitoring of activities, the mechanisms for verifying compliance with the indicators of results and products, and responsibilities for M&E, deadlines and budgets.
Output 4.1.3: Mid-term review and final evaluation conducted in order to constructively inform and guide project implementation, sustainability considerations, and the application of adaptive measures when necessary.	<u>Project Indicator #15:</u> 1 Mid-term review and 1 Final evaluation		1 Mid-term Review Report	1 Final Evaluation Report	MTR and FE reports	The results of the Mid-Term Review and the Final Evaluation are used to review the progress of the project and define corrective actions to achieve the results and objective.

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).

	STAP	FAO response
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	STAP	FAO response
STAP Overall Assessment	<p>Concur: STAP welcomes the project entitled "Conservation and sustainable use of biodiversity within the sustainable use areas of the State Subsystem of Protected Areas (SEAP) of Ecuador and its buffer zones." Overall STAP believes that this is a solid project with a high likelihood of success. The project supports strong local consultation and buy-in, and recognition of the practical and operational barriers to achieving sustainable agriculture and biodiversity conservation. STAP is concerned, however, over how well the underlying economic drivers of agricultural encroachment into PAs have been addressed, and whether the project takes an unduly optimistic view of the potential to reconcile conservation and local livelihood generation. Finally, illegal extraction from PAs is cited as a driver of threats to biodiversity but is not specifically addressed in the project.</p>	<p>We appreciate STAP's positive feedback on this project. We consider that it is an innovative proposal that differs from other previous projects since it is the first at the level of protected areas that combines BD conservation and community participation in buffer zones and sustainable use zones, contributing to the implementation of the Environmental Organic Code (COA) approved in 2018 (see the definitions of buffer zones and sustainable use zones in the description of the intervention strategy in Section 3 presenting the alternative scenario of the FAO Project Document) .</p> <p>Reconciling conservation and the generation of local livelihoods is a medium and long-term process, therefore, the project proposes to <u>generate the conditions</u> and <u>motivate starting the process</u>. This implies the recognition of the existence of socio-environmental conflicts in the sustainable use zones within the protected areas and in their buffer zones in conjunction with the Ministry of Environment, Water and Ecological Transition (MAATE) and the Decentralized Autonomous Governments (DAG). This action will help identify the economic motivations that lead local people to make a change in land use and thus determine the most appropriate actions focused on jointly building sustainable alternatives.</p> <p>To <u>generate the conditions</u>, the project will support the strengthening of technical, operational and legal standards and tools with a gender perspective for the action of the MAATE and the construction of local regulations to ensure adequate land use and spaces for participatory decision-making, that includes technical and tax incentives that motivate a change in local attitude (Component 1, Output 1.1.2, and Component 2, Output 2.1.1). As part of the strengthening, a specialized and complementary training process will be promoted for personnel from the MAATE (Component 1, Output 1.1.3) and from the DAGs (Component 2, Output 2.1.3).</p> <p>To <u>motivate starting the process</u>, a specific intervention will be promoted, through the strategies specified in Component 3, which includes the application of incentives for those who show interest in changing their traditional practices, which in many cases is related to the illegal extraction of biodiversity (Component 3, Outputs 3.1.1, 3.1.2 and 3.1.3).</p>

	STAP	FAO response
Is the objective clearly defined, and consistently related to the problem diagnosis?	The objective is "Promote the conservation and sustainable use of biodiversity and optimize the livelihoods of local inhabitants through the application of an integrated landscape management approach within the State Subsystem of Protected Areas (SEAP), focused on sustainable use areas within PAs as well as adjacent buffer zones, and to build capacities of decision makers for scaling-up throughout the National System of Protected Areas (SNAP)". This is not very clear, and unnecessarily long and complex.	The wording of the objective has been reformulated considering the STAP's comment as follows: "Promote the conservation, sustainable use of biodiversity and capacity building in sustainable use zones and buffer zones within the State Sub-system of Protected Areas (SEAP) "

	STAP	FAO response
A brief description of the planned activities. Do these support the project's objectives?	Yes. Component 2 seems inappropriately named - it does include capacity building, but also developing regulations and establishing new institutional arrangements. And the conceptual distinction between Output 2 and 3 is unclear - component 3 also includes capacity building for more biodiversity-friendly management in the buffer zones. Is the second about establishing the institutional, regulatory and government framework and capacity, whereas the second is about supporting inhabitants to follow biodiversity-friendly practices?	<p>An adjustment has been made in the wording of Component 2 for a better distinction of the difference with Component 3. Component 2 seeks to build local territorial governance to reduce the pressure on biodiversity in the buffer zones of protected areas (zones around the limits of protected areas). Component 3 implements strategies that promote the improvement of the livelihoods of local people, encouraging alternative actions that reduce the pressure on biodiversity both in sustainable use zones (within protected areas) and in their buffer zones.</p> <p>The names of the components are now as follows:</p> <ul style="list-style-type: none"> ? Component 2: Development of local territorial governance to prevent the loss of biodiversity in the buffer zones of protected areas ? Component 3: Improvement of alternative livelihoods to reduce pressure on ecosystem services and biodiversity in the Cayambe Coca and Sangay National Parks

	STAP	FAO response
Are the global environmental benefits/adaptation benefits likely to be generated?	<p>This project appears to provide essential elements of achieving these benefits, but it is questionable whether this project alone will achieve them. For instance, better management of sustainable use areas would seem to require more than just an information system, guidelines and training, such as ongoing implementation, monitoring to ensure they are achieving objectives, etc - are other programs going to achieve this? See below for more detail.</p>	<p>The PPG has preliminarily identified that among the main causes for protected areas not fulfilling their social function, is that the MAATE and DAGs do not have enough legal and technical instruments to create the conditions so that local people can make sustainable use of biodiversity and improve their livelihoods. For instance, the inclusion within the national environmental regulations of the figure of the buffer zone as a strategic territory located around the protected areas, was carried out in 2018. However, the criteria to be considered to define this territory, the land uses in the buffer zone, the relationship between the MAATE and the DAGs, landowners, communities, and existing associations within this territory have not yet been regulated.</p> <p>In the same way, by not having legal, technical, or institutional conditions that allow improving the livelihoods of the local population living in the sustainable use zones of the protected areas, local people seek to generate income in a fast but unsustainable way, which includes the illegal extraction of biodiversity in protected areas and their buffer zones. Activities have increased with the presence of the COVID-19 pandemic because many people who migrated to the cities have lost their jobs and have returned to the countryside and, out of necessity, have carried out such activities.</p> <p>In this context, in order to generate an impact in the territory, the project proposes a comprehensive intervention strategy that encompasses three fundamental and interrelated axes:</p> <p>? <u>Strengthening of national governance</u> : In order to strengthen the institutional framework and generate adequate legal, technical and institutional conditions for the inhabitants living in the sustainable use zones within the protected area, an information system will be developed that is appropriate to the local reality (Component 1, Output 1.1.1); standards, technical, operational and legal tools will be developed or updated (Component 1, Output 1.1.2) and MAATE officials will be trained for their use and socialization with local people (Component 1, Output 1.1.3);</p> <p>i)</p> <p>? <u>Development of governance at the local territorial level</u>: In order to generate adequate governance conditions for the people living in the buffer zones, that is, around the protected areas, inter-institutional and inter-sector coordination mechanisms will be developed (Component 2, Output 2.1.2) so that standards and tools for the conservation and sustainable use of biodiversity can be generated or strengthened in an agreed manner (Component 2, Output 2.1.1); and</p>

	STAP	FAO response
<p>A description of the products and services which are expected to result from the project.</p> <p>Is the sum of the outputs likely to contribute to the outcomes?</p>	<p>In component 1, it seems unlikely that one training program is enough to change practice - what about monitoring and follow-up to ensure practices on the ground have changed? In component 2, are all barriers being addressed here?</p>	<p>As mentioned in the previous response, the axes of the intervention strategy are articulated among each other so that together they can lead to the achievement of the expected results.</p> <p>The development of capacities in Components 1, 2 and 3 (Outputs 1.1.2, 2.1.3 and 3.1.1) are complementary to each other. Components 1 and 2 propose to strengthen institutional capacities to apply regulations and technical instruments in sustainable use and buffer zones, while in Component 3 the development of capacities is aimed at technicians, producers, communities in both areas, to implement good sustainable practices within the framework of the regulations and instruments to be developed under the previous components, and in a coordinated manner between the institutions.</p> <p>Regarding M&E to ensure that practices on the ground have changed, under Component 3 (Outputs 3.1.2 and 3.1.3), activities include the participatory evaluation of the level of adoption of sustainable practices, and the impact of sustainable management practices on livelihoods and the conservation of biodiversity and ecosystem services. This will be done through specific indicators that will be incorporated into the property management plans and comprehensive farm management plans that will be promoted by the project. In addition, there will also be a participatory evaluation of the level of adoption of incentives to support sustainable production. More details are included in the description of Component 3 in Section 1.a, Sub-section 'Objectives, results and expected products of the Project' of the FAO Project Document.</p> <p>The barrier analysis in general and particularly for Component 2 has been expanded and described in greater detail. We consider that the barriers are properly addressed.</p>

	STAP	FAO response
Is the problem statement well-defined?	<p>The key problems are identified as escalating encroachment into NPs and illegal extraction from them. But the deeper drivers behind the expansion of the agricultural frontier are not addressed - what drives this? Do the sustainable use zones as outlined in the CODA allow for sustainable use of forest products (sustainable NTFP collection/hunting/fishing/fuelwood or timber use?) This would seem to be more potentially consistent with principles of sustainable use than agriculture, which always involves removal of forest/natural ecosystems. para 5 (p18) indicates activities in buffer zones " must contribute to the fulfilment of the objectives of the National System of Protected Areas", but what exactly are these objectives?</p>	<p>The previous responses contain answers to this comment regarding some of the "drivers" that motivate the local population to carry out activities related to the illegal extraction of biodiversity.</p> <p>The COA in its art. 48 states: <i>"The communes, communities, peoples and nationalities that are within a protected area will be able to take advantage of natural resources in a sustainable manner according to their traditional uses, ancestral artisan activities and for subsistence purposes"</i>; in the same way, Art. 59 states: <i>?(...) The activities carried out in the buffer zones must contribute to the fulfillment of the objectives of the National System of Protected Areas, within the framework of development planning and land use planning. The Decentralized Autonomous Governments will promote and encourage complementary actions and activities to guarantee conservation in these areas?.</i></p> <p>The COA establishes 12 objectives for the National System of Protected Areas^[1]. What is not clear in this legal body is the status of the sustainable use zones within the protected areas, which includes entire populations, roads, and plots with productive activities. For this reason, the proposal is that the project begins with the recognition of the existence of socio-environmental conflicts in the sustainable use zones within the protected areas and in their buffer zones together with the National Environmental Authority and the DAGs, so that jointly, and in accordance with institutional competencies, adequate governance can be built, and aspects clarified that allow local populations to improve their living conditions sustainably.</p>

	STAP	FAO response
Are the barriers and threats well described, and substantiated by data and references?	<p>The barriers to PAs effectively achieving their objectives are identified as weaknesses in national level governance frameworks (particularly lack of monitoring/accessible information/detailed regulatory framework for newly created land categories inside and outside of PAs); lack of integration of PAs into local level planning frameworks (reflecting lack of local support for PAs); lack of coordination at policy and technical level among different sectors/levels of government; lack of technical/operational capacity of local government actors; and lack of will, incentives and capacity of local actors to implement more sustainable practices. The fundamental economic drivers toward encroachment and illegal extraction don't seem to be adequately addressed. In para 12 and 17 it is assumed that PAs do in fact benefit local people, but that they just don't realise it, and this can be changed with more knowledge. But PAs often do impose a real cost on local people - has this possibility been considered, and is there clear evidence that these PAs do indeed benefit local people? Also, the text assumes that a failure of collective action to achieve sustainability, leading to everyone's detriment (a classic tragedy of the commons) can be cured simply with more knowledge. This is unlikely to be the case - there are many examples</p>	<p>The information collected during the PPG indicates that protected areas do generate benefits for local people. For instance, it was possible to learn about specific businesses that are based on the use of biodiversity to generate economic income in the Sangay National Park (the extraction and sale of a fern for floral decorations) and in the Cayambe Coca National Park (the use of wood from native trees to make handicrafts for tourists). However, the MAATE's standards, and technical and legal have traditionally been developed to guarantee the conservation of biodiversity in protected areas, but they do not clarify their social role or the specific mechanisms and tools for their implementation. The project proposes to solve these problems through Component 2 (Output 1.1.2) by contributing to elaborating, complementing, or updating the existing standards and tools, to adapt them to the socio-ecological reality of Ecuador's protected areas.</p> <p>In a context where unsustainable activity is more profitable than sustainable activity (i.e the sale of wood illegally which is much more profitable than the income received by a community from the Socio-Bosque Program) it is necessary to be able to generate the conditions so that local people see other alternatives that can not only improve their livelihoods but can also contribute to the conservation of biodiversity.</p> <p>In this context, to overcome the barriers identified and described in greater detail in the FAO Project Document (see the sub-section on remaining barriers in Section 1.a), the project intervention strategy includes the implementation of complementary activities throughout all its components, encompassing systemic interventions at the national and sub-national levels and interventions in the field, as described above.</p>

	STAP	FAO response
Is the baseline identified clearly?	No, not really. A list of other funds and programs are listed, but what they will achieve in the absence of this project is not clearly articulated. This is better articulated in the "reasoning for incremental cost" section but remains quite vague. There is a note in the text (para 21) highlighting a discrepancy in figures regarding MAE expenditures.	<p>In the project design phase, the technical team carried out a mapping of key stakeholders in the proposed intervention areas. Due to the restrictions under the COVID-19 pandemic, a large part of the stakeholder consultations were undertaken virtually. Approximately 50 virtual meetings were held with technical personnel from the MAATE, MAG, provincial, municipal and parish DAGs, NGOs, Water Funds, FIAS, second degree associations, international cooperation and GEF projects related to the project theme.</p> <p>The meetings were held to introduce the project to the key stakeholders and to collect information on their initiatives and activities in the two intervention areas. This exercise enabled the team to develop a more adequate description of the baseline and to fine tune the contents and scope of the project to avoid duplications and strengthen and complement the existing actions. The findings of these consultations are reflected in the description of the baseline scenario (Sub-section 2 of Section 1.a) and in the synergies and coordination with other projects. (Sub-section 6.b) of the FAO Project Document.</p>
Does it provide a feasible basis for quantifying the project's benefits?	No	The Project Document now describes and quantifies the global problem, the threats, and their causes, as well as the institutional, legal, political, social, technical, and financial barriers that the project proposes to remove; it describes the current situation of the project intervention areas, including the sustainable use zones and the buffer zones of the Cayambe Coca and Sangay National Parks. Defining the intervention areas, characterizing the territory and stakeholders, and identifying the proposed interventions allows to clearly determine the benefits to be delivered by the project and which are reflected in the Results Framework's indicators and targets.
Is the baseline sufficiently robust to support the incremental (additional cost) reasoning for the project?	No	Based on the findings during the project design phase, the description of the baseline scenario and in particular the baseline initiatives have been expanded. This includes a greater number of ongoing and planned initiatives that provide experiences and lessons for project design, and with which coordination will also take place during the implementation phase (see Sub-section 2 baseline scenario in Section 1.a, and Sub-section 6.b on coordination with other projects).

	STAP	FAO response
What is the theory of change?	<p>There is a general TOC articulated (primarily para 31 and from 36 on), but it doesn't relate interventions specifically to overcoming barriers and addressing drivers of threat, in a way that sets out a clear logical pathway(s) of steps, with accompanying assumptions, to achieve the objective. The TOC is more clearly articulated in the "Reasoning for incremental cost" section, which articulates how components address the different barriers. However, this still does not address how the intervention addresses the deeper drivers of change, and particularly the economic incentives for unsustainable activities, which appear to be a fundamental driving force.</p>	<p>As previously mentioned, in a context where an unsustainable activity is more profitable than a sustainable activity, it is necessary to be able to generate the conditions for local people to see other alternatives that can both improve their livelihoods and contribute to the conservation of biodiversity. During the PPG a wide information base was collected which allowed the assessments and findings that are reflected in a better developed and articulated intervention strategy, or TOC, and which, as aforementioned, comprises three mutually complementary axes, encompassing the strengthening of national governance, local governance and interventions on the ground to improve livelihoods, with their respective outputs and activities.</p>
What is the sequence of events (required or expected) that will lead to the desired outcomes?	<p>p11: why does one column refer to "poaching" and the other to "hunting", when presumably it is the same activity in each?</p>	<p>In the context of current Ecuadorian environmental regulations, the terms "poaching" and "hunting" must be considered as the same activity, because in both cases, these are illegal activities that are punishable by law.</p>

	STAP	FAO response
What is the set of linked activities, outputs, and outcomes to address the project's objectives?	<p>As highlighted above, while the project's interventions seem very important, and crucial steps to achieving outcomes, it is hard to see that alone they will achieve them. The outputs in component 1 (while important) seem unlikely on their own to achieve better management of sustainable use areas, as indicated in Output 1.1, particularly given the indication given that local inhabitants lack incentives or capacity to stop unsustainable practices. Output 1.1 should perhaps be re-worded in line with Component 1, indicating that this is just establishing governance conditions for improved management. In Output 3.2.1, surely the incentives/benefits should only be provided to products produced in a biodiversity-friendly way from the SU/buffer zones, not any products from these areas, as the proposal appears to indicate? Also, is the reference to "non-forest products" meant to say "non-timber forest products"? There doesn't seem to be any reference to illegal/unsustainable hunting or other extraction here - how will this be addressed?</p>	<p>The set of interrelated activities, outputs and outcomes that will lead to the expected results are set out in detail in the intervention strategy (see Section 1.a, Sub-section 3 on the alternative scenario of the FAO Project Document). As mentioned, implementation of this strategy in a sequential and complementary manner, will contribute to the fulfillment of the project's overall objective.</p> <p>The wording of the components and outputs has been reviewed and some minor adjustments have been made based on the STAP's comments, as well as to better clarify the actions and expected results within the framework of the proposed strategy. Please refer to Section 1.a, Sub-section 8 of the FAO Project Document summarizing the changes to the alignment of the project design compared to the PIF.</p>

	STAP	FAO response
Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?	The mechanisms of change are plausible but there is no identification of underlying assumptions. This is an important weakness	The project barriers have been defined and the proposed activities seek to close these gaps so that the project assumptions are adequately covered with the activities proposed in each one of the project components.
Is there a recognition of what adaptations may be required during project implementation to respond to changing conditions in pursuit of the targeted outcomes?	No, but the need to adapt in light of monitoring results is recognised. In this respect, however, the proposal states "A mid-term review and terminal evaluation will be carried out with the purpose of informing and advising on the implementation of the project"; the terminal evaluation will not be able to inform the implementation of the project - only the mid-term can do this.	In addition to the mid-term review that allows for adaptive implementation, there will be a permanent M&E system that will allow for the necessary adjustments. The technical team of the Project Implementation Unit will be in charge of implementing the M&E Plan and identifying the necessary adjustments to project implementation according to the local and changing conditions that may arise.
Is the project innovative, for example, in its design, method of financing, technology, business model, policy, monitoring and evaluation, or learning?	Yes, to some extent - while the approaches aren't particularly innovative they do represent innovations in the national context. Overcoming silo'd governance hierarchies and reconciling conservation and livelihood activities are reasonably innovative. The project seeks to foster implementation of a national high-level legal framework (CODA) that is itself innovative, for instance in recognising the need to recognise and formalise the rights of IPLCs living in national parks, and in enabling and supporting sustainable use by local inhabitants within PAs.	The project will be the first to implement the new COA regarding land tenure and local governance, including local communities, in protected areas. It is an important local challenge, but it represents an important innovation at the political and local management level of the traditional projects that have been implemented in the protected areas of Ecuador. The project seeks to promote inclusive conservation inside (sustainable use zones) and outside (buffer zones) protected areas as the main mechanism to improve local governance and contribute to a change in the management model of landscapes and communities that depend on protected areas and their buffer zones.

	STAP	FAO response
	No map appears to be included.	Section 1.b and Annex E of the FAO Project Document include different thematic maps of the Cayambe Coca and Sangay National Parks and their buffer zones to facilitate understanding of the intervention areas? territories.
Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?	The strong consultation at this stage is very welcome, and particularly the gaining of feedback and assurance of support from indigenous and local populations, whose buy-in will be critical for success of the project.	<p>In the project design phase, the technical team carried out a mapping of key stakeholders in the proposed intervention areas. Due to the restrictions under the COVID-19 pandemic, a large part of the stakeholder consultations were undertaken virtually. Approximately 50 virtual meetings with held with technical personnel from the MAATE, MAG, provincial, municipal and parish DAGs, NGOs, Water Funds, FIAS, second degree associations, international cooperation and GEF projects related to the project theme.</p> <p>Since the project's territories of interest are enormous the PPG technical team carried out an exercise to prioritize the parishes that could potentially be the most suitable for intervention based on a multi-criteria matrix, and with the support of MAATE officials and heads of the Cayambe Coca and Sangay National Parks. As a result of this exercise, 17 parishes in Cayambe Coca and 14 parishes in Sangay were prioritized. Upon project outset a more direct contact will be established with the identified parishes and the key stakeholders? map will be confirmed and/or complemented to ensure the success of implementation. The prioritization methodology is included in the FAO Project Document (Section 1.b and Annex O).</p>
Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences?	Yes. The site-specific information on gender roles is very welcome.	A gender analysis was carried out during the PPG, which identified the gaps and barriers to gender participation in the intervention areas. Based on the analysis a Gender Action Plan has been developed which identifies, characterizes and mitigates the risks and enhances the opportunities offered by the project, differentiated by gender, through specific measures that will ensure adequate implementation (see Annex J of the FAO Project Document). In addition, based on the findings and proposals of the Action Plan, the intervention strategy mainstreams the gender approach.

	STAP	FAO response
Do gender considerations hinder full participation of an important stakeholder group (or groups)? If so, how will these obstacles be addressed?	Yes, some clear measures are articulated to address these.	As previously mentioned, the project includes a Gender Action Plan containing specific actions and activities to encourage the participation of women and improve their participation in decision-making within local context considerations.

	STAP	FAO response
Are there social and environmental risks which could affect the project?	<p>With respect to the second risk, it is assumed that technical solutions can be found that effectively conserve biodiversity while avoiding costs to landholders. Is this really a safe assumption? We know there is often some level of trade-off between biodiversity and development/livelihoods generation - how will these be managed, if present? On the third, meaningful participation in decision-making and management would probably be more effective in securing local buy-in than one-way processes of "raising awareness" and "training", which have no real connection to "ownership".</p>	<p>As afore mentioned, among the main causes for protected areas not fulfilling their social function is that the MAATE and the DAGs do not have enough legal and technical instruments to enable the conditions for local people to sustainably use biodiversity and improve their livelihoods. For instance, the figure of buffer zones as a strategic territory located around the protected areas was included in the national environmental regulations in 2018; however, the criteria to be considered to define this territory, the land uses, the relationship between the MAATE and the DAGs, landowners, communities and associations existing within this territory have yet to be regulated.</p> <p>The PPG also identified that due to the lack of legal, technical or institutional conditions to improve the livelihoods of the local population living in the areas of sustainable use of the protected areas, local people seek to generate income fast but unsustainably, including the illegal extraction of biodiversity in protected areas and their buffer zones. These activities have increased due to the COVID-19 pandemic because many people who migrated to the cities have lost their jobs and returned to the countryside and, out of necessity, have opted for them.</p> <p>In this context the project's proposed intervention strategy includes components with activities that are complementary and synergistic. The proposed interventions include participatory mechanisms for local level coordination (Component 2, Output 2.1.2), where the local stakeholders, including the population represented by their organizations, will have the opportunity to participate in the coordination and dialogue with various stakeholders to reach agreements, organize activities and join efforts in favor of the management of protected areas. Several coordination initiatives exist in the intervention areas such as water funds, local DAG associations, work committees in the buffer zone of the Cayambe Coca National Park (El Chalpi sector). The project will build on these experiences and will strengthen them, which will contribute to the ownership.</p>

	STAP	FAO response
How will the project's objectives or outputs be affected by climate risks over the period 2020 to 2050, and have the impact of these risks been addressed adequately?	These are not clearly articulated. However, the activities of the project are themselves aimed at building climate resilience.	<p>The climate risk analysis is included in Section 5 of the FAO Project Document.</p> <p>Based on an analysis of threats, exposure, vulnerability and adaptive capacity of the Cayambe Coca National Park and the Sangay National Park, the climatic risk of the project is moderate. For this reason, more detailed and participatory assessments of climate risk and impacts are incorporated into the project activities at the local level. To do this, the project will support strengthening the generation and use of climate information, especially under Component 2 (Output 2.1.3) and Component 3 (Outputs 3.1.1, 3.1.2 and 3.1.3) where coordination and permanent workspaces will be maintained with personnel from protected areas, DAGs and local residents for these participatory evaluations.</p>
Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects?	This could be much stronger. There are many other projects running that appears to be working on related issues - surely there are important learnings to be gained from them? What about experiences on sustainable use and buffer zone management from other countries and regions?	<p>During the PPG, approximately 50 virtual meetings were held with technical personnel from the MAATE, MAG, provincial, cantonal, and parochial GADs, NGOs, Water Funds, FIAS, second-degree associations, international cooperation and GEF projects. The meetings were held in order to present the project to the key stakeholders, as well as to collect information on the baseline initiatives and activities each one of them are carrying out in the project's intervention area. This exercise allowed to expand the description of the baseline fine tune the contents and scope of the project to avoid duplication, strengthen complementarities and identify lessons for project design. Section 6.b of the FAO Project Document includes synergies, complementarities, and coordination with ongoing projects, while Section 8 includes a detailed description of the identified lessons, especially from other GEF projects and how they have contributed to project design.</p> <p>Regarding experiences in other countries, the reality in terms of environmental legislation is different for each country; however, it is important to mention that in Ecuador, the legal framework is pioneering in many aspects. The recognition of sustainable use zones within protected areas since 2013 and of buffer zones around protected areas in 2018 offers the opportunity to generate this type of projects. FAO experiences in other countries such as Colombia and Peru were reviewed but the initiatives that combine protected areas, buffer zones and improvement of livelihoods are rare in the region.</p>

	STAP	FAO response
Is there adequate recognition of previous projects and the learning derived from them?	No, this is rather weak.	As mentioned in the previous point, Section 8 of the FAO Project Document includes details of lessons from previous projects and how these have been incorporated into project design.
What overall approach will be taken, and what knowledge management indicators and metrics will be used?	Little detail is provided in this section, but more is given in section f (p31). Overall, this appears sound and well-thought through, with establishment of information-sharing systems and protocols a key feature of the project. However, learning from other projects could be much stronger.	<p>The project will prepare a knowledge management plan, which will be implemented through knowledge products, such as: 1) audiovisuals, 2) publications systematizing lessons and experiences, 3) documents and technical notes, and 4) website. Likewise, it will develop a communication strategy for the dissemination of the project results and good practices, which will include, among others: 1) design of the project's graphic line, logo; 2) media management (press releases, newsletters, brochures); 3) informative and testimonial videos. A plan of visits to exchange experiences will also be developed between MAATE, MAG and DAG personnel, and landowners and producers in buffer zones. The Project Results Framework (Annex A1 of the FAO Project Document) includes indicators for knowledge management. These aspects are described under Component 4 (Outputs 4.1.1 and 4.1.2) of Section 1.a, Sub-section 'Objective, results and products of the Project' of the FAO Project Document.</p> <p>As part of the process of generating lessons and systematizing them in the context of knowledge management, Component 3 will elaborate property management plans and comprehensive farm management plans. Within the framework of these plans, the level of adoption of sustainable practices will be evaluated, as well as the impact of sustainable management practices on livelihoods and the conservation of biodiversity and ecosystem services. For this, the plans will have quantifiable indicators such as: conserved area, areas released for conservation, reforested areas, improvements in productivity, increased income, generated ventures, among others. Within the same component, a participatory evaluation of the impact of the implemented incentives will also be carried out. These aspects are described in greater detail under Component 3 (Outputs 3.1.1 and 3.1.2) of Section 1.a, Sub-section 'Objective, results and products of the Project' of the FAO Project Document.</p>

[1] 1. Conserve and sustainably use biodiversity at the level of ecosystems, species and genetic resources and their derivatives, as well as ecological functions and environmental services; 2. Protect representative samples with singular, complementary and vulnerable values of terrestrial, island,

freshwater, marine and marine-coastal ecosystems; 3. Protect wildlife species and wild varieties of cultivated species, as well as promote their recovery, with special emphasis on native, endemic, threatened and migratory ones; 4. Establish conservation values on which its management will be prioritized; 5. Maintain the hydrological dynamics of the hydrographic basins and protect the bodies of surface and underground waters; 6. Guarantee the generation of environmental goods and services provided by ecosystems and integrate them into the territorial models defined by the Decentralized Autonomous Governments; 7. Protect scenic and landscape beauties, sites of historical, archaeological or paleontological importance, as well as geological formations; 8. Respect, promote and maintain cultural manifestations, traditional, collective and ancestral knowledge of the communes, communities, peoples and nationalities and integrate them into the management of protected areas; 9. Promote bio-knowledge and the valuation of ecosystem services coordinated with human talent, research, technology and innovation, for which the participation of the public, private, mixed and community academic sector will be stimulated; 10. Promote alternatives for recreation and sustainable tourism, as well as environmental education and interpretation; 11. Guarantee the functional connectivity of ecosystems in terrestrial, marine and marine-coastal landscapes; and, 12. Contribute to the adaptation and mitigation of climate change through the mechanisms provided in this Code.

Response to Council comments

Comment	Agency response
<p>Germany</p> <p>Germany would like to suggest that during the further project development, particular care is placed on defining and planning activities under component 3, which are especially crucial to the overall success of the project. This would include broad involvement of all local stakeholders affected by the project, in particular in the buffer zones, in designing alternative income sources and incentives to use them.</p>	<p>Many thanks for the comment. Kindly note that Component 3 now includes a set of activities to facilitate the participation of local stakeholders in value chains and support to access local incentives. During full project preparation, a socio-economic assessment was conducted, including the local communities and the main products that the Project will promote. There are agricultural, livestock and tourism activities in the buffer zones. Moreover, the use of species, as the agraz /Andean blueberry (<i>Vaccinium meridionale</i>) in some areas of the NP Cayambe Coca could work as alternative livelihoods for local communities.</p>

Norway

Component 1: Strengthening SEAP Governance for the management of PAs including their sustainable use areas:

The project aims to develop an Integrated Information System for the management of Protected Areas to be tested and implemented at the intervention sites of the project. The FIP states that the implementation of the system will include the provision of technology to ensure accurate and updated data collection within the two Protected Areas. We would like more background and analysis regarding the scale of technology needed for these two areas and the financial resources required for scaling-up the application of Integrated Information System throughout the National System of Protected Areas (SNAP).

During full Project design of Component 1, an analysis studied the information needs and the current conditions of the SEAP information management. As a result, the Project Document defines the financial and technical requirements (Part II. Project justification. Outcome 1.1 Improved and integrated management of protected areas and their sustainable use zones), and the planned activities for Component 1, including: diagnosis, capacity building of staff, monitoring and evaluation of the use of the information system of the PAs Sangay and Cayambe Coca.

Norway

Component 3: Improvement of alternative livelihoods to reduce pressure on ecosystem services and biodiversity in the Cayambe-Coca and Sangay Protected Areas

The project aims to increase access to markets for products produced in the Cayambe-Coca and Sangay Protected Areas and their buffer zones (output 3.2.1). The project states that improving market access will contribute to improving the income and livelihoods of producers and their families. Two approaches are proposed (i) work with producers and farmers of the two Protected Areas to seek strategies that boost livelihoods and access to economic benefits, ii) contact banks and financial institutions to facilitate access to loans and financial assistance to peasant organizations from the intervention sites. The actions proposed within the second approach are quite broad and more information should be provided on the most relevant strategies for Sangay and Cayambe Coca National Parks. This will require an analysis of the barriers indigenous peoples and local communities face to access to loans and the obstacles that financial institutions encounter to develop specific credit lines to support biodiversity-based businesses.

During the full design of Component 3, a baseline analysis determined that the local communities have some limitations for financial access/financial inclusion and fostering productive activities. However, some opportunities were also identified. The project will strengthen local capacities and will support local people to enhance their conditions to access credits and local incentives (Part II. Project justification. Component 3. Outcome 3.1. Pressure from agricultural activities is reduced through diversification and improvement of local livelihoods). The PPG has also identified coordination with other projects financed by the GCF, European Union, GIZ and the Government of Ecuador, which are fostering biodiversity-based businesses (Section 6. Institutional and coordination arrangement).

Canada comments

This is a very similar kind of project to the one in Comoros. We have not heard of 'sustainable use areas' within PAs before, but this is a very pertinent topic to explore and evaluate further given the links to ongoing CBD post-2020 discussions about what additional PAs created post-2020 should look like (e.g. should they strive for biodiversity conservation as the highest priority and / or sustainable use?).

On a more technical level, the inclusion of 'sustainable use areas' sounds more

like a land-use planning exercise vs designation of a PA per se, more like how an OECM (Other Effective Conservation Measure) would operate which begs the question of how PAs vs OECMs are defined. This could also be an IUCN Category 5 or 6 PA though which allows use. It would be interesting to know how this project (and Comoros) will assess conservation outcomes.

Kindly note that the legislation of Ecuador defines different types of national protected areas, one of them being the 'sustainable use areas'. The latter are areas modified by humans and/or areas with human settlements that should contribute to the objectives set in the management of protected areas. The Project Document includes the following description: 'Sustainable use zones: They are part of the management zones of the PAs that make up the SNAP (Art. 142 of the COA Regulation). They are areas where there is a presence of human activities, in many cases having a close relationship of use or exploitation of natural resources. These zones generally present degrees of alteration by human activities, especially by human settlements, agriculture, housing infrastructure, maritime navigation, artisanal fishing, services, etc. The main objective of this area is that these existing practices are managed and applied sustainably and avoiding their expansion. In these areas, development projects can also be proposed that generate alternatives uses by the population and provide income for local development, while at the same time reducing the pressure on the natural resources of the PA and maintained within the limits of the agricultural frontier, without the need to expand in the future and taking into account the established regulations (EC 2020 - Agreement No. MAAE-2020-10 Official Registry N° 875, 2020)' (Part II. Project justification. 1a. 'The proposed alternate scenario with a brief description of the expected results and components of the project and the Theory of Change of the project'. Project intervention strategy. parr. 98).

<p>United States comments</p> <p>Overall, we support the project and also note the necessity to coordinate and deconflict with similar projects in the Cayambe Coca region, including USAID's AREP program, which has an Amazon Indigenous Rights and Resources project (recently awarded to WWF) that will include work on sustainable economic alternatives. Furthermore, we request consultation with the U.S. Embassy in Quito prior to the confirmation of indigenous communities and organizations as project partners. Additionally, as the project progresses, more detailed information on the exact implementing directorates within the Ministry of Environment as well as the GADS would allow better long-term coordination.</p>	<p>Many thanks. Please note that the AREP project does not have actions in the influence zone of the NP Cayambe Coca. For this reason, the project preparation team did not contact WWF to discuss about this project.</p> <p>During full project implementation, the project will join efforts with other NGOs and INGOs, such as WWF, if common areas and topics arise at the local levels.</p> <p>On a separate note, the FPIC process was conducted during PPG, following the FAO Manual for Practitioners (https://www.fao.org/3/i6190e/i6190e.pdf). Indigenous peoples groups have been identified in both national parks and initial contacts had place to define the activities that will be implemented in indigenous territories. Please see section 2. 2.1. "Stakeholder participation during the project design phase" of the Project Document for more details.</p> <p>The Project has a clear coordination strategy between GADs and MAATE, and this is a central element of Component 2: to achieve an adequate articulation at local level.</p>
<p>United States comments</p> <p>Specifically, we would appreciate clarity on the following questions. First, on page 23 paragraphs 24 and 25 (<i>payments for environmental services</i>), FONAG is listed separately as the Water Protection Fund and the Environmental Water Protection Fund. Are these two separate funds? If so, do they differ other than one focusing on Cayambe Coca and one on Sangay? On page 38, FONAPA is mentioned as a trust fund for water but isn't mentioned previously.</p>	<p>FONAG is the Water Protection Fund of the Quito city, and has influence in the NP Cayambe Coca. The Project Document now includes a description of FONAG, which is also a project co-financing partner. Please see Part II. 1.a. Project description, Section Baseline scenario and associated projects and Table 4 and 5 of the Project Document.</p> <p>FONAPA is the Environmental Fund for the Conservation of the Paute River Basin, a water fund that operates in the southern area of the PN Sangay. During PPG, some working meetings were held and FONAPA is one prospective local actor to coordinate activities with in this Park. Please see Part II. 1.a. Project description, Section Baseline scenario and associated projects and Table 4 and 5 of the Project Document.</p>

<p>United States comments</p> <p>Second, page 41 paragraph 68 mentions that the second work approach includes contacting banks and financial institutions to facilitate access to loans. As OPIC signed an agreement with Banco Pinchinca on November 13 2019 to expand lending to women in Ecuador, we advocate that this project consider looking into this connection for potential loans for qualified projects.</p>	<p>The Bank of Pichincha has been identified as a financial entity with influence in both national parks. The Project will support activities to facilitate the access to credit lines and other incentives (Component 3).</p>
<p>United States comments</p> <p>Finally, we recommend that the organizational structure outlined on page 44 paragraph 70 include, as an observer, a U.S. Embassy representative (i.e. an environmental officer).</p>	<p>The Government of Ecuador, represented by the MAATE, will have the possibility to invite external observers. The Project team will also consider this comment during full project implementation.</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:

PPG Grant Approved at PIF: 150.000			
	<i>GETF/LDCF/SCCF Amount (\$)</i>		
<i>Project Preparation Activities Implemented</i>	<i>Budget Amount</i>	<i>Amount Spent to date</i>	<i>Amount Committed</i>
Consultants	93,568	98,854	28,441
Travel	28,057		3,000
Contracts	4,500		
Training	16,732		

Salaries (BH)	7,143		7,143
Total	150,000	98,854	38,584

ANNEX D: Project Map(s) and Coordinates

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

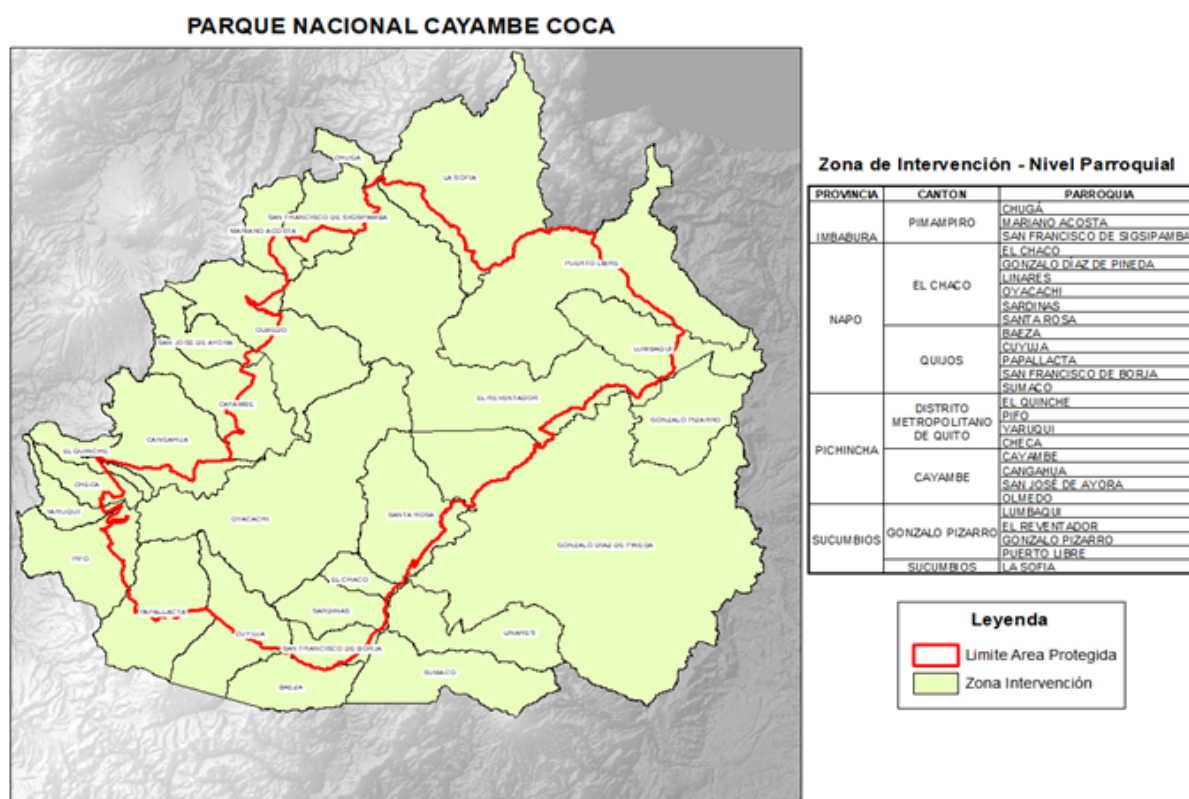


Figure 1 ? Areas of intervention ? parish level

Source: IGM Base Cartography (2015), Territorial Organization of the State - Parish Level ? CONALI (2019)

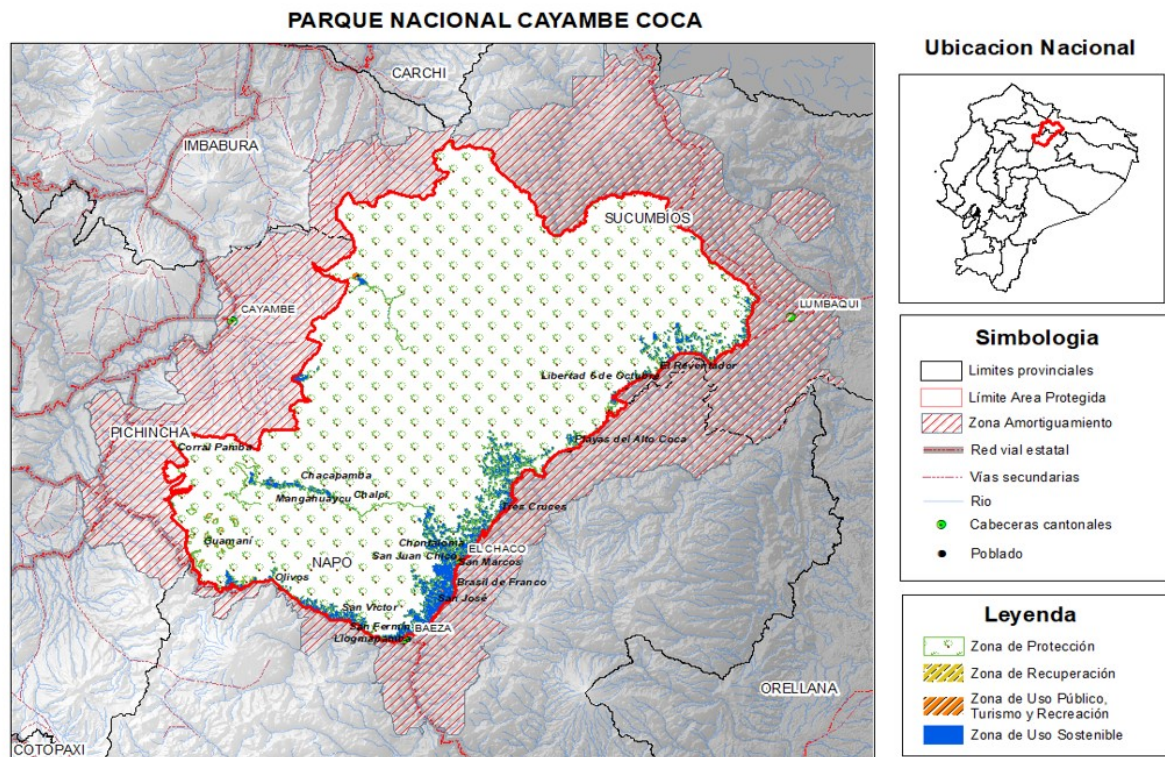


Figure 2 ? Zoning

Source: IGM Base Cartography (2015), Territorial Organization of the State - Parish Level ? CONALI (2019), Protected Area Zoning - MAATE Management Plan.

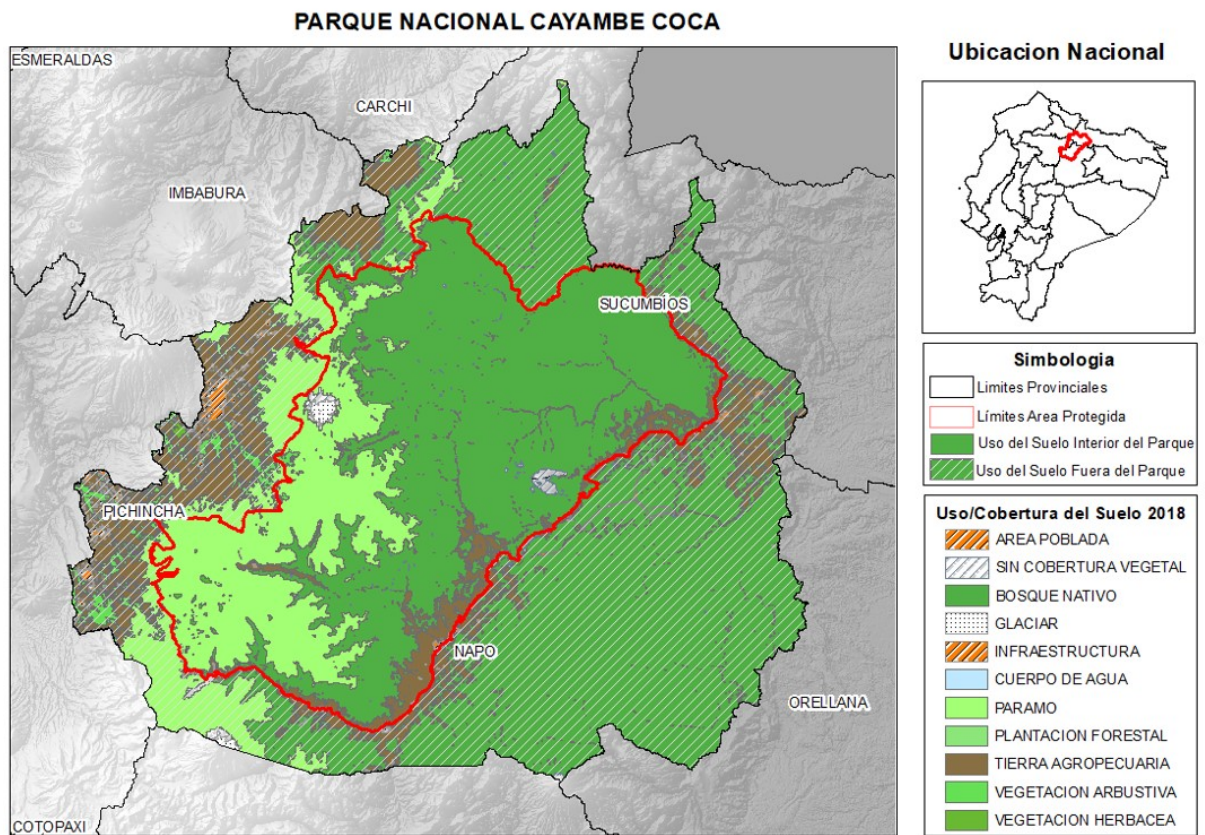


Figure 3 ? Land Use and Coverage

Source: IGM Base Cartography (2015), Territorial Organization of the State - Parish Level ? CONALI (2019), Land Use and Coverage, Ministry of Agriculture and Livestock - Ministry of the Environment and Water (2018).

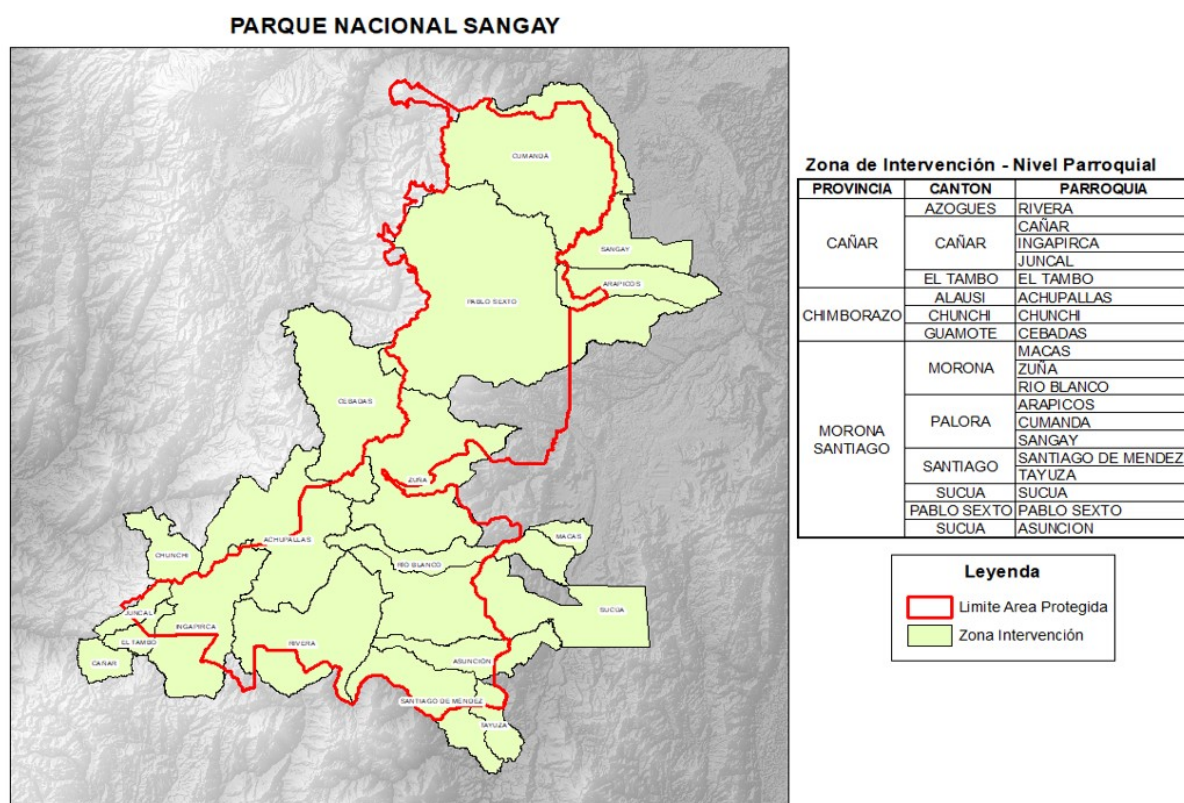


Figure 4 ? Areas of intervention ? parish level

Source: IGM Base Cartography (2015), Territorial Organization of the State - Parish Level ? CONALI (2019)

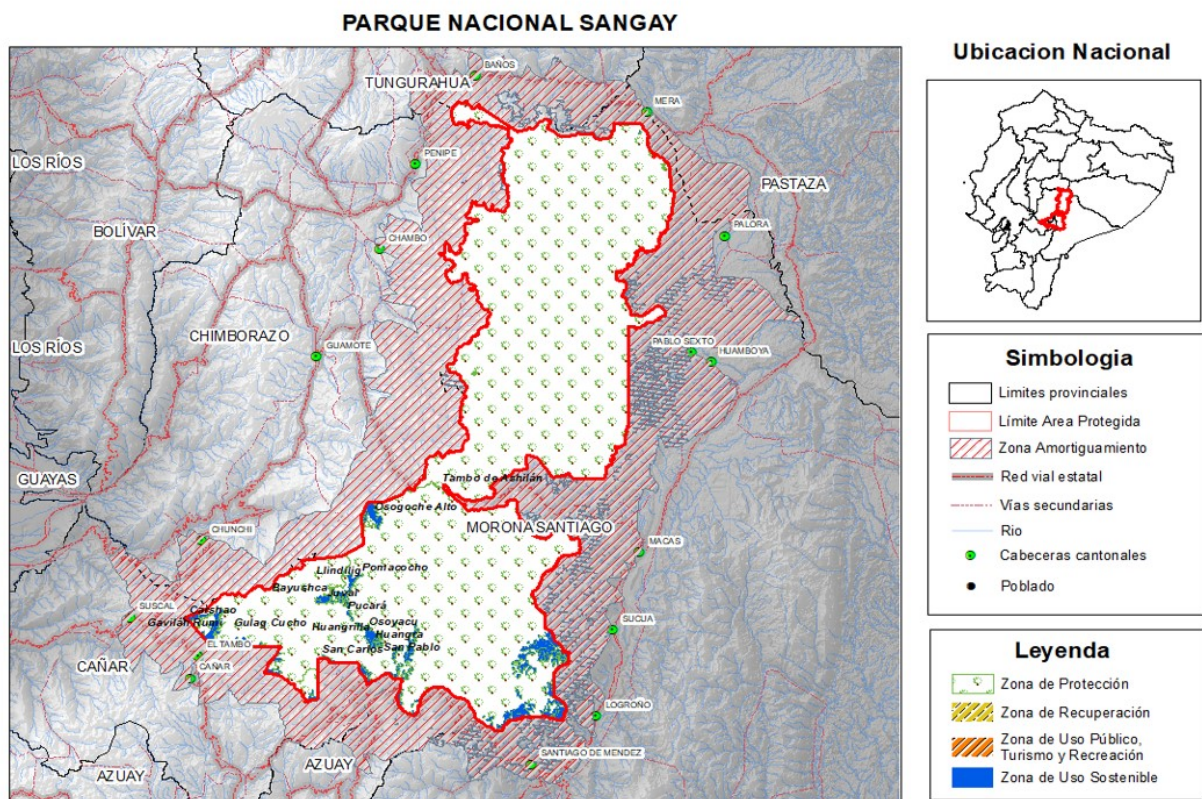


Figure 5 ? Zoning

Source: IGM Base Cartography (2015), Territorial Organization of the State - Parish Level ? CONALI (2019), Protected Area Zoning - MAATE Management Plan.

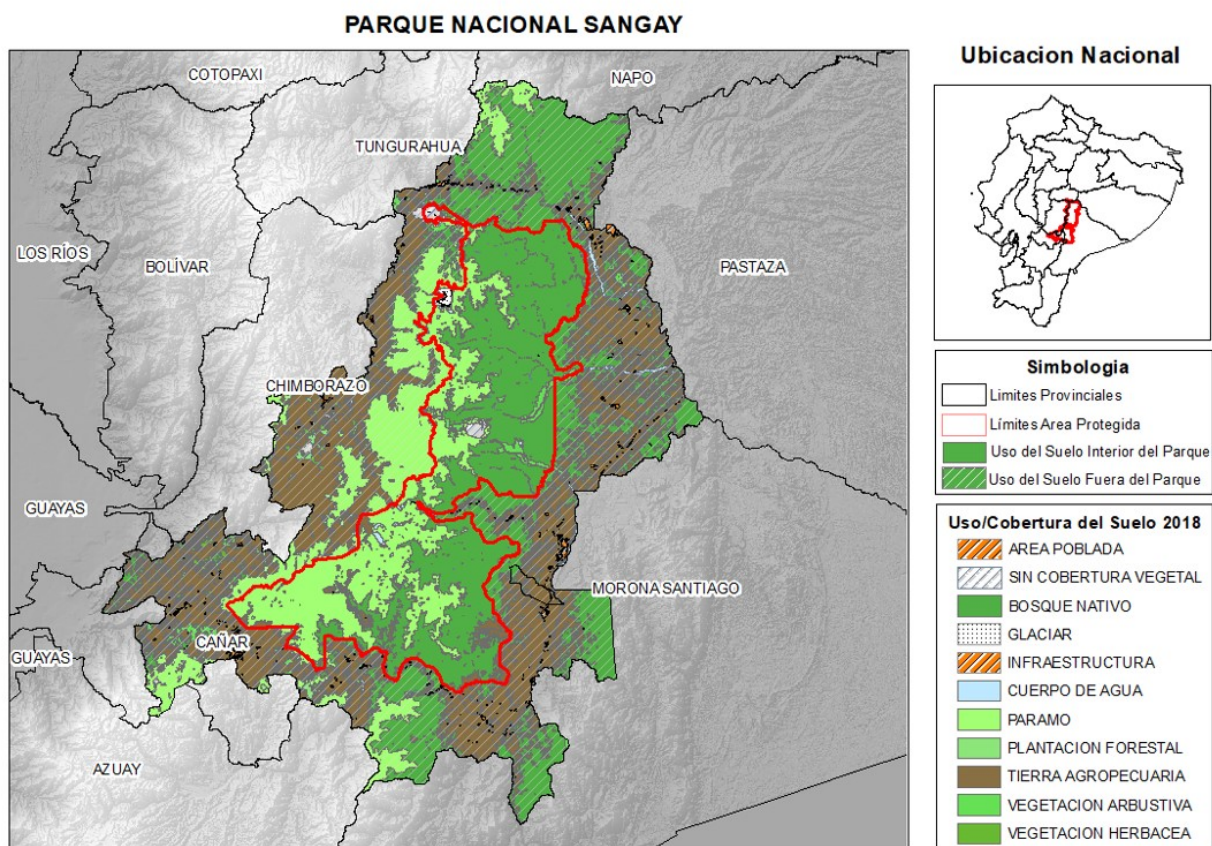


Figure 6 ? Land Use and Coverage

Source: IGM Base Cartography (2015), Territorial Organization of the State - Parish Level ? CONALI (2019), Land Use and Coverage, Ministry of Agriculture and Livestock - Ministry of the Environment and Water (2018).

Location of prioritized Project areas:

Site	North	South	East	West
Cayambe Coca buffer zone	0° 28' 41" N, 77° 36' 10" W	0° 36' 35" S, 77° 52' 1" W	0° 3' 24" S, 77° 15' 2" W	0° 12.7867' S, 78° 22.1919' W
Cayambe Coca National Park	0° 19' 29" N, 77° 49' 28" W	0° 19' 29" N, 77° 49' 28" W	0° 4' 27" N, 77° 22' 35" W	0° 7' 29" S, 78° 15' 0" W

Sangay buffer zone	1° 23' 49" S, 78° 22' 54" W	2° 46' 46" S, 78° 25' 30" W	1° 50' 47" S, 77° 52' 18" W	2° 30' 4" S, 79° 3' 40" W
Sangay National Park	1° 26' 40" S, 78° 26' 29" W	2° 39' 21" S, 78° 23' 18" W	1° 37' 42" S, 78° 3' 42" W	2° 26' 23" S, 78° 57' 8" W

ANNEX E: Project Budget Table

Please attach a project budget table.

FAO Cost Categories	Total Com p. 1	Total Com p. 2	Total Comp. 3	Total Com p. 4	Subto tal	M& E	Pmc	TOT AL FAO	TOTAL OPIM	TOTAL GEF
5011 - Salaries Professional										
Chief Technical Advisor	54,432	54,432	54,432	54,432	217,728	-	41,472	-	259,200	259,200
Sustainable Agricultural Production Specialist	-	-	158,400	-	158,400	-	-	-	158,400	158,400
Conservation, Restoration and PA Management Specialist	-	-	151,800	-	151,800	-	-	-	151,800	151,800
Legal and Conflict Management Specialist	46,200	36,960	9,240		92,400				92,400	92,400
Local Technical Assistant 1 PN Cayabe Coca	-	-	96,600	-	96,600	-	-	-	96,600	96,600
Local Technical Assistant 2 PN Cayabe Coca	-	-	96,600	-	96,600	-	-	-	96,600	96,600
Local Technical Assistant 3 PN Sangay	-	-	96,600	-	96,600	-	-	-	96,600	96,600
Local Technical Assistant 4 PN Sangay	-	-	96,600	-	96,600	-	-	-	96,600	96,600
Local Technical Assistant 5 PN Sangay		-	96,600	-	96,600	-	-	-	96,600	96,600
Social, Environmental and Governance Safeguards Specialist	20,976	20,976	20,976	28,272	91,200	-	-	-	91,200	91,200
M&E Specialist	13,680	27,360	36,480	13,680	91,200	91,200	-	-	91,200	91,200
Communication and Knowledge Management Specialist				82,800	82,800	-	-	-	82,800	82,800
Administrative Assistance	-	-	-	-	-	-	66,150		66,150	66,150

SUBTOTAL Salaries Professional	135,288	139,728	914,328	179,184	1,368,528	91,200	107,622	-	1,476,150	1,476,150
5013 - Consultants										
National Consultants										
Support to implementation of information system(O.1.1.1)	60,000				60,000				60,000	60,000
Support to development of legal instruments (O.1.1.2; O.2.1.1)	30,000	30,000			60,000				60,000	60,000
Design of strategy for adjustment, application, sustainability and coordination of existing monetary and non-monetary incentives (O.3.1.3.)			35,000		35,000				35,000	35,000
Strategies for the management, conservation and sustainable use of biodiversity in alternative value chains. (management plans in local communities and populations, and other technical instruments) pertinent. (O.3.1.2)			40,000		40,000				40,000	40,000
Strengthening the business environment around the sustainable use of biodiversity in PAs and their Buffer Zones (O.3.1.3.)			50,000		50,000				50,000	50,000
SUBTOTAL National consultants	90,000	30,000	125,000	-	245,000				245,000	245,000
SUBTOTAL Consultants	90,000	30,000	125,000	-	245,000	-	-	-	245,000	245,000
5650 - Contracts										
Contracts for development, implementation, administration, advice, training and information collection for the Integrated Information System (O.1.1.1 y O.1.1.3.)	190,000	-	-	-	190,000	-	-	-	190,000	190,000

Contracts for diagnosis, development and advice for legal instruments, technical standards and conflict management (O.2.1.1.)	25,000	15,000	10,000	-	50,000	-	-	-	50,000	50,000
Contracts for information collection, improvement in management and coordination of stakeholders (O.2.1.2 y O.2.1.3.)		37,800	52,200	-	90,000	-	-	-	90,000	90,000
Advice for implementation, training on incentives (O.3.1.3)			70,000		70,000				70,000	70,000
Contracts for publication of lessons learned and systematization of experiences, communication and knowledge management (O.3.1.1.; O.3.1.2.; O.3.1.3.; O.4.1.1.)	-	20,150	32,500	12,350	65,000	-	-	-	65,000	65,000
Contracts for execution of training programs to institution technicians, producers and community in general (O.3.1.1; O.3.1.2.)	30,000	30,000	40,000	-	100,000	-	-	-	100,000	100,000
Contracts for development and evaluation of public campaigns and reinforcement of advocacy actions (O.2.1. y O.4.1.1)	-	13,650	15,050	6,300	35,000	-	-	-	35,000	35,000
Translation services (indigenous peoples) (O.4.1.1.)	2,500	2,500	2,500	2,500	10,000	-	-	-	10,000	10,000
Contract for design of project image and web hosting (O.4.1.1.)	-	-	-	4,000	4,000	-	-	-	4,000	4,000
Mid-term Review (MTR) (O.4.1.3)	-	-	-	35,000	35,000	35,000	-	35,000	-	35,000
Final Evaluation (EF) (O.4.1.3)	-	-	-	45,000	45,000	45,000	-	45,000	-	45,000
Spot Checks-OPIM (O.4.1.2.)	-	-	-	-	-	-	22,750	22,750	-	22,750
Annual audits-OPIM (O.4.1.2.)	-	-	-	-	-	-	33,250	33,250	-	33,250

Terminal report and editing (O.4.1.2.)	1,634	1,634	1,634	3,268	8,170	-	-	8,170	-	8,170
SUBTOTAL 5650 Contracts	249,134	120,734	223,884	108,418	702,170	80,000	56,000	144,170	614,000	758,170
5021 - Travel										
National travel										
Travels project specialists and field work(DSA-Tickets)	28,600	26,400	40,700	14,300	110,000	-	-	5,654	104,346	110,000
Travels technical assistants and facilitators	18,000	18,000	36,000	18,000	90,000	-	-		90,000	90,000
Travels for safeguards compliance (DSA)	6,000	6,000	6,000	9,000	27,000			27,000		27,000
International Tavel										
International travels to events	-	-	-	10,000	10,000	-	-	-	10,000	10,000
Travels for training/workshops/meetings										
Travels for capacity development, field information collection, regional networks (DSA-Tickets)	12,000	12,000	36,000	-	60,000	-	-	-	60,000	60,000
Travels for exchange of experiences, coordination with local partners and beneficiaries (DSA-tickets)	7,200	14,000	14,800	4,000	40,000				40,000	40,000
SUB TOTAL 5021 Travel	71,800	76,400	133,500	55,300	337,000	-	-	32,654	304,346	337,000
5023 -Training										
Socialization and training workshops on Integrated Information System	20,000	-	-	-	20,000	-	-	-	20,000	20,000
Training for development, formation and evaluation in governance and management	10,000	16,000	4,000	-	30,000	-	-	-	30,000	30,000
Workshops for technical and legal trainig to producers and staffs of different institutions	5,600	14,000	50,400	-	70,000	-	-	-	70,000	70,000
Work meetings of local governance spaces	-	28,800	-	-	28,800	-	-	-	28,800	28,800

Regional event on PA governance in coordination with Red Parques	8,000	-	-	-	8,000	-	-	-	8,000	8,000
PSC and PMC meetings	-	-	-	12,000	12,000	-	-	-	12,000	12,000
Inception Workshop	-	-	-	2,500	2,500	2,500	-	-	2,500	2,500
SUBTOTAL 5023- Training	43,600	58,800	54,400	14,500	171,300	2,500	-	-	171,300	171,300
5024 - Expendable procurement										
Materials and inputs to support implementation of priority actions in the work plans of the local governance spaces	-	80,000	-	-	80,000	-	-	-	80,000	80,000
Materials and inputs for implementation of BD conservation practices (O.3.1.1)	-	-	190,000	-	190,000	-	-	-	190,000	190,000
Materials and inputs to implement incentive mechanisms	-	-	150,000	-	150,000	-	-	-	150,000	150,000
Materials and inputs for diversification of productive activities	-	-	150,000	-	150,000	-	-	-	150,000	150,000
SUBTOTAL 5024 - Expendable procurement	-	80,000	490,000	-	570,000	-	-	-	570,000	570,000
6100 - Non expendable procurement										
Technological equipment for implementation of integrated information system in MAATE and monitoring (output 1.1.1) (computers, drones, GPS, servers, scanners, plotters, cameras, signing, etc.)	201,656	-	-	-	201,656	-	-	-	201,656	201,656
Technological equipment (computers) for project technical personnel	4,125	4,125	8,250	-	16,500	-	-	-	16,500	16,500
Support for implementation of priority actions in the work plans of the local governance spaces	-	60,000	-	-	60,000	-	-	-	60,000	60,000

Support for machinery and equipment for implementation of bioenterprise initiatives in PA and buffer zones (output 3.3.2)	-	-	275,000	-	275,000	-	-	-	275,000	275,000
SUBTOTAL 6100 - Non expendable procurement	205,781	64,125	283,250	-	553,156	-	-	-	553,156	553,156
5028 - General Operating Expenses										
Recurrent mobility expenses (car and boat rentals for field activities under outcomes 1.1, 2.1, 3.1, 4.1)	36,774	73,548	98,064	36,774	245,160	-	-	-	245,160	245,160
Communication, licenses, virtual platforms, publication of tenders	3,400	3,400	3,400	3,400	13,600	-	21,400	-	35,000	35,000
Office rental (contribution)							19,500		19,500	19,500
Office supplies							5,774		5,774	5,774
SUBTOTAL 5028 - General Operating Expenses	40,174	76,948	101,464	40,174	258,760	-	46,674	-	305,434	305,434
TOTAL	835,777	646,735	2,325,826	397,576	4,205,914	173,700	210,296	176,824	4,239,386	4,416,210

Component	PIF	Total	%
Componente 1	921,936	835,777	18.9%
Component 2	688,100	646,735	14.6%
Component 3	2,121,178	2,325,826	52.7%
Component 4	474,700	397,576	9.0%
Subtotal	4,205,914	4,205,914	

PMC	210,296	210,296	5.00%
Total	4,416,210	4,416,210	100.0%

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 Agencies 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).