



Part I: Project Information

GEF ID

10971

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

CBIT No

NGI No

Project Title

Conservation and sustainable use of biological diversity in the Caroni river basin of Bolivar state

Countries

Venezuela

Agency(ies)

FAO

Other Executing Partner(s)

Ministry of Ecosocialism and Popular Power (MINEC)

Executing Partner Type

Government

GEF Focal Area

Biodiversity

Sector

Taxonomy

Biodiversity, Focal Areas, Protected Areas and Landscapes, Terrestrial Protected Areas, Productive Landscapes, Community Based Natural Resource Mngt, Productive Seascapes, Coastal and Marine Protected

Areas, Species, Threatened Species, Livestock Wild Relatives, Invasive Alien Species, Wildlife for Sustainable Development, Illegal Wildlife Trade, Crop Wild Relatives, Animal Genetic Resources, Plant Genetic Resources, Forest and Landscape Restoration, Forest, Convene multi-stakeholder alliances, Influencing models, Deploy innovative financial instruments, Strengthen institutional capacity and decision-making, Beneficiaries, Stakeholders, Indigenous Peoples, Non-Governmental Organization, Civil Society, Community Based Organization, Academia, Local Communities, Public Campaigns, Communications, Education, Awareness Raising, Individuals/Entrepreneurs, Private Sector, Information Dissemination, Type of Engagement, Participation, Consultation, Access and control over natural resources, Gender results areas, Gender Equality, Capacity Development, Participation and leadership, Gender Mainstreaming, Sex-disaggregated indicators, Learning, Capacity, Knowledge and Research, Adaptive management, Theory of change, Indicators to measure change, Knowledge Generation

Rio Markers

Climate Change Mitigation

Significant Objective 1

Climate Change Adaptation

Significant Objective 1

Biodiversity

Principal Objective 2

Land Degradation

Significant Objective 1

Submission Date

Expected Implementation Start

1/1/2024

Expected Completion Date

12/31/2029

Duration

60In Months

Agency Fee(\$)

832,715.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-1-1	Integrate biodiversity into all sectors as well as landscapes and seascapes by mainstreaming biodiversity into priority sectors.	GET	4,861,300.00	29,166,600.00
BD-2-7	Address direct drivers to protect habitats and species and improve financial sustainability, effective management, and ecosystem coverage of the overall protected area	GET	3,904,118.00	23,425,800.00
Total Project Cost(\$)			8,765,418.00	52,592,400.00

B. Project description summary

Project Objective

To improve management and governance and enhance institutional and communities' capacities for the integrated and sustainable use of the landscape, the conservation of biological diversity and provision of ecosystem services, to generate socio-economic and environmental benefits in the Caron? River Basin and global environmental benefits (SDGs 2.4, 6.6, 13.1 and 15.4)

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing (\$)
1. Systemic, institutional, and individual capacity for the sustainable management of the multi-use landscape with a gender, generational, and intercultural approach.	Technical Assistance	<p><i>Outcome 1.1. Enhanced capacities for sustainable and integrated management of the multi-use landscape and governance in the Areas under Special Administration Regime (ABRAEs), with a gender, generational, and intercultural approach.</i></p> <p><u>Core Indicator 1.2.:</u></p> <p><i>At least 7,712,919 ha of protected areas under improved management and governance.</i></p>	<p>Output 1.1.1: Institutional and community capacity strengthening program designed and implemented for sustainable landscape management.</p> <p>Output 1.1.2: Geospatial monitoring and evaluation system formulated and developed for sustainable and integrated landscape management, incorporating hydro-meteorological/hydrological elements, ecosystem services, biological diversity, and environmental threats.</p> <p>Output 1.1.3: Module of participatory monitoring for the control and surveillance of environmental threats developed, implemented, and integrated into Product 1.1.2.</p> <p>Output 1.1.4: Support tools for management, planning, and agreements within a multi-level and participatory governance framework for comprehensive landscape management</p>	GET	2,042,421.00	14,550,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing (\$)
2. Integrated landscape management for the sustainable use of biological diversity and increased provision of ecosystem services	Investment	<p><i>Outcome 2.1. The MINEC, sectoral institutions at different levels, and indigenous and criollo communities have managed the landscapes of the ABRAEs in an integrated and sustainable manner, contributing to the restoration, recovery, and conservation of landscapes and biological diversity.</i></p> <p><u>Core Indicator 3:</u></p> <p><i>13,879 ha of restored land areas (Sub-indicator 3.2. Forest and woodland areas: 1,798 ha, and Sub-indicator</i></p>	<p>Output 2.1.1: Five (5) Participatory and Consensus-based Management Plans and Regulations of Use (PORUs) formulated: Canaima National Park, National Monuments of the Tepuyes Chain, La Paragua Forest Reserve, Ikabar? Hydraulic Reserve, South Protected Zone of Bol?var State.</p> <p>Output 2.1.2: Degraded areas are restored within the project intervention area with a gender, generational, and intercultural approach.</p> <p>Output 2.1.3: Formulated financial plan complements the management effectiveness of the system of the 5 ABRAEs in the Caron? River basin.</p>	GE T	2,684,681.00	15,000,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing (\$)	Confirmed Co-Financing (\$)
		<p>3.3. Natural grassland and shrubland areas: 12,081 ha</p> <p><u>Core Indicator 6:</u></p> <p>-13,302,275 tCO₂-e^[1] Greenhouse Gas (GHG) emissions mitigated. Sub-indicator 6.1 Carbon sequestered (-1,714,484 tCO₂-e) and emissions avoided (-11,587,791 tCO₂-e) in the sector of agriculture, forestry, and other land use (AFOLU).</p> <p>[1] Estimation made with the Ex-Act V 9.1 tool (FAO, 2022).</p>				

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing (\$)	Confirmed Co-Financing (\$)
3. Diversification of livelihoods in indigenous and criollo communities for sustainability in landscape management with a gender, generational, and intercultural approach	Technical Assistance	<p><i>Outcome 3.1. Indigenous and criollo communities have implemented resilient, diversified, and sustainable livelihoods in the Caron? River basin.</i></p> <p><i>Core indicator 11: 44,641 indigenous and criollo individuals, as well as members of national, regional, and local institutions, will benefit from the project's implementation (with at least 40% being women).</i></p>	<p>Output 3.1.1: Participatively formulated and implemented community plans integrate sustainable economic activities related to ecotourism, timber and non-timber forest products, and family farming.</p> <p>Output 3.1.2: Designed and implemented program for the sustainable use of wildlife enables the reduction of pressure on biological diversity and improvement in livelihoods.</p> <p>Output 3.1.3: Socio-productive co-management agreements in ABRAEs designed and implemented.</p> <p>Output 3.1.4: Models and business plans support and enhance the development of socio-productive initiatives in the indigenous and criollo communities identified in Products 3.1.1 and 3.1.2.</p>	GE T	2,350,859.00	15,925,800.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing (\$)
4. Knowledge management, Monitoring, and Evaluation with a gender, generational, and intercultural approach	Technical Assistance	<i>Outcome 4.1: Project results are monitored based on adaptive management and with a gender, generational, and intercultural approach, evaluated, transferred, and embraced by stakeholders</i>	Output 4.1.1: M&E strategy developed and implemented with stakeholders. Output 4.1.2: Mid-term review and final evaluation conducted. Output 4.1.3: Mechanisms implemented for knowledge management and exchange of best practices and lessons learned contribute to the replication and scaling of project results, with a focus on gender, generational, and intercultural aspects.	GET	1,108,561.00	5,584,783.00
M&E	Technical Assistance			GET	239,781.00	
Sub Total (\$)					8,426,303.00	51,060,583.00
Project Management Cost (PMC)						
			GET	339,115.00		1,531,817.00
			Sub Total(\$)	339,115.00		1,531,817.00
			Total Project Cost(\$)	8,765,418.00		52,592,400.00

Please provide justification

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Ministry of People's Power for Ecosocialism (MINEC)	Public Investment	Investment mobilized	24,000,000.00
Recipient Country Government	Government of the State of Bolivar	Public Investment	Investment mobilized	14,000,000.00
Recipient Country Government	Bolivarian Agency for Space Activities (ABAE)	In-kind	Recurrent expenditures	5,000,000.00
Recipient Country Government	National Parks Institute (INPARQUES)	Public Investment	Investment mobilized	4,000,000.00
Recipient Country Government	National Foundation of Parks, Zoos, Zoobreeders, and Aquariums (FUNPZZA)	Public Investment	Investment mobilized	2,000,000.00
Recipient Country Government	Ministry of People's Power for Indigenous Peoples (MINPPPI)	In-kind	Recurrent expenditures	1,500,000.00
Recipient Country Government	Latin American Forestry Institute (IFLA)	In-kind	Recurrent expenditures	1,500,000.00
GEF Agency	FAO	In-kind	Recurrent expenditures	363,300.00
Recipient Country Government	National Parks Institute (INPARQUES)	In-kind	Recurrent expenditures	229,100.00
Total Co-Financing(\$)				52,592,400.00

Describe how any "Investment Mobilized" was identified

The investment mobilized from MINEC and INPARQUES corresponds to donations and national investments associated with management of sustainable forest management, control of trafficking or illegal trade of flora and fauna species, the Venezuelan Biodiversity Information System, the National Program for Conservation and Promotion of sustainable agroecological practices, improvement of the national

information system for monitoring and early warning of forest fires, as well as determination of strategies for drought. The investment mobilized by the Bolivar State Government comes from public investment in infrastructure projects for road access that contributes to improving living and tourist conditions in the area, such as the recovery of the main road (Troncal 10). The contribution of the Bolivarian Agency for Space Activities (ABAE) is based on the fact that this institution has in the project implementation area the Luepa station base, which is a satellite operations center located in the Military Fort Manikuy? that is made available for geospatial reference points and to continue exchanging knowledge with indigenous communities to serve children in the surrounding areas to promote love for science, technology, and innovation through gamification. Plans and projects for wildlife management represent the investment mobilized by FUNPZZA. The Sectoral Plan for Indigenous Peoples represents the investment mobilized by MINPPPI. The contribution of the Latin American Forestry Institute IFLA refers to actions that the institution carries out in the framework of their respective plans, programs, and projects, data processing, implementation of protocols, field data collection, and work with indigenous communities in the implementation area. FAO will provide technical assistance, support, training, and supervision of implementing the activities financed by FAO with GEF resources. The GEF project will be co-financed through logistical support in the organization of activities and studies and staff time of the FAO Representation in Venezuela for the follow-up 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(\$)	Total(\$)
FAO	GET	Venezuela	Biodiversity	BD STAR Allocation	8,765,418	832,715	9,598,133.00
Total Grant Resources(\$)					8,765,418.00	832,715.00	9,598,133.00

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount (\$)

200,000

PPG Agency Fee (\$)

19,000

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
FAO	GET	Venezuela	Biodiversity	BD STAR Allocation	200,000	19,000	219,000.00
Total Project Costs(\$)					200,000.00	19,000.00	219,000.00

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
7,712,919.00	9,447,200.00	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)
7,712,919.00	9,447,200.00	0.00	0.00

Name of the Protected Area	WD PA 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)
Monumento Natural Formaciones de Tepuyes	555705240	Natural Monument or Feature	687,500.00	687,500.00			12.00		
Parque Nacional Canaima	61612	National Park	3,000,000.00	3,000,000.00			39.00		
Reserva Forestal La Paragua	10787	Protected area with sustainable use of natural resources	782,000.00	782,000.00			20.00		
Reserva Hidrográfica Ikabar?	NA	Protected area with sustainable use of natural resources	40,000.00	40,000.00			16.00		

Name of the Protected Area	WD PA 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)
Zona Protectora Sur del estado Bolívar	10772	Protected area with sustainable use of natural resources	3,203,419.00	4,937,700.00			14.00		

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
14349.00	13879.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural lands under restoration

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

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1,000.00	1,798.00		

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Woodlands	13,349.00	12,081.00		

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)	12515921	1714484	0	0
Expected metric tons of CO ₂ e (indirect)	0	11587791	0	0

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)	12,515,921	1,714,484		
Expected metric tons of CO ₂ e (indirect)		11,587,791		
Anticipated start year of accounting	2022	2024		
Duration of accounting	20	20		

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)				
Expected metric tons of CO ₂ e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

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

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

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

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)
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Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	29,917	21,416		
Male	32,603	23,225		
Total	62520	44641	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

Notes: Within the project area: * Terrestrial protected areas created or under improved management for conservation and sustainable use (Hectares): Project implementation area.

** Area of land restored (Hectares) : Data obtained from a methodology created in the Prodoc. ***Total Greenhouse Gas Emissions Mitigated (metric tons of CO2-e) : The estimate is based on the EX-ACT tool version 9.1 (FAO, 2022). **** Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment : Data obtained from the 2011 National Census.

Part II. Project Justification

1a. Project Description

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

National context: biological diversity in Venezuela and its main threats

1. The Bolivarian Republic of Venezuela is located in the northernmost part of South America, with a total area of 1,501,446 km², consisting of a land area of 916,445 km², aquatic area of 585,000 km², territorial sea of 504,845 km², and coastal zone of 80,155 km². It shares borders with Colombia, Brazil, Guyana, the Atlantic Ocean, and the Caribbean Sea. The country is divided into 23 states, the Capital District, and 72 Federal Dependencies. It has a population of 28,974,070 according to the 2011 Population and Housing Census, with a projected population for the year 2023 of 30,620,404 inhabitants (INE, 2011).

2. The Bolivarian Republic of Venezuela is one of the seventeen megadiverse countries in the world (Hurlburt, Fedor, and Juliano, 2020) due to its high number of species across various taxa within its territory (Mittermeier et al., 2000, Aguilera et al., 2003). It ranks fifth in amphibian diversity with a record of 387 species (Barrio-Amorós et al., 2019), sixth in bird diversity with 1,384 species (Ascanio et al., 2017), eighth in mammal diversity with 390 species (Linares 1998; Sánchez and Lew 2012), and ninth in reptile diversity with 370 species (Rivas et al., 2012). In terms of vascular plants, Venezuela has 15,820 native or naturalized species, grouped into 2,480 genera and 275 families. Angiosperms are the most represented plant group in the national territory, accounting for 87.6% of the total families and 92.5% of the species (Hokche, Berry, and Huber, 2008). The main centers of endemism are located in the Andes region (Andes Mountains and Sierra de Perijá), the Coastal Range region, and the Guayana region, where there are high levels of endemism among birds, mammals, invertebrates, and vascular plants (Figure 1). The forests of Venezuela represent 5.5% of the forests in South America and 1.2% of the forests in the world.

Figure 1. Map of natural regions of the Bolivarian Republic of Venezuela.



Source: Original elaboration [1] based on information prepared by MINAMB (2011).

3. The forested area of the country covers approximately 462,309 km², which accounts for about 50.45% of the Venezuelan territory. The largest portion of these forests (83%) is located south of the Orinoco River in the Guayana region, specifically in the states of Bolívar (39%), Amazonas (37%), and Delta Amacuro (7%) (FAO, 2020). The Guiana Shield is situated in Amazonas and Bolívar states, which together represent 47.1% of the national territory. Within this region, 76.0% (351,355 km²) of the country's forests are found. It is one of the most pristine and biologically diverse areas, with 80.5% of its forests considered intact (<https://intactforests.org/>) or with a significant level of conservation. Additionally, it possesses abundant freshwater resources, making it a region of strategic importance as one of the last reservoirs of the American Tropics (Señaris and Lasso, 2018).

4. In the Bolivarian Republic of Venezuela, the main cause of loss of forest ecosystems and associated ecosystem services (such as habitat for globally important biological diversity, carbon reserves, and soil conservation) is the destruction and alteration of natural habitats due to land use change. Activities such as agriculture, livestock farming, urban development, and industrial expansion are the most relevant driving forces in the dynamics of destruction and replacement of habitats, including forest ecosystems in particular. Another highly impactful activity is mining, due to its fragmenting and polluting effects on water, air, and soil. Forest fires, hunting of wildlife, and exploitation of plants with high ornamental value are additional factors that contribute to biological diversity loss, both at the national level and in the Caroní River basin.

Conservation value of the Caroní River basin

5. The Caroní River basin belongs to the Guiana Shield, one of the oldest and most stable regions on the planet, with a surface area of 9,216,908 hectares, covering 39% of the Bolívar state, 10% of the national territory, and 9% of the Orinoco basin. Geographically, it is located between the coordinates 60°35' and 64°07' west longitude and between 3°37' and 8°21' north latitude. Politically, the Caroní

River basin falls under the jurisdiction of the Bolívar state in Venezuela, and its study area is predominantly divided into the municipalities of Angostura (53.4%) and Gran Sabana (41.64%), with smaller portions in the municipalities of Piar (3.12%) and Sifontes (0.96%) (**Table 1**).

Table 1. Caroní River basin municipalities.

Municipality	Area (km ²)	Area (%)
Angostura	49.218,25	53,4
Gran Sabana	38.379,17	41,64
Piar	2.875,67	3,12
Sifontes	884,82	0,96

Source: CVG-Company Electrificación del Caroní (EDELCA) (CVG-EDELCA, 2004).

6. The Master Plan developed by the Venezuelan Corporation of Guayana (2004) divided the Caroní River basin into five sectors: Upper Caroní (UC), Medium Caroní (MC), Lower Caroní (LC), Upper Paragua (UP) and Lower Paragua (LP) (**Table 2**).

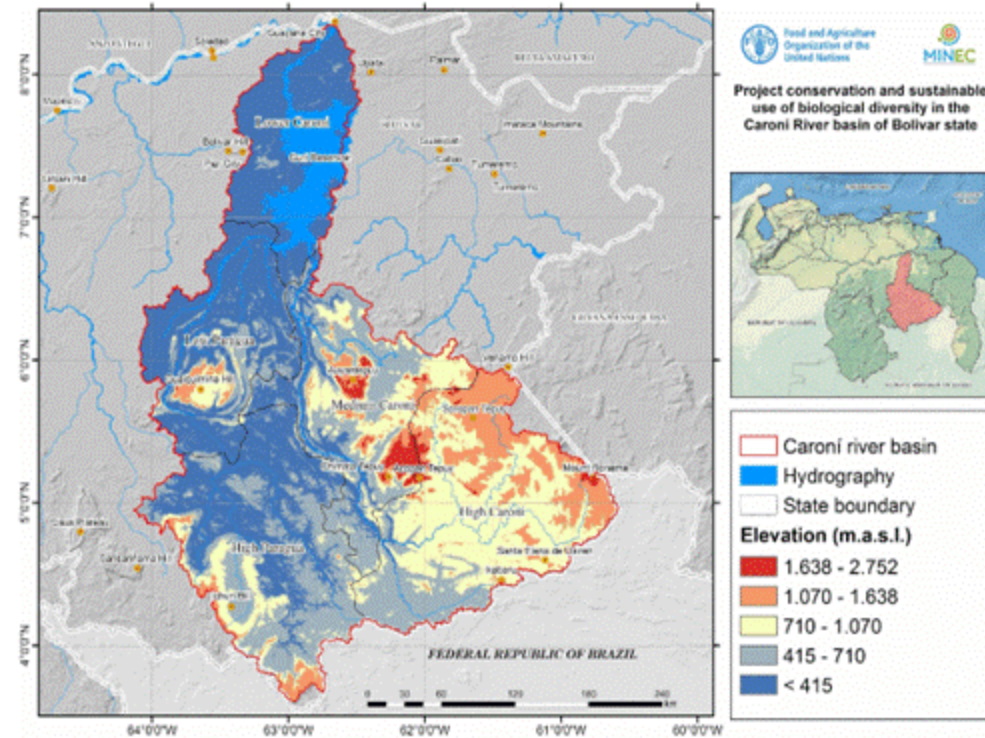
Table 2. Sectors of Caroní River basin.

Sector	Area (ha)	Area (%)
Lower Caroní (LC)	1,315,966	14.28
Medium Caroní (MC)	1,743,363	18.91
Upper Caroní (UC)	2,450,688	26.59
Upper Paragua (UP)	2,215,464	24.04
Lower Paragua (LP)	1,491,427	16.18
Total	9,216,908	100

Source: CVG-EDELCA (2004).

7. Hydrographically, the Caroní River basin constitutes the Caroní Hydrographic Region, which is part of the Orinoco watershed, belonging to the Atlantic Ocean basin. The Caroní River follows an east-west direction under the name Kukenón until its confluence with the Arabopó River, where it changes its name to Caroní until it reaches its confluence with the Orinoco River (CVG-EDELCA, 2003) (**Figure 2**). It is a large basin that is bounded to the north by the Orinoco River, to the south by the Branco River basin, which is part of the Brazilian Amazon, to the east by the Cuyuní and Mazaruní river basins, tributaries of the Essequibo River, and to the west by the Caura and Aro river basins, as well as other minor tributaries of the Orinoco.

Figure 2. Location of the hydrographic system of the Caroní river basin.



Source: Original elaboration based on the Master Plan (CVG-EDELCA, 2004).

Area of intervention of the project

8. The Caroní River basin is characterized by a vast area of undisturbed, dense, and highly humid forests, which constitute a space of national and global importance. These forests are mainly ABRAEs and harbor high biological diversity, strategic water production, hydroelectric energy, mineral wealth, and the presence of ancestral indigenous peoples with their traditions and ways of life (primarily represented by the Pemón people), as well as criollo communities living in the basin. However, this basin exhibits high levels of ecological fragility and is susceptible to being devastated and destroyed by uncontrolled human intervention, resulting in highly negative effects on the ecosystem services within the basin. Therefore, it is necessary to promote concrete actions for the conservation and sustainable development of the landscape.

9. As the intervention landscape of the project, the sectors considered are Upper Paragua (UP), Lower Paragua (LP), Upper Caroni (UC) and Medium Caroní (MC), which represent a total area of 7,900,962 hectares (85.72% of the watershed total area). Table 3 shows the total surface area of the sectors in the Caroní River basin. Out of the 7,900,962 hectares considered as the project's intervention area, 97.62% (7,712,919 ha) are within ABRAEs. Within this protected area, the project's conservation objects are located, including water bodies, morichales (swampy areas with palm trees), tepuys (tabletop mountains), savannas, gallery forests, indigenous settlements, and areas of tourist and recreational interest.

Table 3. Characteristics of the sectors located in the intervention landscape of the project in the Caroní River basin.

Sector	Area (ha)	Percentage in relation to total watershed area	Location	Características Generales
Upper Caroni (UC)	2,450,688	26.59	From the birth of the Kukenan River to the confluence of the Ikabar? River with the Caron? River at the Aripichi rapids.	-The area is characterized by the presence of numerous rivers in steep areas with abrupt or rugged longitudinal profiles. This sector constitutes the main source of water and sediment, with prominent rivers such as Kukenan, Aponwao, Karuai, and Ikabar?. -It includes a significant number of emblematic landforms of the Caron? River basin, such as the Roraima-Tepuy and Kukenan-Tepuy, where the Caron? River originates.
Medium Caron? (MC)	1,743,383	18.91	From the Aripichi rapids to the Tayucay waterfall, at the tail of the Gur? reservoir.	-In this sector, the river flows through deep channels with vertical rock walls, without alluvial plains. There are numerous Tepuys (tabletop mountains) in the area, with notable ones including Chimant?-Tepuy and Auy?n-Tepuy. Additionally, the Angel Falls, with a free fall of 979 meters, is located in this sector.
Upper Paragua (UP)	2,215,464	24.04	From the birth of the Paragua River to its confluence with the Kar?n River.	-It is characterized by the presence of Cerro Ich?n, a distinctive massif in the area known for its high elevations.
Lower Paragua (LP)	1,491,427	16.18	From the mouth of the Paragua River in the Gur? reservoir, near the towns of La Paragua and El Cristo, to the confluence of the Kar?n and Paragua rivers.	-It is an area with limited development of alluvial plains but dominated by intermediate plateaus. It is composed of a western slope that largely shapes the landscape due to the presence of Waikinima-tepuy.
Total	7,900,962	85.72		

Source: Master Plan of the Caron? River Basin. CVG-EDELCA (2004).

10. The sectors of the Caron? River basin to be intervened are located in a natural region characterized by the predominance of plateaus, tepuys (tabletop mountains), piedmonts, hills, valleys, and peneplains. It includes the Sierra de Lema, the eastern and western tepuis, the Gran Sabana, and the Pacaraima mountain range on the border with Brazil. The tepuis are tabular plateaus, steep, with abrupt and highly dissected walls. Roraima and Eruoda reach altitudes that exceed 2,700 meters above sea level. As for the Gran Sabana, it is an extensive peneplain plateau located in the eastern sector of the upper Caron?, extending to the border area with the disputed Guayana Esequiba zone. It has an

approximate area of 18,000 km², ranging from the Sierra de Lema in the north to the Sierra de Pacaraima in the south, with the chain of eastern tepuis standing out towards the east. Undulating plains prevail, interrupted by hills and small valleys where rivers flow over hard sandstone rocks. In the high Paragua peneplain, the predominant relief consists of low hills and hills, located in the middle basins of the Caura, Paragua, and Caron? rivers. Dense forests prevail, with an average annual precipitation of 4,000 mm. There are peneplains, tepuis, waterfalls, mesa-like hills, ridges, and sierra-like hills. In this natural region, there are scenic beauties of extraordinary value that must be preserved for future generations, such as the natural monuments Cerro Ich?n and Guanacoco; Guaiquinima, the western sector of Canaima National Park, and the southern protective zone of Bol?var state.

11. The soils in the Caron? River basin exhibit wide variability due to the interaction between diverse lithological materials, topography, climate, and vegetation cover. In the area, Ultisols dominate, accounting for 57% of the soils. Although they display significant morphological variability, Ultisols have low natural fertility and other physicochemical limitations, making them unsuitable for agriculture. The soils in the Caron? River basin are subject to a wide range of impacts or triggers that have led to their degradation. These include intensive land use for monoculture, the use of agrochemicals, and mercury contamination associated with gold extraction. Studies have shown that these activities cause damage to the soils, the environment, the mining population, and nearby communities[2]. Erosion is one of the soil degradation processes observed in the four sectors considered in this study, resulting in sediment production and a decrease in the soil's qualities for the production of goods and services.

12. Regarding hydrology, the Caron? River is the most important tributary of the Orinoco River and flows through gorges and tepuis, creating numerous waterfalls. The Angel Falls, the world's highest waterfall with a free fall of 979 meters, and the Kukenan Falls are among the notable ones, along with many others of lesser height but significant water flow.

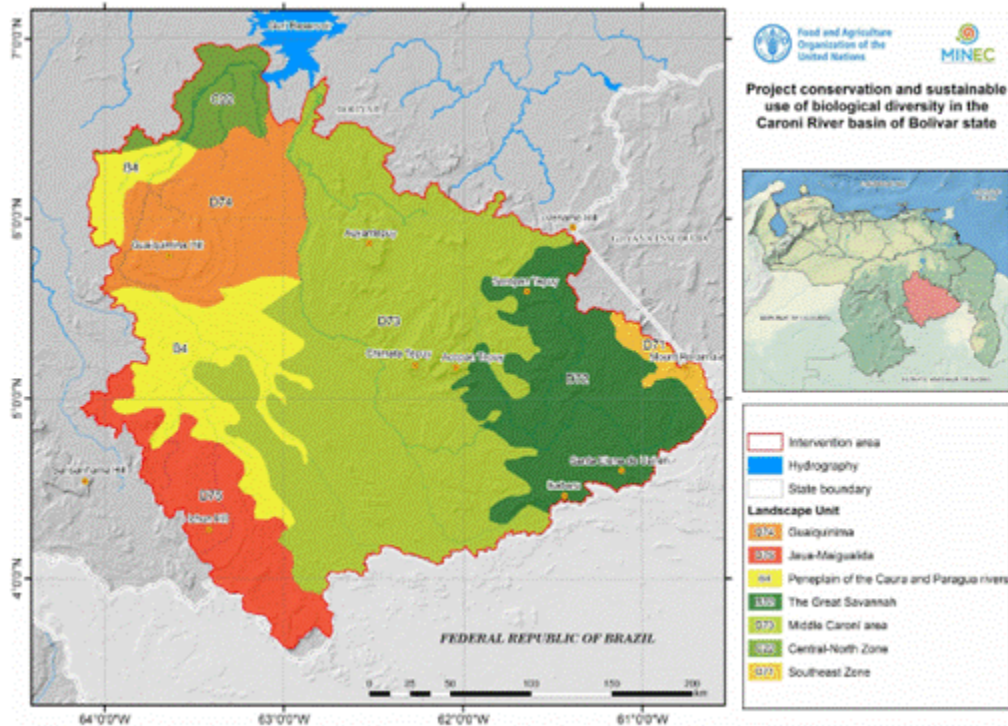
13. Given the strategic importance of this basin for the country's development, from which nearly 70% of the electric power is generated, an analysis of the impact of climate change on the runoff in this basin was conducted in the country's second communication on climate change to the United Nations Framework Convention on Climate Change (UNFCCC). Two global climate models were used for two climate change scenarios: RCP4.5 (intermediate scenario) and RCP8.5 (pessimistic scenario) (MINEA, 2017). The Caron? River basin has an average annual yield of 5,369 m³/s for the period 1980-1999. Considering the impact of climate change on runoff, a reduction in average annual flows of 12% to 25% by the end of this century was estimated for the intermediate scenario, which could increase to 31% for the pessimistic scenario. Similarly, when considering the impact of climate change on the seasonal variation of flows, a decrease in flows of up to 66% in months such as January, February, and June is observed. Based on the applied hydrological model, the impact of climate change on water resource availability is becoming increasingly evident in the basin, making it more necessary to define strategies that allow for adaptation and mitigation of these effects.

14. In this regard, the approach of integrated landscape management with an emphasis on biological diversity conservation allows for the integration of a set of strategies and actions that, while addressing key elements of biological diversity, directly and indirectly contribute to the provision of ecosystem services (such as regulation of water flows and water quality, reduction of erosion and therefore sediment production, pollination, climate regulation, and food production), scenic beauty, among others.

15. At the landscape level, according to Huber and Oliveira-Miranda (2010), the project intervention area falls within the subregions of the Guiana Shield, the Caura and Paragua River Peneplains, the system of low hills and piedmont sierras of the Guiana Shield. In the Neotropics, it remains the largest reservoir of uncontaminated and still potable water, where the hydroelectric exploitation of the lower Caron? River generates vital energy resources for the entire country. It is also highlighted that almost the entire extension of the subregion is included in the National System of ABRAEs, with a core of biologically diverse areas of continental importance that remain in natural conditions with a high level of conservation and intactness. Within this area, there are unique landscapes and natural scenarios,

encompassing seven phytoecological sectors: five in the Mountain Region, representing vegetation landscapes of the mountains - Southeastern Zone (D71), Gran Sabana (D72), Middle Caron? Zone (D73), Guaiquinima (D74), and Jaua-Maigualida (D75); one in the Low Plains Region, representing vegetation landscapes of the low plains - Caura and Paragua River Peniplains subregion (B4); and one in the Hills Region, representing vegetation landscapes of the hills - low hills and piedmont sierras of the Guiana Shield, Central-Northern Zone (C22) (Figure 3).

Figure 3. Landscape units for the project intervention area, Caron? river basin.



Source: Original elaboration based on Huber and Oliveira (2010).

16. In the Gran Sabana, located in the Upper Caron? region, there are over 260 endemic species, as well as endemic genera such as: *Achnopogon*, *Chimanta*, *Quelchia*, *Tepuia*, *Mallophyton*, *Adenanthe*. There are also abundant insectivorous species of the genera *Bromelia*, *Drosera*, *Heliamphora* y *Utricularia*. There are endemic and emblematic species of fauna such as the giant armadillo (*Priodontes maximus*), the giant otter (*Pteronura brasiliensis*), giant anteater (*Myrmecophaga tridactyla*), the jaguar (*Panthera onca*), two-toed sloth (*Choloepus didactylus*), the white-faced saki (*Pithecia pithecia*), the black bearded saki (*Chiropotes satanas*), the Roraima mouse (*Podoxymys roraimae*), the Tyler's mouse opossum (*Marmosa tyleriana*), the harpy eagle (*Harpyha harpija*), the macaw (*Ara nobilis*), the dusky parrot (*Pionus fuscus*), the Guianan cock-of-the-rock (*Rupicola rupicola*), the emerald tree boa (*Corallus caninus*), and the yellow-banded poison dart frog (*Dendrobates leucomelas*). It encompasses unique regions of the Guiana Shield (Weidmann *et al.*, 2003).

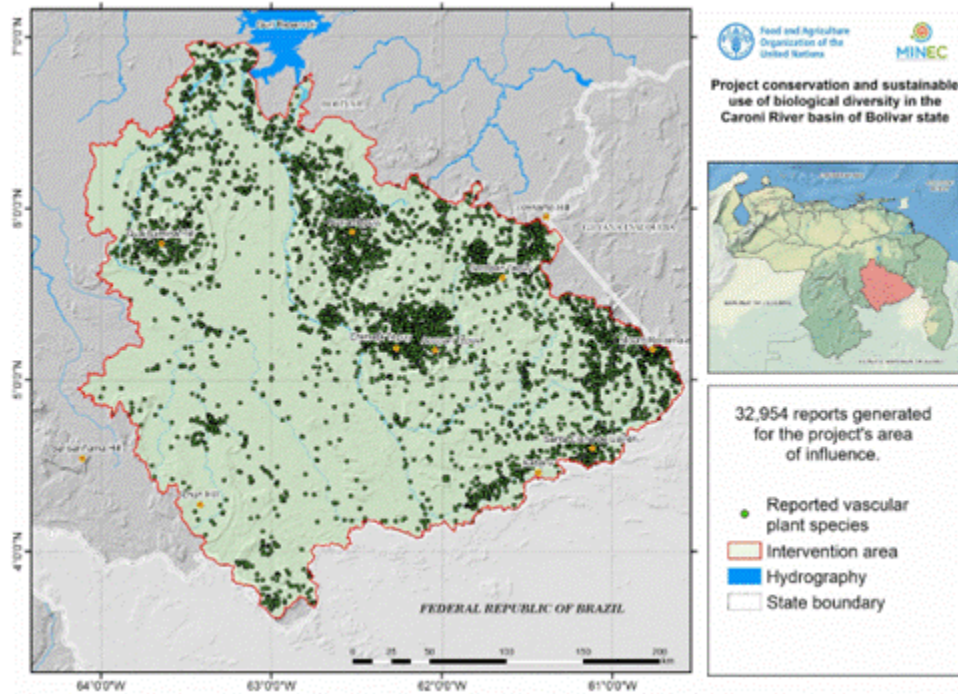
17. According to the floristic composition of forest communities in the middle Caron? basin, species such as can be generally found: *Dacryodes nitens*, *Trattinnickia lawrancei*, *Licania octandra*, *Swartzia piarensis*, *Clarisia ilicifolia*, *Ocotea cernua*, *Virola elongata*, *Miconia dispar*, *M. holosericea* y *M. pubipetala*; mientras que en la cuenca alta de dicho r?o, en bosques medios y altos son frecuentes *Cupania scrobiculata*, *Clidemia bernardii*, *Protium opacum*, *Swartzia arborescens*, *Inga alba*,

Anaxagorea petiolata, *Quiina guianensis* y *Mollinedia ovata*. In the lowland forests of the area, the following are reported *Taralea crassifolia*, *Graffenrieda caryophyllea*, *Pradosia schomburgkiana*, *Ilex polita* y *Pagamea capitata* (Rodríguez *et al.*, 2009; Rodríguez y Colonnello 2009). The shrub formation is characterized by macrothermal shrublands, mesothermal shrublands, and tepuy shrublands, while the herbaceous formation is characterized by macrothermal shrubby savanna, mesothermal treeless savanna, and tepuy herbaceous vegetation. Finally, there is lithophytic vegetation associated with the rocky outcrops characteristic of the large tepuys found in Canaima National Park.

18. Associated with the phytogeographic origin of the floristic composition of this subregion (Berry *et al.*, 1995), the species found in these plant units are part of the Guiana Floristic Region, which is included within the Central Guiana and Pantepui provinces. Additionally, there are (but less common) elements from the Amazon and some species related to the Brazilian shield and the Guianas, as well as from the northern Caribbean region (Aymard *et al.*, 2011).

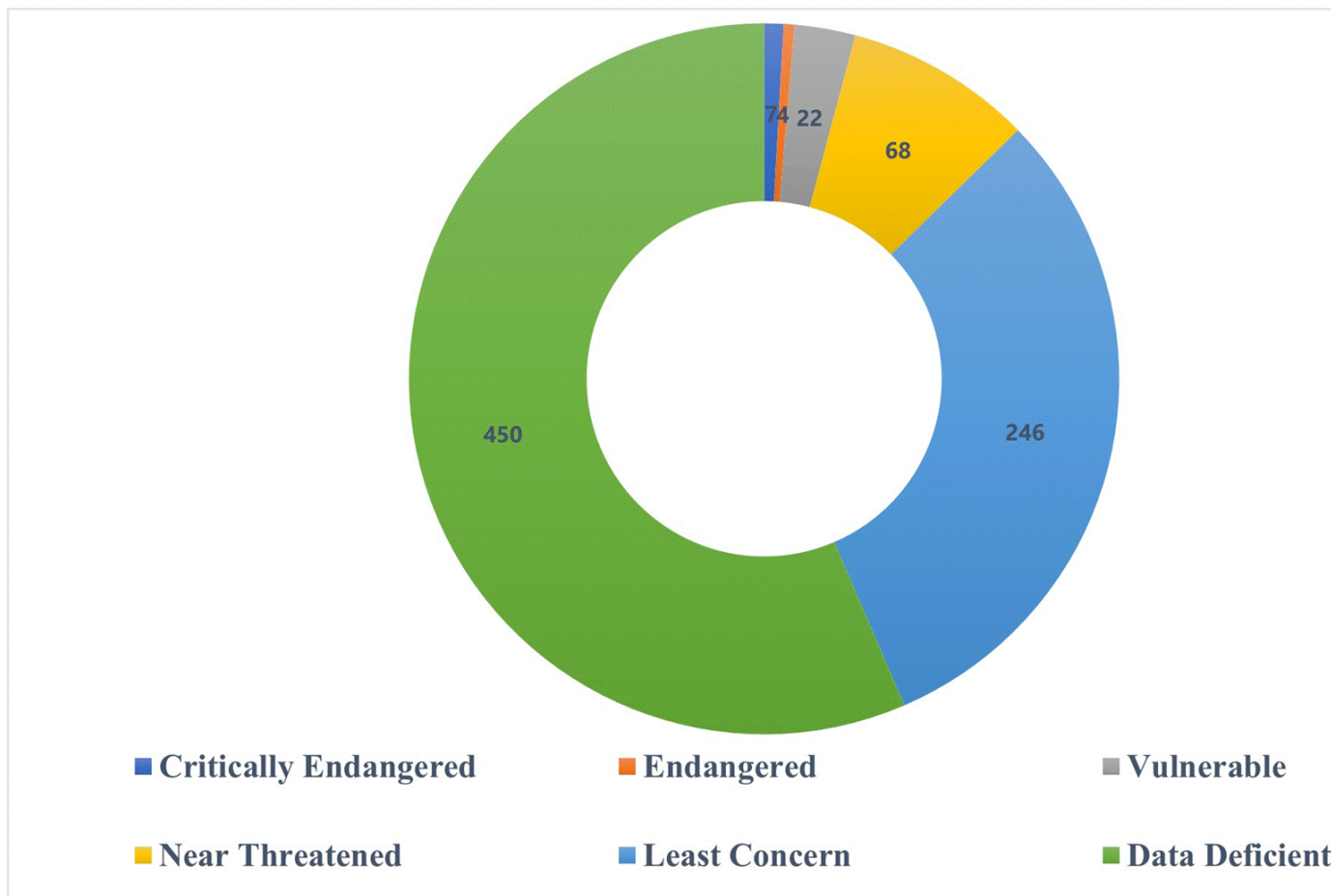
19. Out of the 32,954[3]3 scientific records from the Global Biodiversity Information Facility (GBIF) system, organized within the project's intervention area (**Figure 4**), there are 4,801 plant species, of which 797 (16.60%) have some conservation status category according to the listings reported in the Red Books of the Flora of Venezuela (Llamozas *et al.*, 2003; Hurrano *et al.*, 2020). Among these, 7 species are reported as Critically Endangered (0.88%), 4 are Endangered (0.50%), 22 are Vulnerable (2.76%), 68 are Near Threatened (8.53%), while the categories with the highest number of species are Least Concern with 246 (30.87%), and 450 species with Insufficient Data. It is worth noting the high endemism of plant species reported in the area, as according to the Catalog of the Vascular Flora of Venezuela (Hokche *et al.*, 2008), 451 species are endemic, representing almost 10% of the species recorded for the project's influence area (**Figure 5**).

Figure 4. Reports of flora species generated for the project intervention area.



Source: Original elaboration based on the database of flora species of project GEF ID 5410 (2023).

Figure 5. Total number of species found in the intervention area under conservation status.



Source: Original elaboration based on the database of flora species of project GEF ID 5410 (2023).

20. There are several reasons why these species are classified under different conservation status categories, highlighting the criteria used for their categorization, including the endemism of many of them and the potential uses or quality of their habitat (Hurtado *et al.*, 2020). For example, the case of *Cattleya lawrenceana*, an epiphytic orchid highly sought after in the national and international market by traders and collectors, is classified as Endangered. This is mainly due to the high demand for its trade. The same situation applies to the *Centrolobium paraense*, which is classified as Vulnerable because it is exploited for its beautiful wood, traditionally used in furniture manufacturing, rural and urban housing construction, and decorative elements. However, specific conservation measures for this species are lacking, and despite its recognized use, existing legislation does not adequately protect it (Hurtado *et al.*, 2020). Another native species is the Drago (*Pterocarpus acapulcensi*), categorized as Vulnerable due to its utilization for its quality wood and the extraction of a resin known as "Sangre de drago," which is used in traditional medicine to treat anemia, tonsil conditions, and dental purposes (SEFORVEN, 1993). Although the logging, exploitation, and use of this species have been officially prohibited in the country since 1984, it appears to be disregarded. Lastly, it is important to emphasize the high endemism of plant species reported in the area. According to the Catalog of the Vascular Flora of Venezuela (Hokche *et al.*, 2008), 451 species are endemic, representing almost 10% of the species recorded within the project's influence area.

21. The high biological diversity of the region allows for the presence of species with high economic and game value, such as birds, mammals, reptiles, amphibians, and fish. Among some of the animal species that inhabit the forests, shrublands, and savannas are (Aguilera y P?rez-Hern?ndez, 2007): mammals such as: the common opossum (*Didelphis marsupialis*), the nine-banded armadillo (*Dasypus novemcinctus*), giant armadillo (*Priodontes maximus*), the Venezuelan red howler (*Alouatta seniculus*), the wedge-capped capuchin (*Cebus olivaceus*), the South American tapir (*Tapirus terrestris*), the collared peccary (*Pecari tajacu*), the bush dog (*Speothos venaticus*), the giant anteater (*Myrmecophaga tridactyla*), the red brocket (*Mazama americana*), the Brazilian porcupine (*Coendou prehensilis*), the cougar (*Puma concolor*), the oncilla (*Leopardus tigrinus*), the margay (*Leopardus wiedii*), the jaguar (*Panthera onca*), the ocelot (*Leopardus pardalis*), the Roraima mouse (*Podoxymis roraimae*), the lowland paca (*Agouti paca*). Reptiles such as: mapanare (*Bothrops spp.*), the South American rattlesnake (*Crotalus durissus*), the boa constrictor (*Boa constrictor*), the green anaconda (*Eunectes murinus*), lizards (*Arthrosaura*, *Crocodylurus*, *Kentropyx*, *Uranoscodon*, *Plica*), turtles (*Podocnemis*, *Peltocephalus*, *Geochelone*), the green iguana (*Iguana iguana*). Amphibians such as: toads (*Bufo margaritifera*, *Metaphryniscus sosae*, *Oreophrynella vasquesi*, *O. nigra* y *O. cryptyca*), frogs (*Colostethus Roraima*, *C. guayanensis*, *C. parimae*, *C. tepuyensis*).

22. In the bird fauna, there are reported 44 endemic species, including: "poncha" (*Criptidegus pteritegus*), Roraiman nightjar (*Caprimulgus Whitelyi*), the rufous-breasted sabrewing (*Campylopterus hyperythrus*), the tepui goldenthrout (*Polytmus milleri*), the tepui foliage-gleaner (*Automolus roraimae*), the streak-backed antshrike (*Thamnophilus insignis*), Yapacana antbird (*Myrmeciza disdisjuncta*), the ruddy tody-flycatcher (*Todirostrum russatum*), the Chapman's bristle tyrant (*Phylloscartes chapmani* y *P. nigrifrons*), the great elaenia (*Elaenia dayi*), the Duida grass finch (*Emberizoides duidae*), harpy eagle (*Harpia harpyja*).

23. The forests in the project intervention area represent 13.8% of the country's forests at the national level (FAO, 2020). Out of the total forest area, 5.6% consists of low forests (5 to 15 meters in height in situ), 25.1% consists of medium forests (15 to 25 meters), and 69.4% consists of tall forests (> 25 meters) (Potapov *et al.*, 2021). In terms of integrity, it is noteworthy that 68.6% of these forests are intact, without any form of disturbance (<https://intactforests.org/>). In addition to these forest characteristics, the project intervention area has a great potential for forest resources, particularly in the sector of the Paragua forest reserve, which covers an area of 782,000 hectares. In this area, commercial species of *Parkia pendula*, *Carapa guianensis*, *Ocotea guianensis*, *Brosimum alicastrum*, *Pentaclethra macroloba*, *Licania micrantha*, *Manilkara bidentata*, *Dipteryx odorata*, *Catostemma commune*, *Centrolobium paraense*, *Erismia uncinatum*, *Hymenaea courbaril*. In the Bolivarian Republic of Venezuela, the management of these areas for the commercial timber exploitation is carried out through forest concessions (with specific regulations and mandates), granted by the governing body for the country's environmental policy (MINEC). However, in this area, there is currently no regulated forest exploitation by the governing authority. Like other areas, this region is subject to constant pressure due to conflicts of land use resulting from the expansion of agricultural and livestock activities, as well as illegal mining, given the presence of the greenstone belt and its high gold potential.

24. In the forests of the project intervention area, the highest carbon stocks are concentrated. It is estimated that there are 1.4 Gt C, which represents 15.4% of the country's reserves. Of this, 0.79 Gt C is found in Above Ground Biomass (AGB), and 0.19 Gt C is in belowground biomass (Spaw *et al.*, 2020). Additionally, 0.37 Gt C is stored in Soil Organic Carbon (SOC) (Hengl *et al.*, 2017). In terms of capture, if we consider that these forests absorb an average of 2.95 t CO₂ eq ha⁻¹ year⁻¹ across all their carbon stocks (FAO-MINEC, forthcoming), it can be inferred that they capture 18.9 Mt CO₂ eq year⁻¹ and offset 7.8% of the country's reported emissions in the second national communication to the UNFCCC for the 2000s decade (243.38 Mt CO₂ eq year⁻¹) (MINEA, 2017). However, the land cover and land use changes that occurred in this area between 2001 and 2021 resulted in the loss of -94,800 ha of forests, equivalent to a decrease of 1.2% of the total forest area, with an average annual rate of -0.07% (Hansen *et al.*, 2013). These deforestation processes are primarily driven by agriculture through the establishment of small-scale farming plots ("conucos[4]⁴"), mining activities associated with the

drainage network, and forest fires at the forest-savanna transitions and within the forests. These activities are carried out by both indigenous communities and outsiders engaged in specific activities such as mining. This deforestation caused an average emission of 2.81 Mt CO₂-e per year from AGB. When compared to the average removal of -13.4 Mt CO₂-e per year that these forests generate, the net carbon flux would be -10.5 Mt CO₂-e per year (Harris *et al.*, 2021).

Areas under Special Administration Regime (ABRAEs)

25. The Venezuelan state, in order to preserve its ecological heritage, has established a national system of ABRAEs. These areas are regulated according to the provisions of the Organic Law for Territorial Ordering [5] (articles 15 to 17). ABRAE is defined as "geographical spaces, sites, and elements of the environment with unique biophysical characteristics or other qualities and potentialities in the sociocultural realm, which merit effective and permanent protection by the State under an administration regime that guarantees their physical integrity without compromising their values, through an utilization consistent with the objectives of protection and appropriate management for these characteristics." These geographical spaces are grouped into three general categories, ranging from those focused on economic development to those aimed at strict protection: 1) Areas of strict protection, scientific, educational, and recreational, 2) Areas of protection with regulated use, and 3) Areas with productive or geostrategic objectives. Currently, there are 409 created ABRAEs (MINEC, 2023), occupying 639,950 km², which, excluding overlaps, represent over 70% of the national territory.

26. Areas of strict protection, scientific, educational, and recreational have prohibited uses, including general agricultural crops, commercial or subsistence breeding of domestic animals, mining, hydrocarbon exploitation, and forestry activities (Chapter V of Decree 276 dated 09/06/1989, Partial Regulation of the Organic Law for Territorial Ordering). For National Monuments, Article 18 states that the only compatible use is the one that leads to the unaltered preservation of the natural environment and the features or geographical or ecological characteristics that justified their creation. In Areas of Protection with Regulated Use, specific productive economic activities allowed are determined in the respective forest planning and management plans. In Areas with productive or geostrategic objectives, economic and productive activities with restrictions are developed based on the protection of their watershed as the upper part of the upper Caroní watershed, which functions as the main water source for the Guri reservoir.

27. The following ABRAEs are located within the project intervention area: Canaima National Park (PNC), Natural Monuments of Tepuys (MNT), La Paragua Forest Reserve (RFLP), Ikabarí River Hydraulic Reserve (RHI), and South Protective Zone of Bolívar state (ZPSEB). These ABRAEs lack planning instruments, which implies a lack of management, surveillance, and control actions by the institutions. **Table 4** presents the relevant characteristics of these ABRAEs.

Table 4. Characteristics of the ABRAE located in the project intervention sectors

Typo of ABRAEs	Category	Name	Watershed sector	Administrato r	Declaration/objectives/characteristic s
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National Park (PNC)	Areas of strict protection	Canaima (3,000,000 ha)	UC and MC	INPARQUE S	<p>Decree No. 770 of June 12, 1962. Official Gazette No. 26,873 of June 13, 1962. Land Use Planning and Regulations for the Eastern Sector of Canaima National Park: Decree No. 1640 of July 18, 1991, Official Gazette No. 34,758.</p> <p>Declaration objective: To protect its valuable landscapes, including its rivers, waterfalls, streams, deep and extensive valleys, mountains (tepuyes), savannahs, forests, and palm swamps, which harbor a great diversity of plant and animal species.</p> <p>In 1994, Canaima National Park was designated as a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site for being a natural reserve with unique and exceptional abrupt reliefs found nowhere else in the world.</p>
Natural Monuments of Tepuys (MNT)		<p>Cadena de tepuyes Orientales</p> <p>Kuken?n (Mataui) - tepui (2,650 m.),</p> <p>Yuruan? - tepui (2,400 m.),</p> <p>Wadakapiapu ? - tepui (2,000 m.),</p> <p>Ilu (incluyendo el Tram?n-tepui) (2,700 m.),</p> <p>Karaurin-tepui (2,500 m.)</p> <p>Uei - tepui (2,150 m). (250,000 ha)</p>	UC	INPARQUE S	<p>Decree No. 1,233 dated November 2, 1990. Official Gazette No. 4,240 dated January 18, 1991. It does not have a Land Use Planning and Regulations.</p> <p>Objective of declaration: To protect the territorial spaces known as tepuyes. The eastern tepuyes include Waikinima, Cerro Ich?n-Guanacoco, and Sierra Marutani.</p> <p>These tepuyes possess unique ecological conditions in the world: they are areas of paleoecological interest where representative features and evidence of the planet's evolution are found, supporting a high degree of endemic flora and fauna.</p> <p>Tepuyes are ecosystems of extreme fragility and pristine conditions that require preservation.</p>
		Cerro Guaiquinima (1,600 m.). (170,000 ha)	LP		

		<p>Cerro Ich?n (1,400 m.), Cerro Guanacoco (1,500 m.). (90.000 ha)</p> <p>Sierra Marutani (1,500 m.) (267,500 ha)</p>	UP		
Forest Reserve (RFLP)	Areas with productive objectives	La Paragua (782,000 ha)	LP	MINEC	<p>Decree No. 1,046 of January 23, 1968. Official Gazette No. 28,541 of January 25, 1968. It does not have a Land Use and Management Regulation and Plan.</p> <p>Declaration Objective: Ensure the sustainable use of forest resources in the Paragua River Basin.</p> <p>This area, like other Forest Reserves in the country, faces conflicts related to land use and constant pressure and encroachment from agricultural and livestock activities. It also faces conflicts with mining activities due to the presence of the greenstone belt and the high gold potential in the area. Additionally, the lack of planning instruments and actions for land use management, surveillance, and control over an extended period has contributed to the anarchic growth of agricultural and illegal mining activities, leading to environmental impacts in these spaces.</p>

Protected Zone (ZPSEB)	Protected areas with regulated use	South of Bolívar state (4,937,700 ha)	UC y MC UP and LP	MINEC	Decree No. 942 of May 27, 1975. Official Gazette No. 30,704 of May 28, 1975. Does not have a Zoning and Use Regulation Plan. Objective of declaration: strategically protect a territorial portion that, due to its natural characteristics of climate, vegetation, soils, and hydrology, constitutes the main water source for the "Simón Bolívar" Hydroelectric Complex (Guri), the main supplier of electrical energy for most of the country. Dense forests predominate, with an average annual precipitation of 4,000 mm. The area includes ecosystems of rolling plains, tepuyes, waterfalls, mesa-like hills, and mountain ranges. Almost entirely overlapping with other legal designations.
Hydraulic Reserve (RHI)	Areas with productive objectives	Ikabará (40,000 ha)	UC	MINEC	Decree No. 2,311 dated June 5, 1992. Official Gazette No. 4,548 dated March 26, 1993. No Land Use Planning and Regulation Plan. Objective of declaration: To prevent mining exploitation in the headwaters of the Ikabará River. All these sectors, covered by forest ecosystems, are affected by scattered mining sites, with a rural branch of approximately 121 km connecting the towns of Santa Elena de Uairén and Ikabará.

Source: Original elaboration, based on information from the ABRAEs (MINEC, 2023).

28. An initial assessment of these ABRAEs using the MEET tool indicates that they are threatened by unsustainable development, including human settlements, tourism, mining, and infrastructure, with results below the international standards proposed by the International Union for Conservation of Nature (IUCN).

Population

29. The population of the Bolívar state, which encompasses the Caroní River Basin and according to the population and housing census, is 1,413,115 inhabitants, representing 4.9% of the total national population (INE, 2011). The population is concentrated to the north of the state, accounting for 81.9%, in the influence areas of the cities of Ciudad Guayana, Ciudad Bolívar, and Upata. The remaining 18.9% of the population is sparsely distributed across the extensive territory in small population centers where basic services, particularly in housing, education, and healthcare, are deficient. This results in a low quality of life, as is the case with populations in Santa Elena de Uairén, La Paragua, Ikabará, Ciudad Piar, El Manteco, Guri, and Pao del Hierro, among others (CVG-EDELCA, 2004). Within the

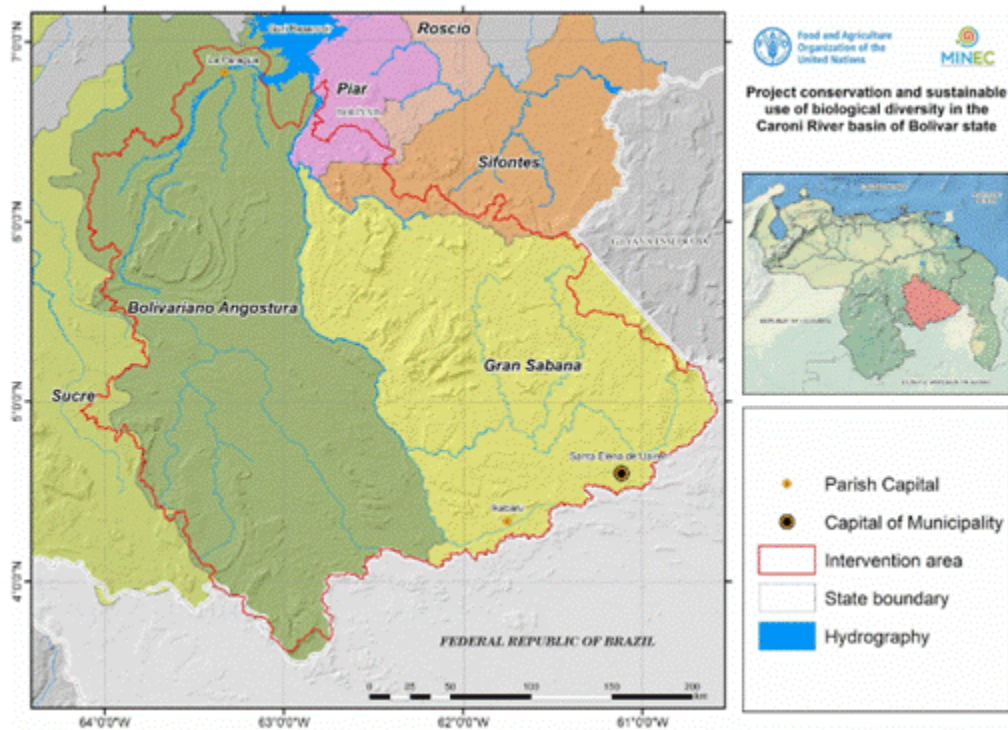
Caron? River Basin, two culturally distinct settlement patterns coexist: the non-indigenous (criollo) population and the indigenous population, which have had limited interaction for over two centuries.

30. Considering the size of the basin and the population, it is a basin with low population density, especially in the Paragua River sub-basin. The regional economy, primarily based on industrial activities and hydroelectric power generation, has led to a significant concentration of urban services and employment in Ciudad Guayana. This has resulted in a strong imbalance and weak territorial integration, with marked social marginalization in small population centers, particularly in rural populations engaged in artisanal mining and the indigenous population. These groups experience extremely precarious quality of life conditions. There is a lack of intermediate population centers that would allow for balanced occupations and contribute to the economic expansion by utilizing the available natural resources in the basin as an alternative. Moreover, these centers would play a role in exercising national sovereignty in the border areas. The small towns lack an economic base and urban services that would enable them to overcome poverty. Artisanal mining activities and the pattern of indigenous subsistence farming are the most visible elements within the basin.

Population in the project intervention area

31. According to the Information System for Territorial Management and Planning (SIGOT), the project intervention area encompasses 53.4% (49,218 km²) of the Angostura municipality (formerly Ra?l Leoni), 41.64% (38,379 km²) of the Gran Sabana municipality, 3.12% (2,876 km²) of the Piar municipality, and 0.96% (885 km²) of the Sifontes municipality (SIGOT, 2022). Within this area, the population is concentrated in specific areas, namely the Barceloneta parish (La Paragua) in the Angostura municipality and the Gran Sabana municipality with the Gran Sabana and Ikabar? parishes (Figure 6).

Figure 6. Municipalities within the project intervention area.



Source: Original elaboration based on SIGOT (2022).

32. According to the official population census figures of Venezuela, conducted by the National Institute of Statistics (INE), the total population in the project intervention area is 44,641 inhabitants (INE, 2011) (Table 5). This population, according to the analysis of unsatisfied basic needs (NIB[6]6) conducted by the INE, indicates that 61.61% of households are considered poor (surveyed population, excluding households in indigenous, other class, and collective dwellings) (Table 6).

Table 5. Estructura poblacional por sexo en municipios y parroquias del ?rea de intervenci?n del proyecto

Municipality	Parish	Male	Female	Total
Gran Sabana	Gran Sabana	13,565	13,057	26,622
	Ikabar?	980	848	1,828
Angostura	Barceloneta	8,680	7,511	16,191
	Total	23,225	21,416	44,641

Source: 2011 Census of the INE (INE, 2011).

Table 6. Poverty by NIB in households of the municipalities and parishes within the project's intervention area[7]7.

Municipality	Parish	Not poor	Non-Extremely poor	Extremely poor	% Poor
Gran Sabana	Gran Sabana	2,936	1473	799	41.90
	Ikabar?	133	170	113	68.03
Angostura	Barceloneta	898	955	1,065	69.03
	Total	3,967	2,598	1,977	

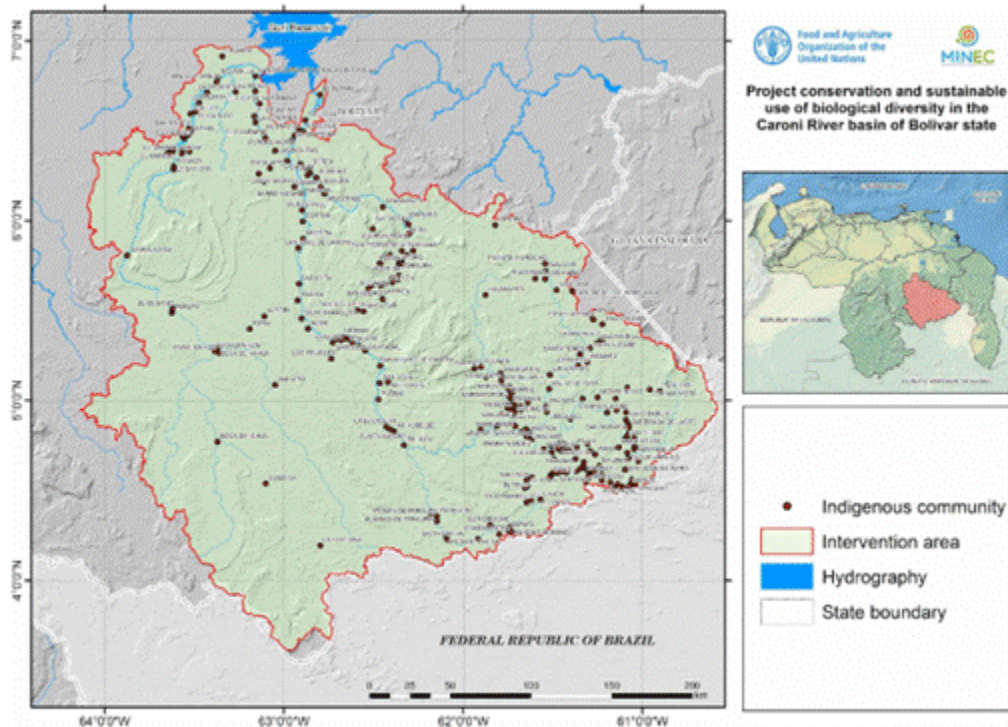
Source: 2011 Census of the INE. Redatam+SP, CEPAL/CELADE 2003-2013[8]8.

33. The project intervention area is located in an ancestral territory with an indigenous population belonging to the Pem?n people, with a total population of 30,148 people according to the INE. Of these, 15,140 (50.22%) are women and 15,008 (49.78%) are men. In the Gran Sabana municipality, 71.67% of the indigenous population, represented by the Pem?n people[9]9, is located in the upper and middle basin of the Caron? River, covering a large part of the territory of the Canaima National Park.

The most important communities of the Pem?n people are Kavanay?n and San Francisco de Yuruan?. The Gran Sabana municipality is the tenth in the country where the indigenous population is the majority in relation to its total population, with 73.76%.

34. In the project intervention area, there are 268 established indigenous communities (SIGOT, 2022). These communities belong to the Pem?n (99.3%) and Sanem? (0.87%) ethnic groups and are predominantly concentrated in the Gran Sabana municipality, specifically in the Secci?n Capital Gran Sabana parish, with 142 communities. This represents 62% of the communities found in the Caron? River basin (CVG-EDELCA, 2004) (Figure 7).

Figure 7. Distribution of indigenous communities within the project intervention area.



Source: Original elaboration based on SIGOT data (2022).

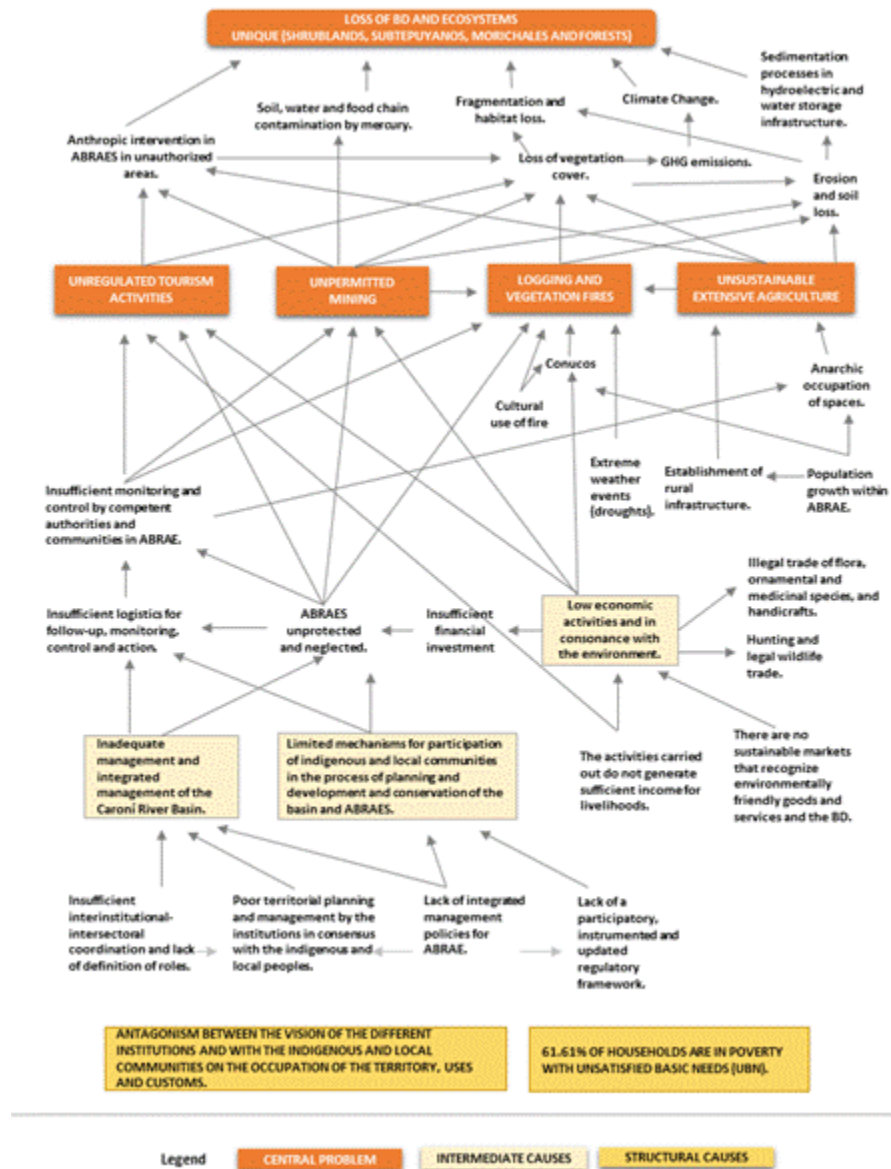
35. The criollo population (non-indigenous communities) is mostly settled in the city of Santa Elena de Uair?n, the capital of the Gran Sabana Municipality, where 26 communities are established, with a population of 16,340 people.[10]10.

Global environmental problem (threats and their main causes)

36. The main causes of biological diversity loss in the Caron? River basin are: i) unauthorized and unsustainable tourism activities, ii) unauthorized and unsustainable mining, iii) deforestation and vegetation fires, and iv) unsustainable extensive agriculture and livestock practices. This issue is associated with the following structural causes in the project area: i) a population experiencing poverty and unmet basic needs, and ii) differing perspectives between institutions and local communities (both indigenous and non-indigenous) regarding the implementation of integrated landscape management. On one hand, this situation leads to limited mechanisms for the participation of local communities in

the planning, development, and conservation of the Caron? River basin, resulting in inadequate management and comprehensive handling of the basin. On the other hand, the local population engages in activities that do not generate sufficient income to sustain their livelihoods, and there is a lack of sustainable markets that recognize biological diversity -friendly goods and services. As a result, there are few economic activities in harmony with the environment. All of this leads to the loss of vegetation cover, erosion, soil degradation, mercury contamination, which in turn causes habitat fragmentation and loss, sedimentation in water infrastructure, and consequently, the loss of biological diversity and decline in the quality of water resources and unique ecosystems (shrublands, subtepuys, morichals, and forests). (Figure 8).

Figure 8. Problem tree. Main causes of biological diversity loss in the Caron? river basin.



Source: Original elaboration.

37. In general, the Caron? River basin is currently experiencing a series of anthropogenic pressures and constant threats that have led to the loss of vegetation cover, soil degradation, biological diversity loss, and water resource quality. Additionally, there is fragmentation and habitat loss, soil erosion, savannization, and contamination of soil, water resources, and the food chain due to mercury. All of these are consequences of practices that have modified the original ecosystems, such as specific activities of small agricultural and livestock producers, illegal logging, unsustainable indigenous farming practices over time, and mining activities with degrading extraction techniques. In most of these activities, periodic deforestation occurs, affecting the forest vegetation and leading to a process of savannization and subsequent alteration in the protective zones of the rivers. The pressures and impacts of socio-economic and subsistence practices vary across each of the ecosystems. **Table 7** mentions some of these, associated with the ecosystems of the Caron? River basin.

Table 7. Pressures and impacts on the ecosystems within the intervention area of the Caron? River basin.

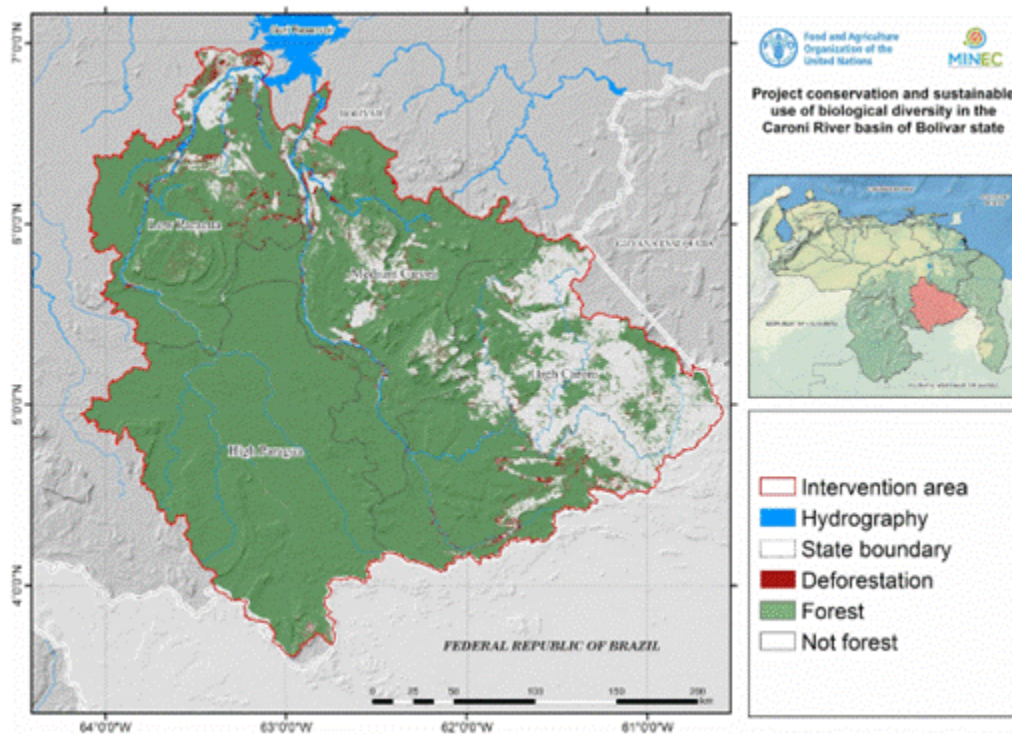
Ecosystem	Definition	Pressures	Impacts	Description (principal pressure)
Forest	Natural vegetation formation, typically multi-layered, where tree-like life forms prevail, reaching a minimum height of five meters, and with a canopy that exhibits a certain degree of coverage intensity (MARNR, 1982).	Agriculture (intensive and conucos) Mining Extensive livestock farming Illegal logging	Loss of vegetation cover, soil, biological diversity, and water resource quality, fragmentation and habitat loss, soil erosion, savannization, and	The establishment of conucos is one of the main pressures within these ecosystems, as they contribute to deforestation, degradation, and fragmentation of the forest, sometimes leading to forest fires that affect other ecosystems.
Gallery forests	Riparian forests are those wooded communities that occupy habitats adjacent to drainage concentration axes, whether they are permanent or intermittent, where soil moisture is higher than expected under existing climatic conditions.	Agriculture in conucos Mining Illegal logging	contamination of soil, water resources, and the food chain by mercury.	
Morichales (Moriche Palm Swamps)	They are defined as "palm savannahs" and are considered part of savanna ecosystems because they are composed of an ecologically dominant herbaceous layer, with the presence of palms having a marginal influence. These are savannahs that are flooded for a large part of the year, characterized by deep, clayey soils with dark coloration and high organic matter content.	Utilization of resources for construction, food, and craftsmanship. Fishing and hunting. Mining.	Loss of vegetation cover and biological diversity, fragmentation, and habitat loss.	The main pressure on Morichales is the utilization of resources for construction, food, and craftsmanship, which leads to processes of deforestation and degradation.

Savannahs	Mono-stratified vegetation formation dominated by perennial grasses, largely devoid of tree or shrub elements or present in scattered form (MARNR, 1982).	Ancestral customs of fire use Mining Uncontrolled tourism Extensive livestock farming	Loss of vegetation cover, soil, and biological diversity, as well as water resource quality, fragmentation and habitat loss, soil erosion, and contamination of soil and water resources.	The ancestral customs of fire use by the indigenous Pem?n community are the main pressure on the savannahs. Fire is used without any control, leading to large and frequent forest fires.
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Source: Original elaboration with information from CVG-EDELCA, (2004) y CAKY, (2021).

38. Among the threats to biological diversity in the area, deforestation is present, which can be observed through the Global Forest Change product by Hansen *et al.* (2013). It shows the loss of forest cover in the project intervention area from 2000 to 2021, as depicted in **Figure 9**. The color green represents forest cover in 2021, while the accumulated deforestation from 2000 to 2021 is shown in red. Analysis of this data reveals that in the year 2000, 84.0% of the project intervention area was covered by forests. However, by 2021, this percentage had decreased to 82.9%, indicating a loss of 1.2% (-94,800 ha) of forest over the past 21 years. The average annual loss was approximately -4,514 hectares per year, with a mean annual deforestation rate (MADR) of -0.07%.

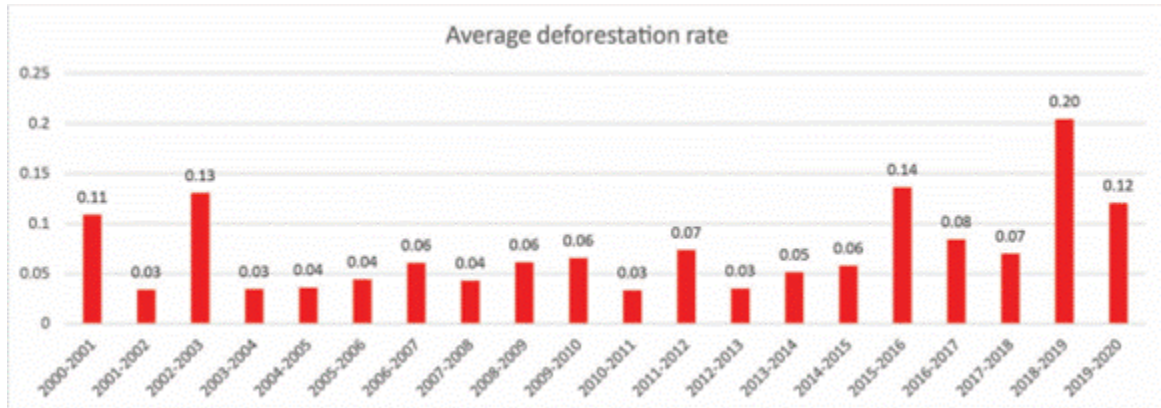
Figure 9. Cumulative deforestation from 2000 to 2021 in the project intervention area.



Source: Original elaboration based on data from Hansen *et al.* (2013).

39. As seen in Figure 10, the period 2018-2019 had the highest MADR value with -0.20, followed by 2014-2015 with -0.14 and 2002-2003 with -0.13. In terms of basin sectors, the BP sector experienced the greatest loss with -34,814 ha, followed by the AC sector with -31,126 ha, the MC sector with -17,597 ha, and the AP sector with -3,271 ha. These sectors had respective mean annual deforestation rates (MADR) of -0.12, -0.11, -0.07, and -0.01.

Figure 10. Average annual deforestation rate from 2000 to 2020 in the project intervention area.

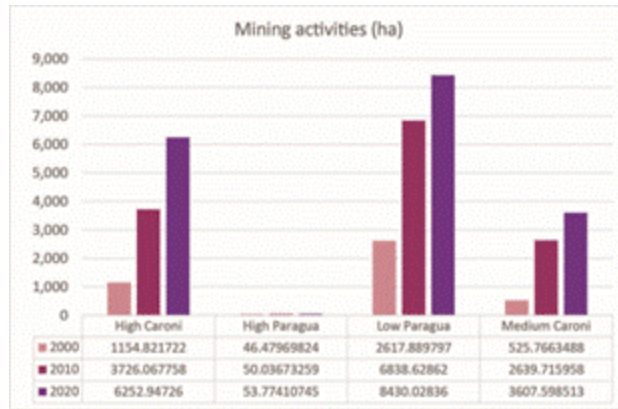


Source: Original elaboration based on data from Hansen *et al.* (2013).

40. Other threats include unauthorized mining activities for alluvial diamond and gold extraction, which utilize environmentally degrading technologies such as hydraulic monitors and mercury. These activities occur in sites such as El Mosquito, El Polaco, and Ikabar?-El Infierno, as well as in the upper Paragua area in the Antabari River zone (Upper Caron?). As a result of these interventions, deforestation and soil loss processes (erosion and sedimentation) have occurred in the adjacent areas designated for storage and other infrastructure required for mining operations.

41. From the land cover and land use maps of MapBiomias Amazonia, data on the mining situation in the project's influence area were extracted for the years 2000, 2010, and 2020. These data revealed that mining activity in the intervention area had been gradually increasing. In the year 2000, there were 4,345 ha of mining activity, which represents a 305% increase to reach 13,254 hectares in 2010. Subsequently, there was a further increase of 138.4% to reach a total of 18,344 ha in 2020 (MapBiomias Amazonia, 2022). In terms of basin sectors, the BP sector had the largest area of mining activity in all three time periods. It increased by 261.2% from 2000 to 2010 and by 123.3% from 2010 to 2020. Following that is the AC sector, which saw an increase of 322.7% from 2000 to 2010 and 167.8% from 2010 to 2020. The MC sector experienced a 502.1% increase from 2000 to 2010 and a 136.7% increase from 2010 to 2020. Lastly, the AP sector had a 107.7% increase from 2000 to 2010 and a 107.5% increase from 2010 to 2020 (**Figure 11**).

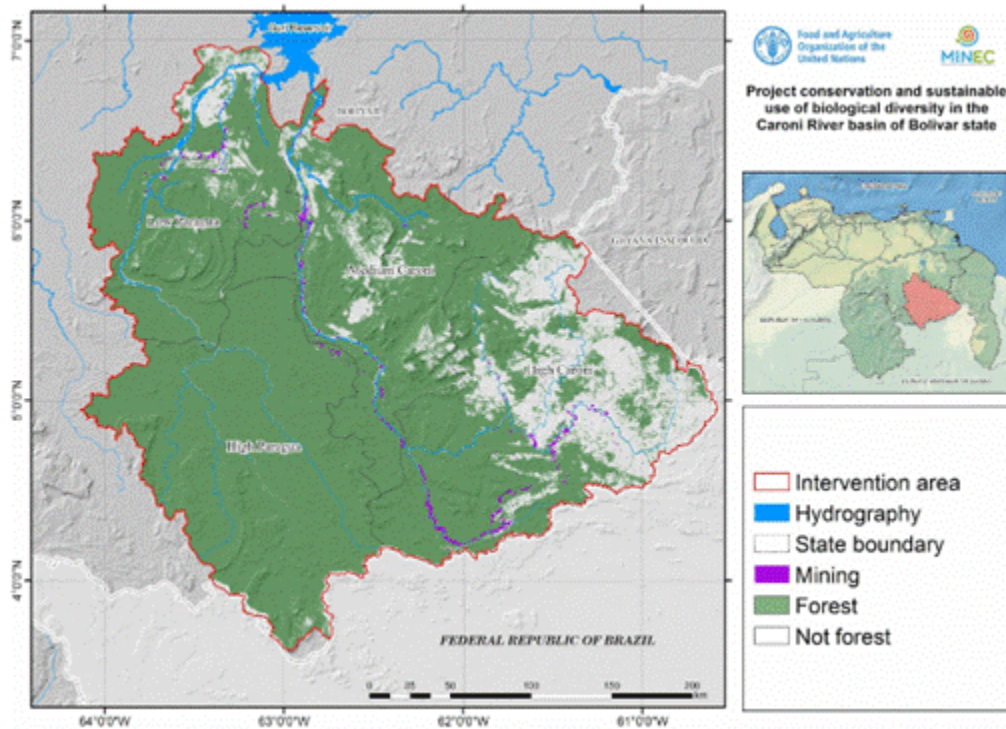
Figure 11. Mining activity for the years 2000, 2010 and 2020 in the project intervention area.



Source: Original elaboration based on data from MapBiomias Amazonia (MapBiomias Amazonia, 2022).

42. Spatially, in **Figure 12**, the situation of mining in the project intervention area for the year 2020 can be visualized.

Figure 12. Mining activities for 2020 in the project intervention area.



Source: Original elaboration based on data from MapBiomias Amazonia (MapBiomias Amazonia, 2022).

43. Uncontrolled tourism activities constitute another threat to the biological diversity of the landscape. Different types of biomes predominate in the tepuis, which are highly sensitive to anthropogenic activities, including trampling by hikers and deliberate fires, which have multiplied in recent years with the increasing number of national and foreign visitors, especially in Roraima-tepuy, Kuken?n-tepuy, and Auy?n-tepuy. On the other hand, the use of off-road vehicles, opening trails in unauthorized areas, causes vegetation destruction, soil degradation, erosion, and sedimentation, as well as soil and water pollution due to improper waste disposal.

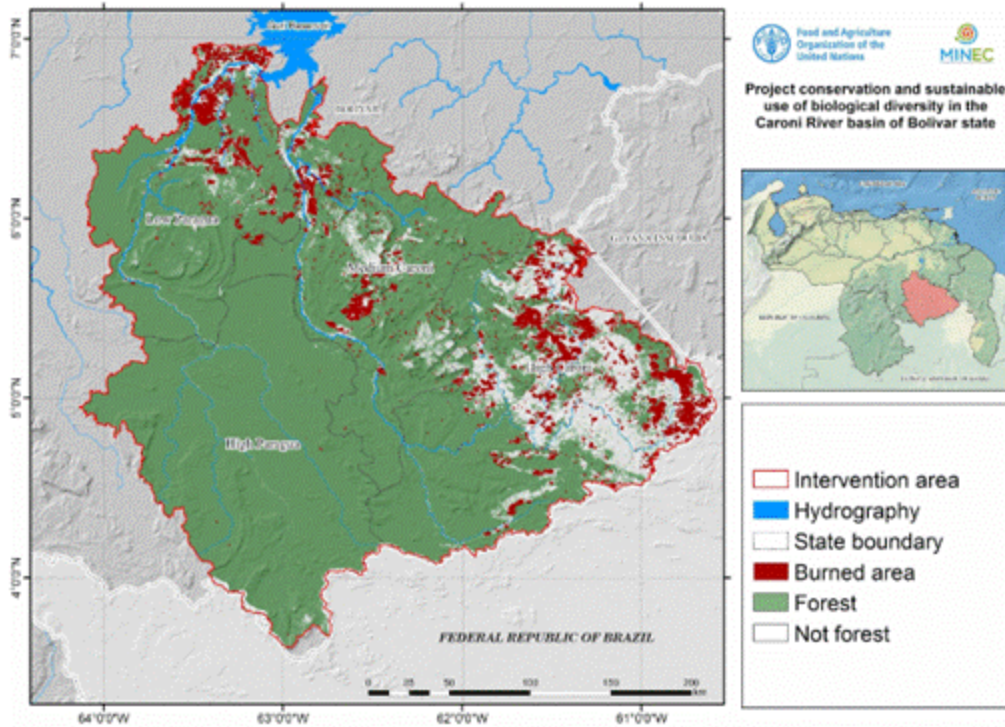
44. An extremely negative activity is the uncontrolled extraction of quartz crystals, orchids, bromeliads, and other species of flora and fauna, such as birds, especially the Venezuelan Psittacidae family, represented by red and green macaws (*Ara chloroptera* y *Ara militaris*), the yellow-shouldered parrot (*Amazona barbedensis*), the yellow-crowned parrot (*Amazona ochrocephala*), brown-throated parakeet (*Aratinga pertinax venezuelae*), and the black-headed parrot (*Pionites melanocephala*).

45. Forest fires are another environmental threat to consider in the project intervention area. According to the data obtained during the period 2000-2021, 441,487 ha were burned, representing 5.6% of the total area. (Balch *et al.*, 2020). Furthermore, there were 15,920 hotspots detected by the Fire Information for Resource Management System (FIRMS) in 2022 (FIRMS, 2022). At the basin level, the AC has the largest area of burned land, with 242,774 ha (9.9% of its total area), and the highest number of hotspots, with 8,261 points. Followed by the BP with 123,494 ha (5.6%) of burned area and 4,934 hotspots, the MC with 74,717 ha (5.0%) of burned area and 2,656 hotspots, and the AP with 502 ha (0.03%) of burned area and 69 hotspots.

46. It is important to note that adverse weather conditions in the intervention area contribute to vegetation fires, specifically related to the El Ni?o phenomenon, which is characterized by increased drought and temperatures. These conditions create ideal circumstances for the rapid drying of fuel, thereby increasing the likelihood of fire ignition.

47. In addition to this, the ancestral culture of the Pem?n indigenous community defines the use of fire as a symbol of life and joy, using fire in numerous aspects of their lives. It is used for cooking, communication, clearing paths, hunting, preparing conucos, keeping themselves warm, warding themselves off from dangerous animals, healing illnesses, collecting insects, drying firewood, and fishing. In the savannahs, for cleaning, maintenance for fire prevention, rejuvenation, and for keeping savannahs beautiful and green (Rodr?guez, 2004). The Pem?n culture has been opposed for years to the vision of technicians and scientists working in the Caron? River basin. For the technicians, fire is an external agent of the landscape that has modified and destroyed it, diminishing its value and beauty, and causing environmental problems that deteriorate the basin and reduce the lifespan of downstream reservoirs. (Rodr?guez, 2004; Sletto, 2008). For this reason, fire control policies have been implemented since the 1970s, which have faced opposition from the Pem?n community, who strongly limit the strategies for controlling forest fires. In **Figure 13**, the burned areas can be observed during the 21 analyzed seasons.

Figure 13. Burned areas for the last 21 years in the project intervention area.



Source: Original elaboration based on data from Balch *et al.*, (2020).

Barriers that limit the solution of the problem

Barrier 1: Weak interinstitutional mechanisms for integrated landscape management and conservation of biological diversity.

48. Institutional weakness has hindered the implementation of specific conservation activities. At the local level, municipalities have not been sufficiently involved in the management of ABRAEs. Various underlying causes contribute to this issue, including limited intersectoral and interinstitutional coordination, differing institutional visions or objectives, and existing coordination mechanisms. For example, working groups, workshops, and other activities are only activated to carry out specific actions based on specific, and sometimes emergency, situations.

49. The institutional and administrative resources dedicated to the ABRAEs are insufficient. Furthermore, the capacity to coordinate and operate is weak, leading to inadequate control and management of the APs in the Caron? River basin. The budget and financial management of INPARQUES have been experiencing budgetary limitations that impact their operational capacity, including the acquisition of materials and supplies, and payments for services and personnel. This has also led to a reduction in surveillance and supervision activities due to the lack of supplies that guarantee the minimum functioning of equipment and vehicles.

50. Social participation in the management of ABRAEs is low. This absence affects environmental education processes, the consolidation of community agreements for conservation, the promotion of new sustainable productive alternatives (ecotourism, sustainable rural production, and the valuation of environmental goods, etc.), as well as the involvement of communities in decision-making, among other priority issues. The limited capacity for communication, dissemination, and education in conservation matters affects an environmental culture that is inclined towards unsustainable activities related to natural resources among actors from the national and local government, indigenous and criollo communities, private enterprises, educational institutions, and organized society in general.

51. The planning in the tourism, forestry, mining, and agricultural sectors is completely isolated and pays little attention to the use and conservation of globally and locally important biological diversity. The regulatory and normative framework for the planning and management of ABRAEs is also deficient, which results in limited effectiveness in the management and combating of threats to biological diversity. An example of these deficiencies is the lack of adequate provision in the process of preparing the Management Plans and Regulations of Use (PORUs) and management plans for the participation of indigenous and criollo communities.

52. The Caron? River basin stands out for its wide variety of ecosystem services, biological diversity, and cultural and economic richness. Despite the fact that most of the basin is protected by different ABRAEs, their management does not meet the conservation needs of the area, due to limited institutional capacity, lack of resources and information, and insufficient tools that bring together the vision of all stakeholders to manage biological diversity in a sustainable manner. An example of this is that the MN, the Ikabar? hydraulic reserve, as well as the ZP in the southern part of the Bol?var state and the La Paragua Forest Reserve do not have usage regulations. The Canaima National Park only has usage regulations in its eastern sector, which is currently outdated.

53. The information related to climate, biological diversity, and hydrology is outdated. A significant portion of the existing infrastructure is currently inoperative and lacks state-of-the-art technology. For example, the hydro-meteorological stations of CORPOELEC, once their budget was reduced, have not received continued maintenance to ensure their operability. This represents a limitation for the collection, management, and interpretation of crucial hydrological, climatic, and meteorological information necessary for monitoring and tracking the environmental aspects of the Caron? River basin.

54. Although there are studies and a master plan for the Caron? River basin, the absence of an information system that collects, integrates, and makes publicly available the information hinders a clear understanding of the socio-ecological systems at regional and local scales. This limits the effectiveness in management and informed decision-making. These information gaps hinder interinstitutional and intersectoral coordination, as well as coordination with the inhabitants of the basin, and impede the design of effective mechanisms to mitigate pressures on ecosystems and promote sustainable management of natural resources in the region.

Barrier 2: Different perspectives among the stakeholders involved regarding the preservation and use of conservation objects.

55. One of the greatest weaknesses in the current institutional framework is the lack of an integrated vision and coordinated approach regarding the planning and management of protected areas in the Caron? River basin. While the MINEC is the national environmental authority and is legally designated as the primary institution responsible for the management of ABRAEs, the area includes a wide range of different categories of ABRAEs in which various institutions have influence and shared responsibilities. This is why opportunities for synergy between institutions are not being exploited, preventing greater operational effectiveness and cost efficiency. Institutional conflicts, such as overlapping competencies and low levels of coordination, have hindered the addressing and resolution of conflicts over the use of space and natural resources. It has also limited the improvement and increase of surveillance and control, and even the definition and implementation of a consensus-based management instrument for this important and strategic territory. As a result, this situation has a negative impact on the conservation of biological diversity.

56. The natural resource management institutions within the governmental sector have different perspectives on the administration of the territory where the Caron? River basin and various ABRAEs are located. On one hand, there is the watershed management approach aimed at conserving the basin for water and energy production purposes. On the other hand, there is the conservation approach focused on protecting biological diversity, public enjoyment, and the continuity of cultural heritage. At present, the utilization of both mineral and non-mineral resources is being executed without the presence of any official regulation and control mechanisms that permit such operation within the basin.

57. The implementation of management policies and regulations has led to disagreements among the indigenous and criollo population regarding programs, projects, and policies that seek to integrate their

perspectives and opinions, often done too late or after they have already been defined. An example of this is the case of CORPOELEC, who, recognizing the environmental importance of the Caron? River basin, developed the Master Plan for the Caron? River Basin (CVG-EDELCA, 2004). However, this plan has not been successfully consolidated, as it is considered to lack a multisectoral management vision and to not adequately address the requirements of its natural, social, and economic dynamics. Nonetheless, it is a valuable resource that could be utilized to engage all stakeholders with a comprehensive vision.

Barrier 3. Unsustainable management in conservation areas and other priority landscape areas

58. The Caron? River basin has a high potential for mineral resources such as iron, bauxite, diamonds, manganese, kaolin, dolomite, titanium, aluminum, quartz, rare earths, and other minerals. These particular lithological characteristics in the entire area have led to the exploitation of precious minerals such as gold and diamonds, which have been extracted through traditional and artisanal mining methods using pans and sieves. However, in recent years, illegal mining has increased, employing highly environmentally degrading technologies and substances such as hydraulic monitors and mercury for gold recovery. The activities of artisanal mining and illegal mining not only degrade the soil and vegetation cover but also result in waste being released into the environment, causing damage and disruptions at the ecological level. This affects the trophic chains of both terrestrial and aquatic fauna. Consequently, the deteriorated vegetation cover can only be restored through the introduction of recovery strategies or by allowing for long-term natural recovery. The numerous environmental impacts of small-scale artisanal mining and illegal mining are perhaps of greatest concern to institutions engaged in management activities in the basin. The disposal of waste and wastewater into tributary rivers, damage to the river in alluvial areas, high sedimentation and concentrated erosion damage in nearby areas where the activity takes place, deforestation, and the consequent destruction of the landscape and impact on biological diversity all demonstrate the vulnerability of ecosystems under the influence of this type of activity. This impact equally affects indigenous populations that rely on natural resources (water, forests, wildlife) as a means of livelihood.

59. The income generated by these mining activities allows indigenous and local communities to obtain sufficient economic resources. Consequently, these communities prefer to engage in mining activities at the expense of the environment, rather than pursuing income or utilizing other natural resources with environmentally friendly techniques. These factors lead communities to focus their efforts on activities that allow them to generate income regardless of the environmental impact. This, combined with weaknesses in institutional management, limited presence in the territory, and inefficient governance mechanisms in the basin, contributes to the situation. This situation persists despite the legal protection of the entire region through legal frameworks.

60. Similarly, a dynamic of forest fires persists in the basin, particularly evident in savanna ecosystems. This affects the forests and morichales located in close proximity. As a result, there have been losses of vegetation cover, soil, biological diversity, and water quality; as well as habitat fragmentation and loss, soil erosion, soil pollution, savannization, and ultimately landscape modification. This phenomenon is particularly pronounced in the current landscapes of the Gran Sabana, where the presence of the human population, specifically the indigenous Pem?n communities, has been historically documented. In their traditional worldview, fire is considered an element that brings joy to their people, their homes, and their land. Thus, fire is intertwined in numerous aspects of Pem?n life and is part of their self-definition as "people of the savanna"

61. There have been various initiatives that have attempted to control fires. In 1974, fire control efforts were initiated in the Gran Sabana through the Master Plan of Canaima National Park, which identified forest fires as one of the main environmental problems in the park and established legal actions to control them for the first time. According to Rodr?guez (2002), several interventions were subsequently undertaken to eliminate or reduce the use of fire in the Gran Sabana. These interventions ranged from military repression to the introduction of alternative agricultural practices, as well as a fire control program developed by the company Electricificaci?n del Caron? (EDELCA, now known as CORPOELEC) to protect gallery forests in order to prevent erosion and sedimentation in the Guri Reservoir. However, none of these initiatives have succeeded in reducing the number of fires (Barreto, 1989), resulting in an unsustainable program over time.

62. Some authors have pointed out that the Pem?n's stance towards fire control policies manifests as a silent but persistent resistance (Scott, 1990). The Pem?n people have continued with their traditional burning practices despite institutional efforts to change them. They have even started fires to challenge the EDELCA firefighters. Currently, the use of fire remains an integral part of their indigenous identity (Sletto, 2006), forming part of their worldview. While this represents a barrier, it could also serve as the foundation for an alternative knowledge production project that leads to a more participatory and effective fire management approach, considering that the management efforts carried out so far have been marked by misunderstandings and disapproval from the Pem?n indigenous people.

Barrier 4. Limited biological diversity-friendly economic alternatives that enable sustainable improvement in the quality of life for indigenous and criollo communities.

63. Despite the recognition of indigenous communities and the rights granted to them by Venezuelan law[11]11 (such as maintaining and promoting their own economic practices based on reciprocity, solidarity, and exchange, as well as preserving their traditional productive activities), there are gaps in optimizing the contribution of state institutions to improve their livelihoods, particularly those related to biological diversity and ecosystem goods. Institutional weaknesses (human resources, equipment, and infrastructure) act as barriers to effective planning. These weaknesses limit long-term compliance with regulations, proper coordination, and support to communities living in the basin that require the implementation of practices enabling sustainable use of the resources on which they rely. Additionally, the lack of awareness regarding the economic effects of environmental degradation hinders the appreciation of the benefits of conservation and provides little incentive for the protection of biological diversity.

64. For the indigenous community, the territorial management approach is based on living within the principles and values inherent to their culture and being the decision-makers in their own lives. From this perspective, most proposals from institutions are not accepted because they do not arise from dialogue or agreements between both actors. Studies in some Pem?n communities reveal that the livelihoods of the inhabitants depend mostly on activities that are not environmentally friendly. This is due to insufficient agricultural production that fails to meet their food needs. Hence, it becomes necessary to search for more profitable alternatives, such as mining activities, even though they are not permitted and lack sustainability.

2) The baseline scenario and any associated baseline project.

Legal and Policy Framework

65. The Constitution of the Bolivarian Republic of Venezuela (1999), in Article 127, recognizes the right to a healthy environment and emphasizes the State's responsibility to protect the environment, biological diversity, national parks, natural monuments, and other areas of ecological importance. On the other hand, Article 128 states that territorial planning policies should be developed taking into account ecological, geographical, population, social, cultural, economic, and political realities, following the principles of sustainable development, including information, consultation, and citizen participation.

66. The Organic Law for the Environment, enacted in 2006, establishes as part of the foundations for environmental management the principles of prevention, precaution, citizen participation, effective protection, environmental education, limitations on individual rights, responsibility for environmental

damage, impact assessment, and environmental harm, among others, as guiding principles for any environmental public policy (Article 4). This law incorporates the concept of environmental management for the first time.

67. The Forest Law, enacted in 2013, aims to establish principles and regulations that guarantee the conservation of forests and other components of the country's forest heritage, in accordance with the social, environmental, and economic interests of the nation, for the benefit of present and future generations. It is important to mention that both the Organic Law for the Environment and the Forest Law recognize the existence of populations dependent on forests and stipulate their participation and consultation regarding the use of natural resources, specifically the management of forest heritage in demarcated indigenous lands. They also emphasize the participation of the people's power through public consultation in general. In this regard, and in addition to these two laws, the legal framework includes other laws that guarantee the participation and prior consultation with indigenous peoples and local communities in the context of natural resource utilization activities, such as the Indigenous Peoples Law, the Law on Demarcation and Guarantee of Habitat and Lands of Indigenous Peoples, and the Organic Law of Popular Power and the Communes Law.

68. The regulations that govern the conservation and utilization of biological diversity are divided into Laws, Decrees, and Special Plans: The Law for the Protection of Wildlife 1970 establishes the need to promote and conserve resources that serve as food and shelter for wildlife. Consequently, the National Executive must take the necessary measures to preserve, modify, or restore the habitat of wild animals. The Law on Biological Diversity of 1999 establishes the guiding principles for conserving the legal assets that make up the biological diversity of the country, including genes, individuals, and animal and plant species, including forestry, in different ecosystems. It also regulates access to and use of these biological and genetic resources. Decree 2,304 establishes the regulations on hunting in special areas and natural ecosystems, published in Official Gazette 34,987 in 1992. Decree 3,269 establishes the regulations for the Law on the Protection of Wildlife, published in Extraordinary Official Gazette 5,302 in 1999. The Plan for the Homeland 2019-2025, which in its Historic Objective V establishes "to contribute to the preservation of life on the planet and the salvation of the human species." The plan specifies the following objectives: i) develop a comprehensive policy for the use and enjoyment of natural resources, based on respect for nature, that guarantees the conservation, protection, and sustainability of biological diversity and the national water system; and ii) develop training programs associated with specific territorial units to achieve responsible and sustainable environmental management.

69. On the other hand, the Organic Law for Territorial Planning (LOPOT), enacted in 1983, governs aspects of territorial planning based on principles such as: The planning and conservation of forest ecosystems, the recognition of the multiple uses and functions of forests, their value as an important part of the national economy, the need to undertake rational activities to maintain and increase forest cover through reforestation and repopulation of unproductive, deforested, and degraded lands, the generation of employment and social well-being, and the harmonization of national and external demand with resource supply. According to the provisions of the law, ABRAEs (including Forest Reserves) are subject to the preparation of management plans. Articles 15 to 17 of the LOPOT establish the ABRAEs and determine that these areas constitute zones of the national territory that are subject to a special management regime according to special laws. The LOPOT establishes 24 categories of ABRAEs and states that these will be created by presidential decree, which will set the boundaries and designate the entity responsible for their administration. It is also established that each ABRAE will have a management plan and a use regulation that regulates the permitted uses (PORUs)[12]12. The PORU consists of two instruments: i) the Zoning Plan and ii) the Use Regulation.). Currently, there are 409 ABRAEs created, belonging to 21 out of the 24 categories, occupying 63,995,000.75 ha, which, excluding overlaps, represent more than 70% of the national territory. However, only 25.25% of the total ABRAEs have a PORU; and of the total area affected by any category of ABRAEs, only 11.85% is regulated by this legal management instrument (MINEC, 2023).

70. The Water Law, enacted in 2007, establishes the provisions governing the integrated management of water as an essential element for life, human well-being, and sustainable development of the country. This law is of strategic nature and state interest. Article 18 states that water management "shall encompass the conservation of hydrographic basins through the implementation of programs, projects, and actions aimed at the harmonious and sustainable use of natural resources. The conservation of hydrographic basins shall consider the interactions and interdependencies among the biotic, abiotic, social, economic, and cultural components that develop within them."

71. The Organic Law for Tourism (2005) establishes that one of its objectives is the protection of the environment (Article 1). Likewise, tourism activities should be conducted while safeguarding the natural and cultural heritage from the perspective of sustainable development (Article 36). An environmental impact study should be an inherent part of the conditions for tourism development. Furthermore, the law provides for the declaration of tourist zones of interest, including those with high natural and ecological value (Article 40) and those with a tourism vocation (Article 45). In the context of community-based tourism, proper management of the natural and cultural heritage is emphasized (Article 48).

72. The Organic Law of Municipal Public Power (2010), which regulates the areas of normative application at the local level. In fact, municipalities have competence in the issuance of administrative acts and regulations concerning environmental management within their territory. For this purpose, both territorial planning and environmental protection are part of the norms and environmental public policies that can be determined from this primary unit of organization of public power.

73. The Constitution of the Bolivarian state (2001), which constitutes the legal framework at the state level, includes several relevant principles. Among them, it states that "it is the duty and right of every person to protect and preserve the environment and its biological diversity, as well as the protection of ecologically important areas, to prevent genetic manipulation and contamination, logging, burning, and to contribute to all measures of environmental public health. The Bolivarian state will guarantee to all individuals the enjoyment of a healthy environment, establishing strategies that promote environmental education, fostering an ecological culture for the responsible use of natural resources."

74. The Bolivarian Republic of Venezuela is a party to the Convention on Biological Diversity (CBD) and recognizes the global framework for biological diversity, Kunming-Montreal (CBD/COP/15/L.25). It is also a party to the UNFCCC and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The National Environmental Authority and operational and technical focal points for these conventions are exercised through the MINEC, an entity that coordinates the implementation of the provisions of the aforementioned Conventions at the national level. It is also part of the Latin American Network for Technical Cooperation in National Parks, other Protected Areas, and Wildlife (Redparques). It is also a member of the United Nations Convention to Combat Desertification (UNCCD), supporting the strategic objectives for the period 2018-2030.

Institutional framework

75. The MINEC is the national environmental authority and is responsible for formulating and implementing forest policy through environmental planning and land management instruments. It provides direction for the conservation policy of forest resources in Venezuela. MINEC governs over the management and conservation of forest ecosystems, the management of biological diversity, the recognition of the multiple uses and functions of forests, and the appreciation of their importance to the national economy. In MINEC, the General Directorate of Forests (DGPF) is responsible for exercising leadership in forest matters in the country. It designs and evaluates policies, plans, and strategies related to the administration, management, conservation, control, and supervision of the forest heritage and other forest components. It also coordinates the implementation of the national forest policy and ensures that it is observed and adopted by other public and private entities and organizations that, by their nature, have responsibilities within forest management. In January 2022, according to Presidential Decree No. 4,635, the Vice Ministry for the Preservation of Life and Biodiversity of MINEC was created. The competence of this ministry is to promote knowledge, innovation, participation, awareness, as well as plans, programs, and projects aimed at preserving ecosystems and safeguarding

the human species against Climate Change as a policy of the Venezuelan State, in compliance with international commitments within the framework of economic and social development plans and the Constitutional Law of the Plan for the Nation. It also has any other powers conferred by laws, regulations, and current legal provisions.

76. MINEC, as the national authority in land planning in the Bolivarian Republic of Venezuela, has several affiliated entities, among which is the INPARQUES (Official Gazette No. 30,223 of October 3, 1973). INPARQUES is an autonomous institute with legal personality, created to ensure the conservation, administration, and management of National Parks, Natural Monuments, and Recreation Parks that make up the National Park System of the country. Another organization is the IFLA, an entity affiliated with MINEC, responsible for matters related to forest research, environmental education, and conservation. Likewise, the National Reforestation Company (CONARE), as an affiliated entity, has expertise and a mandate in national forest recovery and restoration.

Baseline projects and investments (main sources of co-financing for the project)

77. A series of initiatives implemented by public entities supporting the management of protected areas, biological diversity management, restoration of degraded areas, generation of information, and the development of sustainable livelihood alternatives are reported. The project will be based on the following reference scenario:

? State allocations such as the fiscal budget from the Central Government to the MINEC for the implementation of activities related to biological diversity management, watershed and territory management. In 2020, the MINEC allocated USD 148,723 to the General Directorate of Biodiversity for the implementation of the following programs: a) Control of illegal trafficking or trade of flora and fauna species (USD 89,132). b) Venezuelan System of Information on Biodiversity (USD 14,898). c) National Program for Conservation and Promotion of Sustainable Agroecological Practices (USD 14,898), and d) Programs for sustainable use of species (USD 29,796).

? On the other hand, the National Fund for Science and Technology (FONACIT), which receives a budget allocated by the Organic Law of Science and Technology, is responsible for financing productive, educational, dissemination, research, innovation, and technology projects to strengthen the country's scientific, technological, and industrial apparatus.

78. The government has planned carrying out different projects in the southern zone of the state of Bolívar. These projects have been identified and will be implemented by different institutions such as MINEC, INPARQUES, Ministry of Popular Power for Indigenous Peoples (MPPPI), the Governor's Office, and Municipalities of the state of Bolívar, CVG-EDELCA, universities, research centers of the Venezuelan Institute for Scientific Research (IVIC), and private companies. The following projects are currently being implemented, and there is a great possibility of coordination with the project:

? *Control and monitoring of the trafficking of Biological Diversity in Canaima National Park:* It has a budget of USD 30,000 from the Program for the Control of Illicit Trafficking of Flora and Fauna Species as a complement to the aforementioned organizations, specifically for the INPARQUES project on the "Influence on the landscape of changes in patterns of natural resource use in Canaima National Park (PN)."

? *Promotion of sustainable practices in the utilization of biological diversity in the Imataca Forest Reserve (Tumeremo - El Dorado, Bolívar State):* An allocation of USD 10,000 is estimated from the Sustainable Use Program of flora and fauna species as a complement to the aforementioned organizations, specifically for the project of the General Directorate of Forest Heritage on "Sustainable Forest Management and Conservation of Forests from an Ecosocial Perspective in the Imataca Forest Reserve", financed by the GEF and implemented by FAO, and projects of the company Zoocriaderos del Orinoco.

79. Among the past projects of the former Ministry of Popular Power for Ecosocialism and Water (MINEA), there is the INCLAM-INGENIAS Consortium that worked on land use planning in Bolívar state and associated ABRAEs in 2016. They also developed the Water Management Plan for the Caroní River Basin, laying the foundation for the formulation of land use planning instruments for the

associated ABRAEs with the Caron? basin. Therefore, the Project will use the main results of the plan related to Canaima National Park, Natural Monuments, the Protective Zone, and the Ikabar? National Hydraulic Reserve.

80. Another important institution present in the territory is the National Electric Corporation (CORPOELEC), which bases its operations in the energy sector on the power extracted from the water resources of the Caron? River basin. As part of its corporate responsibility, it has the General Management of Environment, Safety, and Occupational Hygiene. One of the six departments is exclusive to the Roraima Region, whose operational departments are Environmental Project Management and Environmental Monitoring, and the Basin Environmental Management Department (DGAC). Between 2014 and 2019, the company had allocated financial resources, of which USD 2,503,628 corresponded to operational expenses. In the last 5 years, the company has implemented 2 projects in the Caron? River Basin for a total amount of USD 6,888,755. These projects have been financed by multilateral entities such as CAF and IDB. The DGAC also carries out promotion and project development activities in the indigenous communities of the Caron? and Cuyun? basins, which were the results of the May? project (completed in 2005). Thus, the DGAC continues to work on:

- ? Community-based tourism, extrapolating the experience of Kavanayen to the San Antonio de Morichal-Paraitepuy axis of Roraima.

- ? Management of natural resources, developed in collaboration with the Fe y Alegr?a Agricultural Technical School of Manak-Kr?.

- ? Support for other activities related to the completion of an inventory of environmental liabilities in the substations of CORPOELEC in Sifontes, Las Claritas, and Luepa.

- ? Support for Luepa and Kavanayen in relation to the management of solid and hazardous waste, wastewater, and vulnerability to fires.

81. CORPOELEC has identified that territorial planning is an important tool for integrated environmental management. Through the fulfillment of contractual commitments made with multilateral financial entities in this regard, it has developed the Master Plan for the Caron? River Basin (2004) and Territorial Planning in Spaces Associated with Hydroelectric Generation (2016). The importance of these tools lies in the fact that they contain integrated proposals for the establishment of land use plans. Likewise, these tools provide specific proposals for the Areas of Special Importance for the Conservation of Biodiversity and Ecosystems declared in those territories, such as PORUs. These tools can be useful inputs for the Project. Furthermore, CORPOELEC has developed a proposal of 7 programs to address environmental conflicts and promote sustainable development and conservation of the environment. On the other hand, the company has developed the Proposal for the Creation of the Area of Public Works Protection (APOP) of the Tocoma Reservoir, Bol?var state, along with its corresponding technical study and PORUs project.

82. Related to monitoring, CORPOELEC has a network of 141 hydrometeorological and limnological stations in the area, with only 22 stations currently operational (8 pluviometric stations, 7 climatological stations, and 7 water level stations). There is a closed limnology laboratory, main camps, and base camps located in the middle and upper Caron? and Paragua areas, which support the monitoring networks. Currently, both types of camps face serious limitations for their operation.

83. The IVIC, as part of its activities, has developed an ecosystem management and monitoring computer platform for ecological units and their components. They have cartographic products of ecosystems at a national level, ranging from scales of 1:250,000 to 1:10,000. Additionally, they have developed the baseline vulnerability of the study area to the effects of climate change in relation to ecological impacts. IVIC also possesses national-level scenario models for changes in the distribution of vegetation formations.

84. INPARQUES is responsible for the management of the ABRAEs (PN and MN) within the study area. For 2020, it was planned to allocate USD 173,974 to develop management activities related to protection, public use, research, resource management, administration, and planning. The majority of activities take place in Canaima National Park. In the Tepuyes Chain and Marutani Natural

Monuments, there are no permanent activities, and the activities there are practically non-existent. This is because both natural monuments are closed to the public, and access is limited due to the area's specific conditions. Additionally, these areas are well protected by indigenous communities because they are considered sacred. INPARQUES has assigned 120 personnel to work in the ABRAEs for Bolívar state. Additionally, there is a proposal to increase the staff allocation to improve the management of the areas, specifically for the intervention areas of the Project. The Institute has the PORUs and corresponding Management Plan for the eastern zone of Canaima National Park. Regarding the recovery of degraded areas, Canaima NP is the most affected. However, the total area to be regenerated has not been estimated yet. Nonetheless, progress has been made in the implementation of a nursery with both forest and non-forest species for the area's recovery.

85. The Ministry of Popular Power for Indigenous Peoples develops the Sectoral Plan for Indigenous Peoples through the following agenda: i) Development, in collaboration with the Vice Presidency of Planning and the Ministry of Indigenous Peoples, of a pre-census survey of Indigenous Peoples, as well as the creation of the first cartography and digital atlas of Indigenous Peoples. ii) Regionalization of the school feeding program (PAE), with direct purchasing processes from indigenous agricultural production. This ensures that at least 30% of the food in the PAE in indigenous regions consists of native products acquired directly from indigenous producers. The coordination of this activity will depend on a Regional Committee of the Presidential Council of Indigenous Peoples, in conjunction with the Ministries of Popular Power for Education and Indigenous Peoples. iii) Incorporation of components of bilingual intercultural education, as well as methodologies and pedagogical practices, into the National Bolivarian Curriculum in the national education system to advance the construction of a multiethnic society that guarantees harmonious balance for the well-being of all. This task was carried out jointly by the Ministry of Popular Power for Education and the Ministry of Popular Power for Indigenous Peoples, as a projection within the framework of the Plan de la Patria 2025. iv) Create a fund for the acquisition and production of machinery and equipment associated with scaling up the production of cassava, casabe (cassava bread), tapioca flour, and plantains, among others, to contribute to food security and sovereignty through increased productivity and the preservation of our traditions and customs.

86. Indigenous peoples are organized at different levels. At the local level, there are community captains who exercise influence within a specific area. They, in turn, form the Council of Captains (Caciques), which is led by the Captain General. These councils are further grouped together to form the Indigenous Federation of Bolívar State (FIEB).

87. The Indigenous Federation of Bolívar State, together with the Ministry of Popular Power for Education and the NGO, The Nature Conservancy, developed a Plan for Public Policies for the Pemón People in 2003. This plan presented a sector-specific diagnosis (Sector I. La Paragua, Sector II-Kamarata-Kanaim?, Sector III-Urim?, Sector IV-Kuyuni, Sector VI-Santa Elena de Uairen, Sector VII-Ikabar?, and Sector VIII-Wonken, excluding Sector V-Kavanay?). This diagnosis laid the foundation for granting collective land titles based on Venezuelan laws. In 2016, the collective land title for the lands of the Pemón people in the Ikabar? sector was recognized.[13]13.

Other projects and initiatives

88. Some experiences that can be used within the project intervention area, with the relevant adjustments, include:

? In 2018, two indigenous peoples from the Venezuelan Amazon made significant progress in their processes of constructing specific models for Prior, Free, and Informed Consultation regarding projects that intend to be carried out within their territories. The Uwot?ja indigenous people of the Autana municipality (Amazonas state) completed the process of workshops and methodological development, revisions, and translation of their own Protocol, culminating in a general assembly for its approval. Similarly, the Yanomami people of the Parima sector have made progress in the same process. These two advancements are important "...because in Venezuela, none of the indigenous peoples had a

specific model indicating a particular method of Prior Consultation, Free and Informed, tailored to the customs and traditions of each one." [14]14.

? The Indigenous Social Production Company Tukupu, led by an indigenous woman who serves as the General Captain of the Kari'á people, supports a key forest co-management model as a result of the implementation of the project 'Sustainable Forest Management and Conservation of Forests from an Ecosocial Perspective' (GEF ID 5410) carried out by the Venezuelan government (MINEC), the Food and Agriculture Organization of the United Nations (FAO), and the Global Environment Facility (GEF) since 2016. The Kari'á indigenous communities manage a forestry company and a territory of almost 54.4 thousand ha, granted in concession by the State in 2020, for sustainable utilization. The collection of seeds from traditional species, the establishment of community and family nurseries, and food production in agricultural plots are practices of Sustainable Forest Management and Sustainable Land Management that involve a majority of women in their implementation and leadership. The experiences and lessons learned from this initiative developed in the Imataca Forest Reserve, located in the state of Bolívar, will be greatly beneficial for the project as long as there are exchanges of experiences between the Kari'á indigenous communities and the Pemón indigenous communities. These exchanges should demonstrate concrete results of forest conservation and biological diversity preservation through sustainable management. All of this will also serve to strengthen the empowerment and leadership of indigenous women in their territory.

? In the project intervention area in the Caroní River basin, the Kumarakapay community formulated and developed a project called the Center for Arts and Crafts of the Pemón People in 2003. This project aims to revalue traditional knowledge in various areas such as techniques for making utilitarian crafts, traditional construction, traditional cuisine, ethnobotany, ecotourism, and the Pemón language. For this project, the community received technical, financial, and organizational support from the Venezuelan Fund for Social Investment (FONVIS, a government institution active at that time), an informal organization of Women of La Gran Sabana, and the Indigenous Federation of the Bolívar state (FIB). Within the framework of this project, a community churuata (traditional communal house) was restored using traditional techniques, and workshops on the mentioned topics were conducted by elders of the community. However, over time, the project lost momentum and shifted towards other activities.

? Community Tourism Networks: between 2003 and 2015, the Community-Based Tourism component of the Mayá Program of CVG-EDELCA, in collaboration with the communities, formulated several proposals to develop ecotourism circuits in 2 areas: the surroundings of the Kavanayn community and the Makunaim Community-Based Tourism Network. The Kavanayn initiative, the Pemón Tourism Pilot Project in La Gran Sabana, was developed through a project formulated by the technical team of CVG-EDELCA and the indigenous community of Kavanayn. The implementation of the project obtained financing through the FIDES (Intergovernmental Fund for Decentralization). The development of the project involved the Pemón Tourism Cooperative Emasensn II, formed by 20 families from the community, the Municipality of Gran Sabana, the Government of Bolívar state, and CVG-EDELCA. Starting in 2005, the project was successfully developed for approximately 10 years, offering accommodation, food, transportation, guided tours, and experiences of the local culture in different itineraries designed to take advantage of the tourist attractions in the community's area of influence, such as the Epopak, Aponwao, and Karuay waterfalls, the Sororopn tepuy, hiking and biking tours, among others. With the drastic decrease in tourist flow in the area since 2016, the initiative was forced to suspend its activities. However, currently, some community leaders consider it possible to reactivate ecotourism in Kavanayn based on the strengths developed through this experience. These ideas will be taken into account in the upcoming activities of consultations and field visits planned within the framework of the Project.

? Similarly, the proposal for the Makunaim Community-Based Tourism Network also involved community organization in activities such as accommodation, guided tours, cycling routes, hikes, and horseback riding to various points of tourist interest, including unexplored pools and waterfalls, viewpoints, and trails located in the areas surrounding the communities of Paraitepuy de Roraima, Mapaur?, and San Antonio del Morichal, all of which are close to Troncal 10 highway. The

formulation of this proposal was undertaken in 2015 by these communities, inspired by the previous experience of Kavanay mentioned earlier. It was supported through a joint effort by the Ministry of Science and Technology, CORPOELEC, CVG, and the Emasens II cooperative. Despite the fact that the approved resources to support the formulation of this project were not effectively transferred, the communities involved took on the costs of formulating the proposal, including the characterization of 24 tourist attractions along the route.

? It is also worth mentioning the current existence of an initiative in Santa Elena de Uair where different social actors have converged. These include the Community Council of the Colinas de Piedra Kanaima neighborhood, some residents from the indigenous communities of Manak Kr? and San Antonio del Morichal, located near Santa Elena de Uair, and the NGO Guardianes del Bosque. This initiative aims to generate strategies for the sustainable use and preservation of the forests in the mountains surrounding Santa Elena de Uair, particularly on the southern side. These forests are home to water sources that need to be protected from invasions and encroachments that have affected nearby forested areas in the past. The goal is to ensure the long-term conservation of these vital ecosystems and their associated water resources. In these mountainous areas, the urban polygon of Santa Elena de Uair converges with the areas of influence of the indigenous communities of San Antonio del Morichal, Sampay, and Manak Kr? (belonging to sector 6 of the Pem communities). Therefore, the strategies to address this issue must involve reconciling the perspectives of the indigenous and local populations regarding the co-management of these territories. In this regard, ideas for these mountainous areas have been proposed, For example, the establishment of walking paths and viewpoints that provide opportunities for physical exercise and landscape appreciation for the population of Santa Elena de Uair or tourists. Other ideas include organizing training experiences for students from schools in the city and nearby communities, conducting scientific studies on the vegetation, fauna, and ecological dynamics of these forests, and more.

89. FAO[15]15 has strong technical expertise and a comparative advantage in projects related to biological diversity conservation and sustainable management of natural resources related to forestry and agriculture. FAO has supported the Government of the Bolivarian Republic of Venezuela in the development of policies and legal norms for the forestry sector, providing assistance in policy formulation, institutional and community strengthening. Additionally, FAO has developed participatory tools and freely accessible guidelines. This has helped promote best practices in sustainable land and forest management that contribute to climate change adaptation and mitigation, as well as the incorporation of biological diversity while improving the livelihoods of rural communities. FAO brings a wealth of experience, technical expertise, and innovative tools to promote ecosystem restoration through ongoing work in agroecology, sustainable forest and landscape management, ecosystem services, among others. FAO is working on initiatives related to integrated landscape management, biological diversity conservation, and sustainable forest management in the context of climate change. This is aimed at supporting government institutions and community organizations in the application of innovations in information management, forest monitoring and evaluation systems, forest management planning, incentive schemes, participatory governance, and empowerment of forest-related communities, as well as multiple mechanisms for the recovery of degraded forest areas in representative forest ecosystems of the country. Within the framework of technological innovations, different validated methodologies and tools will be applied, many of them open-source cloud-based processing tools (such as EX-ACT, Collect Earth, Open Foris, EarthMap, Google Earth Engine, among others), as well as the use of Global Positioning Systems (GPS) and drones.

90. Based on the baseline of the political-institutional and investment framework, it can be affirmed that the Bolivarian Republic of Venezuela has an appropriate public policy for the conservation of biological diversity. It consists of a set of laws, regulations, plans, strategies, instruments, and tools that enable the creation of enabling conditions for the sustainable development of natural resources and the comprehensive management of protected areas in the Caron? River basin and throughout the national territory.

91. However, these efforts are still not sufficient to remove the threats to the conservation targets in the Caron? River basin, due to the strong pressure exerted by various human activities on them. Without

the project, the identified barriers described in detail in Section 1.a Project Description - Remaining Barriers will continue to persist. These barriers include limited, weakened, and fragmented institutional presence, differing views among stakeholders regarding the preservation and use of conservation targets, irregular and unsustainable management of conservation areas and other priority areas in the landscape, and limited environmentally-friendly economic alternatives that could enhance the sustainable livelihoods of indigenous and local communities while protecting biological diversity.

92. Without the necessary momentum, baseline initiatives will not be able to generate the required changes to strengthen coordination and collaboration mechanisms across sectors. The presence of these mechanisms could contribute to the process of articulation and congruence among different planning, financing, and territorial management instruments. This, in turn, would promote the recovery of degraded ecosystems and enhance the flows of biological diversity and ecosystem services. Furthermore, it would create opportunities to improve livelihoods and foster the adoption of sustainable production practices in indigenous and local communities. In this context, the contribution of the Global Environment Facility (GEF) is of vital importance to provide the necessary boost to conservation initiatives and the sustainable use of biological diversity in the Caron? River basin.

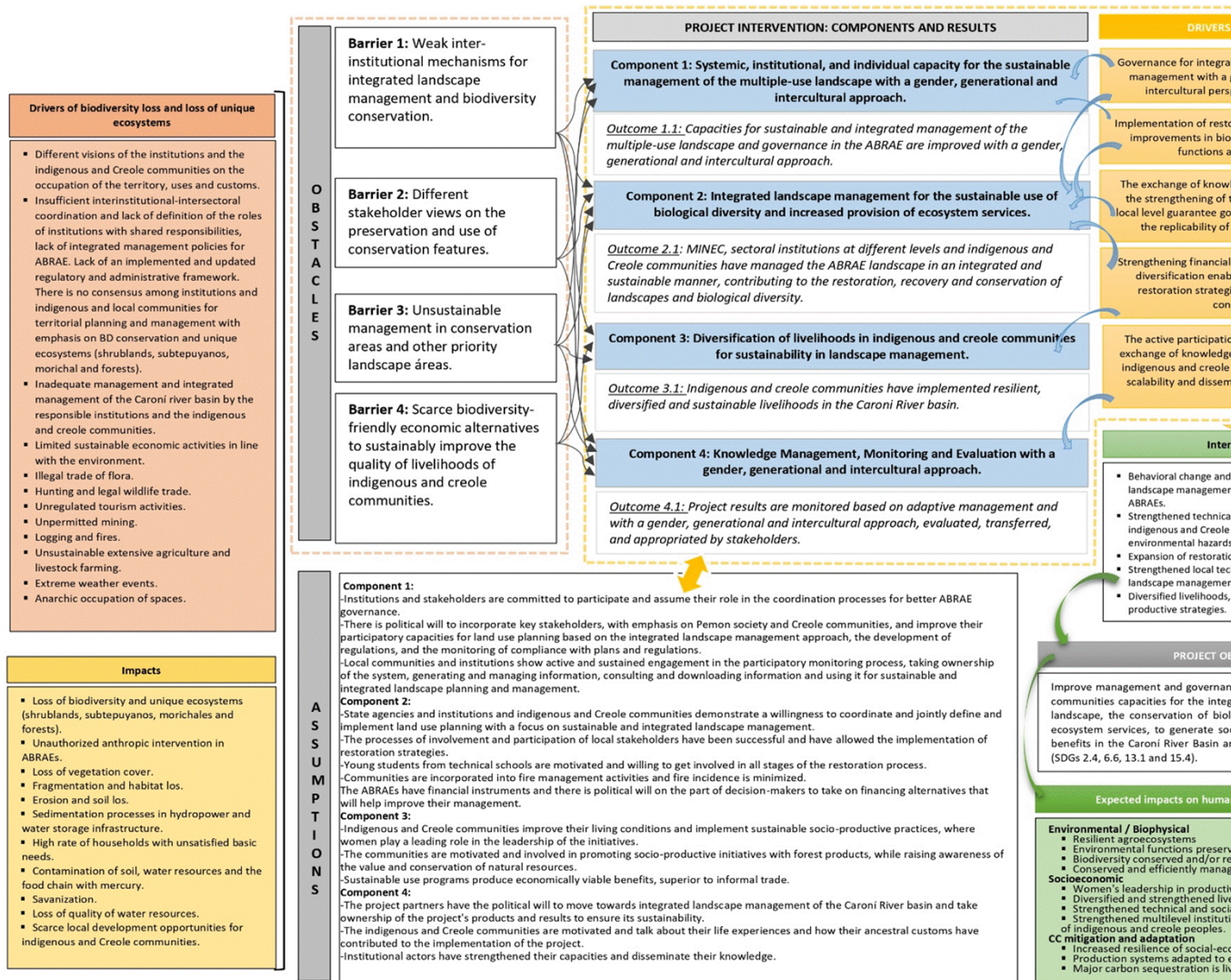
3) The proposed alternative scenario, along with a brief description of the expected outcomes, project components, and the project's Theory of Change.

Project Strategy

93. The objective of the project is to improve management and governance and enhance institutional and communities capacities for the integrated and sustainable use of the landscape, the conservation of biological diversity and provision of ecosystem services, to generate socio-economic and environmental benefits in the Caron? River Basin and global environmental benefits (SDGs 2.4, 6.6, 13.1 and 15.4). To achieve this, the project's key actions are developed in three lines of intervention aligned with the structural and intermediate causes (**Figure 8**).

94. The project aims to achieve the conservation of biological diversity through the implementation of an ILM strategy that includes inter-institutional coordination, territorial planning (Outcome 1.1), financial sustainability, effective management of existing protected areas (Outcome 2.1), and promotion of sustainable and diversified production models (Outcome 3.1). All these aspects will be developed through social participation with an intercultural, generational, and gender perspective. In this way, the project will complement the actions of MINEC and INPARQUES and effectively contribute to the development of a Regional ILM Strategy to overcome institutional weaknesses (Barrier #1 and #2) that generate inefficiencies in the management of protected areas and biological diversity loss (Barrier #3), and allow the persistence of a development model with high environmental impact (Barrier #4) (**Figure 14**).

Figure 14. Theory of change of the Caron? project.



Source: Original elaboration

95. Intervention Line 1: The project will strengthen the institutional and policy framework, build capacities to support effective management and governance of existing ABRAEs within the Caron? River basin, in order to achieve improved coverage of key conservation targets. The project will also promote the participation and coordination among key stakeholders at all levels. In particular, the project will establish a geospatial monitoring system for integrated and sustainable landscape management, consisting of three modules, one of which is participatory for reporting environmental threats in the field. In addition, studies will be conducted to identify optimal roles, more viable financial mechanisms, and platforms for dialogue among relevant sectors and actors. The project will enhance the management capacity of ABRAEs through a training program for personnel at the central and regional levels. The project will focus, for example, on developing methodological capacities, learning from past experiences, and harmonizing technical and collaborative approaches among institutions. Dialogue tables will be promoted among different actors at various levels, including institutional actors and representatives of indigenous and criolla communities. Planning tools will be developed to facilitate effective management and decision-making processes.

96. The main assumptions are: a) Individuals with greater knowledge and capacity for intersectoral collaboration will be able to apply integrated landscape management in the governance and management of ABRAEs through land use planning. b) Strengthening the capacities and awareness of biological diversity conservation and landscape among planning and budgeting officials will lead to increased public investment and the exploration of alternative financial mechanisms to sustain the management of ABRAEs in the Caron? River basin. c) Different government partners will consider their respective legal competencies in planning activities, facilitating progress towards the project's objective. d) With all key actors better prepared and organized, including indigenous and criollo communities, the project will strengthen dialogues and decision-making processes.

97. To achieve the desired change, the proposed strategy is as follows: i) Strengthen the technical capacities of individuals from public entities at different levels and indigenous and criollo communities. ii) Develop a geospatial monitoring and evaluation system that incorporates meteorological/hydrometeorological aspects of ecosystem services, biological diversity, and environmental threats. This is intended to support the management of all entities in the area and generate information related to land management. iii) Establish a participatory monitoring module for the control and surveillance of environmental threats to protect, conserve, and monitor the integrity of cultural and biological diversity and other resources present in the ABRAEs. iv) Develop planning tools to strengthen mechanisms of coordination and intersectoral collaboration. It is expected that these capacities and tools will contribute to the formulation of land use plans for ABRAEs and foster an understanding of the need to seek alternative financing for the sustainable management of ABRAEs.

98. Intervention Line 2: In general terms, the proposed ILM is understood as the harmonization of planning processes, financing, territorial management, and sustainable use of natural and cultural resources. In this regard, the coordination and search for coherence among different planning, financing, and territorial management instruments allow for the promotion of ecosystem recovery through Environmental Planning and the use of participatory management tools among institutions, indigenous and criollo communities, and productive sectors. Connectivity between different conservation schemes is also crucial for the ILM. This approach improves the flows of biological diversity, ensures the provision of ecosystem goods and services, and facilitates the alignment of policies in the territory to achieve landscapes that are sustainably managed.

99. The project will initially support the development of a financial plan to enhance financial management and effectiveness. It will also assist in optimizing and managing the use of available funds. In addition, the project will promote income diversification by creating a diverse, stable, and secure financing portfolio. In this regard, the project actions will be planned and coordinated, taking into account the lessons learned from projects implemented in different ABRAEs within the country.

100. The project aims to improve the integrated management of high-value ecological conservation areas such as forests to enhance carbon sequestration, ecological restoration of degraded areas, support reforestation efforts, and restore areas affected by unauthorized mining, wildfires, and deforestation. This will be achieved through a set of strategies that will restore forest ecosystems, morichal ecosystems (swamp forests), and savannahs. As a result, biological diversity will be increased, and the

capture of carbon and water resources, including the quantity and quality of ecosystem services, will be enhanced. The project proposes the restoration of degraded natural forests, including conservation and silviculture measures to ensure natural forest regeneration. It also involves tree planting using different methods and land protection. The restoration approach for forested areas, savannahs, morichales, and areas degraded by mining includes the application of three methods: agroforestry systems, reforestation, and passive restoration. Passive restoration focuses on controlling human pressures to facilitate the natural process of vegetation succession and the recovery of degraded areas without active intervention.

101. The main assumptions are: i) Institutional actors identified in the project articulate actions and actively participate in the formulation of management plans for ABRAEs and conservation activities in forest and savannah ecosystems. ii) Empowered indigenous communities engage in the conservation and restoration of forests and savannahs. iii) Landscape conservation management generates benefits for the communities. iv) Indigenous actors participate in environmental education programs and become aware of the importance of forest and savannah conservation and restoration. v) ABRAEs have a financial plan that improves their management capacity in the territory.

102. To achieve the desired change, the strategy is as follows: i) Formulate management plans for ABRAEs (PORUs) through a collaborative approach involving stakeholders. These stakeholders will shift the current emphasis from territorial planning to a holistic landscape management approach, including aspects of biological diversity conservation, climate change, carbon flows, and storage, water management, ecosystem goods and services, and sustainable livelihoods. Community participation in the benefits is estimated. ii) Restore degraded areas of forests, morichales, and savannahs within the project's intervention area with the involvement of the communities. Activities will be carried out to raise awareness and knowledge about improving techniques for economic and subsistence activities that minimize environmental impacts. iii) Formulate a financial plan to strengthen the management of the 5 ABRAEs in the watershed.

103. Line of intervention 3: The ILM approach applied by the project will allow for an integrated treatment of a defined geographical space, where environmentally critical areas are combined with collective territories, ABRAEs, and production landscapes to preserve cultural and biological diversity, as well as ecosystem goods. In this way, sustainable economic opportunities will be generated, and goods and food for self-consumption will be provided. It will also promote the participation of social and institutional territorial actors in decision-making processes that benefit or affect their territory (i.e., it promotes participatory territorial, environmental, and productive management).

104. The project includes specific interventions aimed at improving livelihoods and promoting the adoption of sustainable production practices with indigenous and criollo communities at the landscape level. This will generate new supplementary household income by applying best practices to reduce the impact of productive activities. The project will promote working with small-scale producers on properties located in the project intervention areas, where tourism and agriculture activities are being developed. The selected properties will receive support for the implementation of sustainable environmental practices in their various activities, ranging from the adoption of new technologies to the use of alternative inputs. These sustainable practices will enhance resource utilization and generate environmental benefits without negatively affecting the income of small-scale owners.

105. The project will identify existing initiatives and propose suitable practices and approaches based on a participatory process that involves technical, socioeconomic, and cultural aspects. It will also enhance the community's ability to manage sustainable ecotourism and establish connections with business opportunities. Furthermore, the project will establish small funds, specifically rural savings programs, to provide financial support for these activities. These additional livelihood options for criollo communities and indigenous peoples aim to generate insights into local production processes and address emerging development processes within the context of coexistence with ABRAEs in the basin and the conservation of biological diversity.

106. The main assumptions are: i) indigenous and criollo communities are capable of managing and administering their ventures and commercial partnerships in the long term; ii) The strategy identified in the business plans promotes the generation of food, goods for self-consumption, and income from production surpluses, as well as the conservation of the ABRAEs in which these

communities are settled; iii) The income obtained from their productive activities is stable and sufficient to establish and maintain the implemented support mechanism in the long term.

107. To achieve the desired change, the strategy is: i) to develop sustainable economic activities that improve livelihoods and food security through the provision of alternatives in ecotourism, value-added forest products (both timber and non-timber), and family farming, ii) to promote sustainable use of wildlife in order to reduce pressure on native species for traditional consumption, iii) to work with indigenous communities located in the project intervention area to promote socio-productive co-management in protected areas, iv) to define business models that support and enhance the development of socio-productive initiatives in indigenous communities.

108. As a cross-cutting element, the project will include the right of indigenous peoples to Free, Prior, and Informed Consent (FPIC)⁶⁰. This entails obtaining the consensus/consent of indigenous peoples in accordance with their legal systems and customary practices⁶¹. To achieve this, support will be sought from the Captains of the communities, the Council of Captains, and the Indigenous Federation of the Bolivar state. In this way, participatory mapping will be used to identify land use and natural resource utilization in each community: conucos, hunting, natural areas, among other aspects. This information will be combined with the technical information collected by the institutions, which will allow for the development of a foundation for territorial planning. At the same time as gathering territorial information from indigenous communities, sustainable productive alternatives will be jointly evaluated. These alternatives will be based on the production and value-added use of goods and services generated from biological diversity and the promotion of ecotourism. This will contribute to the creation of sustainable economic alternatives, improving livelihoods and food security for the communities. The different roles that women and men of different age groups have and their unique and individual contributions will be respected and recognized. Through their organizations, these contributions can be maximized within the context of the project's strategy and implementation. Additionally, the cultural relevance of the interventions will be observed, focusing on gender, by monitoring, documenting, and systematizing the impact of the gender-focused interventions. (See Annex J containing the Indigenous Peoples' plan and Annex M containing the gender analysis and action plan).

109. The ILM brings together social, cultural, economic, and governmental actors within the framework of good governance processes. In this context, all stakeholders benefit from coordination and cooperation to ensure sustainable development. The functionality and supply of biophysical and socio-cultural elements will be considered, and specific environmental challenges and issues in the operating territory will be addressed. Therefore, the strategy must be consistently implemented as it aims to shape behavior and foster a culture of sustainability. The application of pilot experiences or demonstration projects is crucial for initiating and consolidating the strategy. To achieve this, there should be openness to experimenting with new ideas and an inclusive approach to adaptive management.

110. The project will closely monitor the evolution of the global COVID-19 pandemic, with particular attention to the local level. Appropriate protocols and safety measures will be implemented to safeguard the health of all direct participants (including project staff) as well as the indigenous and criollo communities in the intervention landscape.

111. To achieve the proposed objective, the project has been structured into 4 components with their respective outputs, described as follows.

Component 1: Systemic, institutional, and individual capacity for sustainable landscape management with a gender, generational, and intercultural approach

112. This component will seek to strengthen the capacity development of officials and various stakeholders at the central, state, and municipal levels through the provision of specific tools and training that facilitate effective planning and decision-making. This component will also aim to enhance the management capacity of the ABRAEs through a training program for personnel from national, regional, and local institutions. The training will focus on building methodological skills,

learning from past experiences, and harmonizing technical and collaborative approaches among institutions. Likewise, the capacities of indigenous and criollo community members will be strengthened through dialogues and knowledge exchange, respecting their traditional worldview and local organizational forms. To achieve this, this outcome includes the construction and implementation of a proposal to strengthen institutional and community capacities, aiming to raise awareness among different national and local actors about the importance of conserving biological diversity and promoting sustainable use of natural resources. (Output 1.1.1). The project will promote the development of high-quality geospatial information tools for ecosystem services, biological diversity, and environmental threats, as well as hydro-meteorological/hydrological services (Output 1.1.2). This geospatial information and hydro-meteorological/hydrological services will ensure access to updated information on surface water availability, landscape conservation status, and ecosystem services (biological diversity, carbon reserves, soil conservation). All the aforementioned which will support planning, management, and decision-making on land use planning and its ABRAEs. A control and surveillance system will also be incorporated, which will define a set of measures and early warning actions to be adopted to protect, conserve, and monitor the integrity of biological diversity and other resources present in the ABRAE (Output 1.1.3). From the shared vision of the stakeholders involved, participation and interinstitutional coordination will be promoted among all levels through different governance mechanisms in order to achieve governance of the intervened territory. The aim is to reach consensus, alliances, and integrated management mechanisms that guide actions toward integrated landscape management with a common focus on the conservation and management of biological diversity (Output 1.1.4).

Outcome 1.1: Enhanced capacities for sustainable and integrated management of the multi-use landscape and governance in the Areas under Special Administration Regime (ABRAEs), with a gender, generational, and intercultural approach.

Output 1.1.1. Institutional and community capacity strengthening program designed and implemented for sustainable landscape management.

113. The project will develop a capacity-building program with an ILM approach, structured at two levels. This program will be inclusive in terms of gender, age, and community type:

? The first level will focus on improving the technical and operational performance of officials and personnel from different ministries and public institutions involved in the management and conservation of biological diversity in the Caron? River basin. The approach will be aimed at creating spaces for continuous teaching and learning processes through face-to-face, blended, and virtual modalities. These approaches will be based on stakeholder dialogue for the exchange of knowledge, increasing resilience, and reducing the vulnerability of landscape conservation targets. The training is expected to reach at least 300 officials from the participating ministries and institutions (with at least 30% women). At least 10 workshops with a gender and intercultural focus will be implemented.

? In the second level, training activities will be conducted in indigenous and criollo communities. This will contribute to improving the capacities of both communities in interpreting biological diversity and its relationship with the present and future life of ecosystems and their surroundings. The activities will be carried out through a hands-on learning approach, respecting the traditional worldview and local organizational forms. Women's knowledge of biological diversity, values, and beliefs about the physical, animal, and plant environment will be emphasized. Topics on generational and gender equity will be incorporated. Emphasis will be placed on the importance of promoting better living conditions for indigenous and criollo women in order to strengthen their capacities for autonomous development and participation in decision-making forums. Training is expected to reach at least 200 individuals from indigenous and criollo communities (sectors 5 and 6), with a particular focus on communities led by women. Bilingual staff will be available to facilitate the process.

114. The training program will be designed in collaboration with MINEC, INPARQUES, Ministry of Popular Power for Tourism (MINTUR), INATUR, Ministry of Popular Power for Planning (MPPP),

Ministry of Popular Power for Education (MPPE), and INAMEH, including national and state universities, research institutes, and other entities related to the program's theme. The possibility of hosting the training material on a government institutional platform will be evaluated so that it can be replicated post-project. The Parupa camp facilities, provided by CVG and located within the project intervention areas, will be used as a training and education center. The facilities will be adapted to the project's needs through coordination and administrative arrangements.

115. In the first year, training needs will be identified at the individual, institutional, and systemic levels of the beneficiary organizations and communities. The specificities and profiles of the different actors will also be determined. The requirements for inputs, equipment, including the necessary technical personnel for the formulation, will be included. Likewise, the design and development of the training program will be elaborated, incorporating training mechanisms and didactic resources adapted to the different participants' profiles. It is expected that the implementation of the capacity strengthening program will begin in the same year, according to the agreed execution modality. The program will be carried out during the second, third, and fourth years. The trainings will be conducted annually. For each annual training cycle, trainers will be hired. At the end of each annual training cycle, teams composed of trained personnel will be formed to replicate the trainings and thereby multiply the acquired knowledge.

116. Identification of institutional training topics: Efforts will be directed towards topics that cover aspects from various areas to enhance the use of tools for landscape planning and management.

? Thematic Area 1: Management and conservation of biological diversity, biological diversity monitoring mechanisms, carbon balance, climate change mitigation and adaptation measures, estimation of GHG fluxes and stocks due to land use changes.

? Thematic Area 2: Management of the geospatial, hydro-meteorological, and hydrological data, and the database on ecosystem services for biological diversity management, planning, development, and monitoring.

? Thematic Area 3: Interinstitutional coordination and governance for environmental management, land use planning, and territorial planning, use of tools for analysis (logical framework, problem tree, cause-effect analysis, theory of change applied to natural resource planning).

? Thematic Area 4: Mechanisms and strategies for restoration, conservation, and management of degraded forests.

? Thematic Area 5: Economy, finance, and financial mechanisms for environmental sustainability (economic valuation of environmental goods and services, financial sustainability for protected area management, among others).

? Thematic Area 6: Monitoring of landscape units to determine ecosystem dynamics, forest fires, and their dynamics in protected areas.

? Thematic Area 7: Livelihoods in ABRAEs: meliponiculture, ecotourism, co-management, bio-enterprises.

? Other Knowledge Areas: Other knowledge areas to be determined in the initial needs assessment process.

117. Identification of training topics for indigenous and criollo communities: The topics will be tailored to strengthen the capacities in the different actions to be carried out during the project implementation, involving indigenous and criollo communities. It is important to highlight that the trainings will take into account the participants' capacities and cultural aspect (the contents will be addressed in a bilingually, according to the participants' needs):

? Thematic Area 1: Nursery establishment and production of forest and fruit plants.

? Thematic Area 2: Selection and management of seeds for annual and perennial crops, traditional varieties, biofertilizer management, mountain microorganisms, and mycorrhizae.

? Thematic Area 3: Restoration strategies and agroforestry systems.

? Thematic Area 4: Measurement, systematization, and analysis of hydrometeorological and hydrological data to assess climate variability. Construction and installation of community rain gauges.

? Thematic Area 5: Practical aspects of biological diversity monitoring.

? Thematic Area 6: Fire management training.

? Thematic Area 7: Gender-focused training: Shared responsibilities in caregiving and interculturality. Self-esteem, self-care, and empowerment. Gender-Based Violence (GBV). Strategies for social participation (decision-making, facilitating dialogues for peaceful conflict resolution, and tools requested by women themselves such as public speaking, writing, etc.). Use of Information and Communication Technologies (ICTs).

? Thematic Area 8: Formulation and management of community projects.

? Thematic Area 9: Communication and audiovisual production (photography, illustration/comics, social media management) with a tourist, intercultural, and gender perspective.

? Thematic Area 10: Training and development for ecotourism management: awareness, training, and promotion.

118. The indigenous and criolla population will be certified by institutions in the country that offer this kind of training and have previous experience in the respective procedures.

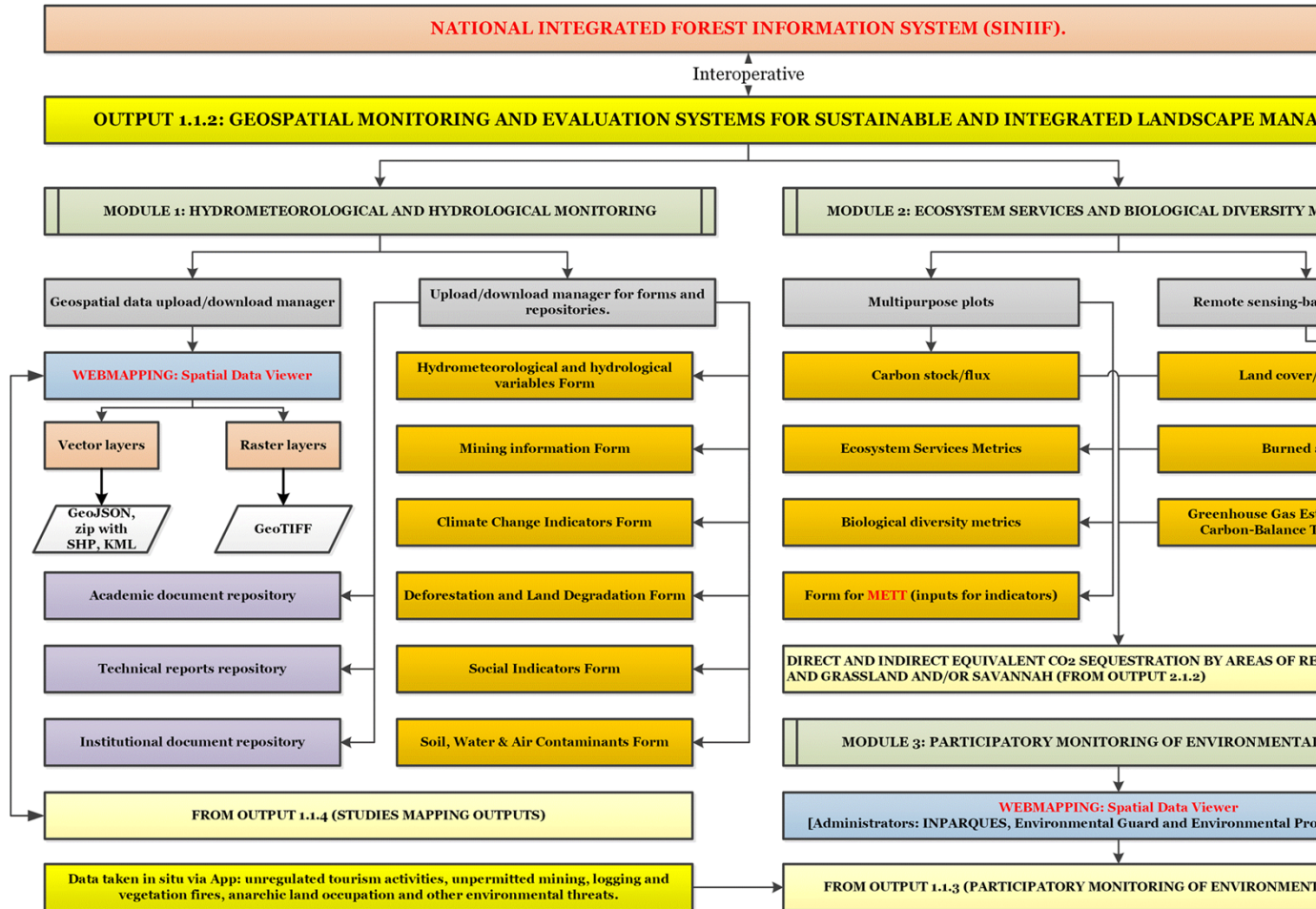
Output 1.1.2. *Geospatial monitoring and evaluation system formulated and developed for sustainable and integrated landscape management, incorporating hydro-meteorological/hydrological elements, ecosystem services, biological diversity, and environmental threats.*

119. The project will support the design of a geospatial monitoring and evaluation information system for sustainable and integrated landscape management. This system will encompass hydro-meteorological/hydrological aspects, ecosystem services, biological diversity, and environmental threats, divided into three modules as shown in **Figure 15**.

120. Users will be able to navigate between modules through a graphical interface based on the type of information they wish to access, download, or upload to the system: a) Module 1: It will contain geospatial data related to hydrometeorology and hydrology of the project area. Additionally, it will have documentary information provided by government and local entities responsible for basin management. It will also store cartographic information derived from studies in Output 1.1.4. b) Module 2: It will address aspects related to ecosystem services and biological diversity, including information on carbon storage and flux, land cover and land use, and areas affected by fires. It will provide indicators for monitoring and evaluating biological diversity management, integrated into the Management Effectiveness Tracking Tool (METT). In addition, this module will facilitate the inventory and classification of land resources and biological diversity within the project. It will also present data regarding the location of critical habitats, establishing limits for the sustainable use of natural resources (land, water, and forests), and providing indicators of ecosystem resilience, carbon reserves, and impacts of climate change. Information on changes in land cover and land use, as well as burned areas, will be obtained through remote sensing, which will provide information on the dynamics of threats present in the project implementation area, complemented by information from Outputs 1.1.3 and 2.1.2. The methodologies developed for these tasks in GEF ID 5410 project will be considered, as well as the possibility of using Openforis62 and its tools Collect Earth and SEPAL, for example. c) Module 3: This module will be developed to store data and enable registration, analysis, and monitoring based on the information generated in Output 1.1.3. This product will provide real-time data collected through a mobile application on environmental threats identified through participatory monitoring with indigenous and criollo communities and local institutional personnel. While participatory monitoring contributes to Output 1.1.2, it is also expected to enhance capacity building and environmental knowledge of the territory, supporting decision-making for sustainable land

management, control, restoration, and landscape conservation. The involvement of the population in the control and management of their natural resources is expected to empower local communities and strengthen their role as part of the ancestral territory.

Figure 15. Conceptual scheme of Output 1.1.2.



Source: Original elaboration.

121. The system will ensure bidirectional migration of information with the National Integrated Forest Information System (SINIIF) through an architecture that facilitates interoperability between both systems. The MINEC will be responsible for designating the institution that will host this system. Through this modular system, government entities such as ministries, INPARQUES, CORPOELEC, CVG, and local authorities will be able to identify the location of critical habitats and endangered or threatened species. It will also be possible to assess the specific threats to these habitats and endangered species, as well as the types of threats they are exposed to.

122. Throughout the first year of the project, the information needs of the participating institutions will be determined to choose appropriate software and hardware solutions for data collection and analysis during the project implementation stage. Additionally, an assessment of existing hydrometeorological and hydrological stations will be conducted, with a focus on strengthening those located in sectors 5 and 6. The restoration of the limnology laboratory of CORPOELEC will also be considered to investigate the physicochemical variables, as well as the flora and fauna associated with water bodies in the Caron? River basin.

123. The project includes the establishment of 24 permanent plots, selected based on the representativeness of forest types and following the multipurpose sampling protocol established by MINEC in the GEF ID 5410 project. This protocol is subject to adjustments to expand the scope according to multiple objectives and to adhere to internationally accepted methodologies, especially regarding carbon estimates. During the first year, the locations of the plots will be defined, and the first 12 plots will be installed and measured. In the second year, the second group of 12 plots will be installed and measured, and from the third year to the fifth year, both groups of plots will be remeasured. These plots will allow for data collection on species composition, abundance, diversity, richness, and distribution; forest structure, conservation status and alteration, non-timber forest products, and ecosystem services provided by the forests in the project area. The information generated will contribute to the National Forest Inventory, the National Greenhouse Gas Inventory of National Communications, and the study of forest dynamics, among others.

124. Data will also be collected on carbon stocks, live and dead biomass, and soil organic carbon. With this information, statistical models will be adjusted and geospatial analysis will be enhanced using a Geographic Information System (GIS). The goal is to obtain continuous surfaces of AGB, Below Ground Biomass (BGB), and soil organic carbon (SOC). The resulting estimates will help identify areas with higher carbon sequestration potential and critical carbon areas. This information will be incorporated into the zoning and regulation of land use PORUs in ABRAEs (Output 2.1.1). These data will be used as inputs for applying the EX-ACT and METT tools, both in the midterm evaluation and at the end of the project.

125. In addition, fauna species (including fish) in the forests will be monitored using photographs, video cameras, pitfall traps, and nets to quantify species' presence and diversity. Throughout the project implementation, data and information from various research and projects related to hydrology, meteorology, hydroelectric potential, and climatological studies in the Caron? River basin will be collected, systematized, and updated (Module 1 of the system). In this regard, protocols and procedures will be established for data collection and analysis, aiming to maintain a centralized and accessible database for institutions and local communities through the most suitable portal determined by MINEC.

126. The project will provide training to a minimum of 10 indigenous and criollo communities in the construction and installation of community rain gauges and the establishment and measurement of multipurpose permanent plots to collect data on GHG fluxes and reserves, as well as forest coverage and biomass in general. In this regard, manuals and supporting materials will be designed and provided in a clear and easy-to-understand bilingual format. The training will adopt a hands-on approach (learning by doing strategy), starting with the installation of the first plot and covering various measurement methodologies for parameters related to CO₂ estimation and biological diversity. The training sessions will be conducted from the first year to the fifth year, with at least four extension workers responsible for field activities, visiting communities to encourage their participation, and conducting on-site training.

127. The project will provide training to a minimum of 50 officials from national, regional, and local ministries and institutions on the use and management of the system. Five mid-term workshops will be conducted in the third year of implementation. By the end of the project, at least 150 officials will have been trained in a total of 10 workshops by the fifth year of implementation. In each training session, the inclusion of women will be ensured, with women representing at least 40% of the participants in each workshop.

128. This product will be developed in cooperation with MINEC, CORPOELEC, MinAgua, INAMEH, IVIC, and INPARQUES, involving experts from national and state universities, research institutes, and other entities related to the topic.

Output 1.1.3: Module of participatory monitoring for the control and surveillance of environmental threats developed, implemented, and integrated into Output 1.1.2.

129. The project will develop and implement a module for monitoring, control, and surveillance of environmental threats under a participatory approach involving indigenous communities, criollos, and personnel from local institutions. This module will be an integral part of Output 1.1.2. The

participatory monitoring for control and surveillance will identify and address threats at early stages in the ecosystems of Sectors 5 and 6, which represent the project's demonstration area (996,308 ha)[16]16. Continuous monitoring will be carried out to assess unregulated tourism activities, illegal mining, deforestation, forest fires, unauthorized land occupation, and other threats.

130. Twenty members of the local community will be trained to serve as monitors, while four managers of the participatory monitoring module for environmental threats will receive training at the institutional level. At least 40% of the monitors will be women. The institutions responsible for the administration and monitoring of the module will be INPARQUES, the Environmental Guard (MINEC), and the Environmental Prosecutor's Office. These institutions will work together through a centralized operational room. A rapid action protocol will be implemented to link the field monitoring teams with the institutional staff responsible for managing protected areas. Reports on potential threats will be systematized and uploaded to a web mapping platform integrated with Output 1.1.2, allowing institutional users easy access to the information.

131. The participatory monitoring module for the control and surveillance of environmental threats will include the following components: i) Local monitors designated by communities and local institutions, trained in control and surveillance, equipped with mobile phones to collect and record data using a mobile application. The monitors will cover the status of the threat, its type and severity, environmental and social impacts, and the actors involved; ii) An institutional administrator responsible for managing an online platform that receives, visualizes (through web mapping), and verifies the data provided by the local monitors; iii) A response protocol to ensure immediate and effective actions are taken when a threat is identified; iv) A security protocol for environmental threat informants to ensure the confidentiality of the information and contribute to preventing, mitigating, or addressing conflicts. This protocol will be coordinated with the institutional staff responsible for managing the protected area (INPARQUES) where the threat is identified, based on the nature of the threat.

132. Along with Modules 1 and 2 of Output 1.1.2, the participatory monitoring module for the control and surveillance of environmental threats will be developed during the first year. This module will include a mobile application, web mapping, the participatory monitoring and response protocol, as well as integration with the Geospatial Monitoring and Evaluation System for the sustainable and integrated management of the landscape (Output 1.1.2). The information collected in Module 3 will be reported and stored in Module 2 of Output 1.1.2. Field-identified alerts will be monitored, mapped through remote sensors, and reported to the responsible authorities. From the second to the fifth year, a participatory monitoring protocol will be implemented to identify environmental threats. This will provide real-time data on the identified threats through Module 3 of the system (**Figure 15**). The project will incorporate awareness-raising and information dissemination actions related to the early warning system, focusing on park rangers, indigenous communities, and local communities. Information resources will be written in a clear and understandable language and in a bilingual format and use alternative formats, depending on the capacities and knowledge of the communities. The experience will be analyzed and systematized in terms of achieving its objective, weaknesses and strengths, and the potential and feasibility of replication in other protected areas under special administration (ABRAEs).

Output 1.1.4: *Support tools for management, planning, and agreements within a multi-level and participatory governance framework for comprehensive landscape management.*

133. The project will enable 5 ABRAEs to improve their performance in management and administration based on PORUs. This will include the development of specific theories of change for each site, ensuring that management tools are better articulated with institutions from the different relevant sectors, and optimizing the allocation of resources from an integrated landscape approach. To achieve this, the project will facilitate the development of necessary baseline studies, based on an assessment of critical information gaps, as support tools for planning, reinforcing the institutional,

legal, and policy framework to achieve effective management of the ABRAEs and improved coverage of key conservation objectives.

134. The project will gather relevant existing baseline information to achieve a comprehensive environmental study. It will also conduct surveys, field verifications, and studies required for the formulation of PORUs, based on identified and prioritized information gaps, including areas of biological diversity conservation, climate change, carbon flows and storage, ecosystem goods and services, and sustainable livelihood management. Among the studies, a socioeconomic survey is planned for information updating, as well as a socio-economic and environmental valuation study of biological diversity in the Caron? River basin, which will contribute to the formulation of PORUs. Special attention will be given to ensuring that data collection and information updating have a gender and intercultural approach.

135. Starting from year 2, mechanisms for inter-institutional coordination in environmental governance should be established. This includes conducting inter-institutional analysis, defining roles, and establishing a pathway for governance agreements. The project will promote participation and inter-institutional coordination among stakeholders at all levels (national, state, municipal, and local). The goal is to achieve governance of the intervened territory by seeking consensus, alliances, and integrated management mechanisms aligned with guidelines and actions for integrated landscape management with a focus on biological diversity conservation and management. All relevant and interested groups will be involved, including public and private institutions, indigenous and local communities, authorities, and Non-Governmental Organization (NGOs). This will strengthen management tools for effective planning and decision-making, leading to improved natural resource management through the strengthening of existing ABRAEs. In these dialogue mechanisms, women's participation in decision-making will be promoted.

136. The project will produce information to generate awareness of the environmental and economic value of biological diversity in the Caron? River basin. This will serve as a tool to understand the value of ecosystem goods and services in the basin and their inclusion in land use planning and management processes, as well as in strategies for financial sustainability within the ABRAEs of the basin.

137. In addition to the development of these tools, the project will provide inputs and equipment. An assessment will be conducted to determine which of the existing camps of the institutions in the basin can support the training activities, implementation of planning tools, monitoring, fire control, and community management. Currently, these processes need to be strengthened to improve their operation.

Component 2: Integrated landscape management for the sustainable use of biological diversity and increased provision of ecosystem services.

138. The shared vision of the involved actors, both institutional and community-based, this component of the project will support the formulation of the PORU (Output 2.1.1) and reaffirm a shift from the current emphasis on territorial planning to a holistic approach to landscape management. This will include areas of biological diversity conservation, climate change, carbon flows and storage, water management, ecosystem goods and services, and sustainable livelihood management, which include community participation in the benefits generated. The new and revised PORU of the ABRAEs will emphasize sustainable management practices for livelihoods and food security to ensure multiple benefits and ecosystem conservation.

139. The project will seek to strengthen the integrated management of the landscape with the participation of different institutional and community actors involved in the management and use of landscape areas by supporting the restoration of areas identified as degraded by fires, deforestation, and unauthorized mining. This will be done through a set of strategies that will restore forest, morichal, and savannah ecosystems. As a result, carbon capture will be improved, among other enhancements to ecosystem services (Output 2.1.2). The project will support the development of a financial plan for the 5 ABRAEs as a strategy to promote their financial sustainability, as well as the strengthening of the management capacity of these ABRAEs (Output 2.1.3). Planning and coordination will be done taking

into consideration the lessons learned from other projects that the country has implemented in its different ABRAEs.

140. The overall implementation of the project will generate -13,302,275 tCO₂-e of greenhouse emissions mitigated through carbon capture and avoided emissions. Through carbon capture, increasing the carbon content of terrestrial reservoirs through the restoration of 13,879 ha of degraded areas, which will directly sequester -1,714,484 tCO₂-e. And through the avoided emissions, the project through other activities will reduce deforestation and degradation by 6% and 1% respectively, and reduce the frequency of fires from 1 to 2 years, which will produce avoided emissions of -11,587.791 tCO₂-e.

Outcome 2.1: The MINEC, sectoral institutions at different levels, and indigenous and criollo communities have managed the landscapes of the ABRAEs in an integrated and sustainable manner, contributing to the restoration, recovery, and conservation of landscapes and biological diversity.

Output 2.1.1: Five (5) Participatory and Consensus-based Management Plans and Regulations of Use (PORUs) formulated: Canaima National Park, National Monuments of the Tepuyes Chain, La Paragua Forest Reserve, Ikabar? Hydraulic Reserve, South Protected Zone of Bolivar State.

141. The PORU, a planning means of ABRAEs, will establish guidelines, directives, and policies for the management of the respective area, as well as guidance for the allocation of permitted uses and activities. The implementation of the PORU will be in the short and medium term, to achieve a long-term objective. The PORU will include proposals for the allocation of uses aimed at promoting the rational use of existing natural resources in that spatial context, the restoration of degraded areas, and improving the living conditions of current and future inhabitants. In the case of Canaima National Park, the PORU will be developed taking into account the existing zoning in its eastern zone and creating a single instrument that covers the entire territory. For the three Natural Monuments, as well as the South Protective Zone of the Bolivar State and the Ikabar? National Hydraulic Reserve, the PORU will be reviewed and subjected to a consultation process for subsequent approval. All the aforementioned tools will be coherent with the different strategies and plans in force in the region, such as the Comprehensive Water Management Plan for the Caron? River Watershed, among others.

142. These implementation instruments will be designed for short and medium-term purposes, aiming to achieve a long-term objective. They will include proposals for the allocation of uses that promote the rational utilization of the natural resources within that spatial scope, the restoration of degraded areas, and the improvement of living conditions for current and future inhabitants. The project will update and develop its management tools to support the improvement of ABRAEs management. In the case of Canaima National Park, the PORU will be developed taking into account the existing zoning in its eastern zone and creating a single instrument that covers the entire territory. For the three Natural Monuments, as well as the South Protective Zone of the Bolivar State and the Ikabar? National Hydraulic Reserve, the PORU projects will be reviewed, and support will be provided for their consultation and subsequent approval. All the aforementioned tools will be coherent with the different strategies and plans in place in the region, such as the Comprehensive Water Management Plan of the Caron? Hydrographic Region, among others.

143. The formulation of the PORU will identify and define a set of operational on-the-ground action programs for each ABRAEs. The analysis will consider the physical, socio-environmental, legal, and institutional realities. Subsequently, consultation will be conducted with relevant stakeholders and interested parties. The project will support the management of the PORU by involving communities in on-the-ground actions. To achieve this, the field activities defined in Output 1.1.2, Output 1.1.4, Output 2.1.2, Output 3.1.1, and Output 3.1.2 will be implemented. These activities include data collection, monitoring, approaches and practices for sustainable landscape management, and restoration of forested and savanna areas. These actions will serve as pilot demonstration areas for the management of the PORU and will be incorporated into the operational programs of the PORU. In the first year, baseline information will be collected for the entire basin with the support of Output 1.1.2

and Output 1.1.4, taking into account the physical-natural and socioeconomic context, policy guidelines, the preliminary assessment of ABRAEs through the METT, legal regulations, and recognition of entities in the environmental sphere. This information will serve as the basis for the development of the five PORUs.

144. Based on the existing baseline information and the field surveys and verifications conducted to assess needs or existing gaps, it will be necessary to standardize aspects such as: cartography, biophysical and socioeconomic information, legal, institutional, and administrative information, field data, community involvement in the planning process, overall structure of the information, basic concepts, zoning criteria, and existing territorial units. Next, it will be necessary to identify and analyze the central issues, taking into consideration resource valuation, human population dynamics, socioeconomic profiles, conflicts, threats, development and conservation orientations for biological diversity, and spatial dynamics reorientations. These two stages will define the initial concept of the formulation process in terms of its technical and economic elements. Next, it will be necessary to identify and analyze the central issues, taking into consideration: resource valuation, human population dynamics, socioeconomic profiles, conflicts, threats, development and conservation orientations for biological diversity, and spatial dynamics reorientations. These two stages will define the initial concept of the formulation process in terms of its technical and economic elements. It will be essential to engage with the communities, listening to and considering their opinions and proposals. Their expectations will be noted to assess and incorporate them into the PORU, as long as they are technically, socially, and legally feasible. The existing information on the relationships between population and territorial units, land use, hierarchy of population centers, size and range, economic base, political-administrative status, external population centers (flows), functional structure of political-administrative units, intra-territorial unit relationships, extra-territorial unit relationships, socio-economic aspects of territorial units, and ecological threats should be systematized and analyzed.

145. In year 2, the mechanisms for participation and governance will be defined through Output 1.1.4, and the formal zoning processes of the management units of the 5 ABRAEs will be executed. The following units will be considered: i) landscape units: Based on the comprehensive ILM approach, taking into account climate, soils, biological diversity, and ecosystem services, which define important aspects of the studied reality with its limitations and potential; ii) Administrative or Political-Administrative Units: Based on institutional competences and jurisdiction; iii) Urban Units and Rural Units. iv) Socio-Cultural Units; v) Other units identified in the basin, such as micro-watersheds. These activities will be carried out during years 2 and 3. Based on the defined zoning criteria, the Geographic Space will be inferred as one or several spatial units. It will also be important to conduct territorial assessments, considering conservation and management options for the ABRAEs. This process of assessment and zoning will allow for the delimitation of sections within the total area, assigning them corresponding land use categories.

146. In order to establish the regulations, relevant uses will be assigned to each category, following the general criteria established for the project's development. Based on the obtained results, the preliminary proposal of the PORU will be configured, including both the decree text and the corresponding map. A table will be created, including the different zoning units by categories, identification, surface area, percentage proportion relative to the total area, characteristics, and possible uses. Based on the proportions of each category within the area, conclusions can be drawn regarding the overall state of the ABRAEs, leading to decisions that will shape the general management of the area.

147. During year 3, following the participatory process initiated at the beginning of the project, the formal process of preliminary socialization of the PORU for each ABRAE will be initiated. During this stage, the socialization process will take place in the communities, primarily indigenous communities, after obtaining the Prior Informed Consent. The purpose of this process is to inform, raise awareness, discuss, analyze, and enrich the developed proposal. Once this stage is consolidated, social viability will be conferred based on the comprehensive understanding of the zoning documents by the future users of the project. It is important to highlight that this process should be dynamic and initiated from the very moment of gathering the baseline information of the area, involving indigenous communities as protagonists of their own development process. It will be necessary to process the

information according to the proposals and suggestions gathered in the communities, taking into account the moments of the baseline information. The explanations should be clear regarding which suggestions were fully or partially incorporated and which ones could not be included. This step will require detailed planning, clear and well-managed communication by the project team to inform about the objectives. It will also be necessary to align expectations and make a broad, well-informed, and timely call for participation, seeking the highest and best possible level of involvement. The general structure of the PORU will be developed for discussion, emphasizing the zoning category or categories that have a direct relationship with each community, as well as the possible assigned uses. The presentation of the zoning map is very important to facilitate the identification of communities within it. The results of the consultation will be documented in the corresponding records, including attendance records and the outcomes. These records will capture any ratifications or modifications to the proposed PORU in consultation, as well as proposals for new aspects to be included. The outputs of the consultation will be compiled, systematized, and analyzed using the tools specifically developed for this purpose.

148. By mid-year 4 and throughout year 5, the decree, the final zoning map, and the technical final report will be developed, marking the completion of the formulation process for the PORU project. The decree, the final zoning map, and the technical final report will include the diagnosis, thematic cartography, zoning map, socialization process, and the conclusions that will lead to its promotion. It is crucial at this stage to validate the final version through discussion sessions with the personnel involved in the formulation, with a focus on achieving technical, legal, and social viability. The coherence of the formulation process will be particularly valued, ensuring the alignment between the objectives of creating the area, the objectives of the PORU, and the applicable regulations.

149. The PORU constitutes a general administrative act with the rank of a decree, as it is issued by the President of the Republic. The decree becomes effective upon its publication in the Official Gazette. Its general structure commonly consists of four sections: general provisions, land use plan, usage regulations, and transitional and final provisions. The second section includes a chapter on programs, subprograms, and management actions, which organizes the Management Plan appropriately and ensures consistency with the area's management instruments. The entire process of formulation and socialization will be carried out in accordance with the guidelines of the MINEC and the INPARQUES, involving the various stakeholders identified in the management of the Caron? River basin.

Output 2.1.2. *Degraded areas are restored within the project intervention area with a gender, generational, and intercultural approach*

150. In the project, the potential areas for restoration^[17] are located in Sectors 5 and 6. The total area to be restored will be 13,879 ha, consisting of forested areas and grasslands or savannahs. Specifically, 1,798 ha will be targeted for restoration in forested areas (1,220 ha of forest and 578 hectares of morichal), while 12,081 hectares will be focused on restoring savannah areas. The restoration actions will be implemented in tropical rainforest, morichal, and savannah ecosystems. Table 8 outlines the planned goals, ecosystems, restoration approaches, surface areas in hectares, and the estimated total carbon capture for each area to be restored during the project implementation.

Table 8. Sub-indicators, ecosystems, strategies, areas (ha), and CO₂-e total sequestration of the areas to be restored.

Subindicator GEF	Ecosystem	Restoration approaches	Area (ha)	tCO ₂ -e[18]18 Capture
3.1. Forest and Woodland Area	Forest	Passive restoration	300	-87,953
		Reforestation	323	-94,697
		Reforestation of mining areas	18	-6,681
		SAF (conucos and crop residues)	401	-7,056
		SAF (Productive yards)	178	2,623
	Morichal	Passive restoration	328	-117,762
		Reforestation	250	-73,295
3.2. Area of natural grasslands and shrublands	Savannah	Passive restoration	12,081	-1,329,663
Total			13,879	-1,714,484

Source: Original elaboration, based on the study to determine the degraded areas and areas to be restored designed during the Prodoc (2023).

151. The project will implement forest restoration approaches that encompass practices of Sustainable Forest Management (SFM) such as agroforestry systems, reforestation, and passive reforestation, in collaboration with indigenous and criollo communities and in partnership with institutions present in the area. These approaches aim to promote the recovery of degraded habitats to generate connectivity between fragments of natural forests for biological diversity conservation, restore areas that enhance and support high conservation values, contribute to the generation of sustainable food sources and livelihoods for communities, promote restoration in water protection areas to improve water regulation, and facilitate soil stabilization to prevent erosion and promote the formation of topsoil. Biological diversity conservation and carbon sequestration will be cross-cutting themes considered in the design and implementation of the restoration approaches.

152. For the restoration of the 1,220 ha of degraded forest ecosystems, three restoration approaches are proposed: Agroforestry Systems (SAF), reforestation, and passive restoration:

153. 1) The development of SAF will focus on recognizing traditional and ancestral knowledge, the integral use of native species, the valorization of non-timber forest products, and the improvement of conucos in order to diversify and extend production, and promote food security for Pem?n families and communities. Efforts will be made to associate traditional agricultural crops of indigenous communities with native tree species and multipurpose palms to promote diversified production and sustainable use of both conucos and fallow areas[19]19 (401 ha), and productive yards[20]20 (178 ha). It is recommended to establish 401 ha of SAFs (conucos and fallow areas) within forest patches to support the establishment of ecological corridors. Additionally, the 178 ha of agroforestry systems (productive

yards) can be established in savannah areas, following the proposal made by CAKY (2021), which can be replicated with the participation of families involved in this activity.

154. For these purposes, species adapted to the ecological conditions of the area and accepted by the communities will be used, such as: guamo (*Inga sp*), araguaney (*Tabebuia chrysantha*), cacao de agua (*Pachira minor*), achiote (*Bixa orellana*), Guamita (*Inga sertulifera*), grugru palm (*Acrocomia sclerocarpa*), guava (*Psidium guajava*), soursop (*Annona muricata*), tacamajaca (*Protium heptaphyllum*), strawberry tree (*Rheedia sp*), caruto (*Duroia gransabanensis*), palma San Pablo (*Geonoma deversa*), Gransaban palm (*Heliconia cannoidea*), fig tree (*Ficus sp*), Caruto (*Genipa americana*), t?piro (*Solanum sessiliflorum*), guayabita (*Psidium sp*), tiritita, casupo (*Ischnosiphon obliquus*), jobito (*Tapirira guianensis*), pendare (*Symphonia globulifera*), moriche (*Mauritia flexuosa*), seje (*Jessenia bataua*), moriche (*Mauritia flexuosa*), among others. Among the annual crops mentioned are: bitter cassava (*Manihot esculenta*), sweet potato (*Ipomoea batatas*), hot chili pepper (*Capsicum annuum*), pineapple (*Ananas comosus*), cocoyam (*Xanthosoma sagittifolium*), banana (*Musa acuminata*), plantain (*Musa paradisiaca*), yam (*Dioscorea alata*), sugarcane (*Saccharum officinarum*), mapuey (*Dioscorea trifida*), beans (*Phaseolus vulgaris*), pigeon pea (*Cajanus cajan*), corn (*Zea mays*), cotton (*Gossypium hirsutum*), rice, (*Oryza sativa*), among others.

155. 2) The reforestation efforts will focus on establishing species whose main function is to protect the soil and reduce the risks of landslides and floods. It also aims to contribute to the regulation of the hydrological cycle, utilizing the labor of the beneficiary communities through participatory work systems, including seed collection, nursery production, actual plantations, and cultural care practices. The forest plantations to be implemented in the identified area will promote the participation of indigenous and local communities, biological diversity conservation, and multiple uses of the forest. With this reforestation approach, 323 hectares of deforested areas resulting from land use changes will be restored through the establishment of mixed plantations involving a diversity of native species that are accepted by the involved communities. Some of the species that can be considered within these efforts are those that are endemic and have conservation status, such as: *Acrocomia aculeata*, *Aldina latifolia*, *Anacardium giganteum*, *Aspidosperma excelsum*, *Aspidosperma steyermarkii*, *Brosimum lactescens*, *Caraipa psilocarpa*, *Caryocar nuciferum*, *Cassia grandis*, *Cecropia sciadophylla*, *Centrolobium paraense*, *Copaifera pubiflora*, *Couma utilis*, *Couratari guianensis*, *Desmoncus polyacanthos*, *Dipteryx odorata*, *Endlicheria an?mala*, *Enterolobium schomburgkii*, *Eri.sma uncinatum*, *Eschweilera subglandulosa*, *Euterpe oleracea*, *Euterpe precatoria*, *Ficus albert-smithii*, *Ficus amaz?nica*, *Garcinia madruno*, *Geonoma deversa*, *Guarea guidonia*, *Handroanthus impetiginosus*, *Himatanthus articulatus*, *Hymenaea courbaril*, *Inga ingoides*, *Iriartea deltoidea*, *Jacaranda copaia*, *Mabea taquari*, *Mauritia flexuosa*, *Nectandra pichurim*, *Ocotea cernua*, *Oenocarpus vacaba*, *Oenocarpus bataua*, *Parkia pendula*, *Pera bicolor*, *Piper bolivaranum*, *Piper lemaense*, *Pourouma bolivarensis*, *Pouteria canaimaensis*, *Pterocarpus acapulcensis*, *Schefflera morototoni*, *Tachigali guianensis*, *Terminalia guyanensis*, *Triplaris weigeltiana*, *Virola sebifera*, *Vismia guianensis*, *Vitex capitata*, *Vochysia tetraphylla* y *Xylopia aromatica*, entre otras.

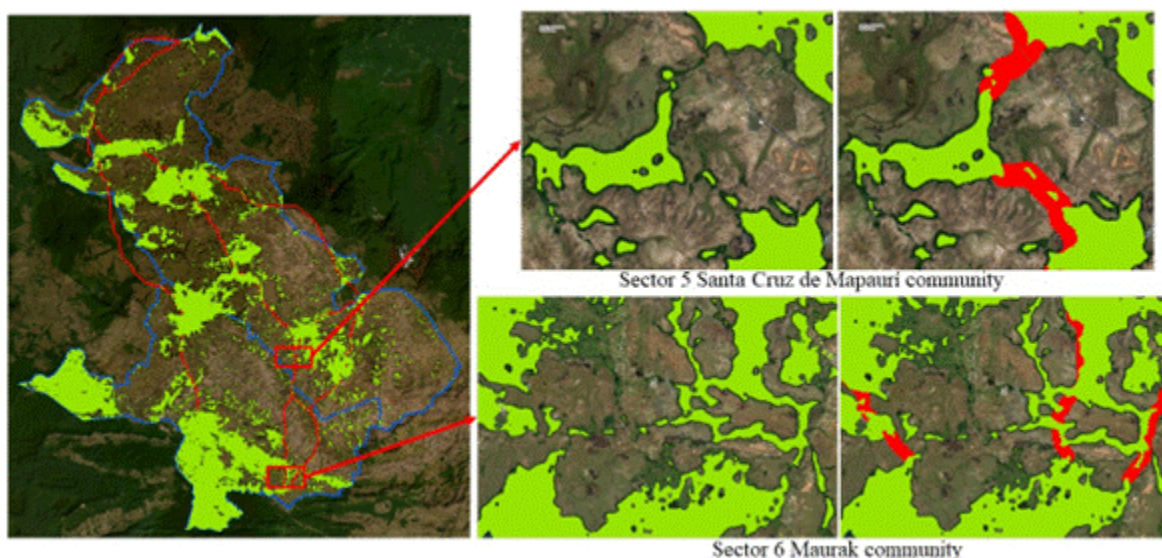
156. For the reforestation and recovery of areas degraded by mining activities, 18 ha will be selected to establish pilot trials designed in blocks. The objective is to evaluate different restoration techniques that can facilitate the recovery of these areas. This selected area will serve as evidence of soil degradation caused by mining activities and will help establish reference levels for future ecological restoration actions.

157. 3) For passive restoration[21]21, 300 ha of forests will be allowed to recover naturally, with the control of stressors such as fire frequency, forest fires, utilization rate of natural resources, and erosion processes. This approach will be applied in both forest patches and edges. In fragmented areas such as forest patches, for example, the conucos, the establishment of applied nucleation and management of natural regeneration is suggested, protecting these spaces from activities that originally degraded the ecosystems.

158. During the formulation of the Prodoc, a study was conducted to spatially identify potential areas for restoration that could contribute to improving the ecological connectivity of the forest ecosystem.

Preliminarily, it was proposed that out of the 1,220 ha of forests to be restored, approximately 470 ha had the potential to contribute to this functionality. These areas were located in regions with greater accessibility to indigenous communities and are divided into two zones: a) The first zone is in Sector 6, surrounding the Maurak community and in the vicinity of the airport and Santa Elena de Uair?n. This area consists of three sections: the first section with two connectivity areas of 41 ha and 26 ha, the second section with three connectivity areas of 32 ha, 34 ha, and 35 ha, and the third section with one connectivity area of 176 hectares. b) The second zone is in Sector 5, in the Santa Cruz de Mapaur? community, near the Kumarakapay Agricultural Technical School. This zone has two sections, the first section with 66 ha and the second section with 60 ha (Figure 16).

Figure 16. Preliminary sectors for the establishment of ecological corridors in Sector 5 and 6.



Source: Original elaboration based on the analysis of areas with potential for ecological connectivity of landscapes through corridors during the Prodoc (2023).

159. For the restoration of the 578 hectares of morichal ecosystems, passive restoration and reforestation approaches are proposed:

160. Morichal ecosystems are important for the conservation of water resources as they can be found along riverbanks, similar to gallery forests. They provide food for various birds and mammals and act as efficient sediment traps. Morichals also offer different products to indigenous communities, including fruits, leaves, and trunks. For the restoration of the 578 ha of morichals, a passive restoration approach will be employed (328 ha). Similar to forests, morichals can naturally recover if actions are taken to control stressors. For reforestation in morichals (250 ha), recommended methods include applied nucleation, mixed-species plantations using native species, seed banks utilization, management of natural regeneration, and the provision of bird perches, among others. Species adapted to the area's conditions and accepted by the community will be used, such as: *Mauritia flexuosa*, *Acosmium nitens*? *Ocotea cymbarum*, *Oenocarpus bataua* y *Simaruba amara*.

161. For the restoration of the 12,081 hectares of savanna ecosystems, a passive restoration approach will be used. Savannas are the most affected ecosystem by vegetation fires, which often go uncontrolled and directly impact forest edges. Therefore, the passive restoration approach is proposed, considering the vast extent of savannas. Similar to forests and morichals, savannas can naturally recover by controlling the stressor of fire frequency, which is the main barrier to their regeneration. This approach will be supported by the design and implementation of a comprehensive fire management program, which will be initiated in the first year of the project, as explained later on.

162. In year 1, the project will validate in the field the criteria used for the prioritization of areas, as well as the different restoration approaches to be implemented and the design of the restoration plan. The project will identify the communities, the Technical Agricultural Schools (ETA), and the governmental and non-governmental institutions that will be involved in the restoration process. This validation process will allow for necessary adjustments to be made based on ecological, economic, and sociocultural conditions.

163. Durante this first year, the Indigenous Productive Open Classrooms Network (RAAPI) will be established, consisting of the ETAs located in sectors close to the restoration areas (sectors 5 and 6). Training will be provided through a hands-on learning approach for at least 3,000 students from these ETAs. In the technical schools, nurseries will be established with the aim of producing native forest and fruit species, such as kaicharak?n (*Garcinia madruno*) or wonp?n (*Genipa sp*), as well as legumes like guamas (*Inga sp*, *Maipayek*, *Kamadakyek*). This initiative will contribute to diversifying the areas of cultivation and will support the activities of restoring areas by enriching fallow lands and productive yards, thereby strengthening their character as permanent agroforestry systems. These RAAPIs will serve as demonstration centers for agroecological practices and agroforestry systems, involving young people, parents, teachers, and technical staff from each of these technical schools. Operational support will be provided to them for the conditioning and adaptation of their productive infrastructure. The open classrooms will facilitate engagement with young people who will be part of the volunteers integrated into the restoration strategies of the identified areas. The project will work with educational authorities, such as the MPPE, to explore the possibility of including a specialization in Agroforestry Systems in the curriculum of the technical schools.

164. In this first year, a comprehensive fire management program will be created and implemented. The objective of the program is to develop a system for the prevention and reduction of forest fires, involving indigenous communities and government institutions, to reduce damages in the landscape units of Sectors 5 and 6 of the Caron? River Basin. The program will facilitate coordination among state agencies, indigenous communities, and other stakeholders to integrate efforts, human resources, and materials for the protection of landscape units. Additionally, the establishment of at least 2 community fire brigades will be promoted, providing training in fire management, suppression and extinguishment, operations, prevention and control, and investigation of the causes of forest fires (Output 1.1.1). A protocol for post-fire assessment will be developed, enabling the mapping of burned areas using remote sensing and the estimation of greenhouse gas emissions resulting from the fires. In this first year, the establishment of nurseries and plant production is also planned to initiate the restoration process. From year 2 to year 5, the restoration actions will be implemented and monitored.

165. The restoration of degraded areas in the project will require a monitoring system that can be adapted to different operational scales and a wide variety of sites. This is necessary to understand the progress of the restoration efforts, determine the reasons for success or failure, and learn from both the successes and failures. Participatory monitoring is proposed as a valuable evaluation approach, as it is a collaborative, multi-level system that involves local stakeholders in data collection and analysis, learning, and decision-making (CIFOR, 2016).

166. In this regard, a participatory monitoring system will be designed (year 1) and implemented (from year 2 to 5) following the guidelines of the Center for International Forestry Research (CIFOR). (https://www.cifor.org/publications/pdf_files/OccPapers/OP-167.pdf) and the World Wildlife Fund (WWF) (https://wwflac.awsassets.panda.org/downloads/guia_de_monitoreo_de_la_restauracion_de_bosques_a_escalade_sitio_web.pdf.) In this system, learning networks should be created to facilitate the engagement of stakeholders at multiple levels (international, national, local). These networks should include support staff, technical resources, data management infrastructure, training, workshops, and meetings. The resources should generate reliable and accurate information about forest cover change, its drivers, threats, and biophysical and socioeconomic impacts. Additionally, the system will incorporate monitoring of land cover and land use changes as outlined in Output 1.1.2, as well as field surveillance through the use of unmanned aerial vehicles (drones).

167. The lessons learned from the various restoration approaches implemented in the project will be shared through practical guides that will be illustrated and bilingual (in Spanish and Pem?n languages). This dissemination activity will align with Output 4.1.3.

168. Between years 1 and 5, training workshops will be conducted for technical staff, indigenous and local communities, and institutional personnel as part of the activities related to the restoration of degraded areas (Output 1.1.1).

Output 2.1.3. *Formulated financial plan complements the management effectiveness of the system of the 5 ABRAEs in the Caron? River basin*

169. In the first year, the project will develop a document that includes the analysis of the financial sustainability of the 5 ABRAEs, based on the planning and preparation of the quantification of the financial gap, the collection of information, processing and analysis, and validation of the results. For the strengthening of the Guardaparques Center in the community of Paratepuy de Roraima, an assessment of the conditions of the facilities dedicated to the management of the ABRAEs in the basin will be carried out for the conditioning and equipping of the office in one of the important points for the development of tourism in the intervention area.

170. In the second year, the project will develop a document on the financial plan for strengthening the management of the ABRAEs in the basin. The paper will include a general framework of the protected areas system, financial background, a summary of financial gaps, investment priorities, and a summary of financing strategies and implementation. In the same year, the conditioning and equipping of the office of the Guardaparques Center in the community of Paratepuy de Roraima will begin based on the assessment carried out in the first year. This year, the Payment for Environmental Services (PES) study's design will also be included as a proposed financial mechanism for the Environmental Management Sustainability in the Caron? River Basin. Additionally, the development of protocols for designing environmental ecological tributes for the APs in the Caron? River Basin is proposed as a complementary mechanism for Financial Sustainability.

171. These documents will be presented to MINEC and INPARQUES for their consideration and validation. The Project team will engage in a process of raising awareness and providing support to these institutions in order to contribute to the potential implementation of the financial plans.

Component 3. Diversification of livelihoods in indigenous and criollo communities for sustainability in landscape management with a gender, generational, and intercultural approach

172. This component will strengthen the integrated landscape management through balanced activities and actions based on the production and value-added use of goods and services derived from biological diversity. This will contribute to improving the livelihoods and food security of indigenous and criollo communities. To alleviate the pressures of these communities on natural resources, alternative livelihoods will be promoted through the project, with a gender and intercultural focus under sustainable productive alternatives. The GEF's alternative financial and technical support will strategically focus on identifying, analyzing, and implementing schemes for the sustainable use of natural resources (Output 3.1.1 and Output 3.1.2). This will increase opportunities for sustainable nature-based income-generating activities to enhance household income and reduce vulnerabilities. Increased production and/or income will help indigenous and criollo communities improve their socioeconomic status and food security, as well as establish or expand sustainable businesses. This is key to the successful management of conservation areas and the reduction of pressure on them (Output 3.1.4).

173. Through the Subsidies to Direct Beneficiaries, different Grant Agreements will be established, in which beneficiaries identify and manage their own needs with the technical support of FAO in order to improve ownership, sustainability, autonomy, and the valorization of local knowledge.

Outcome 3.1: Indigenous and criollo communities have implemented resilient, diversified, and sustainable livelihoods in the Caron? River basin.

Output 3.1.1: Participatively formulated and implemented community plans integrate sustainable economic activities related to ecotourism, timber and non-timber forest products, and family farming.

174. The project, under the application of free, prior, and informed consent, initiated in its formulation stage, will continue to promote the participation of the indigenous Pem?n people's Captains (Council of Chiefs, General Captains, Communal Captains, Council of Elders) as well as the organizational instances of the criollo communities (communal councils) to identify sustainable productive alternatives. Among the possible options to consider are: a) development of ecotourism, including supporting infrastructure, b) agroforestry and family agriculture, c) nurseries for useful, ornamental, timber, and non-timber plants, and gardens, d) processing and commercialization of timber and non-timber useful plants, e) crafts and similar activities.

175. The project will conduct a participatory diagnosis to identify community plans. In this formulation stage, at least three community plans with development potential were identified: 1) a plan for the management and utilization of non-timber forest products, 2) a plan for the application of best practices in family agriculture, and 3) an ecotourism development plan to strengthen community tourism organizations. At least one of these plans will be led by women. These plans will be accompanied by training and business model design. The design of the plans should be based on community priorities and participatory planning, with clear definitions of financially viable, economically feasible, and environmentally sustainable activities. Additionally, the plans should have the capacity to adapt to different local situations that may influence development. The assistance of extensionists will be required throughout the production and marketing process, at least one of whom must be bilingual. At the beginning of plan implementation, partnerships will be established with institutions such as INPARQUES, Science and Technology, Universities, and the Ministry of Agriculture to ensure the continuity of the community plans after the project concludes.

176. The first plan for the management and utilization of Non-Timber Forest Products (NTFPs) will focus on training in the sustainable harvesting, management, processing, marketing, and promotion of the identified products. The plan will adhere to criteria of sustainability and comply with the collection and extraction rates allowed by regulatory agencies. The plan will focus on establishing pilot units for the utilization of NTFPs such as Moriche oil (*Mauritia flexuosa*), Seje oil (*Oenocarpus sp*, *Jessenia bataua*), and tacamajaca resin (*Protium heptaphyllum*). Additionally, native medicinal species will be used as raw materials for the production of soaps, creams, ointments, medicinal products, and cosmetics. These pilot units will be developed as bioenterprises led by women and young people from the communities. In the project area, specifically in sectors 5 and 6, there are experiences of families processing of some of these forest products. However, regarding the sustainability of the mentioned uses, there is limited knowledge and research specific to the project area. It is known that all these utilization methods are only sustainable when extraction rates do not exceed the resilience of the vegetation formations, meaning their ability to recover from intervention through the natural processes inherent to the ecosystems they comprise. Therefore, determining these sustainable extraction rates should be the subject of specific technical studies for each type of resource used, whether it be fibers, fruits, or other elements. Institutions will conduct monitoring to ensure compliance with the permitted extraction rates. In this regard, direct observation of the daily practices in some communities highlights the need for such studies in certain cases, such as the extraction of moriche and seje leaves for roof construction, or the use of manare for the production of utilitarian crafts.

177. In this sense, direct observation of the daily life in some communities highlights the importance of conducting these studies in certain cases, such as the extraction of moriche and seje leaves for roof construction, or the use of Manare for the production of utilitarian crafts.

178. Based on the above, it will be necessary to conduct the necessary ethnobotanical and chemical bioprospecting studies to provide technical and scientific support to the Bioentrepreneurship[22]22 activities that will be carried out. To conduct these studies, an alliance will be formed with CVG, specifically with the Environmental, Science, and Technology Management, which has personnel

experienced in ethnobotanical studies. The aim is to leverage the facilities of the Parupa Scientific Station of this institution, located in the area, which includes indigenous technicians with experience in local vegetation surveys. These studies should be participatory. The local population should engage with their traditional knowledge (often preserved only by the elders of the communities). The community should also participate in determining management parameters and designing other project components to empower themselves with sustainable resource utilization strategies. This will allow them to revalue their ancestral knowledge and capacity to manage their territories. All of this should be done with external support, considering the constraints of the current reality. This will establish a pilot experience that lays the groundwork for evaluating the feasibility of establishing an industry and a market linked to bioproducts once the project is completed.

179. The second plan will focus on the application of best practices in family agriculture. The goal is to diversify the traditional food products in the family diet. For example, efforts will be made to improve the effectiveness and reduce the working time of women producers of casabe and kumache^[23] (who manually grate vegetables and use traditional stoves for cooking). This will help increase their productivity and supply of products in the local and municipal markets. Technical improvements will enhance the production of casabe and kumache by using mechanical equipment for grating cassava and eco-efficient clay stoves and cookers that save firewood. Initiatives related to cassava processing for obtaining flour, starch, and amish[?] (a traditional food supplement made from cassava leaves) will also be promoted, as well as the production of kat[?] (a food sauce byproduct of casabe production). Another initiative included in this plan is the processing of fruits such as pineapple (*Ananas comosus*) and p[?]p[?] (muc[?], t[?]piro, or cocona, *Solanum sessiliflorum*) to make preserves, jams, and dehydrated products. P[?]p[?] is a native fruit with high vitamin C content. Likewise, work will be done with productive home gardens located near the households, usually in savannah areas, through agroforestry systems (implemented in conjunction with Product 2.1.2). These productive gardens are typically managed by women in the family, so the full participation of women should be considered in all improvement practices within these systems aimed at increasing food production and diversification for family sustenance (both for self-consumption and commercialization), incorporating legumes and multipurpose native trees. Spaces for knowledge exchange on the nutritional values of the foods produced in the productive gardens will be created, incorporating the revaluation of traditional gastronomy in these gatherings.

180. The third plan will focus on promoting ecotourism as a sustainable livelihood in the Luepa-Kavanay[?]n and Luepa-Santa Elena de Uair[?]n road axes in Canaima National Park. This plan aims to provide a reliable economic support for the families and communities involved in ecotourism while ensuring the conservation of the natural environments that sustain it. Additionally, it seeks to stimulate the economy at the family and local levels.

181. In general, the project area is an already established tourist destination due to its rich landscapes and unique ecological characteristics. On the other hand, its status as Pem[?]n indigenous territory identifies this indigenous group as one of the main social actors in the area. Specifically in sector 5 of Canaima National Park, tourism has been developed for many years in the Luepa-Kavanay[?]n and Luepa-Santa Elena de Uair[?]n road axes. From years 2003 to 2016, a community-based ecotourism project was developed by the indigenous cooperative Pem[?]n E[?]masens[?]n II. They offered accommodation, food, transportation, guided tours, and experiences of the local indigenous culture at different points along the Luepa-Kavanay[?]n road axis. Along this road axis, you can find communities such as San Luis de Awarakay, Liwo Riw[?], Kavanay[?]n, and other populated centers like Karuay, Unatey, and Mowak. The drastic decrease in tourist flow in the area starting from 2016, related to the country's economic crisis and later exacerbated by the Covid-19 pandemic, led to the cessation of operations. Currently, the members of the E[?]masens[?]n cooperative and some community leaders in the area consider the reactivation of ecotourism activities along this road axis feasible based on the strengths developed through this experience. In order to promote ecotourism activities and minimize the impacts on wildlife, efforts will be made to improve the Visitor Center located at the INPARQUES Operations Headquarters in Luepa, which will be managed by nearby communities. Communication tools will be strengthened to promote these tourist destinations, and signage will be designed and

implemented to facilitate ecotourism activities while avoiding or minimizing impacts on wildlife. All these actions will be carried out in accordance with the guidelines established in the PORU of each ABRAEs. Additionally, partnerships with institutions such as INPARQUES and Gran Sabana Municipality will be promoted. In these sectors, there are experiences of indigenous organization focused on community-based tourism. These partnerships aim to strengthen collaboration, support, and coordination between the indigenous communities, INPARQUES, and the local government to enhance community-based tourism initiatives and ensure their sustainable development.

182. Regarding the implementation of the activities described above, in the first year, community assemblies will be held to identify the families and organized groups that will participate in each of the proposed initiatives. Learning Communities (groups of people with common interests and needs to share and acquire knowledge about a specific topic or activity in their immediate reality) will be established. This knowledge exchange can occur through formal and non-formal educational practices, as Learning Communities are a pedagogical strategy that prioritizes principles and practices of inclusion, equality, solidarity, dialogue, and knowledge sharing. Therefore, they are a suitable platform for knowledge exchange within the framework of the project and for planning specific activities in each community. All members of the community, including grandparents and women, will be encouraged to participate in the Learning Communities. The following initial topics are proposed: fire management, agroforestry, selection and management of seeds for annual and perennial crops, traditional varieties, biofertilizer management, mountain microorganisms and mycorrhizae, and processing of the production (which will be organized from Output 1.1.1).

183. Once the families, individuals, or organizations have been identified, the preparation and design of the various plans will commence. From year 2 to year 5, these plans will be executed, and their implementation will be monitored. The necessary support will be provided, including training and the provision of equipment, tools, and inputs required to initiate the different plans. Incentives will be encouraged to address specific documented initiatives, which will be reviewed and approved by the Project's Steering Committee.

184. In this Output, it is contemplated to incorporate Subsidies to Direct Beneficiaries through different Donation Agreements, in which indigenous and Creole communities identify and manage their own needs with the technical support of FAO. These donation agreements will constitute a direct response to the demands of the indigenous and Creole communities, which, through the management of resources to overcome the identified needs, will achieve a sense of belonging and the sustainability of the project.

185. This modality of donation agreements allows resources to reach the beneficiaries directly according to their most felt needs, ensuring appropriation, sustainability, and autonomy, as well as enhancing local knowledge.

186. As a pilot, it is intended to support sustainable economic processes that allow improving livelihoods in relation to ecotourism in the Canaima National Park. Obtaining resources through Donation Agreements will allow local communities to establish infrastructure to support ecotourism, such as signage, billboards, furniture for natural parks, computer equipment, tourist inns, infrastructure for the sale of handicrafts and non-profit forest products. timber. Organized indigenous communities, which predominate in the area, as well as organized creole communities will participate mainly.

187. In principle, the project will work with at least 6 indigenous and Creole communities. Although communities with potential for ecotourism development have been identified in the project formulation stage, they will be selected and prioritized in the community assemblies during the implementation stage, where the eligibility criteria for the selection of beneficiary communities will be established. Once the communities have been prioritized, the number of beneficiaries disaggregated by sex will be calculated during the project implementation stage, specifically when the socioeconomic study is carried out (Output 1.1.4).

188. Among the tourist activities that will be carried out within this framework are, for example, the participatory design of interpretive trails, guided tours of the different landscapes and natural monuments in the area, the design and establishment of signage and posters, the design of participatory activities that include visits sites with typical foods and points of sale for handicrafts and timber and

non-timber forest products, among others. In the project implementation stage, the business model will be designed for the ecotourism activities developed by the communities (Output 3.1.4), which will directly support the management of the resources executed through the Donation Agreements.

189. The modality of donations to beneficiaries will be made in such a way as to minimize the risks of the investments made in this pilot experience. The estimated budget is USD 50,000, so each community will receive around USD 8,000 in kind.

190. Sustainable economic processes are incorporated, especially ecotourism, which will allow them to facilitate the implementation of the planned investments. Lastly, it is highlighted that in Component 3 business plans will be designed, which will include sustainability plans to ensure that, once the project is finished, the investments will allow continuing to develop and strengthen ecotourism activities. Monitoring and verification will be carried out through the project's monitoring unit, which will carry out field monitoring and design mechanisms to minimize the risks that may arise in the implementation of this pilot experience.

Output 3.1.2. Designed and implemented program for the sustainable use of wildlife enables the reduction of pressure on biological diversity and improvement in livelihoods

191. The project will support initiatives that promote the sustainable use of wildlife and reduce pressure on biological diversity. This will optimize the ecological and productive potential of the ecosystem in line with community priorities and participatory planning. During the project formulation process, through the FPIC process, information was gathered about some community experiences regarding the use of wildlife.

192. The limited information on the impacts caused on wildlife, as well as the lack of data on harvests and local trade, hinders effective documentation of the pressures generated on wildlife. Indeed, the illegal exploitation of wildlife is an activity that poses a threat to biological diversity in all its forms. Apart from subsistence hunting, illegal exploitation also encompasses the unauthorized capture, collection, transportation, and trade of wildlife specimens for local commerce. An example of unregulated exploitation is the harvesting of plant species such as *Cattleya lawrenceana*, an epiphytic orchid highly valued in the domestic market and sold for local trade. Wildlife products are utilized in various ways by indigenous and local populations in the project area. For instance, the roofs of their traditional architecture incorporate materials like moriche palm (*Mauritia flexuosa*) and seje (*Oenocarpus sp.*, *Jessenia bataua*) trunks, while the pellas from seje trunks are used for constructing house walls. The fruit pulp of these two palms serves as important dietary supplements in the daily diet. Therefore, their utilization becomes a factor of pressure, resulting in alterations in population sizes (abundance, density) and structures. It can also impact their reproductive potential, genetic composition, and have repercussions on the flow and dynamics of food chains.

193. The program for sustainable use of wildlife will be designed in a participatory manner based on the diagnosis. Although there is a small preliminary diagnosis available, the Project will conduct a baseline study of wildlife to understand the main pressures, identify those engaging in unsustainable practices, explore the reasons behind them, and address other points of interest. Based on this, the program will define the following: i) The approach to sustainable use/regulation of use, identifying which species will be promoted for sustainable use, their utilization, limitations, and other relevant aspects; ii) The approach to address the underlying causes of pressure on wildlife (such as lack of subsistence options); iii) Defining strategies to reduce pressure, including alternative food and subsistence production options, practices that address human-wildlife conflicts, among other measures. A pilot test of some proposals that emerge from the participatory program will be carried out in collaboration with indigenous and criollo communities. The project will ensure the participation of institutions present in the basin in the discussion of alternatives, guaranteeing their presence and support during and after the completion of the project.

194. From the preliminary diagnosis available, some potentialities have emerged. For instance, the practice of beekeeping in Pem?n communities can be highlighted. It is worth mentioning that beekeeping is already a traditional activity among the population of El Pauj? and the surrounding areas of Canaima National Park. This activity started in the 1950s when the first beehives were introduced,

taking advantage of the pollution-free environments in the area to produce high-quality honey. The honey produced has gained recognition in national-level competitions. In recent years, the Pauj? community has started practicing Meliponiculture (Breeding of Stingless Native Bees or ANSAs). This practice has also been carried out in the surroundings of Santa Elena de Uair?n, especially for the utilization of Propolis, which is a therapeutic substance produced by bees from plant resins and exudates. In this regard, it is important to highlight that the Pem?n population has traditional knowledge about certain species of stingless native bees that produce exquisite-tasting honey with medicinal properties. These bees are only beginning to be recognized as a significant opportunity for utilization.

195. This initiative could become a sustainable business opportunity for families, considering the establishment of a pilot center for the management of stingless native bees in collaboration with interested communities. If this activity is prioritized, it would be possible to work with the interested communities to provide training, set up a pilot center, and offer technical support in the development of meliponaries and their entrepreneurial management.

196. Also from the preliminary diagnosis, the potential for managing native fish species through pisciculture was identified during formulation phase, with information about the presence of infrastructure (ponds) in some communities in the area. This could serve as a starting point for implementing such activities. According to the information collected in the field during the early 2000s, there was an experience in the construction and management of fish ponds. This experience focused on the hybrid called Cachamoto, a crossbreed between Cachama (*Colossoma macropomum*) and Morocoto (*Piaractus brachypomus*). At that time, the breeding of this hybrid was proposed in communities and Technical Schools within Canaima National Park to take advantage of its genetic characteristics:

? Being a hybrid, it does not reproduce naturally, which means it does not become an introduced species competing with the local species.

? Fast growth is a characteristic of these genetic crosses due to the *hybrid vigor*.

? Being omnivorous, it can survive on any food residue in case of a shortage of suitable concentrated feed.

197. The proposal was made within the framework of a development program that had institutional support for obtaining fingerlings (baby fish) and concentrated feed during the initial years of the experience. This support aimed to develop local capacities for establishing a laboratory for fingerling production and for producing the food items necessary for the fish diet. After a few years, institutional support weakened. However, the communities and participating Technical Schools had already established infrastructure and acquired knowledge regarding the management of the fish ponds. Some producers began introducing local species into the ponds and experimenting with locally available resources for fish feed. In this way, the utilization of the existing infrastructure continued through the reevaluation of local knowledge. The local species used so far are small-sized and naturally adapted to the relatively cold conditions of this area, such as the "Viejitas" fish (*Kuru?wak*, *Aequidens potaroensis*, *Guianacara stergiosi*). These fish species, such as guabina (*Pata'kay*, *Hoplias malabaricus*) and buscos (*Arivay*, *Callichthys callichthys*), are commonly used as ingredients in the traditional Pem?n soup known as tum? and some are sold grilled at the local market. It is possible to conduct tests with larger local species in order to assess their behavior in both natural lotic environments (such as rivers and reservoirs in the area) and the lentic environment of the ponds. This study can be conducted by ensuring proper oxygen supply through water management and providing a controlled diet based on local resources.

198. It was also mentioned the potential for the management of native fish farming, with information about the existence of infrastructure (ponds) in some communities in the area, which could serve as a starting point for the implementation of such activities. Another initiative that emerged from these consultation spaces is the sustainable use of biological diversity through the cultivation of ornamental plants. These could be developed by both indigenous and non-indigenous communities, using appropriate techniques and nurseries for the reproduction, exhibition, and sale of these species. The

technical and economic feasibility of these options identified during the formulation phase will be analyzed during the implementation phase, based on the baseline study and the program for sustainable use of wildlife.

199. In year 1, participatory meetings and workshops will be conducted with indigenous and non-indigenous communities to identify and define initiatives based on their interests and needs. Once these initiatives are defined, the respective formulation and design will be carried out for their implementation starting from year 2, with continuous support and technical assistance provided throughout the remaining 3 years of the project.

Output 3.1.3: Socio-productive co-management agreements in ABRAEs designed and implemented

194. Indigenous communities, in accordance with the current Venezuelan legislation^[24], will establish partnerships with the government (and the private sector when applicable) for co-management of forestry, ecotourism, and agricultural production (including agroforestry systems, artisanal fishing, and aquaculture) in the project intervention area, diversifying and strengthening their livelihoods.

195. Socio-productive co-management is a dynamic process with an organizational structure based on consensus. The government and the community in the areas subject to management (ABRAEs) agree, define, and formalize shared roles and responsibilities regarding the administration of natural resources through a set of practices based on scientific and traditional knowledge. Co-management involves the continuous development in a specific area, from assigning productive land use and landscape management to the generation of its products, with the aim of maintaining the sustainability of landscapes and their ecosystems, while generating environmental, social, and economic benefits.

196. The implementation of Socio-Productive Co-management (SPC) (ecotourism, agricultural production, including agroforestry systems, fishing, and other productive activities) will be carried out in two major stages: Preliminary Stage and Execution Stage. The target will be to develop and implement at least one socio-productive co-management pilot in the project area. The following describes each stage and the activities to be carried out:

197. Preliminary States, year 1:

198. Identification of potential initiatives and prioritization: In the initial stage of Socio-Productive Co-management (SPC), the promotion of the identified socio-productive activity (such as ecotourism, agricultural production, among other activities) can be initiated by the interested community or by the State itself. The project and MINEC or INPARQUES will support this promotion process, which involves identifying the social and productive actors or organizations present in the territory. Participatory group techniques will be used to characterize and understand the economic, social, cultural, and environmental needs, expectations, and capacities of the inhabitants and communities for the development of SPC in their territory.

199. In year 1, the existing organizations in the project intervention area will be identified, specifically those that have the potential to assume co-management roles in activities or projects developed within the project's influence area, either in the medium or long term. A contextual analysis will also be conducted to identify opportunities for strategic partnerships between these organizations and national, regional, and local entities that support protected area management. The project will select community organizations based on their technical, legal and economic qualifications.

200. Community agreements: after the promotion stage of the Socio-Productive Co-management (CSP), processes will be carried out to establish commitments and agreements among the residents and communities of the territory where the socio-productive management system will be implemented, under the vision of co-responsibility.

201. The mechanism to be used is the Popular Consultation (assemblies, congresses, workshops, technical tables, or collective participation techniques), which must be complied with and verified or validated by the inhabitants and communities of the territory. The project, together with MINEC and INPARQUES, will support the processes of communication, information, summons, consultation space, logistics, agenda, participation, quorum, representation, responsibilities, discussion

methodology, presentations (objective, scope, duration of the activity, methodology, destination, benefits to the communities, geographical area of project influence, community-based socio-productive organization). All of this will be presented in understandable language for better CSP discussion, agreement minutes, photos and videos, dissemination, and other means.

202. Executing Organization, Direct Social Ownership Enterprise: The socio-productive organization is part of a process to make popular participation and participatory planning effective. It is involved in productive management and responds to collective needs to contribute to the development of the potential and capacities of the communities. The Organic Law on Communal Economic System (LOSEC), in Article 9, defines socio-productive organizations as production units constituted by instances of Popular Power, Public Power, or through an agreement between both, with common objectives and interests, oriented towards satisfying collective needs through an economy based on the production, transformation, distribution, exchange, and consumption of goods and services, as well as knowledge and expertise, in which work has its own authentic meaning, without any form of discrimination.

203. The project will support the establishment of the organization in accordance with the Organic Law on Communal Economic System. The most recommended figure for the CSP is the Direct Communal Social Ownership Enterprise (EPSdC), experience never implemented in the area of intervention of the project. This will be a socio-productive unit constituted by instances of Popular Power in their respective geographical areas, aimed at benefiting the producers who are part of it, the corresponding community, and the comprehensive social development of the country. The organization will operate through the social reinvestment of its surpluses. The management and administration of the direct communal social ownership enterprises will be exercised by the instance of Popular Power that constitutes it. The project, MINEC, and INPARQUES will support the administrative and legal processes for the preparation of the Constitutive Act. The operation of the EPSdC is defined by the Constitutive Act, which is the document that stipulates all the general aspects, composition, basic characteristics, origin, purpose, domicile, duration, values, and principles of the enterprise. Likewise, this document will contain the regulatory framework, socio-productive management, and the obligations of its members.

204. Registration: For the implementation of the Socio Productive Co-management (CSP), only entities with legal personality from Popular Power, especially socio-productive organizations constituted within the communal economic system, as well as organs and entities of Public Power, can participate. The Ministry of Popular Power for Communes and Social Movements, through the Coordinating Body, carries out the verification, registration, and enrollment of the EPSdCs. This is done because it is responsible for the subsequent monitoring and control of the activities defined in the purpose and objectives outlined in the Constitutive Act of the socio-productive organization (EPSdC). The EPSdC will be constituted through a statutory document accompanied by the respective socio-productive project, with the latter serving as the social capital of the enterprise. The statutory document will be prepared based on the needs and potentialities of the communities of the instance of Popular Power to which it belongs. According to the development plan of the communal aggregation system, the project, MINEC, and INPARQUES will provide support in the registration process of the EPSdC to be formed.

205. Application: The constituted Communal Direct Social Ownership Enterprise will submit the necessary permits for the defined socio-productive activity, based on verifiable conclusions and agreements reached by the communities or peoples. These conclusions will be obtained during the previously conducted meetings (community agreements) with the respective public institutions (MINEC, INPARQUES, Ministry of Agriculture, Ministry of Tourism, among others). The application may include historical, social, and environmental elements justifying the area and the proposed productive activity, as well as the level of co-responsibility in the socio-productive management to be assumed. It will also cite the legal framework that supports the development of these initiatives.

206. Allocation: The first year of the preliminary stage will conclude with the allocation supported by the project for the socio-productive activity submitted for co-management or the corresponding permit. The response to the request for the activity or area to be co-managed should be formulated in a document that establishes the Terms of Reference (ToR) for the development and presentation of the

productive activities under co-management. The combination of uses that maximizes collective well-being while ensuring environmental and socio-economic sustainability should be sought.

207. Implementation state, year 2 to year 5:

208. **Planning:** In this stage, the socio-productive activities identified in the previous stage will be detailed. A socio-productive project will be formulated for the area designated for co-management, taking into account traditional knowledge and practices that contribute to ensuring the sustainable use of the territorial space to be intervened. A sustainability plan, including elements such as capacity building, self-management, financing and mobilization of financial resources, and a mechanism to document the challenges and the lessons learned during the process will be designed and implemented. The project will support the training of participating communities, with a focus on women and young people, following the training programs designed in Output 1.1.1. This training will include building the communities' capacity to prepare project proposals with technical, economic, and environmental viability. Additionally, the project, along with MINEC and INPARQUES, will provide support throughout this formulation process.

209. **Execution:** Execution is the set of integrated office and field actions. These actions require a joint execution, with a unified vision of prioritized operations, to fulfill the objectives and goals proposed in the formulated project. It serves as a guide that provides a structure to carry out the socio-productive co-management. Within this schedule, the following stages have been considered:

- a) **Financing:** Budget allocations for the project implementation should be secured by contacting and reaching agreements with financial institutions and other entities that could support the formulated project.
- b) **Selection and Hiring of Personnel:** The EPSdC will be activated to provide logistical and technical support to the work activities. Most of the personnel for the EPSdC will be selected from the team responsible for coordinating the formulated project.
- c) **Personnel Training:** Once the personnel has been selected and before the start of EPSdC operations, training for the staff involved in direct field activities is planned.
- d) **Other Preliminary Activities:** These include actions that can be carried out before or parallel to the activities directly related to the implementation of the formulated project. These activities may involve studies, activity planning, assignment of responsibilities, and development of educational materials and/or pilot experiences, and will mainly take place during the first year of EPSdC operations.

210. **Evaluation:** This refers to the activities carried out by the EPSdC to generate mechanisms for monitoring and control over the development of the planned activities in the formulated project for the utilization or management of socio-productive activities under the co-management framework.

Output 3.1.4: *Models and business plans support and enhance the development of socio-productive initiatives in the indigenous and criollo communities identified in Outputs 3.1.1 and 3.1.2.*

211. Despite being protected areas, the processes of natural resource degradation and deterioration of quality of life in ABRAEs are significant. It is emphasized that the development of sustainable activities within ABRAEs will contribute more effectively to the well-being of communities and the way they operate. In this context, market expectations emerge, focused on ecotourism, aquaculture as a previous experience developed in indigenous communities, and beekeeping or stingless beekeeping, all aimed at improving quality of life and conservation, under the approach of sustainability and financial sustainability. Each of the activities will be following developed from the perspective of the community experience developed so far in the intervention area, where social factors carry significant weight, as well as the need to maintain and improve environmental sustainability and the managerial skills necessary for comprehensive enterprise management.

212. The project will be in charge of promoting the design of the business plans, taking into account the organizations or microenterprises established in the intervention area and the different production processes. For this purpose, the following aspects should be considered: gathering existing basic information (market analysis), interacting with the communities, and understanding the legal structure or entity that has been established to obtain the entrepreneur's value proposition for their enterprise.

Opportunities for financing and partnerships with the private sector for the implementation will also be explored. Additionally, it is essential to understand the organizational functioning structure. Furthermore, it is necessary to understand the value chain, key activities, problems to be solved, relationships to be established, purpose and key resources of the production process, impact metrics (such as job creation), cost structure, and sources of income (financing or revenue generated by the production activity).

213. In the first year, a diagnosis will be conducted for all the aspects described above, in synergy with Output 3.1.1 and 3.1.2. In the second year, the development of the business model and plan will begin in collaboration with the existing communities or productive organizations. Together, project stakeholders will provide information regarding the legal structure, key activities of the production processes, cost structures, target markets, and expected revenues. The value proposition of the product or service under which the commercial activities will commence will be defined in collaboration with these communities or organizations. The implementation process will start with a training phase to strengthen administrative, organizational, and managerial aspects of the business initiatives that arise from the design. In the third and fourth years, at least two business models and plans will be added. The project will provide support in the legal, administrative, and managerial procedures required for the implementation of the different business models.

214. For the promotion of productive activities in indigenous and criollo communities, the project will establish small funds aimed at family or community productive development. Taking rural banks as a reference, these funds will function as small banks, owned by community members who have decided to organize themselves with the mission of raising resources from various sources and making them available to their members for credit. In Venezuela, there are already some experiences related to this instrument. First, communities will undergo training under constant monitoring, which will allow for technical intervention to achieve their long-term development. The diagnosis and design of these initiatives will take place in year 2, with the participation of the actors involved in the various socio-productive development activities outlined in Outputs 3.1.1 and 3.1.2. In the third year, with the participation and validation of the involved communities, at least two rural banks will be established, taking into account the characteristics of interculturality and prioritizing women in the management and leadership of these rural banks.

215. As a financial strategy, with the support of the project, the communities will establish a portfolio of previously identified and analyzed productive projects. These projects may be considered viable for seeking financing from national financial institutions, both public and private, as well as potential donors. To this end, communities or organizations will be trained in key topics such as project formulation and evaluation. Orientation workshops will be held to guide access to microcredit and credit and analyze productive chains, among other aspects. Likewise, business rounds may be established as a means of facilitating commercial exchange involving communities, private sectors, and potential donors.

Component 4: Knowledge Management, Monitoring, and Evaluation with a gender, generational, and interculturality approach

216. Component 4 will focus on ensuring the monitoring, evaluation, and knowledge management of the project for the sustainability and scalability of the results. The information resulting from the monitoring and evaluation system will be disaggregated by gender, age group, indigenous and criollo communities. This will allow reporting on the role of women and different age groups, as well as the intersectionality and interculturality within the project and their contribution to the conservation of biological diversity. The support from the GEF will be allocated to knowledge management activities, communication and information, and monitoring and evaluation, including overseeing project progress, meeting indicators, monitoring risk mitigation measures, identifying new measures to address unforeseen risks, and extracting lessons learned (including both successes and failures) from the project implementation. These experiences can be disseminated at the national and international levels and serve as guidance for similar projects.

Outcome 4.1: Project results are monitored based on adaptive management and with a gender, generational, and intercultural approach, evaluated, transferred, and embraced by stakeholders.

Output 4.1.1: M&E strategy developed and implemented with stakeholders.

217. A Monitoring and Evaluation (M&E) system will be developed for the project based on the indicators and goals outlined in its logical framework. This system will track the development objective indicators (impact) and component indicators (processes) of the logical framework, relying on project-level information. The system will also provide evidence of goal achievement and associated results. These results will be presented to partners and stakeholders (GEF, FAO, MINEC, CORPOELEC, CVG, MinAguas, MPPPI, indigenous and criollo communities, among others) through regular M&E reports during implementation. The M&E system will ensure the generation of appropriate documentation and support project outputs and indicator verifiers, the generation and monitoring of Agreements, and other instruments.

218. During year 1, the system will be designed, and from year 2 onwards, it will be implemented. Until year 5, the technical team of the Project Management Unit (PMU) will be responsible for executing the monitoring and evaluation plan, including the project inception workshop, workshops for semi-annual and annual planning, tracking of activities, outputs, and results, monitoring of the risk matrix, and identification of potential risks and mitigation measures to reduce these risks. Additionally, the system will monitor the Gender Plan and the Plan for Indigenous Peoples.

219. The Project Coordinator will prepare semi-annual Project Progress Reports (PPR) and an annual Project Implementation Review (PIR) with the support of the FAOVE Office. These reports will include the project results framework with outcome indicators, baseline, and semi-annual objective indicators, monitoring of the risk matrix, and identification and mitigation measures to reduce these risks. The M&E will also involve completing the GEF monitoring tools and the Template for measuring the institutional capacities of the FAOVE agency halfway through the project and at the end of the project. The delivery of 15 progress reports (10 PPR and 5 PIR), including considerations of gender, generational, and intercultural aspects, is anticipated.

Output 4.1.2: Mid-term review and final evaluation conducted.

220. The Mid-Term Review (MTR) will be conducted when the project's implementation reaches 50%. It will be carried out by an external consultant who will work together with the project team, including the FAO-GEF Coordination Unit, the FAO- Lead Technical Officer (LTO), and other partners. The MTR will include field visits to selected sites and consultations with local stakeholders and national project partners to allow for any necessary adjustments in the results framework or planned activities. This evaluation will also assess the financial disbursement and co-financing provided by project partners. The team will also monitor and evaluate the administrative aspects agreed upon between FAO and MINEC for the project's implementation. The MTR will also provide insights into the adaptive management of the project and make recommendations to enhance its implementation for the remaining duration.

221. According to FAO's evaluation policy, the FAO Evaluation Office (OED) will conduct a final evaluation of the project. Its objective will be to identify the project's achievements, its sustainability, and its actual or potential effects. It also aims to indicate the future measures necessary to ensure the continuity of the process developed through the project. The FAO OED will evaluate in consultation with the project stakeholders and the donor and will share the evaluation report with them, which is a public document.

Output 4.1.3: Mechanisms implemented for knowledge management and exchange of best practices and lessons learned contribute to the replication and scaling of project results, with a focus on gender, generational, and intercultural aspects.

222. This Output addresses various actions related to project knowledge management, with a cross-cutting focus on the products and activities being developed. To achieve this, the project will establish multiple platforms for sharing experiences, knowledge, and skills among the project beneficiaries, as well as national, regional, and local institutions responsible for landscape management in the project's area of influence.

223. The activities to be carried out in this product are as follows: 1) Design and implementation of a Knowledge Management Plan; 2) Design and implementation of a Communication Strategy and Plan; 3) Design and implementation of an Experience Sharing Plan; 4) Design, implementation, and annual monitoring of an Advocacy Plan for sustainability and scalability (project exit strategy). These plans will aim to promote dialogue, trust, and participation so that key stakeholders are aware of and take ownership of the project, and they will be oriented toward influencing public policies and other initiatives that promote the sustainability, replicability, and scalability of the project experiences and results. The actions to be developed will be based on FAO's Knowledge Management Strategy.

224. During the project formulation, a stakeholder mapping exercise was conducted, which identified two main types of target audiences: The first one refers to direct beneficiaries, including 1) national, regional, and local institutions; 2) indigenous and criollo communities, which include small-scale producers organized in families, associations, and organizations that reflect the worldview of these indigenous peoples, and young students in secondary and technical education. The second group consists of indirect beneficiaries, including 1) universities, educational centers, and scientists; 2) communicators and journalists; 3) politicians, regional and local authorities, and decision-makers; 4) social and community leaders; 5) the general public.

225. The plans will be developed taking into account these target audiences, and the project's communication messages will be tailored to the specific characteristics of each audience. The knowledge and communication products will be created in formats and languages adapted to each audience, considering interculturality and a gender approach as cross-cutting themes in the various plans to be developed.

226. The Knowledge Management Plan will include validated methods for the ongoing systematization of lessons learned and best practices at different levels. It will clearly define the objectives of systematization, the subject matter, the focus, and the strategy of the systematization process, taking into account the existing differences and information needs among the various key actors in the project area. The products to be developed in the knowledge management plan will primarily aim to promote greater involvement and awareness among indigenous and criollo communities, as well as members of public institutions at different levels, towards the conservation of biological diversity and the landscape. The dissemination of lessons learned from the project will be considered through the following means: i) Establishment of a project website (coordinated by MINEC) to provide permanent and updated information on the project's progress to various stakeholders and partners, as well as the general public; ii) Creation of audiovisual products (for dissemination on social media platforms and local media such as community radio programs); iii) Publication of at least 8 documents that systematize lessons learned in areas such as improving the integrated management of conservation areas of high ecological value, ecological restoration of degraded areas, mechanisms for intersectoral coordination and collaboration, alternative financial mechanisms, management plans for ABRAEs (areas of special ecological importance), monitoring measures and actions, sustainable production initiatives, and business models. These dissemination activities will contribute to sharing the project's achievements, best practices, and lessons learned with a wide range of stakeholders and audiences.

227. The project's communication strategy and plan will include communication products that allow beneficiaries, donors, and the general public to comprehensively and cohesively understand the functioning and objectives of the project. The aim is to disseminate and scale its results and best practices, utilizing various communication channels as appropriate. The communication strategy will establish a common message on strategic topics related to biological diversity conservation and sustainable land use, with a focus on gender, generational, and intercultural aspects of the project. The messages will be tailored to the target audience defined for each communication product. This communication strategy and plan will be validated during the project's inception workshop, where counterparts will agree on their roles and responsibilities within the Communication Plan.

228. Communication products will be developed to showcase the strategies and progress made by the project about the following aspects: development of planning tools to strengthen intersectoral coordination and collaboration mechanisms, development of management plans for protected areas of ecological importance (ABRAEs), involvement of indigenous communities in training processes, the establishment of dialogue tables to achieve governance in the territory, sustainable land management

practices and restoration of forests and savannahs, raising awareness among communities about forest valuation and ecosystem services, diversification of livelihoods for landscape management sustainability and sustainable economic activities involving indigenous and criollo communities, among other important aspects. The content produced to disseminate results, progress, best practices, and lessons learned from each component must be guided by a gender perspective, highlighting the role that women play in each of the activities carried out within the project. The content should be presented in both Spanish and Pem?n language.

229. The communication plan will include life stories, with at least 6 systematized and published life stories translated into indigenous languages. The communication products will feature testimonials from women and men, indigenous and criollo communities, and institutional actors, taking into account the gender, intercultural, and generational approach.

230. A communication brigade comprising indigenous and criollo members will be formed to support the promotion of activities carried out in various products, including translation and an intercultural approach to information. Special emphasis will be placed on disseminating actions related to Output 2.1.2, which focuses on strategies for restoring and preserving biological diversity, as well as activities related to control and surveillance in Output 1.1.3. Training for this communication brigade will be provided through Output 1.1.1. Once formed, they will receive the necessary support and facilities to operate both in the field and in the office.

231. The Knowledge Exchange Plan: The project will address knowledge exchange through spaces of participation and integration among different groups, whether institutional or community-based. The project has planned exchanges using various formats such as forums, seminars, workshops, fairs, or any other identified exchange space during the implementation stage. The scope will be expanded by incorporating stakeholders who were not directly involved but offer opportunities for replication and scaling at the national level.

232. At least 9 documented national and international knowledge exchange events will be conducted, with a focus on gender, generational, and intercultural perspectives. Of these events, at least 6 will involve knowledge exchange with indigenous and criolla populations, aiming to disseminate and provide feedback on experiences related to restoration, sustainable natural resource management, and sustainable production. The remaining 3 events will be international, focusing on landscape restoration, financing strategies for protected area management, protected area monitoring programs and their threats, and involving institutional actors at the state and national levels. International events can be promoted within international networks such as RedParques or others. Travel expenses for national, regional, or international events by project team representatives and/or associated institutions may be covered by the GEF budget, depending on budget availability and the agreed-upon work plan by the project's Steering Committee. This plan will be closely linked to activities carried out in Output 1.1.1.

233. The Advocacy Plan for the sustainability and scalability of the project's results will be developed, taking into account its close connection with PORUs (Special Management and Use Plans) and existing governance initiatives at the local level or those that have been created. Based on the concrete experiences that will be developed in the implementation area, actions will be designed to link the project's results to regional and national priorities regarding protected area management in the country. These actions will encompass policies, programs, implementation, replicability, and scalability. The main aspects to be included in the design and implementation of the advocacy plan will be addressed during the project's inception workshop.

234. The design and formulation of this plan will take place in the first semester of the project's initiation once the work teams have been formed and the specialists in knowledge management, communication, gender, and interculturality are available. The MINEC and partner institutions will participate in the design of the plan, agreeing on actions for its implementation and monitoring.

4) Alignment with the GEF focal area and/or program impact strategies

235. This project is aligned with the Biodiversity Focal Area Strategy, specifically with the following objectives:

234. *BD1-1: Integrate biodiversity into all sectors, including terrestrial and marine landscapes, through the integration of biodiversity into priority sectors.* The project proposes an integrated landscape management approach within protected areas, harmonizing sustainable development with conservation, incorporating environmental considerations into economic sectors, promoting planned land use and restoration of degraded areas, establishing collaborative and participatory public-private partnerships, and strengthening community participation in decision-making mechanisms. Specifically, through the development of Components 1, 2, and 3 and their respective outcomes, progress will be made in strengthening capacities for sustainable and integrated landscape management and governance of protected areas, as well as in the restoration and conservation of landscapes and biodiversity. Under this approach, the aim is to integrate and strengthen sustainable livelihoods and the protection of ecosystem services in the Caron? River basin, considering the concept of "landscape," which encompasses all land uses present, including cultivated areas, pastures, forests, subtepuy shrublands, morichal wetlands, and watersheds. The approach proposes to connect biological diversity with sustainable use under the principles established by the indigenous peoples settled in the region. In this way, through an inclusive and participatory process, pilot projects for the sustainable use of wildlife will be identified, analyzed, and implemented.

235. *BD1-5 Integrate biodiversity in all sectors, as well as terrestrial and marine landscapes through inclusive conservation.* This approach proposes integrating and strengthening sustainable livelihoods and the protection of ecosystem services in the Caron? River basin, considering the concept of "landscape", which integrates all present land uses and includes areas of crops, pastures, forests, subtepuian shrub lands, morichales, and watersheds. The approach proposes to connect biological diversity with sustainable use under the precepts established by the indigenous peoples settled in the region. In this way and in an inclusive and participatory manner, pilot projects for the sustainable use of wildlife will be identified, analyzed, and implemented.

236. *BD2-7 Addressing the direct drivers to protect habitats and species and improving the financial sustainability, effective management, and ecosystem coverage of the protected area as a whole.* The project has identified the direct drivers of biological diversity loss and the unique ecosystems within the project intervention area, which is 97.62% covered by ABRAEs. There is the presence of various public and private organizations, as well as indigenous and criollo communities. The project will establish a platform for exchange between institutional actors and communities, which, along with the support of technical and legal tools, will promote strengthened management of the ABRAEs and their financial sustainability. Components 1, 2, and 3, along with their respective outcomes, are aligned with this objective, as they focus on strengthening capacities for sustainable landscape management and governance of ABRAEs, restoring degraded areas, and implementing territorial planning and co-management processes. By adopting a gender, generational, and intercultural approach, these components will address the direct drivers of degradation and contribute to the effective conservation of ABRAEs. Additionally, the development of a geospatial monitoring and evaluation system for sustainable and integrated landscape management, incorporating territorial reports from communities, will directly contribute to the control of environmental threats in the project intervention area. Also, the mechanisms that enable the sustainable use and commercialization of biological diversity species will contribute to financial sustainability and the improvement of socio-economic conditions for the population. In this regard, the prioritization of women's leadership role in economic and productive activities to be developed is emphasized.

5) Justification of incremental/additional costs and contributions expected in the baseline, the GEF, the UNFCCC, the GCF, and co-financing.

237. The Bolivarian Republic of Venezuela, through the contribution of the GEF, will make progress in removing the identified barriers. This will be achieved through: 1) weak interinstitutional mechanisms for integrated landscape management and conservation of biological diversity; 2) different perspectives among the stakeholders involved regarding the preservation and use of conservation objects; 3) unsustainable management in conservation areas and other priority landscape areas, and 4) limited biological diversity-friendly economic alternatives that enable sustainable improvement in the quality of life for indigenous and criollo communities. Within this framework, the gender, generational, and intercultural approach is integrated in a cross-cutting manner, aiming to actively involve and provide leadership roles for women, youth, and elders from indigenous and criollo communities. The GEF financing proposal will complement the counterpart investment resources provided by the Government of the Bolivarian Republic of Venezuela, which have been allocated to the region to continue supporting its achievements.

238. As mentioned before, the initial assessment of the ABRAEs using the METT tool indicates that they are threatened by unsustainable development, including human settlements, tourism, mining, and infrastructure, with results below the internationally proposed levels by IUCN. Many critical ecosystems are threatened by unsustainable development, including human settlements, tourism, mining, and infrastructure. Under this scenario, habitats will continue to decline, and viable populations of endangered species will slowly disappear if the necessary incremental investments are not made to promote livelihoods and alternative systems that are environmentally friendly and compatible with biological diversity conservation.

239. By working with local communities on a small scale, the project will benefit indigenous and criollo communities in the Caron? River basin through the sustainable use of their natural resources to overcome poverty while maintaining or improving conditions for biological diversity conservation.

240. The proposed amount of US \$59,237,808 represents the estimation by the Government of the Bolivarian Republic of Venezuela of the incremental cost needed to achieve the expected global benefits that would not be financeable through existing programs. This investment would also contribute to establishing a framework to channel ongoing investments and leverage new investments in biological diversity conservation and sustainable management of livelihoods for local communities and conservation in the country. This could generate greater economic stability to complement the substantial social and environmental gains achieved through previous projects of the GEF and the Government of the Bolivarian Republic of Venezuela for conservation.

241. In addition, non-governmental efforts to promote sustainable production are scattered and small-scale. However, innovative investments are needed to scale up initiatives and develop new opportunities to improve livelihoods. In summary, the baseline scenario along with the GEF alternative has a total cost of US \$61,357,818, of which the resources provided by the GEF (US \$8,765,418) represent 14.28%. Co-financing resources amount to a total of US \$52,592,400. **Table 9** presents the matrix of incremental costs of the project.

Table 9. Matrix of incremental costs.

Component	Cost Category	US\$	National Benefits	Global Benefits
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<p>1. Systemic, institutional, and individual capacity for sustainable management of the multi-use landscape with a gender, generational, and intercultural approach.</p>	<p>Base scenario(GdRBV)</p>	<p>14,550,000</p>	<p>Implementation of integrated programs for capacity development in institutions and local communities in the comprehensive landscape management and livelihood improvements. Strengthening the institutional capacities of the involved actors to carry out monitoring, evaluation, and follow-up of sustainable and biological diversity-friendly practices in the Caron? River basin.</p> <p>Training and more efficient performance of government officials at the central, state, municipal, and local community levels (indigenous and criollo). The strengthening of social capital will be a cornerstone of the project and will help communities improve their governance, foster community participation, reduce conflicts, and increase</p>	<p>Area under biological diversity-friendly and sustainable production, contributing to global environmental benefits, such as maintaining vegetation areas that provide habitat connectivity, contributing to water absorption and reducing erosive processes in the upper parts of the Caron? and Paragua river watersheds. The project will implement ongoing actions for conservation and sustainable use that will ensure the conservation of significant biological diversity at a global level.</p>
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their income through better forest management and income generation.

Awareness-raising of the inhabitants in the intervention area about the conservation of biological diversity and the sustainable use of natural resources.

The policy of sustainable development and the shared vision of the use of natural resources and ecosystem goods by the actors in the Guayana region reduce the elements that threaten biological diversity.

The project aims to overcome potential tensions at the social, economic, environmental, and political-institutional levels and find agreements between productive interests and ecosystem conservation, biological diversity, and ensure the promotion of

			sustainable livelihoods in the Guayana region.	
	With GEF alternative	2,042,421	Extended benefits of the base scenario.	Extended benefits of the base scenario.
	Increase	12,507,579		
Component	Cost Category	US\$	National Benefits	Global Benefits

<p>2. Integrated landscape management for the sustainable use of biological diversity and increased provision of ecosystem services.</p>	<p>Base scenario (GdRBV)</p>	<p>15,000,000</p>	<p>The existing ecosystem services in the project landscape have been assessed, identifying mechanisms for reinvestment derived from the uses of the Caron? River basin, such as tourism, water production, and electricity generation. Shared vision of local and global ecosystem services generated by protected area systems in the Caron? River basin. There is legislation that facilitates the management and improvement of the governance and financing of ABRAEs. This includes the formulation of PORUs and the adoption of an updated global strategy under a Comprehensive Landscape Management approach that includes the conservation of biological diversity, climate change, carbon storage flows, ecosystem goods and services, and the sustainable management of livelihoods. This includes the</p>	<p>Con el desarrollo del Componente 2, se aportar? al fortalecimiento de la conservaci?n de la diversidad gen?tica de car?cter ?nico, a la mitigaci?n del cambio clim?tico y a la generaci?n de modelos de gesti?n local con enfoque intercultural, que podr?n ser replicables en situaciones similares por fuera de Venezuela.</p>
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formulation of PORUs and the adoption of an updated global strategy under a Comprehensive Landscape Management approach that includes the conservation of biological diversity, climate change, carbon storage flows, ecosystem goods and services, and the sustainable management of livelihoods.

Share the vision and responsibilities of the ABRAEs with all relevant stakeholders, including ministries, governments, municipalities, private owners, concessionaires, Non-Governmental Organizations (NGOs), co-managers or co-governors, and local communities (criollo and indigenous).

Activities will be implemented to improve the management effectiveness of ABRAEs, as well as their surveillance and control. An expanded restoration program in

			priority degraded areas explicitly designed to address the conservation of biological diversity in protected areas, as well as the integration of biological diversity criteria into regular government programs and projects in the Guayana region.	
	With GEF alternative	2,684,681	Extended benefits of the base scenario.	Extended benefits of the base scenario.
	Increase	12,315,319		

<p>3. Diversification of livelihoods in indigenous and criollo communities for sustainability in landscape management</p>	<p>15,925,800</p>	<p>The indigenous and criollo communities adopt sustainable livelihoods. The communities meet their needs in terms of sustainable and integrated management of natural resources. New sustainable productive activities allow for the improvement of poverty rates in local communities. The project generates significant and sustainable benefits for the indigenous and local population. The promotion of livelihoods contributes to conservation while providing concrete economic benefits to the beneficiary populations, motivating them to manage and protect their natural resources. Productive activities, particularly those related to sustainable agriculture, promote rural economic growth and poverty reduction.</p>	<p>The diversification of livelihoods for indigenous and criollo communities will contribute to increased global ecosystem services, reduced pressure on natural resources, and enhanced effective conservation of biological diversity. From a financial perspective, pilot experiences will be created for the sustainable management of genetic diversity with the capacity for replication and scalability in territories outside of Venezuela.</p>
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			Promotion of productive diversification and implementation of biological diversity-friendly best practices.	
	With GEF alternative	2,350,859	Extended benefits of the base scenario.	Extended benefits of the base scenario.
	Incremento	13,574,941		
Component	Cost Category	US\$	National Benefits	Global Benefits

4. Knowledge management, monitoring, and evaluation with a gender, generational, and intercultural approach	Base scenario (GdRBV)	5,584,783	<p>Strengthening of local, regional, and national M&E systems for the socio-economic and environmental outcomes resulting from the planned investments.</p> <p>Development and implementation of Information and Communication Management strategies for Rural Development, in order to systematize and disseminate achieved results, good practices, and lessons learned experiences.</p>	<p>A better understanding of the socio-economic and environmental benefits of mechanisms based on the implementation of sustainable practices and improvements in livelihoods to promote the conservation of biological diversity that contribute to global frameworks associated with biological diversity, restoration, and climate change.</p> <p>The knowledge generated by the program is taken into account in the programming or planning of related investments worldwide.</p> <p>A geospatial monitoring system will be developed for integrated landscape management, which will integrate available global information and make local information available.</p> <p>The lessons learned and successful case studies will be systematized and made available to ensure their replicability in other countries in the region. Additionally, this component will establish actions for international exchange and cooperation, generating synergies in the utilization of existing capacities at the regional/global level.</p>
	With GEF alternative	1,108,561	Extended benefits of the base scenario	Extended benefits of the base scenario
	Incremento	4,476,222		
TOTAL	Base scenario (GdRBV)	51,060,583		

	With GEF alternative	8,186,522	Extended benefits of the base scenario.	Extended benefits of the base scenario.
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Note: It does not include project management costs. (PMC).

Source: Original elaboration.

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

242. The biological diversity of Venezuela, specifically the Guiana Shield, is of global importance. The wide variety of biomes present, especially the Tepui Mountain System, which is unique in the world, make this landscape home to a great diversity of biological species. Canaima National Park was designated as a UNESCO World Heritage Site in 1994. It was recognized for being a natural reserve with unique and exceptional rugged landscapes found nowhere else in the world. It is worth noting the high endemism of plant species reported in the area. According to the Catalog of the Vascular Flora of Venezuela, 451 species are endemic, representing almost 10% of the species recorded in the project's influence area. Furthermore, the wildlife in the area includes 72 species of mammals, 175 species of birds, 29 species of reptiles, and 28 species of amphibians. Collectively, they represent 12.5% of the country's species. At the same time, the landscape holds significant cultural richness as it is home to 268 indigenous communities. The majority of these communities belong to the Pem?n People, whose territories are threatened by the effects of air and water pollution, soil quality, vegetation and fauna degradation, as well as impacts on human health.

243. Despite the fact that the majority of the landscape (97.62%) is protected by the ABRAEs, areas such as Canaima National Park, Tepuyes Chain Natural Monument, La Paragua Wildlife Refuge, Ikabar? Hydrological Reserve, and the southern zone of Bol?var state, there are imminent threats by human interventions that jeopardize the conservation of biological diversity and the survival of indigenous peoples. Therefore, this project aims to cover 7,712,919 ha of protected areas under improved management (GEF Core indicator 1) for conservation and sustainable use. Furthermore, at least 13,879 ha of degraded lands will be restored (GEF Core indicator 3), including 1,798 ha of forests and forested lands (Subindicator 3.2) and 12,081 ha of natural grasslands and shrublands (Subindicator 3.3).

244. The implementation of the project is estimated to have a potential mitigation of GHG of -13,279,271 tCO₂-e (Subindicator 6.1 Carbon sequestered or emissions avoided in the AFOLU sector. Directly, the project will help sequester -1,691,480 tCO₂-e through increased carbon content in terrestrial reservoirs through restoration strategies for 13,879 hectares of degraded lands. Indirectly, other project activities will contribute to emissions avoided of -11,587,792 tCO₂-e, resulting from avoided deforestation and degradation and a reduction in fire frequency. Similarly, through this GEF-funded project, the aim is to achieve integrated landscape management with the inclusion and participation of the various stakeholders in the intervention area. For this purpose, an innovative approach is proposed, which includes: i) By law[25]25, the full recognition of indigenous rights; ii) the intercultural dimension to structure a discourse of sustainability, based on indigenous and Western thinking, as a basis for building context, convergence, and motives for a common conservation agenda; iii) balancing the objectives of biological diversity conservation with the needs of local and national economic development; iv) valuing and validating indigenous ancestral knowledge, as well as defending indigenous property rights and their resource management systems and institutions relevant to conservation objectives; v) creating new institutional arrangements for natural resource management that allow for the participation of all. In this way, the project, through its actions, will benefit 44,641

people, represented by 21,216 women and 23,225 men (including indigenous and criollo populations) (GEF Core indicator 11).

245. The above aims to improve systematic and institutional capacity for the sustainable management of the multi-use landscape, implement activities for integrated landscape management, and develop sustainability frameworks. Under this approach, all groups will be involved: public and private institutions, indigenous and criollo communities, authorities, and NGOs. The global benefits resulting from this support will include having quality information to monitor biological diversity, hydro-meteorological and hydrological aspects, ecosystem services, and environmental threats in a participatory manner. This will enable tracking, monitoring, and providing key information to influence planning and decision-making for conservation purposes. Therefore, the management of natural resources will be improved through the strengthening of existing protected areas. Additionally, the collaborative work with indigenous and criollo communities to diversify and strengthen sustainable livelihoods will promote their involvement in the care and protection of ecosystems from a shared vision and generate sustainable management models. Finally, it is expected that these improvements will be sustainable in the long term through the recognition and replication of successful experiences. This will be achieved through the promotion and dissemination of successful cases, ensuring that the knowledge and lessons learned are shared and applied in other contexts. By doing so, the positive impact and benefits can be extended and sustained over time.

246. The project, through the generation of global environmental benefits, will also contribute to the achievement of the SDGs 2, 6, 13 and 15. The project aligns, operates, and implements this SDG, in line with the country's priorities. It also aligns with SDG 2: "Ending hunger"; Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, contribute to the maintenance of ecosystems, strengthen the capacity to adapt to climate change, extreme weather, droughts, floods, and other disasters, and progressively improve soil quality. The project also contributes to SDG 5 "Achieve gender equality and empower all women and girls", it will contribute, for example, to target 5.5: ensure full participation in leadership and decision-making; 5.7 equal rights to economic resources, property ownership and financial services; and 5.8 promote empowerment of women through technology. It is also aligned with SDG 6: "Ensuring availability and sustainable management of water and sanitation for all." Target 6.6: By 2020, protect and restore water-related ecosystems, including forests, mountains, wetlands, rivers, aquifers, and lakes. Additionally, it aligns with SDG 13: "Taking urgent action to combat climate change and its impacts"; Target 13.1: Strengthening resilience and adaptive capacity to climate-related hazards and natural disasters in all countries The project also is aligns with SDG 15: Protecting, restoring, and promoting sustainable use of terrestrial ecosystems, sustainably managing forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss and its targets. Target 15.2: By 2020, promotes the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and substantially increase afforestation and reforestation globally; Target 15.5: Taking urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity. By 2020, protecting and preventing the extinction of threatened species; and Target 15.9: By 2020, integrating ecosystem and biodiversity values into national and local planning, development processes, strategies, and poverty reduction accounts. Target 15.a: Mobilizing and significantly increasing financial resources from all sources to conserve and sustainably use biodiversity and ecosystems. The project harmonizes, operates, and implements these SDGs in accordance with the country's priorities.

247. **Table 10** presents the breakdown of Core Indicator 11, the number of direct beneficiaries disaggregated by gender as a co-benefit of GEF investments.

Table 10. Project beneficiaries.

Outputs	Direct Beneficiaries	Number of	Total	Total per
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				people		component
Componente 1	Outcome 1	1.1.1	Officials from national, regional, and local ministries and institutions with strengthened capacities.	At least 300 people (at least 120 women)	300	594
			Indigenous and criollo people with strengthened capacities	At least 120 indigenous and criollo people (at least 48 women)	120	
		1.1.2	Officials from national, regional, and local ministries and institutions with strengthened capacities in the management and application of the monitoring and evaluation system	At least 150 officials (at least 60 women)	150	
		1.1.3	At least 20 members of the local communities (monitors) trained and participating in data collection.	At least 20 members of the local communities (at least 8 women).	20	
			At least 4 institutional administrators trained in information management.	4	4	
		1.1.4	Organized instances of indigenous and criollo communities (e.g., dialogue tables).	Does not apply	0	
Component 2	Outcome 2.1	2.1.1	Indigenous and criollo people benefit from the implementation of territorial planning processes.	At least 23047 people (at least 9218 women).	23,047	31,047

		2.1.2	Indigenous and criollo people incorporate restoration approaches/strategies.	At least 5000 Indigenous and criollo individuals (at least 2,000 women).	5,000	
			Students from technical schools trained in restoration approaches/strategies.	At least 3000 students	3,000	
		2.1.3.	Does not apply	0	0	
Component3	Outcome 3.1		Women and men from indigenous and criollo communities benefiting from the implementation of resilient and diversified livelihoods.	At least 15000 people (including at least 5200 women).	13,000	13,000
Component 4	Outcome 4.1		Cross-cutting beneficiaries across all project components.	Does not apply	0	0
TOTAL NUMBER OF PROJECT BENEFICIARIES.						44,641

Source: Original elaboration.

250.
(Table 11).

The project will also contribute to the following Kunming-Montreal targets for 2030

Tabla 11. Kunming-Montreal targets for 2030

Kumming-Montreal targets for 2030

<p>Component 1: Systemic, institutional, and individual capacity for sustainable landscape management with a gender, generational, and intercultural approach</p>	<p><u>Target 1:</u> By 2030, achieve comprehensive participatory spatial planning for all areas that takes into account biodiversity and/or effective management processes, addressing land and ocean use change, in order to bring the loss of areas of significant importance for biodiversity close to zero, including ecosystems of high ecological integrity, while respecting the rights of indigenous peoples and local communities.</p>
	<p><u>Target 20:</u> Strengthen capacity building, access to technology and its transfer, and promote the development of innovation and technical and scientific cooperation, including South-South, North-South, and triangular cooperation, to meet the needs of effective implementation, particularly in developing countries, by fostering joint development of technologies and joint research programs for the conservation and sustainable use of biodiversity, and enhancing scientific research and monitoring capacities, in line with the ambition of the objectives and targets of the Framework.</p>
	<p><u>Target 21:</u> Ensure that the best available data, information, and knowledge are accessible to decision-makers, professionals, and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to enhance communication, awareness, education, research, and knowledge management, including within the context of traditional knowledge, innovations, practices, and technologies of indigenous peoples and local communities with their free, prior, and informed consent, in accordance with national legislation.</p>
<p>Component 2: Integrated landscape management for the sustainable use of biological diversity and increased provision of ecosystem services</p>	<p><u>Target 2:</u> By 2030, achieve effective restoration of at least 30 percent of degraded ecosystems, including terrestrial, inland freshwater, coastal, and marine ecosystems, to enhance biodiversity and ecosystem functions and services, ecological integrity, and connectivity.</p>
	<p><u>Target 3:</u> By 2030, ensure that at least 30 percent of land, inland waters, coastal areas, and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are conserved and effectively managed through ecologically representative and well-connected systems of protected areas and other effective conservation measures, integrated into wider landscapes and seascapes, and governed equitably, while respecting and recognizing indigenous and local communities' rights, including the recognition of indigenous and traditional territories where applicable, and ensuring that sustainable use, where appropriate, is fully consistent with conservation outcomes.</p>
	<p><u>Target 11:</u> Restore, maintain, and enhance nature's contributions to people, including ecosystem functions and services, such as air, water, and climate regulation, soil health, pollination, and the reduction of disease risks, as well as protection against natural hazards and disasters through nature-based solutions and ecosystem-based approaches, benefiting all people and nature.</p>

	<p><u>Target 14:</u> Achieve the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments and impact assessments, and, where appropriate, national accounts at all levels of government and across all sectors, particularly those with significant impacts on biodiversity, gradually harmonizing all relevant public and private activities, financial and fiscal flows with the objectives and goals of this Framework.</p>
<p>Component 3: Diversification of livelihoods in indigenous and criollo communities for sustainability in landscape management with a gender, generational, and intercultural approach</p> <p> </p>	<p><u>Target 4:</u> Urgently adopt management measures to recover and conserve species, in particular, threatened species, and maintain and restore genetic diversity among and within species, including native, wild, and domesticated species, in order to preserve their adaptive potential, among other things, through in-situ conservation, sustainable conservation and management practices, and effective management of interactions between humans and wild fauna and flora, with the aim of minimizing conflict between humans and wildlife for coexistence.</p> <p><u>Target 5:</u> Ensure that the use, collection, and trade of wild species are sustainable, safe, and legal, avoiding overexploitation, minimizing the impacts on non-target species and ecosystems, and reducing the risk of pathogen spread, applying the ecosystem approach while respecting and protecting the customary sustainable use by indigenous peoples and local communities.</p> <p><u>Target 9:</u> Ensure that the management and use of wild species are sustainable, providing social, economic, and environmental benefits for all people, especially those in vulnerable situations and those who rely most on biodiversity, through sustainable activities, products, and services based on biodiversity that enhance biodiversity and through the protection and promotion of sustainable customary use by indigenous peoples and local communities.</p> <p><u>Target 10:</u> Ensure that agricultural, aquaculture, fisheries, and forestry areas are managed sustainably, particularly through the sustainable use of biodiversity, including a substantial increase in the implementation of biodiversity-friendly practices such as sustainable intensification, agroecological methods, and other innovative approaches, thereby contributing to the resilience and long-term productivity and performance of these production systems and to food security, while conserving and restoring biodiversity and maintaining the contributions of nature to people, including ecosystem services and functions.</p>

Component 4: Knowledge management, monitoring, and evaluation with a gender, generational, and intercultural approach

Target 22: Ensure full, equitable, inclusive, and effective participation and representation, with gender perspective, of indigenous peoples and local communities in decision-making processes, as well as their access to justice and information related to biodiversity, while respecting their cultures, rights to lands, territories, and resources, and traditional knowledge. Ensure the participation of women, children, youth, persons with disabilities, and ensure the full protection of environmental human rights defenders.

Target 23: Ensure gender equality in the implementation of the Framework by adopting a gender-responsive approach where all women and girls have equal opportunities and capacity to contribute to the three objectives of the Convention, including the recognition of their equal rights and access to land and natural resources, and their full, equitable, meaningful, and informed participation and leadership at all levels of action, engagement, policy, and decision-making related to biodiversity.

Source: Original elaboration.

7) Innovation, sustainability, scalability potential, and capacity for development.

Innovation

251. In this project, the main innovative elements are primarily related to integrated and participatory planning and management with indigenous and criollo communities from the beginning of the process. The integrated scenarios for landscape management and territorial and environmental planning in the Caron? River basin will promote actions to reduce the impact of illegal mining. Furthermore, these scenarios will help conserve the biodiversity and ecosystem goods of the basin to preserve the water resource for electricity generation, which is highly innovative in the region. The project will introduce an integrated approach to the use and management of forests with the participation of indigenous and criollo communities. This integrated approach will support natural regeneration and other restoration techniques to address various forms of existing degradation. Under Component 2, the project will implement specific approaches to test options for restoring highly degraded lands. At this point, the implementation of "productive yards" stands out, which aims to increase sustainable food provision and enhance landscape connectivity. These experiences are innovative and have high potential for replication in other territories at the national and international levels. With the active participation of indigenous and criollo communities, the project will implement sustainable practices for the use of biological diversity, contributing to the improvement of livelihoods and the reduction of pressure on plant and animal species in the basin. Specifically, Component 3 aims to improve living conditions and establish economic relationships and financial mechanisms based on the productive systems promoted in the project intervention area.

252. Other elements of innovation refer to the incorporation of concepts and practices of integrated landscape management, sustainable forest management, agroforestry, and sustainable soil management in the processes of territorial planning and restoration in the project intervention area. While there are concrete actions addressing this approach at the regional level, they are unprecedented in the Caron? River Basin. The mechanisms for interinstitutional coordination to achieve consensus on management agreements and biological diversity conservation, as well as the search for new mechanisms for the financial sustainability of protected areas in the basin, are novel. The introduction of agroforestry and agroecological productive practices in the surroundings of households settled in the savannah ecosystem (productive yards).

253. Within the framework of technological innovations, different validated methodologies and tools will be applied, many of which are open-source and cloud-based (such as EX-ACT, Collect Earth, Open Foris, EarthMap, Google Earth Engine, among others). Additionally, the project will utilize Global Positioning Systems (GPS) and drones for data collection and analysis.

Sustainability

254. To ensure the sustainability of landscape management initiatives, the project has been designed to create a facilitating framework for protecting the functions of biological diversity and the ecosystem of the Caron? River basin against existing and emerging threats from unsustainable production practices. The development of joint planning exercises, strengthened dialogue, improved policy and regulatory instruments, and enhanced coordination in the implementation of different landscape management initiatives will help project stakeholders, particularly participating government institutions, overcome the prevailing culture of short-term planning and sectoral solutions. It will also foster a discipline of coordination and collaboration under a common long-term vision for the Caron? River basin, ensuring the sustainability of project outcomes.

255. The project will actively develop and maintain broad-based relationships and partnerships that promote collaboration. Dialogue and alliance-building will be key tools for consensus formation, enabling coordinated planning. The establishment of dialogue platforms will contribute to the sustainability of the project's outcomes. The project will work to engage various public and community stakeholders in a way that ensures these platforms serve as a long-term space for alignment, ownership, and the development of concrete and collaborative actions to strengthen the conservation of biological diversity in the Caron? River basin.

256. Support will be sought from NGO networks to work with indigenous and criollo communities in landscape planning processes, and technical assistance will be provided through government agencies, NGOs, universities, academic institutes, and other institutions. The development of capacities will strengthen planning and management skills, as well as the implementation of tools for landscape restoration and monitoring. By strengthening institutional capacities within the existing policy framework, the project will establish a more cohesive governance framework with improved capabilities to efficiently and effectively conserve globally significant biological diversity.

257. Financial sustainability will be promoted through the actions proposed in Component 2, Product 2.1.3. This outcome includes the development of a financial plan for the ABRAEs system in the Caron? River basin. To achieve social sustainability, the project will employ participatory approaches with both indigenous and criollo communities to identify the interests, needs, and priorities of men and women (Components 2 and 3) of different age groups. They will participate in decision-making processes and the sustainable management of biological diversity, considering their different roles and responsibilities. The stakeholder engagement process will be developed throughout all phases of the project. The participatory planning processes will highlight the need to take actions and measures that consider the differences and inequalities among certain populations (e.g., indigenous and criollo communities) to ensure the protection of their rights. The project will promote the creation of community networks for knowledge exchange between elder community members and youth, as well as between communities. Through the use of a participatory approach, the project will adopt mechanisms that promote interest, motivation, and ensure trust, providing a supportive environment for intercultural social equality and leading to the elimination of dispositional, physical, and communication barriers (Component 4).

258. The sustainability of livelihoods. Community ownership is a critical factor contributing to the sustainability of project benefits. Therefore, from the beginning, all members of the indigenous and criollo community (men, women, youth, and elders) will be involved in all stages of the project cycle: design, implementation, monitoring, and evaluation. The project will contribute to the financial sustainability of the basin through the participatory development of management tools, the sustainable use of resources, and effective management. Sustainable production systems will be promoted with the aim of conserving and managing ecosystem goods and services in the long term and improving local livelihoods. These plans will include a technical support and capacity development strategy. Additionally, community-based ecotourism initiatives will be strengthened through Component 3. This will generate new jobs in the target communities and provide additional income for local households

participating in the project. The ecotourism actions will also contribute to the long-term conservation and sustainable use of biological diversity.

259. The project adopts a strategy related to incremental adaptation, particularly reflected in Component 3, outputs 3.1.1, 3.1.2, and 3.1.3. This strategy aims to maintain the integrity of the productive processes of the communities while improving their livelihoods by introducing new environmentally-friendly processes in line with ABRAEs. The goal is to enhance productivity levels and seek to improve the communities' income and livelihoods. In conjunction with these actions, a transformative change is adopted, which is expressed in outputs 1.1.1, 2.1.1, and 2.1.3. These products propose actions that involve medium-term changes in the governance of ABRAEs (Areas of Special Importance for the Conservation of Biodiversity and Ecosystem Services), as well as the definition of norms and the adoption of policies that influence territorial occupation through the development of PORU (Use and Occupation Plans) and protocols for the exploration of alternative mechanisms for financing the management of ABRAEs.

260. The project interventions will adopt a gender approach, considering the important role that women play in production and generating family income. The project aims to empower women by promoting their participation in decision-making processes, improving their access and control over resources, and enhancing their incomes and livelihoods. These efforts are crucial to ensure the sustainability of the project interventions. In addition, interventions targeting indigenous communities will follow and respect their organizational structures and cultural norms. Efforts will be made to ensure that all actors demonstrate respect for their dignity and human rights, employing an intercultural and intergenerational approach that takes into account the broader cultural vision of each ethnic group. This includes respect for their collective and individual rights, protected by national and international norms, and the implementation of safeguards to prevent any negative impacts on the livelihoods of indigenous communities. By doing so, the project aims to ensure the sustainability of its actions.

Scalability potential and capacity for development

261. Involving indigenous communities in this project, regarding the promotion of sustainable alternative livelihoods, creates ample opportunities to enhance project improvement. By engaging indigenous and criollo communities who have the best knowledge of their territories and can propose options in line with their reality. The participation of various stakeholders will continue to identify potential improvement opportunities, as well as the identification of financing mechanisms to enhance the project through conservation area management.

262. The project's potential for replication is also based on the identification of best practices, appropriate technologies, and lessons learned. The incorporation of a landscape approach, best practices, and lessons learned in technical assistance and work programs of key public actors and communities working in the landscape will seek to ensure the maximization of results and replication throughout the Caroní River basin, reaching a greater number of communities and their organizations. The training and dissemination strategy will facilitate replication. Actions such as learning by doing, experience sharing, technical visits, and workshops will maximize the exposure of different producers to the most successful and innovative aspects of the project, and will also facilitate the extension of project benefits.

263. The project implements actions in output 1.1.1 related to governance, as well as output 2.1.2 associated with carbon accounting, forest fires, and mine site rehabilitation activities, which constitute working experiences that can be replicated in other studies and projects at the national level through different GEF projects. The project will also serve the national government in supporting the establishment of a national network of multipurpose plots, which together with remote sensing data, will contribute to the national forest inventory, biological diversity inventory, and greenhouse gas emissions inventory. With these technical elements, the country will have the capacity to respond quickly and efficiently to the multiple international commitments it has made under United Nations Conventions, such as combating climate change, biological diversity loss, and desertification.

264. In addition, through Component 4, the performance and impact of the project will be evaluated to systematize and disseminate good practices and lessons learned in adaptive management, as well as to discuss and evaluate potential project replication sites. Collaboration and exchange of experiences with

government institutions, indigenous and local communities, and NGOs will facilitate the widespread dissemination of the project's efforts. The systematization of experiences and lessons learned will serve to promote the replication of project results throughout the rest of the Caron? River basin.

Actions that will be implemented to support the expansion, replication, and/or sustainability of the expected key deliverables of the project.

265. Improved capacities for sustainable and integrated management of the multi-purpose landscape and governance in ABRAEs, with a gender, generational, and intercultural focus (Outcome 1.1). The project will strengthen the capacity development of officials and various stakeholders at the national, state, and municipal levels through the provision of tools for planning and management of ABRAEs. It will also provide specific training to facilitate effective planning and decision-making, enhancing methodological capacities, learning from past experiences, and harmonizing technical and collaborative approaches among institutions. These outcomes will enable access to updated information and the adoption of mechanisms and work protocols that will help organize the territory, harmonizing land uses under different perspectives, and implementing innovative mechanisms for the financial sustainability of protected areas. The agreement platforms that will be fostered in this outcome will enable the pooling of efforts, and as local communities have a positive influence on decisions that affect and commit the future of biological diversity. Finally, it will strengthen the management of the Ministry, as achieving consensus and fostering cooperation reduces resistance and improves communication channels, thereby enhancing the efficiency and effectiveness of biological diversity management. These actions can be replicated in the management of other existing ABRAEs in the country. In the long term, new alliances between national and local government authorities, NGOs, and local communities would increase awareness of biological diversity conservation issues and help foster a local conservation mindset in the basin that is vital for sustainability. During implementation, the project team will encourage universities and research centers to take action and apply these results in other settings.

266. The MINEC, institutions at different levels, and indigenous and local communities have managed the ABRAEs landscape in an integrated and sustainable manner, contributing to the restoration, recovery, and conservation of landscapes and biological diversity (Outcome 2.1). The project will update and develop management tools to support the improvement of ABRAEs management. These outcomes will provide access to updated information and enable the adoption of mechanisms and work protocols that will help organize the territory, harmonize land uses according to different perspectives, and implement innovative approaches for the financial sustainability of protected areas. The new and revised instruments will facilitate the implementation of sustainable management practices for livelihoods in order to ensure multiple benefits and the conservation of ecosystems and their components.

267. The project will seek to manage and utilize landscape areas through tools and techniques for the restoration of degraded areas caused by fires, deforestation, and unauthorized mining. These strategies and tools, outlined in output 2.1.2, will enable the restoration of forest, swamp, and savannah ecosystems, resulting in increased biodiversity and enhanced carbon sequestration, among other improvements in ecosystem services. These aspects can be replicated outside the project intervention area once they are consolidated and achieve the expected change. With these actions, the Ministry of Environment and Natural Resources (MINEC) as the governing body of environmental policy can promote and transfer the lessons from the project to other parts of the country, with particular attention to forest restoration processes in fragmented areas. By involving indigenous communities in forest and savanna restoration and conservation activities, the long-term sustainability of these actions would be promoted. MINEC would actively promote participation, sharing the knowledge gained from this project, catalyzing networks, and, when necessary, contributing to conflict mediation.

268. Indigenous and criollo communities have implemented resilient, diversified, and sustainable livelihoods in the Caron? River basin (Outcome 3.1). This outcome will strengthen the integrated landscape management through balanced activities and actions based on the production and value-added use of goods and services generated from biological diversity. This will contribute to improving the livelihoods of indigenous and criollo communities. To alleviate the pressures of these communities on natural resources, the project will promote alternative livelihoods with a gender, generational, and

intercultural approach, contributing to the development of sustainable productive alternatives (Outputs 3.1.1, 3.1.2, and 3.1.3). These efforts aim to provide the communities with viable and environmentally friendly options for generating income and improving their livelihoods. Increasing incomes will help indigenous and local communities establish or expand sustainable businesses, which is crucial for the successful management of conservation areas. As these communities rely on biological diversity and ecosystem services as the main element for their activities, promoting alternative livelihoods becomes essential. These experiences to be implemented in indigenous communities serve as a demonstration of the viability of their application and replication in other indigenous communities. By diversifying their income sources and promoting sustainable economic activities, these communities can reduce their dependence on unsustainable practices and contribute to the long-term conservation and sustainable use of biological diversity. Maintaining the set of activities involved in these outcomes will be crucial for sustaining and increasing the production of planned agroforestry practices. Therefore, the project will motivate national and local entities to actively participate in the co-management of productive activities. Additionally, the MINEC has secured long-term support for these activities to ensure their functioning alongside other government institutions and transfer learnings to other regions of the country, particularly to other indigenous communities, thus ensuring their replicability and sustainability. By promoting collaboration and knowledge-sharing, the project aims to create a network of stakeholders committed to the long-term success of these sustainable livelihood initiatives.

[1] The maps made in this document use as a cartographic base the official information of the country generated by the Geographical Institute of Venezuela Sim?n Bolívar through the Information System for Territorial Planning (SIGOT) (SIGOT, 2022). Likewise, they use the standard practices of the United Nations Geospatial, which applies the modalities of the UN for border demarcation and UN disclaimers (UN, 2020).

[2] Comptroller of the Bolivarian Republic of Venezuela (2010).

[3] Database of flora species of the GEF project ID 5410 (2023).

[4] Agricultural system generated within the forest by the indigenous communities, for the provision of food, in a rounded shape and with an approximate extension of 0.25 ha (from 2,000 to 3,000 m²) (CAKY, 2021). It is the area of the conuco that, after 3 years of use, is not cultivated again. However, it contains perennial or semi-perennial species such as pineapple, chili pepper, sweet potato, and many multipurpose trees (fruit trees, timber trees) that are occasionally utilized by families.

[5] Official Gazette 3,238 Extraordinary of August 11, 1983.

[6] Situation of those households that are unable to consistently gather the necessary resources to meet the basic needs of their members. These needs include: school attendance, housing conditions (structure and services), education of the head of the family, and economic dependency. It only applies to households residing in family dwellings.

[7] It does not include households in indigenous, other class, and collective dwellings.

[8] <http://www.redatam.ine.gob.ve/Censo2011/index.html>

[9] The word "Pem?n" can be translated as "person" or "people," and it is used to group their three ethnicities, each with its own dialect. They are: Taurepan, Arekuna, and Kamarakoto.

[10] INE's estimation for the year 2021.

[11] The specific rights of indigenous peoples have been widely and comprehensively recognized in the Constitution of the Bolivarian Republic of Venezuela (1999), the Organic Law on Indigenous Peoples

and Communities (2005), and a large number of laws contained in the legal framework, which encompass various forms of protection and guarantee of their rights as collective subjects with their own identity.

[12] This is an instrument based on the Organic Law for Territorial Planning (LOPOT) and the regulatory norms that develop it. It serves the implementation of environmental policy in spatial, technical, and legal aspects. The PORU has different connotations. On the other hand, the PORU of an ABRAE is a planning tool aimed at achieving the goals of environmental management in general and the specific objectives of the area. In its formulation, the most compatible scenarios with such objectives should have been chosen.

[13] Sector VII Ikabar?, Gran Sabana municipality, Bolívar state. It benefits a population of 4,650 inhabitants and has a final surface area of 597,982.87 ha. (MPPPI, 2016).

[14] Wataniba, "We have a direct relationship with the environment and we can be the ones to provide the world with options to protect it" at <http://bit.ly/2TejCVh>.

[15] FAO Project: 1) Support to Regional Cooperation for Climate Management of Agricultural Ecosystems with emphasis on Water and Soil (2022), 2) Reduction of Vulnerability to Climate Change Effects and Increased Resilience of Rural Women (2022), 3) Forest Management and Conservation in the Ecosocial Perspective (in the process of closure, 2023), 4) Integrated Management of Multiple Use and High Conservation Value Landscapes for the Development of the Venezuelan Andean Region (currently ongoing). Within the framework of technological innovations, FAO utilizes various validated methodologies and tools, many of which are open-source and cloud-based, such as EX-ACT, Collect Earth, Open Foris, EarthMap, Google Earth Engine, among others.

[16] The selection criteria for the demonstration area of the project are described in Annex O.

[17] The selection criteria and methodology for the areas to be restored are explained in Annex P.

[18] For further details, refer to Annex N.

[20] They are courtyards adjacent to houses where various useful species and multipurpose trees are maintained, such as native and introduced fruit trees, fibers, spices, and vegetables. They also serve as seed banks for traditional species and varieties, as well as for raising chickens and poultry.

[21] Passive restoration is the process by which ecosystems recover on their own when there are no stressors or when barriers that impede their regeneration are removed. It relies on controlling human pressures to facilitate the process of vegetation succession (SER, 2004).

[22] Initiatives that promote the strengthening of livelihoods, food security, or applied research are related to the sustainable utilization of Non-Timber Forest Products (NTFPs) from natural or reforested forests, including adjacent agroforestry areas.

[23] Corrected translation: Fermented beverage made from cassava and sweet potato juice.

[24] The constitutional framework, environmental rights, and the protagonistic participation of Indigenous Peoples in public affairs have been expanded and have expression in various national legal instruments, among which the Organic Law of Indigenous Peoples and Communities (LOPCI) dedicates an entire chapter to Prior and Informed Consultation, defining its process in nine articles.

[25] Constitution of the Bolivarian Republic of Venezuela (1999), in the Organic Law of Indigenous Peoples and Communities (2005).

1b. Project Map and Coordinates

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

269. The project intervention area has considered the sectors of Upper Paragua (UP), Lower Paragua (LP), Upper Caroni (UC) and Medium Caroni (MC), which represents a total area of 7,900,962 (85.72%) (Figure 17).

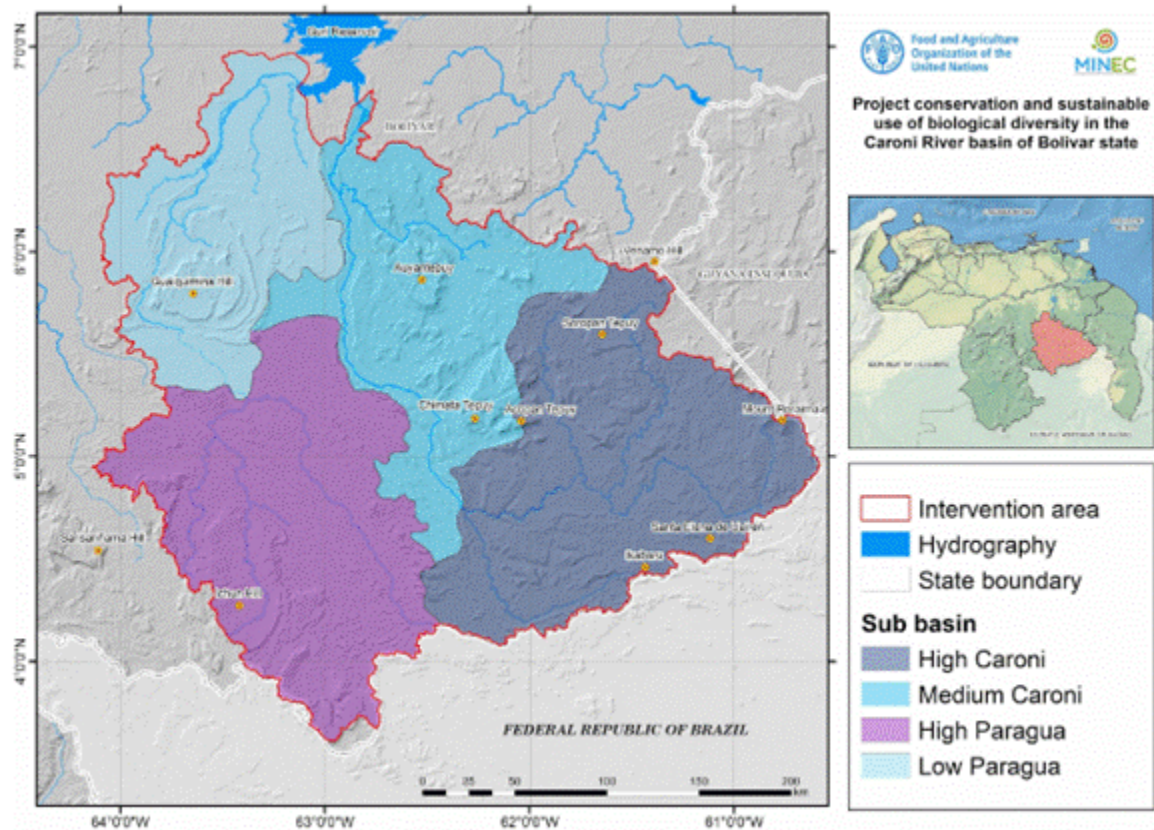


Figure 17. Location of the project area in the Caroni river basin.

Source: Original elaboration based on Plan Maestro (CVG-EDELCA, 2004).

270. Out of the 7,900,962 ha considered as the project intervention area, 97.62% are within ABRAEs, resulting in a designated area of 7,712,919 ha as the protected terrestrial area, which constitutes the project intervention area. This area includes the conservation targets of the project, such as water

bodies, morichales, tepuis, savannas, gallery forests, indigenous settlement areas, and recreational tourist zones.

271. Within the project intervention area the following ABRAEs are located: Canaima National Park (PNC), Natural Monuments of Tepuys (MNT), La Paragua Forest Reserve (RFLP), Ikabaró River Hydraulic Reserve (RHI), and South Protective Zone of Bolívar state (ZPSEB) (Figure 18).

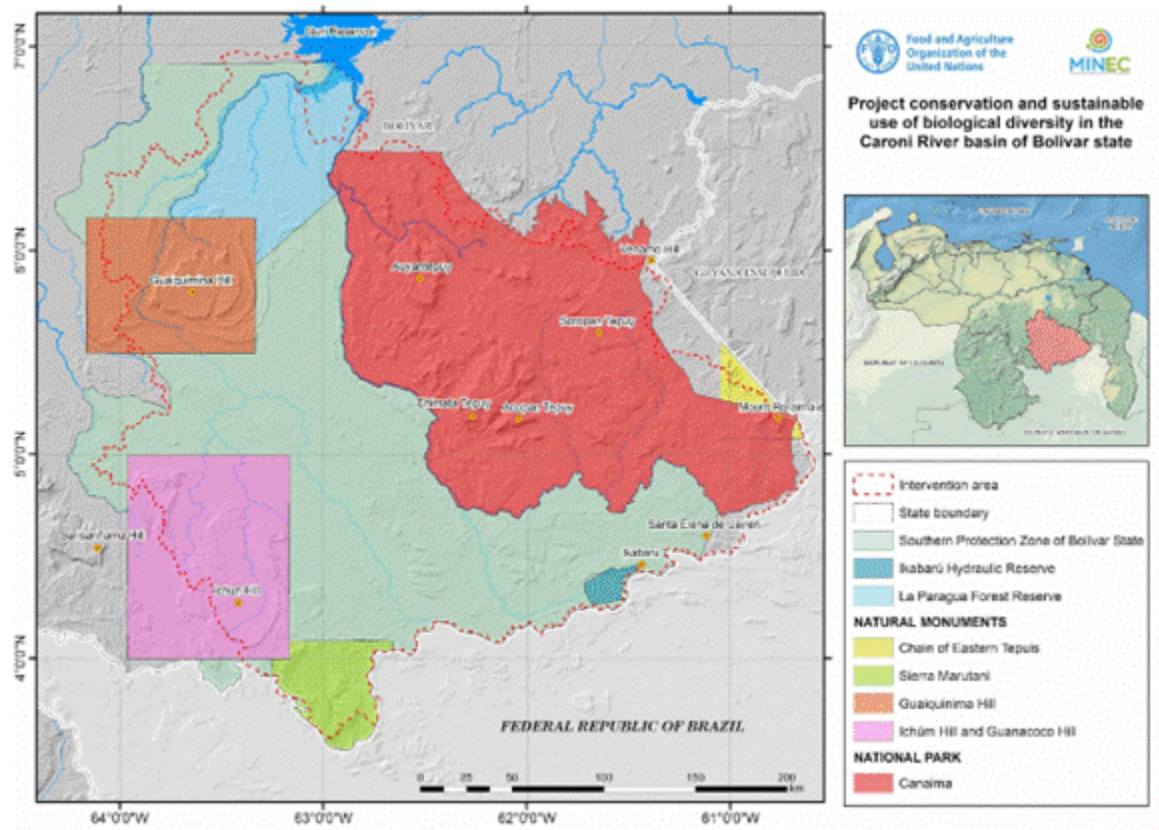


Figure 18. Areas Under Special Administration Regime within the project intervention area.

Source: Original elaboration based on SIGOT (2022).

1c. Child Project?

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

N/A

2. Stakeholders

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

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities No

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

272. The consultation process with relevant stakeholders began through the Project Preparation Grant (PPG) inception workshop, which took place in two stages. The first stage, at the national level, was held in Caracas at the headquarters of the MINEC on November 17, 2022. It involved the participation of 31 individuals, including representatives from various departments and affiliated entities of MINEC, as well as representatives from the following institutions: Ministry of Popular Power for Indigenous Peoples (MINPI), MinAguas, MIDME, National Electric Corporation (CORPOELEC), INAMEH, IVIC, and the Bolivarian Agency for Space Activities (ABAE).

273. The second stage took place in the city of Puerto Ordaz, Bolívar state, from November 24th to 25th, 2022. The workshop was held at the facilities of CVG Aluminum del Caroní S.A. (ALCASA) and had the participation of 102 representatives from 15 regional and national institutions. The formal opening of the workshop included presentations by the Minister of MINEC, the FAO representative in Venezuela, the Vice President of CVG, the Environmental Authority of Bolívar state, and representatives from the Bolívar state government.

274. In both stages, an official project presentation was conducted. In the second stage in Puerto Ordaz, three working groups were organized. Working Group 1 addressed strengthening for sustainable management with 26 participants (13 women and 13 men); Working Group 2 focused on integrated landscape management with 19 participants (9 women and 10 men); and Working Group 3, which focused on livelihoods in indigenous and criollo communities, consisted of 28 participants (15 women and 13 men) generating inputs for the project formulation.

275. In the diagnosis and formulation phase of the PRODOC, several meetings and informative contacts were held throughout the information-gathering process, culminating in the project review and validation workshop. This process also includes FPIC with the Pemón People. The application of FPIC in the involved communities during the formulation phase was organized based on the approach developed by FAO (2016).

276. After the initial workshop, a socialization plan was designed in collaboration with representatives of the Pemón People to develop a schedule of discussions that would allow for the transparent delivery of project information. In Pemón communities, there is a customary procedure or protocol to engage in community work, which involves first contacting the General Captaincy of the sector, then the Communal Captaincy, and finally the interest groups, families, or community instances. During the month of December 2022, three informative and preparatory meetings were held in the project area with representatives of the General Council of Chiefs in preparation for the socialization workshops. The socialization plan was approved by the traditional authorities for the FAO Venezuela (FAOVE)-MINEC field mission in January 2023.

277. While the socialization plan addressed all sectors grouped in the General Council of Chiefs, the Project focused its attention on the areas covered by indigenous sectors 5 and 6 of the Pemón people, where the largest number of indigenous communities are concentrated, located in the Upper sector of the Caroní River basin. The defined criteria for sector prioritization are as follows: a) Existence of communities with permanent agricultural activity and experience in ecotourism and community project implementation; b) Accessible populations by land and with access to gasoline; c) Distance from areas of social conflict; d) Communities led by women (communal captaincies); e) Active ETA, which implies communities of young people dedicated to the conservation and protection of biological diversity.

278. In the field campaign, two socialization workshops were held with the sectors identified as the demonstration area of the project (sectors 5 and 6), in which the General Captains of sectors 3, 7 and 8

also participated. They were held in Spanish and with translation into the Taurep?n language whenever necessary, through the General Captains of each sector. In both workshops, there was: an official presentation of the project by the FAO team; presentation of the MINEC; work tables by community; presentation of the results of the tables with emphasis on their aspirations and expectations with the project; reading of the documents requesting the Free Prior and Informed Consent. In the first workshop (sector 5) the FPIC document was approved and signed by 63 people, including several Community Captains, of whom 21 (33.33%) were women and 42 (66.67%) men. In the first workshop, the FPIC document was approved and signed by 63 people, including several Community Captains, of whom 21 (33.33%) were women and 42 (66.67%) men.

279. At the end of the workshops, a reasonable timeframe was agreed upon to disseminate the project information within their communities and submit their consensus-based proposals to the project team. This agreement was fulfilled, and many communities in the prioritized sectors held meetings regarding the project and FPIC, and submitted proposals focused on two important productive activities as sources of income for the communities and families, namely: a) resuming and expanding ecotourism activities, and b) technical improvement of traditional agriculture.

280. During the workshops, the inclusive nature of the consultation process was emphasized, highlighting the importance of ensuring the expression of all community members' voices, actively including women and youth. In the prioritized sectors (5 and 6), there are 53 communities, 16 of which are led by women. The fieldwork was complemented with remote interviews with women's organizations and communal captains who were motivated to share their life stories.

281. During the field mission, the local organizations "Guardianes del Bosque" and "La Cosecha" in Santa Elena de Uair?n also participated. These organizations are engaged in environmental and reforestation work alongside the indigenous population, and they provided valuable information for the project. The places visited and consultations with key stakeholders are summarized in Annex I2, "Interested Parties Engagement Matrix."

The stakeholders of the project

282. Considering the components and areas of intervention of the Project, actors have been identified at different political-territorial levels: National, Regional (State), and Local (Municipal, Parish, Communal), including state-owned enterprises, private institutions, and grassroots community organizations, each with particular interests and carrying out actions with implications for the management of the watershed area. The relevant actors identified during the formulation stage are listed below (Table 15 and 16).

Table 15. Interested Parties.

Interested parties, affiliated entities or under administration	
Ministry of Popular Power for Ecosocialism (MINEC)	
	National Institute of Parks (INPARQUES)
	Latin American Forestry Institute (IFLA)
	National Reforestation Company (CONARE)
Ministry of Popular Power for Indigenous People (MINPI)	
Ministry of Popular Power for Water Affairs (MinAguas)	
Ministry of Popular Power for Tourism and Foreign Trade (MITCOEX)	
	National Institute of Tourism (INATUR)

Ministry of Popular Power for Electric Power (MPPEE)	
	National Electric Corporation (CORPOELEC)
Ministry of Popular Power for Interior, Justice, and Peace (MPPRIJP)	
	National Institute of Meteorology and Hydrology. (INAMEH)
Ministry of Popular Power for Defense (MPPD)	
Ministry of Popular Power for Ecological Mining Development (MPPDME)	
	Misi?n Piar Foundation
	National Institute of Geology and Mining (INGEOMIN)
Ministry of Popular Power for Communes and Social Movements (MPPCMS)	
Ministry of Popular Power for Productive Agriculture and Lands (MPPAPT)	
Ministry of Popular Power for Planning (MPPP)	
	Geographical Institute of Venezuela Sim?n Bol?var (IGVSB)
Ministry of Popular Power for Science and Technology (MINCYT)	
	Bolivarian Agency for Space Activities (ABAE)
	Venezuelan Institute of Scientific Research (IVIC)
Ministry of Popular Power for Women and Gender Equality (MinMujer)	
	National Institute for Women (INAMUJER)
Ministry of Popular Power for Education (MPPE)	
	National Institute of Training and Socialist Education (INCES)
Government of Bol?var State.	
Venezuelan Corporation of Guayana (CVG).	
HIDROBOLIVAR	
City Halls from Gran Sabana, Angostura, Sifontes and Piar municipalities.	
Interested parties, affiliated entities or under administration	
Indigenous Organizations	
	General Council of Chiefs of Pem?n People.

	Indigenous Federation of Bolívar state (FIEB).
	Sector Chiefs and Community Chiefs.
	Association of Tourist Guides.
Agricultural Technical Schools	
	ETA Kavanayán.
	ETA Kumarakapay.
	ETA Maurak.
	ETA Chirikayán
	ETA Wonkán
	ETA Apoipó
	ETA Manak Kró
Universities	
	Guayana Experimental University (UNEG)
	Experimental Pedagogical University Libertador (UPEL)
	National Experimental Polytechnic University of the Armed Forces (UNEFA)
	Central University of Venezuela (UCV)
	University of Los Andes (ULA)
	National Experimental Indigenous University Tauca(UNEIT)
local NGOs	
	Harvest.
	Forest Guardians.
	Codehciu.

Source: Original elaboration.

Table 16. Local communities consulted during the project design.

	Municipality	Indigenous sector	Community
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1	Gran Sabana	5	Kavanay?n
2	Gran Sabana	5	Liwo Riw?
3	Gran Sabana	5	San Luis
4	Gran Sabana	5	San Rafael de Kamoir?n
5	Gran Sabana	5	Kama Meru
6	Gran Sabana	5	Kumarakapay
7	Gran Sabana	5	Paraitepuy de Roraima
8	Gran Sabana	5	San Camilo
9	Gran Sabana	5	Kuy Yeremep? (Agua Fr?a)
10	Gran Sabana	5	Mare Paru
11	Gran Sabana	5	Uroi Uarai
12	Gran Sabana	5	Itowat? (Monte Bello)
13	Gran Sabana	5	San Ignacio de Yuruan?
14	Gran Sabana	5	El Oso
15	Gran Sabana	5	Mapaur?
16	Gran Sabana	6	Chirikay?n
17	Gran Sabana	6	San Antonio del Morichal
18	Gran Sabana	6	War?
19	Gran Sabana	6	War? Mer?
20	Gran Sabana	6	Campo Grande
21	Gran Sabana	6	Betania
22	Gran Sabana	6	Paw?k
23	Gran Sabana	6	Kanayeut?
24	Gran Sabana	6	Apoip?
25	Gran Sabana	6	San Miguel de Caracol
26	Gran Sabana	6	Maurak

27	Gran Sabana	6	Santa Luc?a
28	Gran Sabana	6	Santo Domingo de Turas?n
29	Gran Sabana	7	El Pauj?
30	Gran Sabana	8	Wonk?n

Source: Original elaboration.

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

Participation in the implementation of the project

250. The ministerial stakeholders with competence in environmental matters, who are responsible for implementing control and monitoring policies in the territory, as well as those responsible for tourism management, agriculture, watershed management, indigenous affairs, gender, and their affiliated entities at the national, state, and local levels, will be included throughout the project implementation stage in training and capacity-building programs related to technologies, techniques, management tools, territory supervision and monitoring, and comprehensive and sustainable landscape management with a focus on biological diversity conservation and management, incorporating a perspective of gender, generational diversity, and interculturality into the actions to be carried out in the project. These programs will enable them to improve the mechanisms for monitoring and controlling ABRAEs, provide training, advice, and technical assistance to indigenous and local communities, strengthen and create inter-institutional mechanisms to enhance territory management. They will have planning tools developed with an integrated vision of institutions, indigenous communities, and local communities, which include considerations of biological diversity, ecosystem services, livelihoods, as well as updating socio-environmental, economic, and cultural data with a gender perspective.

251. The project will promote mechanisms and spaces for participation with the objective of achieving the involvement of key members through spaces for inter-institutional coordination for governance in environmental management and the formal processes of formulation and socialization of the PORU, starting with the Canaima National Park, and continuing with the La Paragua Forest Reserve, the South Protected Zone of Bol?var state, the Ikabaru Hydraulic Reserve, the Ikabaru Hydraulic Reserve and finally the Tepuy Chains Natural Monuments. The entire formulation and dissemination process will be carried out in accordance with the guidelines of the MINEC and the INPARQUES, with the participation of national and regional institutions involved in the management of the Caron? river basin. For landscape restoration actions and strategies, a broad participation of indigenous and criollo communities will be promoted in the design, validation and implementation stages of the activities, providing organizational mechanisms that ensure the participation of women and young people from these communities. The strengthening of institutional alliances is contemplated to achieve the sustainability and scalability of the plans and initiatives that are developed in the execution of the project.

252. Indigenous and local communities will implement resilient, diversified, and sustainable livelihoods around ecosystem services in the Caron? River basin, strengthening the integrated landscape management through balanced activities and actions based on the production and value-added use of goods and services generated from biological diversity, with a gender and intercultural focus, jointly evaluating sustainable productive alternatives. The alternative financial and technical support from the GEF will strategically focus on identifying, analyzing, and implementing schemes for the sustainable use of natural resources. This will increase opportunities for sustainable nature-based income-generating activities, aiming to enhance household income and reduce vulnerabilities. Existing

local organizations in the area will support the implementation of conservation and production activities outlined in the project execution.

253. The project will ensure the participation of interested parties (national, regional and local) in knowledge management and M&E, promoting exchange instances for their involvement in the tasks and activities of the knowledge management plan, the communication plan, the plan exchange of experiences and incident plan contemplated in the project. The M&E system of the project will include consultation instances with the stakeholders to collect their opinions regarding the Project and achieve their participation and contributions in the transfer of knowledge that contributes to the replication and scaling of the lessons learned.

254. The project will have a mechanism for handling and resolving complaints, which will be disseminated among the interested parties of the project to inform of its existence and mode of operation. The UGP will be responsible for documenting all claims and ensuring that they are addressed in a timely manner. If unresolvable conflicts arise at that level, they will be resolved at the Country Office or Regional Office level. If a concern or complaint cannot be resolved through consultation and action at the managerial or project management level, a complaint may be filed requesting a review with the Office of the General Inspector (OIG) in accordance with the guidelines for compliance of reviews? in accordance with the provisions of the FAO[1] environmental and social standards (see Annex I2). **Table 17** presents the roles of the main stakeholders in the project.

Table 17. Role of key stakeholders in project implementation.

key stakeholder	Role of the stakeholder / Capacity of the key stakeholder	Key stakeholder competence
Government		
Ministry of Popular Power for Ecosocialism (MINEC)	? Competent authority in environmental matters.	? Project promoter and coordinator.
	? leading at the national and regional levels the processes of biological diversity conservation, management of forest heritage, promotes land use planning and management, conservation of watersheds, climate change mitigation and adaptation processes, environmental impact assessment instruments, and deals with international environmental issues.	? Member of the Project Operative Group. ? ? Providing technical guidelines and basic information.
	? Administrator of the Southern Protection Zone of Bolívar state and of the Ikabara National Hydraulic Reserve.	? Project Implementer. ? ? Project co-financier.

key stakeholder	Role of the stakeholder / Capacity of the key stakeholder	Key stakeholder competence
Ministry of Popular Power for Indigenous People (MINPI).	<ul style="list-style-type: none"> ? Competent authority in indigenous peoples' rights. ? Integral development of the indigenous peoples and communities. ? They articulate with the communities the attention of socio-productive proposals. ? Demarcation and titling of the lands and habitats of indigenous people and communities. ? Indigenous Communal Territory of Valleys, Savannas, and Tepuys (Bol?var state). 	<ul style="list-style-type: none"> ? Providing technical guidelines and basic information. ? Project Implementer. ? Project co-financier.
Ministry of Popular Power for Water Affairs (MinAguas).	<ul style="list-style-type: none"> ? Competent authority in water management. ? Overseeing at the national and regional levels the care, treatment, monitoring, and protection of drinking water, wastewater, watersheds, water resources, and reservoirs. 	<ul style="list-style-type: none"> ? Providing technical guidelines and basic information. ? Project Implementer. ? Project co-financier.
Ministry of Popular Power of Tourism (MINTUR)	<ul style="list-style-type: none"> ? Competent authority in tourism matters. ? Responsible for the promotion and sustainable development of the national territory as a tourist destination. ? Promoting projects with the participation of indigenous communities for the development of sustainable tourism development alternatives, especially in the Canaima National Park and Natural Monuments. 	<ul style="list-style-type: none"> ? Providing technical guidelines and basic information. ? Project Implementer. ? Potential co-financing of the Project.
Ministry of Popular Power for Ecological Mining Development (MPPDME).	<ul style="list-style-type: none"> ? Competent authority in mining activities and the National Ecological Mining System. ? Allocating potential spaces to develop mining activity within the framework of land use planning and other technical and legal instruments. ? They promote the application of new technologies that reduce the impact of mining activity and contribute to the recovery of historically affected areas. 	<ul style="list-style-type: none"> ? Providing technical guidelines and basic information. ? Project Implementer. ? Project co-financier.

key stakeholder	Role of the stakeholder / Capacity of the key stakeholder	Key stakeholder competence
Ministry of Popular Power for Defense (MPPD).	<ul style="list-style-type: none"> ? Competent authority in matters of national security and defense. ? Administrator of the Border Security Zone of the Bolívar and Amazonas states. 	<ul style="list-style-type: none"> ? Providing technical guidelines for the elaboration of the PORU due to the nature of the border zone of the area of intervention of the project. ? Providing support in terms of security.
Ministry of Popular Power for Electric Energy (MPPEE).	<ul style="list-style-type: none"> ? Competent authority in matters of the Electrical Power System and Service. ? Identifying new sources and rational use of electrical energy. ? Generating strategic alliances for the maintenance and management of the national electrical system. 	<ul style="list-style-type: none"> ? Providing technical guidelines. ? Project co-financier.
Ministry of Popular Power for Communes and Social Movements (MPPCMS)	<ul style="list-style-type: none"> ? Competent authority in matters of organizing and consolidating Popular Power; the registration of Communal Councils, Communes, and other instances and organizations of Popular Power. ? Overseeing the communal training system, the microfinance system, the communal economic system, regimes of collective ownership based on popular initiative, and the recognition of social movements. 	<ul style="list-style-type: none"> ? Providing technical guidelines and basic information. ? Project Implementer. ? Potential co-financing of the Project.
Ministry of Popular Power for Productive Agriculture and Land (MPPAPT).	<ul style="list-style-type: none"> ? Competent authority in agricultural, plant, livestock, aquaculture, fishing, forestry matters, and rural infrastructure. ? Leading research and technological development and agricultural innovation. ? Managing and distributing agricultural land, the administration of waste land for agricultural exploitation and the rural cadastre. 	<ul style="list-style-type: none"> ? Providing technical guidelines and basic information. ? Potential implementer of the Project.

key stakeholder	Role of the stakeholder / Capacity of the key stakeholder	Key stakeholder competence
Ministry of Popular Power for Planning (MPPP).	<ul style="list-style-type: none"> ? Competent authority in sectoral and spatial planning of the country at its various scales. ? Leading and monitoring international technical cooperation and multilateral financing. ? Following up on plans at all levels. 	<ul style="list-style-type: none"> ? Monitoring territorial planning processes as President of the National Territorial Planning Commission (CNOT). ? Following-up on multilateral financing. ? Provide technical guidelines.
National Institute of Parks (INPARQUES)	<ul style="list-style-type: none"> ? Entity attached to the Ministry of Popular Power for Ecosocialism, competent in matters of administration and management of National Parks (PN), Natural Monuments (MN) and Open Field Recreational Parks (OFRPs), integrated into the National Park System (NPS). ? Leading the processes of conservation of biological diversity in the NPS at the national and regional level, as well as promoting its processes of planning and management of the territory. ? Operational manager of the Park Rangers and Forest Firefighters, in addition to being the Entity with a strong link with research institutions. 	<ul style="list-style-type: none"> ? Member of the Project Operative Group. Project Implementer. ? Providing technical guidelines and basic information. ? Project Implementer. ? Project Implementer.
Ministry of Popular Power for Women and Gender Equality (MinMujer)	<ul style="list-style-type: none"> ? Responsible for the national policy on gender equality and protection against mistreatment of women. 	<ul style="list-style-type: none"> ? Providing technical guidelines and basic information.
National Reforestation Company (CONARE)	<ul style="list-style-type: none"> ? Entity attached to the Ministry of Popular Power for Ecosocialism, has expertise and a mandate in forest recovery and restoration. 	<ul style="list-style-type: none"> ? Providing technical guidelines and basic information. ? Project Implementer.
Bolivarian Agency for Space Activities (ABAE)	<ul style="list-style-type: none"> ? Entity attached to the Ministry of Popular Power for Science and Technology, in charge of developing and carrying out the policies of the National Executive of Venezuela regarding the peaceful use of outer space 	<ul style="list-style-type: none"> ? Providing technical guidelines and basic information. ? Project Implementer. ? Project co-financier.

key stakeholder	Role of the stakeholder / Capacity of the key stakeholder	Key stakeholder competence
Secretary of the National Security Council (SECODENA).	<p>? Consultative competent authority for planning and advising the national, state, and municipal public authorities on matters related to the comprehensive security and defense of the Nation.</p> <p>? Keeping the record and giving technical guidelines on the declaration and management of Security Zones.</p>	<p>? Provide technical guidelines.</p>
National Electric Corporation (CORPOELEC).	<p>? State company attached to the Ministry of Popular Power for Electric Energy, competent in the provision of electrical service.</p> <p>? Its policy for its areas of interest is to promote activities that improve the environment, as well as to avoid, minimize and control activities capable of degrading it, based on the environmental principles of prevention, sustainability, legality, responsibility, education and continuous improvement.</p> <p>? It has the Regional Environment Division in the Project area, which in turn has the Departments of Environmental Project Management, Environmental Monitoring, and Basin Environmental Management.</p>	<p>? Provide technical guidelines and basic information.</p> <p>? Project Implementer.</p> <p>? Project co-financier.</p>
Latin American Forestry Institute (IFLA)	<p>? Entity attached to MINEC, has a team of researchers in forestry, agroforestry, climate change, watershed management and geographic information systems, basins management and SIG, and dedicated to training and research in environmental management plans.</p>	<p>? Providing technical guidelines and basic information.</p> <p>? Project Implementer.</p> <p>? Support in terms of research and academic consultation.</p> <p>? Project co-financier.</p>
Venezuelan Institute of Scientific Research (IVIC).	<p>? Autonomous Institute attached to the Ministry of Popular Power for Science and Technology, competent in the generation of knowledge through basic and applied scientific research.</p> <p>? Promoting technological development projects to meet the country's demands in areas such as the environment, from species to ecosystems; process and function models; studies of structure, toxicology and state of conservation.</p>	<p>? Providing technical guidelines and basic information.</p> <p>? Project Implementer.</p> <p>? Support in terms of research and academic consultation.</p>

key stakeholder	Role of the stakeholder / Capacity of the key stakeholder	Key stakeholder competence
National Institute of Meteorology and Hydrology (INAMEH)	<p>? Entity attached to the Ministry of People's Power for Interior Relations, Justice and Peace, competent in matters of regulation and coordination of national hydrometeorological activity.</p> <p>? Collecting and compiling information on weather, climate and hydrology; bodies of water, volumes, organs, runoff in time and space.</p> <p>? Addressing issues related to the processes of mitigation and adaptation to climate change and meteorological risks (drought; water deficit, forest fires, deforestation, soil loss; bathymetry studies in reservoirs; the entire hydrological cycle).</p>	<p>? Invited Member of the Technical Group of the Project.</p> <p>? Project Implementer.</p> <p>? Providing technical guidelines and basic information.</p> <p>? Potential co-financier of the Project.</p>
National Institute of Geology and Mining (INGEOMIN).	<p>? Specialized entity attached to the Ministry of Popular Power for Ecological Mining Development, competent in conducting research, mainly of an interdisciplinary nature, in the areas of geology, mineral resources, geophysics, geochemistry, geotechnics and other related areas.</p> <p>? They have geological and mining laboratories.</p>	<p>? Providing technical guidelines and basic information.</p> <p>? Potential co-financier of the Project.</p>
Bol?var State Government	<p>? In charge of the administration and government of Bol?var state.</p> <p>? It is the responsibility of the organization of its Municipalities and other local entities; the regime and use of non-metallic minerals; organization of state public services; conservation and use of state land roads and national highways.</p>	<p>? Providing technical guidelines and basic information.</p> <p>? Support for the implementation of the project.</p>
Venezuelan Corporation of Guayana (CVG).	<p>? Development corporation attached to the Ministry of Popular Power for Basic, Strategic and Socialist Industries.</p> <p>? Within its environmental policy, it seeks to contribute to the search for options for the sustainable use of natural resources, the prevention and control of environmental pollution, and the recovery of areas degraded by human activities in the Guayana region.</p> <p>? There is an important database associated with studies and projects in the areas of engineering, geospatial, mining, environment, territorial, geostrategic, mapping and geographic information systems, and inventory of natural resources in the region.</p>	<p>? Potential Guest Member of the Technical Group of the Project.</p> <p>? Providing technical guidelines and basic information.</p> <p>? Support for the implementation of the project.</p> <p>? Potential co-financier of the Project.</p>

key stakeholder	Role of the stakeholder / Capacity of the key stakeholder	Key stakeholder competence
Gran Sabana City Hall	<p>? It has a legal personality and exercises its powers independently.</p> <p>? Municipalities are responsible for, among others, territorial and urban planning; historical heritage; social interest housing; local tourism; parks and gardens, environmental protection and cooperation with environmental sanitation.</p>	<p>? Providing technical guidelines and basic information.</p> <p>? Support for the implementation of the project.</p>
Social Organizations		
Council of Captains of the Pem?n Indigenous People.	<p>? They lead the communities and represent the spokespersons of the Indigenous Community Captains (male or female).</p> <p>? They elect the General Captain who represents the group of Captains in internal affairs and their defense before the Venezuelan state, acting as spokespersons and promoters of initiatives, in pursuit of the social, economic, cultural, and political common good of the Pemon people.</p>	<p>? Providing social guidelines.</p> <p>? Potential Guest Member of the Technical Group of the Project.</p> <p>? Support for the implementation of the project.</p>
Indigenous Federation of Bol?var state (FIEB)	<p>? Non-profit civil association, made up of the indigenous peoples and communities: Pemon, Ye'kwana, Kari?a, Akawaio, Arahuaco, Mapoyo, Piaroa, E?ep?, Sanema, Warao, Jiwi and other indigenous people and communities.</p> <p>? Promoter of the division of the Pem?n territory into eight (8) sectors and the defense of indigenous territories in general.</p>	<p>? Providing technical guidelines and basic information.</p>
Community Indigenous Captains.	<p>? Representatives of the two sectors of the Pem?n territory: Sector V-Kavanay?n; Sector VI- Santa Elena de Uair?n.</p> <p>? Person elected in the Community Assembly, by members of legal age, who has the responsibility of representing the community, managing funds and resources from economic activities and social investments for the collective benefit according to the approval of the Community Assembly itself.</p> <p>? Mediators between indigenous people and public and private institutions.</p> <p>? They convene and lead community actions, including prior consultation processes.</p>	<p>? Providing social guidelines.</p> <p>? Potential Project Implementer.</p>

key stakeholder	Role of the stakeholder / Capacity of the key stakeholder	Key stakeholder competence
Communal Councils.	? Communal Councils are instances of participation, articulation, and integration between citizens, community organizations, social and popular movements, which allow the organized people to exercise community governance and direct management of public policies and projects aimed at addressing the needs, potential, and aspirations of the communities, in the construction of a new socialist model of society based on equality, equity, and social justice.	? Providing social guidelines. ? Potential Project Implementer.
NGOs		
NGO: Guardians of the Forest.	? It is a non-profit civil association, whose social purpose is based on the fact that education is a fundamental tool in the conservation of natural resources. ? It promotes sustainable development projects to improve the quality of life. And the protection of forests.	? Potential Project Implementer.
Academy		
Guayana Experimental University (UNEG)	? Regional Higher Education Center. ? The investigative strength is developed through 10 centers including topics of: environment, anthropology, management, sustainable development, among others.	? Providing technical guidelines and basic information. ? Potential Project Implementer. ? Support in terms of research and academy consultation.

Source: Original elaboration

Project beneficiaries

288. The project will directly benefit 44,661 people (Table 6). The main stakeholders of the project to be financed by the GEF are the indigenous communities, who also become strategic partners for the implementation of the project. In annex J, there is a detailed description of the indigenous communities present in the study area and the approach process through FPIC.

[1] FAO (2015) Environmental and social management. Guidelines.

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

289. From the identification of the different social and institutional stakeholders in the area, the following groups emerge:

a) stakeholders promoting the project; b) national, regional, and local government institutions interested in territorial planning and other aspects related to the project; c) local indigenous and Criollo community beneficiaries; d) non-governmental organizations such as La Cosecha, Guardians of the Forest, and Cooperative E' masens'n, which have developed socio-productive plans in the territory, and many of their members are part of indigenous communities; e) other local interested institutions.

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

250. The integration of the gender approach in the formulation of the project responds to the standards of the FAO Gender Equality Policy (2013, 2021) and the central indicators of the GEF, considering the different opportunities and challenges that women and men have, as well as the interrelationships between them and the different roles that are socially assigned to them. Both the Gender Analysis and the actions developed in the Gender Action Plan have the objective of defining a baseline that makes it possible to account for the effects and impacts of the implementation of the project on the beneficiary population in order to reduce the risk of designing a project based on assumptions and stereotypes, so that the proposed solutions are strategically planned, identifying possible gender gaps and how the project can contribute to their reduction. For this, women and their community organizations are considered among the main beneficiaries of the project with a view to strengthening their capacities to improve their livelihoods, increase their decision-making power and reduce the workload through the incorporation of technologies that saves time and facilitates product transformation processes.

Diagnostic findings

251. In accordance with the findings of the diagnosis carried out during the formulation, the project proposes a set of actions for implementation that aim to strengthen the capacities of women and men to improve their livelihoods, increase their decision-making power and reduce the workload. through the incorporation of technologies that allow them to save time and facilitate product transformation processes. The project has a Gender Action Plan (see Annex M) to ensure the proper participation of women present in the intervention areas.

252. In the intervention area of the project, a greater workload for women stands out. These are dedicated to the development of productive activities, at the same time that they carry out reproductive activities (home and child care). They do not have tools that allow them to reduce working time in productive activities. The cassava production activity requires an effort of up to two days a week depending on the quantity to be produced. The incorporation of the gender approach is required in the collection of socio-environmental and economic information in order to have updated and detailed data

on the productive, reproductive and community division of labor, as well as the use of time to identify the workloads currently carried out by women and men in the project area, as well as unpaid work.

253. The traditional agricultural system of the Pem?n People is structured around 3 types of productive spaces: the conuco, the stubble and the productive patio. The productive patios, also called poroi, are normally managed by the women of the family nucleus, which is why the full participation of women in all improvement practices in these systems should be considered. Various useful species and multipurpose trees are cultivated in them, such as autochthonous and introduced fruit trees, fibers, spices, vegetables, and they also serve as a reservoir of seeds of traditional species and varieties, and for raising hens and chickens. These areas, which are regularly swept to keep them clean, end in a line that separates the patio from the surrounding savannah, in which a row of trees develops due to the accumulation of seeds and organic matter resulting from the sweeping; that line receives the traditional name of poroka't?.

254. There are very few opportunities for action of women to generate their own income. The women interviewed in the field research expressed the need for work and production alternatives to mining. They refer to important contradictions between the sustainable use of the Basin (including its culture) and mining.

255. With regard to the education of the communities of the Pem?n People, it is fulfilled at basic levels. In the best of cases, there is usually one school in each community (communities are often very distant from each other). Especially in older women, there is a high degree of illiteracy, which limits them to develop intercultural skills. According to the INE (2011), among indigenous women in Bol?var State there is an illiteracy rate of 33.5%, and among indigenous men the rate is 29%. Another gap between men and women is language skills. The field investigation showed that in the project area there are intergenerational linguistic differences, for which the communities consulted requested that the information generated about the project in its implementation, as well as the training processes, be bilingual (Spanish / Taurep?n) and with visual resources.

256. Based on these findings, the Project proposes a set of actions that aim to strengthen the capacities of women and men to improve their livelihoods, increase their decision-making power, promote the closing of gender gaps in access and control of natural resources. At the same time, it also seeks to reduce the workload through the incorporation of technologies that allow them to save time and facilitate product transformation processes, generating socio-economic benefits for women.

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

Yes

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

Yes

4. Private sector engagement

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

250. The extraordinary landscape richness, characterized by a great biological and ecosystem diversity, in addition to the scenic monumentality, guide the existing tourist possibilities in the area. which

explains that the participation of the private sector is mainly related to tourism, through the presence of tourist agencies and operators (**Table 18**), hotels, camps and inns, and eventually air transport lines.

251. The main operators present in the project area are national and international tourist agencies, who contract lodging, guiding and transportation services with local tour operators, some of them inhabitants of indigenous communities. National tourism makes use of the aforementioned agencies, or independently accesses the camps and local operators to organize their tours.

252. The project will promote strategic alliances that will seek to create synergies between the communities that practice ecotourism as a way of life and the private stakeholders that act as tour operators in key aspects such as: i) strengthening the capacities of the communities in terms of improving services tourist services to offer, ii) diversification of tourist services and supply and income opportunities for indigenous communities that are organized according to ecotourism activity. These initiatives will contribute to results 1.1 and 3.1, in terms of improving the capacities of the organizational instances for the tourist offer in the area, and will also support the diversification of the livelihoods of the local indigenous and criollo populations.

253. The strategies proposed in this regard within the framework of the Project will be aimed at empowering indigenous and criollo families. In this way, community-based ecotourism will be developed according to the organizational forms that the families and communities themselves consider appropriate, being able to generate private, collective or state participation instances. In this sense, in the participatory diagnoses that are carried out in the implementation of the project, the forms of relationship of the private sector with the organizational instances that the communities have for it must be evaluated in detail.

Table 18. Private sector companies that operate in tourism in the Project area.

Company	Type
Nativa Tours Khasen, C.A.	Local company that offers tours to the tourist destinations of La Gran Sabana, including the Tepuy Roraima.
Eco-Aventura Tours	Local company that offers tours to tourist destinations in La Gran Sabana, including Tepuy Roraima.
Roraima y G.S. agencia tur?stica.	Local company that offers tours to tourist destinations in La Gran Sabana, including Tepuy Roraima.
Backpacker Tours, C.A.	Local company that offers tours to tourist destinations in La Gran Sabana, including Tepuy Roraima.
Inv. Destino Sur, C.A.	Local company that offers tours to tourist destinations in La Gran Sabana, including Tepuy Roraima.
Explora Tepuy, C.A	Local company that offers tours to tourist destinations in La Gran Sabana, including Tepuy Roraima.
Tarolla Tours travel, C.A	Local company that offers tours to tourist destinations in La Gran Sabana, including Tepuy Roraima.
A de V Turo-Sen Tours	Local company that offers tours to tourist destinations in La Gran Sabana, including Tepuy Roraima.
Venezuela Explorer Kam?	Local company that offers tours to tourist destinations in La Gran Sabana, including Tepuy Roraima.

Company	Type
Kamadac Travel, C.A.	Local company that offers tours to tourist destinations in La Gran Sabana, including Tepuy Roraima.
Vago Tours, C.A.	Local company that offers tours to tourist destinations in La Gran Sabana, including Tepuy Roraima.
Hotel Gran Sabana	Local company, offers accommodation and restaurant services.
Hotel Anaconda	Local company, offers accommodation and restaurant services.
Hotel Lucrecia	Local company, offers accommodation and restaurant services
Cabañas Roraima	Local company, offers accommodation and restaurant services
Posada Los Pinos	Local company offers accommodation services.
Hotel Villa Fairmont	Local company, offers accommodation and restaurant services.
Hotel La Patrona	Local company offers accommodation services.
Campamento Ecológico Yakoo	Local company, offers accommodation and restaurant services.
Campamento Venezuela Explorer	Local company, offers accommodation services
Campamento Turístico Petoí	Local company, offers accommodation and restaurant services
Posada Namast?	Local company offers accommodation services.

Source: Original elaboration.

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):

250. Risks to the Project have been identified and analyzed during the project preparation phase and mitigation measures have been incorporated into the Project design. With the support and supervision of FAO, the Project Steering Committee (PSC) will be responsible for the management of such risks, as well as the effective implementation of mitigation measures. The Monitoring and Evaluation (M&E) system will serve to monitor the indicators of results and products, the risks of the project and the mitigation

measures. The CDP will also be responsible for monitoring the effectiveness of mitigation measures and adjusting mitigation strategies as necessary, as well as identifying and managing any new risks not identified during Project preparation, in collaboration with partners.

251. The semi-annual PPR constitute the main instrument for monitoring and risk management. The preparation of reports on risk monitoring and their rating will also be part of the annual PIR prepared by FAO and submitted to the GEF Secretariat.

Section A: Risks to the Project.

Table 19. Risk for the Project.

Description of Risk	Impact[1]	Probability	Mitigation actions	Responsible Party
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<p>Reduced government commitment to the project and high turnover and changes in government administration may cause project delays.</p>	<p>Low</p>	<p>P=2</p>	<p>The project will include measures to keep informed and increase the Government's interest in the importance of conserving ecosystems, and therefore the biological diversity of the Caron? river basin for national develop. These measures could include:</p> <ul style="list-style-type: none"> ? Maintain regular and fluid communication with counterparts at the management level (Ordinary and Extraordinary Meetings of the Steering Committee) ? Constantly monitor the government's priorities and survey the actions of the projects related to them (internal and external communication about the project; communication plan). ? The project will improve the data and information that will support the formulation and implementation of initiatives and informed decision-making at various levels. 	<p>PMU</p> <p>Project partners (MINEC, MINPPPI, MinAguas, MINTUR, MIDME, CVG, MEPPEE, INPARQUES, CORPOELEC, Government, City Halls).</p>
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<p>Insufficient inter-institutional coordination, at the national, regional, and local levels, and a deficit in cooperation mechanisms with the private sector and local institutions may cause delays in the implementation of the project.</p>	<p>Moderate</p>	<p>P = 2</p>	<p>Mechanisms for inter-institutional coordination and cooperation between public institutions at the national, regional, and local levels will be developed and strengthened to address the problems of the Guayana region with a comprehensive landscape management approach. Ensuring the consultation and participation of relevant and interested actors, including the private sector and local institutions will enhance the chances to identify, strengthen and establish cooperation and alliances. The development of capacities of the institutional stakeholders involved in these mechanisms will improve coordination, awareness raising and dissemination of information between the different actors and levels (central, state, municipal).</p>	<p>PMU Project partners (MINEC, MINPPPI, MinAguas, MINTUR, MIDME, MEPPEE, INPARQUES, CORPOELEC, Government, City Halls).</p>
<p>Difficulty to materialize the project co-financing</p>	<p>Low</p>	<p>P=2</p>	<p>To address this risk, the project management unit will: (i) maintain fluid communication with key project partners to identify difficulties in materializing co-financing, (ii) encourage project partners to maintain as much as possible their contributions to the project and monitor the materialization, (iii) seek opportunities for collaboration with other ongoing projects and initiatives to obtain contributions that can add to project co-financing</p>	<p>PMU Project partners (MINEC, MINPPPI, MinAguas, MINTUR, MIDME, MEPPEE, INPARQUES, CORPOELEC, Government, City Halls).</p>

<p>Lack of institutional support: government agencies may not effectively support the implementation of the project during the execution period due to their insufficient budget and weak technical capacities.</p>	<p>Low</p>	<p>P=2</p>	<p>The project has been requested by the National Government through the MINEC in support of its activities at the regional and national level in the commitment to the 2030 Agenda. With a comprehensive look at economic, social, environmental, cultural and political. At the same time with the responsibility of guiding public policies to comply with the ODS and advance in the year 2030, in addition to the priorities and recommendations included in the National Strategy for the Conservation of Biological Diversity.</p> <p>Agreements and commitments will be promoted among the stakeholders involved in the project, according to their interests and considering co-financing opportunities and synergies with the project.</p>	<p>PMU</p> <p>Project partners (MINEC, MINPPPI, MinAguas, MINTUR, MIDME, MEPPEE, INPARQUES, CORPOELEC, Government, City Halls).</p>
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<p>The lack of interest and commitment on the part of local communities to participate in the project translates into low levels of participation that jeopardize the implementation, achievement and sustainability of the results and objective of the Project.</p>	<p>Low</p>	<p>P=2</p>	<p>The methodological and strategic focus of the project will be participatory. During the formulation phase, participatory processes of consultation and validation of the design were carried out to promote the interest, involvement and appropriation of the indigenous and criollo communities. Prior, free and informed consultation processes have been carried out following the guidelines of GEF and FAO to raise the opinions of indigenous communities, in order to incorporate them into the implementation of the project. During the implementation phase of the project, an appropriate level of consultation and participation will take place, following the FPIC methodology.</p> <p>The project will incorporate a gender and intercultural approach. With the aim of encouraging the participation of indigenous communities, women and youth. It will also include specific activities targeted at these beneficiaries, such as promoting their participation in dialogue and decision-making spaces, promoting control and access to resources, and improving income and livelihoods.</p>	<p>PMU</p> <p>Project partners (MINEC, INPARQUES, MINPPPI, Council of Captains, indigenous and criollo communities).</p>
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<p>Lack of sustainability of the project: there is a risk that at the end of the project there will be a lack of adequate financing and capacity for continuity of the activities undertaken. There is the risk that the financial plan is not assumed by government institutions; there is also the risk that the business plans targeting the improvement of food security and livelihood of the communities do not continue after the finalization of the project</p>	<p>Moderate</p>	<p>P=2</p>	<p>The project will strengthen regional, national and private institutional capacities in order to ensure that the technologies and knowledge necessary for the continuation of project activities can be transferred to the relevant institutions prior to project closure.</p> <p>Likewise, a financial plan will be prepared for the system of the 5 protected areas of the Caron? river basin, considering legal, technical and finance feasibilities. The business plans will be formulated considering the interests, capacities, and technical and economical feasibilities.</p> <p>A sustainability plan and knowledge management plan will be developed and implemented throughout the project, targeting appropriation, consolidation of lessons learned and replication of success experiences.</p>	<p>PMU</p> <p>Project partners (MINEC, MINPPPI, MinAguas, MINTUR, MIDME, MEPPEE, MPPP INPARQUES, CORPOELEC, MINPPPI Government, Mayors, indigenous and criollo communities.</p>
<p>Communities continue to prefer to carry out illegal and unsustainable mining activities, as well as other unsustainable activities, instead of the sustainable alternatives promoted by the project.</p>	<p>Moderate</p>	<p>P=2</p>	<p>The project will promote productive and economic alternatives that involve the interests and needs of the indigenous and criollo communities, considering the vocation of the area, and the technical and financial feasibility, in order to improve food security and economic income.</p>	<p>PMU</p> <p>Project partners (MINEC, MINPPPI, MinAguas, MINTUR, MIDME, MEPPEE, MPPP INPARQUES, CORPOELEC, MINPPPI Government, Mayors, indigenous and criollo communities.</p>

<p>Increased threats and level of insecurity in the project areas due to the growth of the mining sector.</p>	<p>Moderate</p>	<p>P=2</p>	<p>The institutional alliances that will be developed through the project will promote awareness in other Ministries and institutions (MIDME, MPPD) about the threats that mining represents for the conservation of the Caron? river basin.</p>	<p>PMU Project partners (MINEC MIDEL, MINPPAL INPARQUES, Captains Council, Government, City Halls).</p>
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<p>Communities do not take appropriate measures to prevent the traditional use of fire from causing fires and causing loss of forests, affecting biodiversity and ecosystem services</p>	<p>Moderate</p>	<p>P=2</p>	<p>The project will provide exchanges of knowledge and learning with communities in Acre (Brazil) and other communities at the national or international level that adopt appropriate practices and measures to prevent the traditional use of fire from causing fires</p> <p>The project will create of at least 2 community fire brigades will be promoted, providing training in fire management, suppression and extinguishment, operations, prevention and control, and investigation of the causes of forest fires (Output 1.1.1).</p> <p>A comprehensive fire management program will be created and implemented. The objective of the program is to develop a system for the prevention and reduction of forest fires, involving indigenous communities and government institutions, to reduce damages in the landscape units of Sectors 5 and 6 of the Caron? River Basin. The program will facilitate coordination among state agencies, indigenous communities, and other stakeholders to integrate efforts, human resources, and materials for the protection of landscape units.</p>	<p>PMU</p> <p>Project partners (MINEC, MINPPPI, MinAguas, MINTUR, MIDME, MEPPEE, INPARQUES, CORPOELEC, Government, City Halls). Indigenous and criollos communities</p>
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<p>Extreme weather in the intervention area may increase the level of threats such as fires and floods (Annex F)</p>	<p>Moderate</p>	<p>P=2</p>	<p>The project contemplates a series of strategies aimed at directly and indirectly increase the resilience to, prevent and mitigate climate risks: i) protected land areas under improved management for conservation and sustainable use, ii) restoration of degraded land and improvement of ecological corridors -both will have a powerful effect on preventing, mitigating and increasing resilience to the impacts associated with climate variability-, iii) support for indigenous and criollo communities in the diversification of livelihoods for sustainability in the management of the landscape and carry out productive socio-management.</p> <p>Geospatial monitoring and evaluation system formulated and developed for sustainable and integrated landscape management, incorporating hydro-meteorological/hydrological elements, ecosystem services, biological diversity, and environmental threats (Output 1.1.2)</p>	<p>PMU</p> <p>Project partners (MINEC, MINPPPI, MinAguas, MINTUR, MIDME, MEPPEE, INPARQUES, CORPOELEC, Government, City Halls).</p>
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The participation of local communities as monitors of environmental threats generates conflicts with stakeholders that carry out unsustainable activities in the area.	Moderate	P=2	The project contemplates the generation of a response protocol to ensure immediate and effective actions; and a security protocol for informants of environmental threats. This ensures the confidentiality of the information and contributes to preventing, mitigating or addressing conflicts. The protocol will be coordinated with the institutional personnel responsible for managing the protected area where it is identified and based on the nature of the threat (INPARQUES, MPPD, MIDME).	PMU Project partners (MINEC, INPARQUES, CORPOELEC, INAMEH, Government, City Halls).
Project implementation delays caused by a new peak of COVID19* or other future pandemics	Low	P=2	The project will begin activities in 2024, and the pandemic is expected to remain under control. In the event of a new peak of the disease, the Project, through will implement biosafety measures.	PMU

Source: Original elaboration.

252. The COVID19 pandemic is currently under control. However, in the event of a new peak and future pandemics, the project will support green recovery and resilience for the GEF spheres of activity, through wildlife conservation and sustainable landscape management, through: i) strengthening institutional capacities for sustainable landscape management; ii) integrated management of the landscape. It involves the preparation of management plans and regulations for the use of protected areas. It includes the restoration of degraded areas with the use of the best practices and methods of restoration of ecosystems such as: the use of multiple native species, natural regeneration, analog forestry, among others; iii) support to local communities with sustainable economic activities that improve livelihoods, with the provision of alternatives in ecotourism, added value of timber and non-timber forest products and family farming. This through joint decisions between the project and the indigenous and criollo communities, using participatory analysis methods.

[1] Scale from least to greatest impact: Low, Moderate and High.

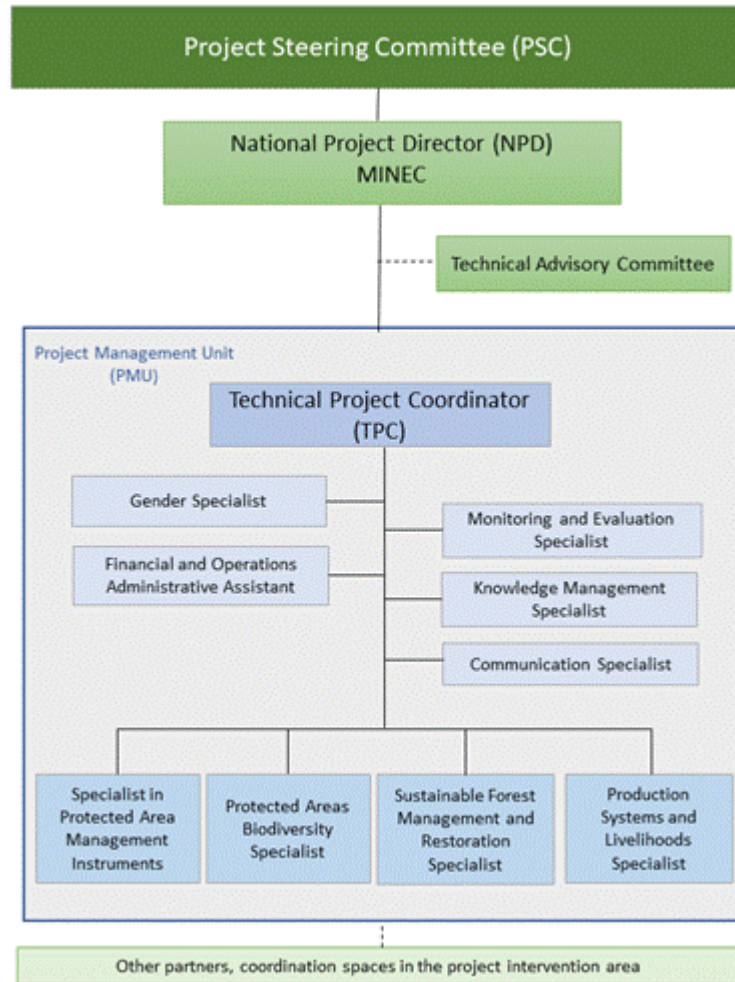
6. Institutional Arrangement and Coordination

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

6.a Institutional arrangements for project implementation

250. MINEC will have overall technical and execution responsibility for the project, and the Food and Agriculture Organization of the United Nations (FAO) will be the implementing entity of the GEF (GEF Agency), as described below. The ?project? is the project document (PRODOC) approved by the Global Environment Facility (GEF) and signed by the Government of the Bolivarian Republic of Venezuela and FAO. Upon request of the Government of Venezuela, MINEC will act as the lead Executing Entity with full programmatic control of the project activities. FAO will disburse and administer the day to day budget under MINEC guidance and in accordance with approved Work Plans and Budget. As the lead Executing Entity, MINEC is responsible for the timely execution of the agreed project results, the operational supervision of the execution activities, the presentation of timely reports and the effective use of GEF resources for their intended purposes and in accordance with FAO and GEF policy requirements. Figure 19 shows the organization chart of the project.

Figure 19. Project organization chart.



Source: Original elaboration.

Project Steering Committee (PSC)

251. For strategic decision-making, a PSC will be formed, composed of formally designated representatives from MINEC, INPARQUES, IFLA, a representative from CORPOELEC, INAMEH, ABAE, MINPI, MinAguas, and representatives from the Government of Bolívar state. Two representatives from beneficiaries (who have their own organizational form to define their representatives in a general assembly, following their ancestral culture and organizational forms) and the FAO Representative in Venezuela, along with other institutions that may be invited to the meetings. The CDP is a collegial advisory council chaired by the MINEC delegate. The main functions of the CDP are:

- a. Providing orientation and strategic definitions for the execution of the project.
- b. Supervise the implementation of the project and ensure the technical quality of its results and products.
- c. Reviewing and agreeing on the strategy and methodology of the project, as well as agreeing on the changes and modifications that may be necessary from the implementation in the field.

- d. Approving annual work plans and budgets, as well as progress reports.
- e. Knowing and discussing the midterm and final evaluation reports of the project, as well as to take measures to implement the recommendations.
- f. Coordinating and managing through institutional means the timely contribution of the agreed co-financing by each participating institution in the project, as well as other sources of financing that contribute to the project's objective and results.
- g. Promoting agreements and other forms of collaboration with national and international organizations that contribute to the execution of the project and the achievement of the results.
- h. Convening and organizing meetings with relevant national, regional, and local stakeholders, when appropriate.
- i. If necessary, resolving conflicts related to the project and its proper execution.
- j. Taking measures and making arrangements to ensure the sustainability of the main project outcomes, as well as their expansion and replication.
- k. Promoting the dissemination of the lessons and learning of the project.

252. The CDP will hold regular sessions at least twice a year. However, if its members deem it necessary, extraordinary meetings may be convened. The sessions can be held in person or through electronic means. Whenever possible, in-person sessions will take place in the project area. All decisions of the committee will be made by consensus. In its first meeting, the CDP will agree on its operational procedures.

253. The members of the CDP will be formally appointed through a formal letter addressed to the FAO. The indigenous communities participating in the project will agree on the individuals who will represent them on the PSC. The representatives of the indigenous communities will ensure that the CDP takes into account the perspectives and visions of the project beneficiaries.

254. Each member of the CDP will serve as a focal point for the project in their respective entities or sectors. Therefore, the project will have a focal point in each involved entity or sector. As focal points, the members of the PSC:

- i. They will technically supervise project activities related to their entity or sector.
- ii. They will ensure the smooth exchange of information and knowledge in both directions between their entity/sector and the project.
- iii. They will facilitate the coordination and linkage between the activities of the project and the work plans of their entity or sector.
- iv. They will facilitate the provision of co-financing to the project.

National Project Director (NPD)

255. The Minister of MINEC will appoint an official from the ministry as the NPD. The NPD will be based at MINEC and will be responsible for:

- i. Representing the government in activities related to the project.
- ii. Being the link with the FAO, representing the MINEC as the main executing entity.

- iii. Coordinating activities with all national entities related to the different components of the project, as well as with project partners.
- iv. Ensuring the implementation of the PRODOC and the strategies and decisions of the PSC.
- v. Supervising and guiding the Technical Project Coordinator (see below) on government policies and priorities.
- vi. Ensuring the proper technical and administrative execution of the project by monitoring and evaluating the project work plans, in close coordination with the Technical Coordinator of the Project.

Technical Advisory Committee

256. The Technical Advisory Committee (CTA) is a space for interinstitutional coordination. It will have an executive body composed of formally designated technical representatives from MINEC, INPARQUES, MinAguas, CORPOELEC, and FAO, and will be chaired by the National Project Director. In their first meeting, the Technical Advisory Committee will agree on the operational procedures. Other institutions may be formally invited to participate in the CTA if needed.

257. The main functions of the Technical Advisory Committee are:

- i. Ensuring smooth communication and intersectoral collaboration among the project partners.
- ii. Providing technical guidance to the NPD and the project unit to support the achievement of the project's outcomes.
- iii. Supervising the technical working groups of the project.
- iv. If necessary, appoint working groups for each technical area of the project (involving the different project partners), which will be responsible for providing technical inputs and advice for project implementation and facilitating intersectoral coordination.
- v. Reviewing the annual operational plan and its corresponding budget before they are submitted for consideration by the PSC.
- vi. Review and provide feedback on the draft of the PIR report before it is submitted for consideration by the PSC.
- vii. Evaluating and providing feedback on the midterm review report.

Project Management Unit

258. A Project Management Unit (UGP) will be established, which will be funded by the GEF grant. The main functions of the project unit, following the guidance and directives of the PSC, are to ensure efficient management, coordination, implementation, and monitoring of the project through effective implementation of the Project Document (PRODOC) and the annual work plan and budget.

259. The UGP[1] will be led by a Project Technical Coordinator (PTC). It will have a cross-cutting focus throughout the project. At least 50% of the members of the UGP will be women.

- i. Project coordinator,
- ii. Specialist in Protected Area Management Instruments,
- iii. Specialist in Biological diversity of Protected Areas.

- iv. Specialist in Sustainable Forest Management and Restoration,
- v. Specialist in Production Systems and Livelihoods,
- vi. Administration/Financial and Operations Assistant
- vii. Monitoring and Evaluation Specialist,
- viii. Specialist in Gender and Indigenous People,
- ix. Knowledge Management Specialist.
- x. Communication Assistant.

260. The project unit will be located within the project area. Preferably, the project offices will be situated within the facilities of the project partners, which will provide space and amenities for the functioning of the UGP, as well as coordination of project activities in the territories, in accordance with the agreed work plans.

Project Technical Coordinator (PTC)

261. The PTC has the authority to lead the day-to-day implementation of the project, as well as oversee and guide the management, administration, and technical quality of the project, on behalf of the main implementing entity and within the guidelines established by the PTC.

262. The primary responsibility of the PTC is to ensure that the project produces the specified results in the PRODOC, with the required quality standards and within the specified time and cost limitations. This individual will lead the coordination and supervision of the project and provide expertise and technical guidance within the guidelines established by the PSC and FAO. The PTC will work in constant communication with the Lead Technical Officer (LTO) of the project.

263. The PTC will report to the CDP and FAO on any delays or difficulties that arise during implementation so that corrective measures and appropriate support can be taken. This individual will be responsible for, among other things:

264. Technical features:

- i. Providing guidance and review of all technical deliverables developed by technical consultants, the M&E specialist, and regional facilitators to ensure alignment with project objectives and quality standards.
- ii. Ensuring the comprehensiveness and complementarity of the four project components during execution and adherence to the technical criteria that have been considered in each of the components.
- iii. Ensuring a high level of collaboration among participating institutions and organizations at the national and local levels.
- iv. Making the necessary arrangements to facilitate project development and the achievement of its objectives through interinstitutional agreements and partnerships.
- v. Conducting regular field supervision visits and providing guidance to the technical staff of the implementing partners.
- vi. Providing technical supervision and guidance to the implementing partners for the execution of project activities.

vii. Monitoring risks according to the risk matrix and ensuring the implementation of mitigation measures.

viii. Coordinating and carrying out M&E activities, which include: i) periodic monitoring and evaluation visits to project intervention sites, ii) monthly monitoring and evaluation of progress in achieving product and result indicators, iii) providing technical and operational support to personnel from participating institutions, and iv) proposing potential changes in project implementation strategies if necessary.

ix. Completing the GEF tracking tools (BD, LD) at the midterm and end of the project.

x. Provide technical guidance and supervision to the UGP and partners for the implementation of project activities. For each component of the project, the PTC will have the following technical functions and responsibilities.

265. Coordination functions

xi. Organizing and leading the project kick-off workshop, the annual project progress review, and planning workshops with local stakeholders and implementing partners for the preparation of the Annual Work Plan and Budget (AWPB).

xii. Coordination and constant communication with the personnel of the implementing partners in charge of project activities.

xiii. Coordinating the work of the consultants hired for project implementation.

xiv. Preparing the Project Progress Reports (PPR) in coordination with the project specialists.

xv. Preparing the annual PIR in coordination with the LTO.

xvi. Supporting MINEC in the preparation of co-financing reports in cash and in kind provided by co-financiers as well as other partners not provided for in the Project Document.

xvii. In consultation with the PSC, FAO Evaluation Office, LTO, and FAO-GEF Coordination Unit, support the organization of midterm and final evaluations.

xviii. Preparing, with the support of project specialists, terms of reference and technical specifications for the procurement of services and/or signing of agreements for the implementation of project activities.

xix. Scheduling, organizing, and participating in the meetings of the PSC, acting as the Secretary.

GEF Agency

266. FAO will serve as the GEF Agency for the project and, consequently, provide support and project cycle management services as outlined in the "Project and Program Cycle Policy" of the Global Environment Facility. Additionally, FAO will be responsible for project supervision and provision of technical advice during project implementation. As the GEF Agency, FAO has overall responsibility to the GEF for achieving the project's results. The roles and responsibilities of FAO are described in Annex K. To mitigate the risk of currency devaluation, the agency will maintain cash balances and disburse funds as required by the MINEC as the Executing Entity, responsible for achieving project results and ensuring proper use of all resources. As requested by the government in the OFP letter, FAO will provide support by managing a portion of the resources and disbursing funds only when required by the MINEC and in accordance with the work plans and budgets validated by the PSC. FAO will also participate in Letters of Agreement with national institutions identified during project implementation, following FAO's rules and

procedures, for the execution of activities that account for more than half of the project's budget, also under the guidance of MINEC.

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

267. In synergy with the GEF ID 1678 project "Integrated Management of Multiple-Use Landscapes and High Conservation Value for the Sustainable Development of the Venezuelan Andean Region," which aims to reduce and reverse forest degradation in productive landscapes of the Venezuelan Andean region to create a favorable environment for the conservation and sustainable use of biological diversity, with an emphasis on simultaneous SAF and Forest Systems that contribute to the livelihoods of local populations and global environmental benefits. The project is currently being implemented. Coordinations will be promoted between both projects to exchange experiences regarding the adoption of resource management practices and land use that help improve biological diversity conservation, specifically in activities related to restoration strategies and the incorporation of concepts and practices of integrated landscape management, sustainable forest management, and sustainable soil management in territorial planning processes.

268. Another project that is linked is GEF ID 5410 "Sustainable Forest Management and Forest Conservation from an Ecosocial Perspective in the Imataca Forest Reserve." The development objective of this project is to support government institutions and community organizations in the application of innovations in information management, incentive schemes, participatory governance, empowerment of forest-related communities, and multiple mechanisms for the recovery of degraded forest areas in representative forest ecosystems of Venezuela (in the finalization process). The experience in empowering indigenous communities in productive processes, as well as the incorporation of agroforestry systems as an alternative to improve their food systems, will be common topics of interest. Therefore, the links and coordination established will be maintained beyond the completion of the project, scheduled for mid-2023.

269. The project will establish links with the GEF Small Grants Programme (SGP) [2] program that is implemented by PNUD, where practices and learning in natural resource management and work with local communities will be used. Of particular importance will be the experience of the SGP in the management of enterprises and initiatives of local communities that seek to develop capacities and generate sustainable business opportunities based on biological diversity. Permanent coordination will be maintained in order to promote spaces for scaling up local initiatives that are in tune with the priorities established in the SGP and in the project.

[1] The Terms of Reference (ToR) of the members of the PMU are included in Annex L.

[2] PPD Projects: 1) Conservation of the tropical dry forest, critically threatened landscape, through the promotion of agroforestry systems, and implementation of climate-smart technologies as a strategy to generate sustainable livelihoods in communities in the biological corridor Pico Codazzi Natural Monument, Cordillera from the Coast (2021); 2) Recovery of degraded forests through reforestation, rehabilitation and sustainable development of at least 20 hectares of cocoa plantations (2021); 3) Sustainable use of species from the Amazon tropical forest, in indigenous communities displaced from Puerto Ayacucho, Amazonas state (2021); 4) A CROWN FOR THE QUEEN? ? Ethical-Environmental Tourism in the Laguna La Reina-Higuerote Coastal Wetland (2023); 4) Development of a community agroforestry reserve with native species of the semi-arid with agroecological management, which allows the conservation and use of timber for artisanal use and food production (2023); Women to the blackberry without delay: An alternative for sustainable endogenous development in the Los Uvitos P?ramo, Sucre municipality of M?rida state (2023).

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.

Consistency with national policies and strategies

250. The project is aligned with different national and international strategies in which the country is a signatory. Some of these strategies include:

251. Venezuela is a party to the CBD, the UNFCCC, and the CITES. The National Environmental Authority and the operational and technical focal point for these conventions are carried out through the MINEC, which coordinates the implementation of the provisions of the aforementioned conventions at the national level.

252. Currently, there is the National Strategy for the Conservation of Biological Diversity 2010-2020 and its National Action Plan (ENCDB-PAN), which are included in Program 44 of the Law of the Plan for the Homeland: Second Socialist Plan for Economic and Social Development of the Nation 2013-2019 (2013), in response to its fifth historical objective: "Preserve life on the planet" Ministry of Popular Power for the Environment, 2012. The ENCDB-PAN aims to promote a new eco-socialist ethics through the conservation and sustainable use of biological diversity, involving broad sectors of society. Additionally, the project will implement the actions outlined in the Sixth National Report on Biodiversity (2019), which supported the country's position at the 15th COP on Biodiversity in December 2022. The project is consistent with the Kunming-Montreal Biodiversity Targets for 2030 and will contribute to their achievement, particularly with Targets 1, 2, 3, 4, 5, 9, 10, 11, 14, 20, 21, 22, and 23 (see Table 11).

253. The project will also implement actions to reduce greenhouse gas emissions (GEI) as outlined in the framework of the Second National Communication on Climate Change to the CMNUCC (2017). The project will contribute in the following ways: a) the reduction of GEI emissions, and b) the reduction of forest fires and effective management of biological corridors and forest ecosystems to enhance their resilience to climate variability and change, and to ensure the maintenance of ecological processes and natural goods and services. It will also support the achievement of strategic objectives of the CNULD (2018-2030) through the 8 goals of the Land Degradation Neutrality (LDN) Program and the country's referenced goals, including: i) By 2030, increased forest cover by 262,361 hectares; ii) By 2030, reduced the incidence of forest fires by 50% across the territory; iii) By 2030, 50% of shrub and grassland cover will have naturally regenerated into forests; iv) By 2020, improved coordination among different institutions, civil society, professional associations, and the promotion of participatory mechanisms.

254. The Third Socialist Plan for Economic and Social Development of the Nation 2019-2025, developed in 2019, includes several objectives related to development. One of them is the Great Historical Objective V: Contributing to the Preservation of Life on the Planet and the Salvation of the Human Species. Additionally, in the objective 6th they have to: Ensure availability and sustainable management of water and sanitation for all, and objective 15th, particularly 15.1, which aims to ensure the conservation, restoration, and sustainable use of terrestrial ecosystems, inland freshwater ecosystems, and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements.

Consistency with the FAO strategic framework

255. The comparative advantage of FAO is that it supports its country's members and partners in the development of standards, regulations, and policies. It provides technical assistance for the implementation of national and local programs through capacity development activities and knowledge management. Over time, FAO has developed and made available a range of integrated landscape systems to help improve natural resource management and optimize productivity and sustainability of production systems. This

includes a range of policies and technical guidelines developed through international processes, based on country-specific experiences, such as integrated watershed management; mountain/highland management; wetland and coastal area management; conservation and sustainable use of agricultural biological diversity; agroforestry systems and crop-livestock integration; climate-smart agriculture; sustainable forest management; and the linkages between food, water, and energy.

256.FAO also advises and builds the capacities of governments, partners, and beneficiary populations in the development, formulation, and implementation of sustainable land use systems, as well as policies, strategies, programs, tools, technologies, and agricultural practices that have been developed in various projects in different areas of the country and have successfully enhanced their practices.

257.In addition, FAO seeks to achieve the transformation towards more efficient, inclusive, resilient, and sustainable agri-food systems, aiming for improved production, nutrition, environment, and quality of life, leaving no one behind. This involves ensuring sustainable consumption and production patterns through efficient and inclusive agricultural and food supply chains at the local, regional, and global levels. It also entails ensuring the resilience and sustainability of agri-food systems under changing climate and environmental conditions. FAO promotes the sustainable use of terrestrial and marine ecosystems and the fight against climate change through more efficient, inclusive, resilient, and sustainable agri-food systems. Emphasis is placed on priority programmatic areas such as gender equality and empowerment of rural women, inclusive rural transformation, resilient agri-food systems, and increased investments.

258.Within the country's programming framework, FAO supports the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs). These goals require transformative changes, integrated approaches, and solutions to structural obstacles to sustainable development, recognizing the crucial role of sustainable agriculture in connecting people, the planet, and prosperity. Achieving the 2030 Agenda is closely linked to the concept of Nutrition and Food Security (NFS), which is inseparable from the urgency to eradicate extreme poverty, address climate challenges, enhance community resilience, responsibly manage natural resources, and conserve and sustainably manage biological diversity. In summary, achieving the 2030 Agenda calls for a fundamental transformation of our agri-food systems to create a better life for all.

259.In the United Nations Strategic Cooperation Framework for Sustainable Development (SCF) and the FAO Country Programming Framework (CPF) approved in 2022, Result 3 of the CPF/Direct Effect 2.3 of the SCF states: "By 2026, the effects of climate change, particularly on the most vulnerable populations, will have been adapted to, reduced vulnerability, and mitigated, along with the implementation of measures for biological diversity conservation, as well as urban and rural environmental management and recovery, as a basis for nature-respecting development."

260.Through Result 3, FAO will address the management of biological diversity and ecosystem services in a way that does not compromise the natural heritage of future generations. Additionally, FAO will promote agri-food systems that are more sustainable, better adapted to climate change, and emit fewer Greenhouse Gas (GEI) emissions. Complementarily, efforts will be made to build resilience in rural livelihoods and enhance institutional and local capacities, improving the adaptation of productive systems and reducing their vulnerability to climate-related and socio-environmental threats. The project aligns with the objectives of this result.

261.In Product 3.2 of the MC and MPP, it states that "Central and territorial government institutions, social organizations, the science, technology, and innovation sector, the private sector, rural communities, and male and female producers have policies, programs, methodologies, and tools that promote integrated and sustainable management of land, water, biological diversity, and landscapes within the framework of agri-food activities. They also mitigate and adapt to climate change and become more resilient to multiple threats in an environment that promotes gender equality, intercultural and intergenerational dialogues and relationships, and the dissemination and access to timely and context-specific information."

262.Similarly, FAO will support practices aimed at improving: i) the inclusion of integrated and sustainable management of land, water, biological diversity, and landscapes, and ii) adaptation to climate change and agricultural risk management, incorporating the participation of women, youth, and indigenous peoples. FAO will contribute to the development of plans for the sustainable management and utilization of agri-food genetic resources, terrestrial ecosystems, and aquatic ecosystems (inland, coastal, and marine

1) Development of the Strategy and communication and information plan aimed at different actors with a gender and intercultural approach.	A project website to disseminate experiences and keep stakeholders informed.	x	x	x	x	x	40,500
	Communications Assistant	x	x	x	x	x	133,100.00
	Knowledge Management Specialist	x	x	x	x	x	145,200.00
	Media management and press releases		x	x	x	x	Included in the amount of the Communications Assistant
	Audiovisual products for dissemination on social networks and local media, such as community or local radios.		x	x	x	x	29,700.00
	At least one communication brigade		x	x	x	x	Included in the amount of the Communications Assistant
	At least 8 regular newsletters		x	x	x	x	10,000.00

	Social networks (Key messages, photographs, articles, videos, spots, documentary, Infographics).		x	x	x	x	9,000.00
	Technical publications generated by the project (Manuals, Protocols, Research that are part of the project results)		x	x	x	x	50,000.00
	Publications of evaluation reports (EMT, Informe final)			x		x	10,000.00
2) Knowledge exchange plan.	knowledge exchanges (national government) (in Forum-workshop format, fairs).	x	x	x	x	x	80,000.00

3) Advocacy Plan (Strategy and exit from the project, scalability)	Documenting and systematizing the lessons learned throughout the project, providing elements and recommendations to key stakeholders on how to incorporate, take ownership of, and empower themselves with these lessons in their initiatives, programs, and policies (Communication Assistant and Knowledge Management Specialist). This process will be carried out systematically from the beginning of the project, allowing for participatory analysis, identification of issues, and reorientation of actions if necessary (Vázquez de Francisco et al., 2015). Generation, communication, promotion of appropriation and empowerment of lessons learned, good practices, approaches among others, generated throughout the implementation of the project.	x	x	x	x	x	Knowledge Management Consultant
Total budget (USD)							507,500.00

Source: Original elaboration.

Communication Strategy

252. The communication strategy will be designed with communicational products that prioritize the gender, generational, and intercultural approach of the project, highlighting the role of women in different stages and implementation processes of the Project. Multiculturalism will be taken into account, and therefore, the products will be developed in Spanish and in the Pem?n dialect. A project website will be established to disseminate experiences and keep stakeholders informed. Additionally, audiovisual products will be created for dissemination on social media platforms and local media, such as community or local radios. For more details, please refer to Product 4.1.3.

253. The ancestral knowledge held by members of indigenous communities regarding natural resources, ecosystem functions and dynamics, as well as management practices, beliefs, traditions, and related

organizations passed down from generation to generation, will be documented. Through Product 1.1.1, workshops on communication and audiovisual production (e.g., photography, illustration/comics, social media management) will be conducted with a tourism, intercultural, generational, and gender perspective. The following will be produced: a series of short videos or podcasts on the sustainable use of nature and key aspects of the organization of the Pem?n People, with an emphasis on female leadership. The editing of illustrated myths and chants of the Pem?n People, life stories, and photography exhibitions will be promoted. This process will strictly comply with the Organic Law of Indigenous People and Communities of 2015, particularly regarding the protection and defense of indigenous intellectual property. Article 103 stipulates that "The State guarantees the right of indigenous peoples and communities to establish and protect, in accordance with their customs and traditions, their cultural, artistic, spiritual, technological, and scientific heritage, knowledge about animal and plant life, designs, traditional procedures, and, in general, all ancestral and traditional knowledge associated with genetic resources and biodiversity." Special care will also be taken to adhere to the legal actions established in Article 104: "Indigenous people and communities may exercise, directly or through indigenous organizations, the necessary civil, criminal, and administrative actions to determine responsibilities and make reparations against any person who has directly or indirectly engaged in the illicit exploitation of their knowledge, technologies, innovations, and practices in violation of their collective property rights. The State, through the competent bodies and at the request of indigenous peoples and communities, shall provide legal and technical support to these peoples and communities in exercising such actions, both nationally and internationally."

254. The various activities carried out during the project implementation will provide an opportunity to maximize project visibility. Therefore, it will be necessary to adapt communication strategies to the target audience.

255. The capacity-building activities in Component 1 will have significant visibility among the technical and operational staff of participating institutions. The workshops planned in this component will support the development of methodological capacities, learning from past experiences, and harmonizing technical and collaborative approaches among institutions. Information and training materials will support the communication of key project messages in this component, including the development of planning tools to strengthen intersectoral coordination and collaboration mechanisms that contribute to the formulation of management plans for ABRAEs and the understanding of the need to seek alternative financing for the sustainable management of ABRAEs. The integration of hydro-meteorological data and ecosystem services information into a web-based system provides a practical and easily accessible way to share data generated in the project, contributing to visibility among users such as planners, authorities, and decision-makers in the environmental sector. The involvement of indigenous communities in the training process will give visibility to the project as these actors become aware of the importance of biological diversity conservation and sustainable use of natural resources. Similarly, the establishment of dialogue platforms to achieve governance in the territory will provide an opportunity to showcase project actions.

256. In Component 2, the formulation of the Management Plans and Regulations of Use (PORU) will generate high visibility for the project at both institutional and community levels. This is because the formulation process includes a socialization process with indigenous communities, which involves exchanges through forums, meetings, and working groups with all actors and institutions involved in the watershed. Sustainable land management practices and the restoration of forested and savanna areas will be carried out through the collaboration of INPARQUES, Agricultural Technical Schools, indigenous and criollo communities, and other CSO present in the area. This will give visibility to the project across all involved institutions and raise awareness among communities about the value of forests and their ecosystem services. The didactic materials and communication messages for these activities should be adapted to the characteristics of the target audience to facilitate effective communication.

257. In Component 3, the workshops and training materials will serve to transmit knowledge and raise awareness among beneficiaries regarding livelihood diversification for sustainable landscape management. The implementation of sustainable economic activities involving indigenous and criollo communities will give high visibility to the project in terms of its on-the-ground execution, aiming to empower communities with sustainable resource utilization strategies and revalue their ancestral knowledge and capacities for managing their territories.

258. Component 4 will contribute to the communication and visibility of the project through the systematization of experiences and lessons learned, which will be published and disseminated. Additionally, the project will ensure mechanisms for maximum dissemination of generated documentation, particularly technical reports and intermediate and final evaluation reports. The project website will serve to disseminate information to a broad audience, raising awareness among the population about the importance of conserving the biological diversity and ecosystem services of the Caron? River basin.

Lessons from other projects

259. Knowledge management also includes the application of lessons learned from other projects in different areas of project management. Among the main lessons learned and how they are applied in the design and implementation of the project, the following can be mentioned:

260. GEF ID Project 5410, "Sustainable Forest Management and Conservation of Forests in the Ecosocial Perspective (OFSCBPE)," implemented by FAO-MINEC in the state of Bolívar, Venezuela, in Kariña indigenous communities. The project is nearing completion in mid-2023. Lessons learned (reviewing the positive or negative aspects that could have limited or enhanced these initiatives): The activities implemented in this project regarding the conservation of biological diversity, promotion of agroforestry, local processing of timber and non-timber forest products, and marketing of forest and agricultural products, while respecting the indigenous population's worldview, provide guidance for sustainable forest management and the empowerment of indigenous communities as active agents of their own development. This serves as a framework for the project implementation in the Caron? Basin. The necessary articulations will be made to exchange experiences from this project at all levels, from technical documents, protocols, and other planning and organizational mechanisms produced, to knowledge sharing among the indigenous communities benefiting from both projects. These experiences will contribute to the project, such as protocols for monitoring and evaluating forest cover and forest ecosystems, methodologies for establishing multipurpose permanent plots, the SINIIF (Output 1.1.2), lessons learned in the application of restoration strategies with the participation of indigenous communities (Output 2.1.2) and participatory monitoring, socio-productive alternatives, implementation of forest co-management, organization, and creation of an Indigenous Social Production Company (Outputs 3.1.1, 3.1.2, 3.1.3, and 3.1.4), implementation of an M&E system, and appropriate communication strategy (Component 4). Another important aspect is the application of gender equality. The OFSCBPE project achieved the visibility, inclusion, and empowerment of Kariña women in activities traditionally carried out by men. The successful management of EPSDC Tukupu by Captain General Cecilia Rivas and the high participation of women in activities (46%) brought about a positive change in the way of life for Kariña indigenous communities, which is expected to endure over time and be passed down from mothers to children. This experience will serve as a reference point for the application of a gender approach in the project, where the empowerment and visibility of women in various project activities can be achieved. Another important aspect has been the participation of beneficiaries in the PSC and decision-making processes.

261. GEF ID Project 1678, "Integrated Management of Multiple Use Landscapes and High Conservation Value for the Sustainable Development of the Venezuelan Andean Region." The project has been in progress since 2022. Close collaboration will be established with this project in such a way that the experiences and good practices developed within its scope can strengthen the proposed initiatives in the implementation of the project in the Caron? River Basin. These experiences include the empowerment of women in agricultural practices, the establishment of local agribusinesses through community nurseries, and the production of bio inputs with the participation of women and youth. These experiences can contribute to strengthening the proposed initiatives in the implementation of the project in the Caron? River Basin (Outputs 2.1.2 and 3.1.1).

262. Similarly, the Small Grants Programme (SGP) of VEN/SGP/OP6 and OP7, which supports local initiatives in the focal areas of biological diversity, land degradation, and climate change while generating sustainable livelihoods in communities, will play a crucial role within the project framework as a source of practices and lessons learned from its small-scale natural resource management. In Component 3, socio-productive initiatives will be implemented involving communities in the management of timber and non-timber forest products, wild and native species management, family agriculture, community-based tourism, among others. These initiatives will aim to diversify the livelihoods of local communities, where experiences and good practices generated in the SGP can be applied.

263. GEF Project ID 3609. "Strengthening the Financial Sustainability and Operational Effectiveness of Venezuela's National Parks System" Implemented by PNUD-INPARQUES. Completed in 2013. Necessary reviews will be conducted on the capacity building and institutional induction processes implemented in that project regarding the financial sustainability of Protected Areas (AP), as well as the difficulties and limitations encountered for their scalability and implementation in different national parks of Venezuela. These experiences will be useful in addressing issues related to the strengthening of financial sustainability of the project's ABRAEs (Outputs 1.1.1 and 2.1.3).

9. Monitoring and Evaluation

Describe the budgeted M and E plan

250. The monitoring and evaluation (M&E) of the progress in achieving the project's results and objectives will be carried out based on the targets and indicators established in the Project Results Framework (Annex A1) and its description in Section 1.a. Project supervision and evaluation activities have been budgeted for their implementation. The monitoring and evaluation activities will adhere to the policies and guidelines of FAO and GEF. The monitoring and evaluation system will also facilitate learning and the replicability of project results and lessons learned in relation to integrated landscape management. The M&E officer's work should be conducted in close communication with the Knowledge Management officer.

9.1 Supervisory and Monitoring Responsibilities

251. The functions and responsibilities of M&E specifically described in the monitoring and evaluation plan will be executed through: i) continuous day-to-day monitoring and missions to supervise the project's progress on a daily basis by the Project Management Unit (UGP); ii) technical tracking of indicators to measure the degree of achievement of results and product targets (UGP and LTO, appointed by FAO in coordination with partners); iii) mid-term review and final evaluation (independent consultants and FAO Evaluation Office); iv) monitoring and supervision missions (FAO and team designated by MINEC); v) ensuring effective implementation of Gender and Indigenous Peoples Plans throughout the project; and vi) familiarity with and utilization of tools such as METT, EX-ACT, geographic information systems, among others, to monitor the achievement of project targets.

252. At the beginning of the GEF project implementation, the UGP and the DNP will establish a monitoring and evaluation system to oversee the project's progress. Participatory mechanisms and methodologies will be developed to support the monitoring and evaluation of indicator performance and products. During the project inception workshop (see section 9.3 below), the M&E tasks will include: i) presentation and explanation (if necessary) of the project's Results Framework to all project stakeholders; ii) review of monitoring and evaluation indicators and their baseline data; iii) preparation of clauses or requirements that will be necessary for inclusion in consultancy contracts to ensure compliance with reporting responsibilities for monitoring and evaluation (if applicable); and iv) description of the monitoring and evaluation tasks to be carried out by the various actors involved in the project.

253. The CNP, together with the UGP team, will prepare a draft M&E matrix to be applied during the project implementation. The M&E matrix will serve as a management tool for the CNP, the UGP team, and project partners to: i) monitor the achievement of results indicators on a semi-annual basis; ii) annually supervise the achievement of results indicators; iii) clearly define responsibilities and means of verification; iv) select a method for processing indicators and data.

254. The M&E Plan will be prepared by the CNP and the M&E Specialist in collaboration with project partners in the first quarter of Year 1 and validated with the CDP. The M&E Plan will be based on Table 21 below and the M&E Matrix, and it will include: i) an updated Results Framework, with clear indicators per year; ii) an update on the baseline, if necessary, and selected tools for data collection; iii) a description of the monitoring strategy, including roles and responsibilities for data collection and analysis, reporting flows, the 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 tracking tool

indicators, data collection, and tracking strategy to be included in the mid-term review and final evaluation; vi) schedule of assessment workshops, including self-assessment techniques.

255. The continuous monitoring of project implementation will be the responsibility of the DNP and the PTC, and it will be associated with the preparation and implementation of an Annual Work Plan and Budget (AWPB), with tracking through Semi-Annual PPRs. The preparation of the AWPB and the semi-annual PPRs will represent the outcome of a unified planning process among key project stakeholders. As results-based management tools, the AWPB will indicate proposed actions for the next year of the project and provide necessary details on the product goals to be achieved, while the PPRs will present information on the monitoring of action implementation and product goal attainment. Contributions to the AWPB and PPRs will be prepared through a participatory system of progress review and planning involving all stakeholders, coordinated by the DNP and facilitated through project progress review and planning workshops. These contributions will be consolidated by the CT into the draft AWPB and PPRs.

256. An annual project progress review and planning meeting will be held with the participation of the Steering Committee to finalize the AWPB and PPRs. Once finalized, the AWPB and PPRs will be submitted to the Steering Committee for approval (AWPB) and review (PPRs), and to FAO for approval. The AWPB will be prepared in accordance with the Results Framework to ensure proper compliance and monitoring of the project's products and outcomes.

257. After project approval, the first-year AWPB will be adjusted (either reduced or extended) to align with the annual reporting schedule. In the following years, the AWPB will follow an annual preparation scheme, in line with the reporting cycle as specified in section 9.3 below.

9.2 Indicators and Information Sources

258. For monitoring project outputs and results, including contributions to overall environmental benefits, a set of indicators is established in the results framework (Annex A1).

259. The indicators and means of verification from the Results Framework will be applied to monitor both the project's performance and its impact. Following FAO's monitoring procedures and progress report formats, the collected data should be sufficiently detailed to allow monitoring of specific products and results, and to identify project risks in advance. A methodological sheet will be developed for each indicator at the beginning of the project, prior to the inception workshop. This will help identify issues and adjustment needs, as well as contribute directly to the monitoring of actions.

260. The compliance indicators for activities will be monitored every six months, while the results indicators will be evaluated annually, whenever possible, or at a minimum during the midterm and final evaluations. The main sources of information to support the M&E plan include: i) participatory progress review workshops with stakeholders and beneficiaries; ii) on-site monitoring of intervention implementation; iii) progress reports prepared by the PTC with inputs from partners, project specialists, and other stakeholders; iv) consultancy reports; v) monitoring and tracking folder with product verifiers; a SIG system for recording and tracking surface goals, spatial documentation of project work; vi) training reports; vii) Mid-Term Review and Final Evaluation; viii) financial reports and budget reviews; ix) Project Implementation Reports prepared by the project coordinator in coordination with the FAO LTO and with support from the FAO Representation in Venezuela; and x) reports from FAO monitoring missions (including LTO technical support missions and administration or operations missions).

9.3 Reporting plan

261. The reports that will be specifically prepared within the framework of the monitoring and evaluation program are: (i) Project Inception Report, (ii) AWPB, (iii) PPR, (iv) annual PIR, (v) technical reports generated by hired specialists, (vi) Co-Financing Reports, and (vii) the Final Report. Additionally, the Core Indicators worksheet of the GEF will be completed prior to the midterm review and final evaluation to compare progress against the established baseline during preparation.

Project startup report.

262. After the project is approved by FAO, a project inception workshop will be conducted. Immediately after the workshop, the PTC will prepare a project inception report in consultation with the FAO office in Venezuela and other project stakeholders. The report will include a description of institutional functions and responsibilities, coordination actions among project actors, progress made in project establishment and initial activities, and an update on any changes in external conditions that may affect project implementation. It will also include a detailed AWPB for the first year and a detailed monitoring plan based on the monitoring and evaluation plan presented later. The draft inception report will be distributed to FAO and the Steering Committee for review and comments before its finalization, within three months after project commencement. The report must be approved by the Budget Holder (BH), the Lead Technical Officer (LTO), and the FAO-GEF Coordination Unit, who will integrate the report into the Field Programme Management Information System (FPMIS).

Work Plans and Annual Budget (AWPB).

263. The PTC, under the supervision of the NPD, will submit a draft AWPB to the Steering Committee before January 10th of each year. The AWPB should include detailed activities to be executed for each project product on a monthly basis, as well as the dates by which the targets and milestones of the product indicators will be achieved throughout the year. A detailed budget for the project activities to be carried out during the year will also be included, along with all the necessary monitoring and supervision activities throughout the year. The FAO Office in Venezuela will circulate the draft AWPB among the FAO multidisciplinary team members involved in the project for their review and consolidation, and will provide comments to the PTC. The PTC will incorporate the Steering Committee's comments, and the final AWPB will be submitted to the Steering Committee for approval and to FAO for final authorization and integration into the FPMIS.

Project Progress Reports (PPR).

264. The PPR are used to identify limitations, issues, or bottlenecks that hinder the timely implementation of the project and to take appropriate corrective measures. PPR reports will be prepared based on the systematic monitoring of the product and result indicators identified in the project's Results Framework (Annex A1), the AWPB, and the monitoring plan. Each semester, the PTC, under the supervision of the NPD, will submit Project Progress Reports to the Steering Committee and the FAO Office in Venezuela by July 31st (covering the period from January to June) and by January 31st (covering the period from July to December). The first semi-annual PPR should be accompanied by an updated AWPB, if necessary, for review and approval by FAO. Each semester, the FAO Office in Venezuela will review the PPR, gather and consolidate any FAO comments (BH, LTO, FAO-GEF Coordination Unit), and provide them to the PTC. Once the comments have been duly incorporated, BH and LTO will give final approval and submit the final PPR to the FAO-GEF Coordination Unit for final approval and integration into the FPMIS.

Annual Execution Project Implementation Review (PIR).

265. The PTC, in coordination with the Lead Technical Officer (LTO), with the support of the FAO Office in Venezuela and input from the PTC, will prepare an annual PIR report covering the period from July of the previous year to June of the reporting year. The PIR will be submitted to the BH and the FAO-GEF Coordination Unit for review and approval before July 31st. The FAO-GEF Coordination Unit will integrate the final PIR into the FPMIS and submit it to the GEF Secretariat and the Evaluation Office as part of the annual portfolio review report for FAO-GEF. The FAO-GEF Coordination Unit will provide the LTO with the updated PIR format as required.

Technical reports.

327. The technical reports will be prepared as part of the project's deliverables in addition to documenting and disseminating lessons learned. Drafts of all final technical reports generated in the consultancies should be submitted by PTC to the DNP and the FAO Office in Venezuela, who will in turn share it with the LTO for review and approval, and with the FAO-GEF Coordination Unit for information and any potential comments, prior to finalization and publication. Copies of the technical reports for the final products of the consultancies will be distributed to the PSC and other project stakeholders, as appropriate. These reports will be published in the FAO's FPMIS.

Co-financing reports.

266. The PTC 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 PTC will present these reports to the FAO Representation in Venezuela before July 31, covering the period from July of the previous year to June of the reporting year.

Core Indicators Worksheet.

267. In accordance with GEF policies and procedures, the GEF Core Indicators Worksheet will be submitted to the GEF Secretariat three times: i) together with the project document for approval by the GEF Director General; ii) together with the mid-term review of the project; and (iii) together with the Final Evaluation of the project. Its filling is the responsibility of the PTC.

Term or final report.

268. Within two months prior to the project completion date, the PTC will submit a draft of the Final Report to the DNP and the FAO Representation in Venezuela. The main objective of the Final Report is to provide guidance for decision-making at the policy level necessary for monitoring the Project and present information to the donor on the use of funds. Therefore, the Final Report will consist of a brief summary of the main results, products, conclusions and recommendations of the project. The report will be intended for people who are not necessarily technical specialists and who need to understand the policy implications of the findings and the technical needs to ensure the sustainability of project results. In the Final Report, the activities will be evaluated, the lessons learned will be summarized, and the recommendations will be delivered in terms of their application for the ABRAEs in the areas of intervention, in the context of development priorities at the national and regional level, as well as in terms of practical application. This report will specifically include the conclusions of the final evaluation described in section 9.5 below. A project evaluation meeting must be held in order to review the draft Final Report with the CDP, before its finalization by the PTC and its approval by the BH, LTO and the FAO-FAO Coordination Unit. GEF.

9.4 Monitoring and Evaluation Plan

269. Table 22 presents a summary of the main M&E activities, those responsible, deadlines, and budget.

Table 22. Project monitoring and evaluation plan.

M&E activity	Responsibles	Period of time/Frequency	Indicative budget (USD)
Startup Workshop and project startup report.	PTC, FAOVE (Support from LTO and the Coordination Unit FAO-GEF).	In the first 3 months of starting the Project.	35,000.00
Monitoring of the impact of the project "on the ground" with the support of SIG tools and drones.	UGP, project partners and local organizations.	Continuous	The field missions will be covered by the project's travel budget.

Field visits for supervision and monitoring to target areas and pilot landscapes.	PTC and M&E Specialist, FAO (FAOVE, LTO). Support from PMU, DNP specialists.	Annually or as required.	They are contemplated in the Travel Item
Project Progress Reports (PPR)	PTC and M&E Specialist, with contributions from project partners and other institutions participating in the execution, DNP.	Semester	M&E Specialist; distributed among Component 4 and the M&E Component corresponding to 73,309
Annual Execution Project Implementation Review (PIR), including the risk matrix	PTC and the support of the M&E Specialist, with the contributions from partners project, with the supervision of the LTO and RP. approved and sent to the GEF by the FAO-GEF Coordination Uni	Annuals	5% of the time of the PTC and 10% of the time of the M&E specialist.
Meetings of the Project Steering Committee (PSC), UGP and Project Partners	CNP, FAO, Member Institutions	Annuals	The expenses for this concept are included in the annual planning workshops budget.
Co-financing reports	PTC, with inputs from the other co-financiers	Annuals	2% of the PTC time and 5% of M&E
Technical Reports	PTC, FAOVE, LTO	As required	-
Mid-Term Review (MTR)	PTC, FAOVE, external consultants, FAO Evaluation Office in consultation with the project team, including the FAO-GEF Unit and others.	Halfway through the implementation of the project.	41,520

Final Evaluation (FE)	PTC, FAOVE, external consultants, FAO Evaluation Office in consultation with the project team, including the FAO-GEF Unit and others.	Two months before the project completion date.	72,912
Final Report	PTC, FAO (FAO VE, LTO, Coordination Unit) FAO-GEF, TCS Reporting Unit).		6,650
Costs of the Environmental and Social Risk Management System (SGAS)		Fixed amount for each year of the project	10,390
Total budget (USD)			239,781

Source: Original elaboration.

9.5 Provisions for Evaluation

270. An independent mid-term review (MTR) will be carried out at project mid-life in terms of expenditure and/or overall project duration, tentatively in the 2nd quarter of project year 3. The BH will arrange an independent MTR in consultation with the Project Steering Committee (PSC), the Project Management Unit (PMU), the lead technical office (LTO) and the FAO-GEF Coordination Unit in FAO headquarters. The MTR will be conducted to review progress and effectiveness of implementation in terms of achieving project objective, outcomes, and outputs. The MTR will allow mid-course corrective actions, if needed. The MTR will provide a systematic analysis of the information on project progress in the achievement of expected results against budget expenditures. It will refer to the project budget (see Annex A2) and the approved AWP/Bs (only valid for the GEF). It will highlight replicable good practices and key issues faced during project implementation and will suggest mitigation actions to be discussed by the PSC, the LTO and FAO-GEF Coordination Unit

271. 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.

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

on: selection of the external evaluators, terms of reference (TOR) of the evaluation, draft and final report. OED will be responsible for the quality assessment of the terminal evaluation report, including the GEF ratings. After the completion of the terminal evaluation, the BH will be responsible to prepare the management response to the evaluation within four weeks and share it with national partners, GEF, OED and the FAO-GEF CU.

10. Benefits

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

250. The project will support initiatives aimed at improving livelihoods and the adoption of sustainable production practices with indigenous and criollo communities that generate new supplementary incomes for participants' households, applying best practices to reduce the impact of productive activities on the landscape and biological diversity. The project will promote working with small-scale producers in the project intervention areas, who will receive technical support to enhance their traditional agricultural practices and promote sustainable environmental practices in their various activities. These sustainable practices will optimize resource use and generate environmental benefits without affecting the income of small-scale landowners.

251. In component 3 of the project, the development of activities that promote the management of non-timber forest products and the promotion of sustainable ecotourism will be supported, as an alternative option for economic diversification and improvement of livelihoods. The identification of already existing initiatives, the strengthening of the community's capacities for the management of sustainable ecotourism, and the promotion of links with business opportunities, as well as the start-up of small funds (rural banks) to finance these activities will be present within the framework of the project. These complementary subsistence options with criollo communities and indigenous peoples seek to generate lessons about local production processes and deal with unsustainable emerging development processes, within the framework of coexistence with the ABRAEs of the basin and the conservation of the biological Diversity.

252. As a transversal element, the project within its strategies will include the right of indigenous peoples to free, prior and informed consent FPIC. In a participatory manner, sustainable productive alternatives will be evaluated, based on the production and use with added value of goods and services generated from biological diversity and the promotion of ecotourism, thus contributing to the creation of sustainable economic alternatives and improving the means of life of the communities, to the extent that decent and productive employment opportunities are generated. Special respect and recognition will be given to the different roles that women and men play and how their unique and individual contributions, and through their organizations, can be maximized within the context of project strategy and implementation, as well as the cultural relevance of the interventions.

11. Environmental and Social Safeguard (ESS) Risks

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

Overall Project/Program Risk Classification *

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate	Medium/Moderate		

Measures to address identified risks and impacts

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

250. Complying with the environmental and social management guidelines of the FAO and the GEF, whose objective is to "Identify, evaluate and manage the environmental and social risks and impacts of a project, adopt a mitigation hierarchy and promote agriculture and food systems sustainable?, an evaluation is carried out. This makes it possible to identify the potential risks that some actions to be developed by the project may generate during its implementation, subsequently proposing mitigation measures. The result of this analysis will allow the project to be classified at a risk level: low, medium or high.

251. For this analysis, the FAO "environmental and social (E&S) evaluation checklist of projects" was used, through the review of environmental standards that the project can influence. The environmental standards or safeguards stipulated in the guidelines are:

- a. **ESS 1** Natural Resource Management
- b. **ESS 2** Biological diversity, ecosystems and natural habitats
- c. **ESS 3** Plant genetic resources for agriculture and food
- d. **ESS 4** Animal - Livestock and Aquatic - Genetic resources for food and agriculture.
- e. **ESS 5** Pest and pesticide management
- f. **ESS 6** Involuntary resettlement and displacement
- g. **ESS 7** Decent job
- h. **ESS 8** Gender equality

i. EES 9 Indigenous people and cultural heritage

252. The potential risks associated with each safeguard and the measures that must be implemented to reduce the generation of impacts that may arise in the implementation of the project are presented in Table 20.

Table 20. Environmental and social risks of the project

Risks and social and environmental impacts	Mitigation measures	Implementation and responsibility	Cost	Timeline
ESS 1: Natural resource management				
N/A	The project includes, as strategies, the development of PORU for the management of ABRAEs (Component 2), as well as the promotion of good practices in the use of natural resources (Component 1 and 4). To achieve this, we will work together with competent organizations and involve indigenous communities (Component 3). According to the plan, no negative impacts are expected in this regard.	PMU and project partners (MINEC, MPPAPT, INPARQUE, Government, Mayors, Pem?n communities, etc.)	They are included in components 1, 2, 3, and 4.	During the implementation of the project.
ESS 2: Biological diversity, ecosystems and natural habitats				

<p>Biological diversity is still threatened by the illegal and unsustainable exploitation of wildlife and plants in the area</p>	<p>Sustainable wildlife management plan with sensitization. Training and best practices. Participatory monitoring of environmental threats.</p>	<p>PMU and project partners (MINEC, MPPAPT, City Halls, Pem?n communities, etc.)</p>	<p>They are included in components 2 and 3.</p>	<p>During the implementation of the project.</p>
<p>The project actions focus on improving biological diversity management and conservation in sectors 5 and 6 of the ABRAEs, but there may not be sufficient incentives for the sustainable use of bio-resources during implementation.</p>	<p>Landscape approaches and measures for the management and conservation of biological diversity will be established, including management plans (PORUs), the restoration of affected habitats and protection of sensitive species (Product 2.1.2). The project will focus on interventions for sustainable use, ensuring economic returns and reducing risks as sustainability barriers are eliminated (Component 3).</p>	<p>PMU and roject partners (MINEC, MPPAPT, City Halls, Pem?n communities, etc.)</p>	<p>They are included in components 2 and 3.</p>	<p>During the implementation of the project.</p>

<p>The project actions related to ecotourism in ABRAEs could lead to an increase in the influx of people in the area, resulting in direct impacts on wildlife and indirect impacts associated with increased vehicle traffic. This could pose risks of wildlife roadkill and habitat fragmentation.</p>	<p>The design of the PORU (Component 2) will provide measures to prevent and mitigate the impact of ecotourism on wildlife. Studies will be conducted on carrying capacity, zoning, tourist management training, infrastructure improvement tasks will be carried out, signage will be designed and installed, and wildlife corridors will be designed. Additionally, in Component 1, early alerts of environmental threats will be reported from the field within the framework of participatory monitoring.</p>	<p>PMU and project partners (MINEC, MINTUR, INPARQUES, Government, City Halls, Pem?n communities, etc.)</p>	<p>They are included in components 1 and 2.</p>	<p>During the implementation of the project.</p>
<p>ESS 3: Plant genetic resources for agriculture and food.</p>				

<p>The project will establish agroforestry systems with traditional crop and local tree species, and restoration actions with local species representative to the project area. This ESS is activated as a precautionary measure, in case at some point of the implementation, the project considers introducing new varieties and species.</p>	<p>The project will promote agroforestry systems and restoration actions (Output 2.1.2 and 3.1.1). Those will use traditional crop species, revaluing indigenous crop and costumes, and local tree species representative to the local flora and ecosystems.</p> <p>If at some point the project considers the use of introduced species, new varieties, then relevant measures will be taken in order not to erose diversity and avoid introduction of pest and diseases. This measures could include:</p> <p>Rigorous monitoring and control of the implementation of the restoration tasks of the project, avoiding the introduction of introduced species</p> <p>Guarantee the local origin of the plant material that will be used in</p>	<p>PMU and project partners (MINEC, MPPAPT, City Halls, Pem?n communities, etc.)</p>	<p>They are included in Component 1, 2 and 3.</p>	<p>During project implementation.</p>
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	the restoration actions			
ESS 4: Animal - Livestock and Aquatic - Genetic resources for food and agriculture.				
The project could consider aquaculture to diversify community livelihood, though this ESS is activated as precautionary measure. Although the use of exotic species is not consider under the project, there is the risk that the infrastructure and aquaculture practices incorporated by the communities lead to the incorporation of exotic species in the future and that may impact biodiversity.	The promotion of sustainable fishing will be the preferred option, in line with the vocation of the territory. In case of aquaculture is prioritized by the communities as one viable livelihood alternative, its promotion will be carefully analyzed and planned to prevent associated risks. The activities will follow FAO related guidelines and capacity building will be promoted to build awareness.	PMU and project partners (MINEC, MPPAPT, City Halls, Pem?n communities, etc.)	They are included in Component 3.	During project implementation
ESS 5: Pest and pesticide management				

N/A	<p>The project will promote sustainable agroforestry and use the best available practices to control pest and diseases, especially bio-inputs. The bio-inputs will not be used when there are risks to non-target species.</p> <p>The use of pesticides and agrochemicals in the agroforestry systems will not be considered (Product 3.1.1).</p> <p>Therefore, no impacts are expected in this regard.</p>	PMU and project partners (MINEC, MPPAPT, City Halls, Pem?n communities, etc.)	They are included in Component 3.	During the implementation of the project.
ESS 6: Involuntary resettlement and displacement				
N/A	N/A	N/A	N/A	N/A
ESS 7: Decent job				

<p>During implementation, the project will create jobs in tourism, agroforestry and natural resource management, but it could be socioeconomically detrimental if there is a decrease in tourists or if the activities are not sustainable in the medium and long term.</p>	<p>The project will promote employment opportunities for men, woman and young people in actions linked to conservation, sustainable natural resource management (Output 2.1.2), agroforestry, sustainable tourism (Product 3.1.1); will involve local communities in identifying and planning jobs (Product 3.1.3) and provide training and resources to develop relevant skills (Product 1.1.1, 3.1.1, 3.1.2, and 3.1.4).</p> <p>The business models and plans that will be developed under the project implementation phase will take into consideration the use of the best technologies, practices and models that generate better employment opportunities, reduce the workload and are safe for people, The models and plans will also</p>	<p>PMU and project partners (MINEC, MPPAPT, City Halls, Pem?n communities, etc.)</p>	<p>They are included in Component 3</p>	<p>During the implementation of the project.</p>
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	consider feasibility and sustainability from both technical and economic perspectives.			
ESS 8: Gender equality				

<p>The project strategies adopt a gender equality approach, which may be resisted or rejected by certain groups or individuals who feel threatened by the change.</p>	<p>The project incorporates gender issues throughout its entire cycle, based on the premise that, in addition to ensuring the participation of women and their organizations in spaces generated by the project, it will contribute to their effective empowerment as social actors (components 1, 2, 3, and 4). During the implementation of the project, the prevention of violence and harassment of women will be ensured. The project recognizes the cultural characteristics of the Pem?n Indigenous People and the role played by the family in production and income generation, the socioeconomic differences between men and women, and the differences in environmental knowledge in each case. The gender action plan details these measures, including economic</p>	<p>PMU and project partners (MINEC, MPPAPT, City Halls, Pem?n communities, etc.)</p>	<p>Included in the entire project</p>	<p>During the implementation of the project.</p>
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	strengthening of women and reduction of family workload (Component 3).			
ESS 9: Indigenous peoples and cultural heritage.				
Indigenous people Pem?n are core beneficiaries of the project. Although extensive assessment and consultation processes were carried out during the formulation phase, its implementation may involuntarily affect its culture and rights.	<p>The project involves the Pem?n communities in the project intervention area, respecting their rights, lands, and cultural heritage. Additionally, it helps preserve their heritage, traditional practices, and languages, fostering their cultural identity and connection with natural resources (components 1, 2, 3, 4).</p> <p>The indigenous people action plan contains details of context analysis, mitigation measures and the transversal how the FPIC process was considered during project formulation and will be considered during project implementation.</p>	PMU and project partners (MINEC, MPPAPT, City Halls, Pem?n communities, etc.)	They are included in the entire project.	During project implementation

Source: Original elaboration.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Annex J_FPIC_Indigenous peoples	CEO Endorsement ESS	
AnnexI1_Climate Risk Screening	CEO Endorsement ESS	
ESM Risk Classification GEF Caroni	Project PIF ESS	

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

Results Chain	Indicator s	Baseline	Mid-term goal	Goal	Means of Verificati on	Assumpti ons	Responsib le for data collection
<p>Aim: Improve the sustainable use, conservation of biological diversity, and provision of ecosystem services to generate local socio-environmental benefits in the Caron? river basin and global environmental benefits (SDG 2.4, 6.6, 13.1 and 15.4)</p>							
<p>Component 1: Systemic, institutional, and individual capacity for the sustainable management of the multi-use landscape with a gender, generational, and intercultural approach.</p>							

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
Outcome 1.1: Enhanced capacities for sustainable and integrated management of the multi-use landscape and governance in the Areas under Special Administration Regime (ABRAEs), with a gender, generational, and intercultural approach.	Core Indicator 1.2: At least 7,712,919 ha of protected areas are under management, and improved management.	<u>METT scores:</u> Canaima National Park (3,000,000 ha): 39 Tepuyes Chain Natural Monument (687,500 ha): 12	<u>METT scores:</u> Canaima National Park: 61 Tepuis Chain Natural Monument: 33	<u>METT scores:</u> Canaima National Park: 88 Tepuyes Chain Natural Monument: 78 La Paragua Forest Reserve: 70	GEF Follow-up: METT and Capacity Building Quarterly reports on the progress of the outputs to be developed, Technical documents.	The institutions and actors involved are committed to participate and assume their role in coordination processes for better management of protected areas.	Project Technical Coordinator (PTC), Specialist in Management Instruments for PA, Specialist in Sustainable Forest Management and Restoration, Specialist in Biological Diversity for PA, Specialist in Production Systems and Livelihoods, Specialist in M&E, a specialist in gender and indigenous communities, MINEC, and INPARQUES,
	- - Number of national, regional, and local	La Paragua Forest Reserve (782,000 ha): 20 Southern Protection Zone of Bolívar state (4,937,700 ha): 14 Ikabar? Hydraulic Reserve (40,000 ha): 16	La Paragua Forest Reserve: 42 Southern Protection Zone of Bolívar state: 50 Ikabar? Hydraulic Reserve: 48 At least 8 public	Southern Protection Zone of Bolívar state: 69 Ikabar? Hydraulic Reserve: 70 At least 15 public institutions At least 50 indigenous and criollo communities			

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	institutions involved and of indigenous and criollo communities that have improved their capacities for sustainable management of the multiple-use landscape and for governance in the ABRAEs	Little intersectoral and interinstitutional coordination, different institutional visions or objectives, and little knowledge of sustainable and integrated landscape management.	institutions At least 25 indigenous and criollo communities				

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
Output 1.1.1: Institutional and community capacity strengthening program designed and implemented for sustainable landscape management.	Number of people (differentiated by gender and age range) from public institutions trained in sustainable and integrated landscape management, with a gender, generational, and intercultural approach (<i>Core indicator 11</i>)	The MINEC and other state institutions have few professional and technical officials trained in sustainable and integrated landscape management. The officials of the Ministries and the indigenous and criollo communi	At least 100 officials from the Ministries and national, regional, and local institutions with strengthened capacities, of which at least 40% are women.	At least 300 officials from the Ministries and national, regional, and local institutions with strengthened capacities in sustainable and integrated landscape management, with a gender, generational, and intercultural approach (at least 40% women), with strengthened capacities (at least 10 workshops)	Document with the training program, training report, and self-assessment survey of the training. Report on the application of the training program, systematization of training, and lessons learned. Attendance records with data on gender,	The people of the institutions and the indigenous and criollo communities are interested, motivated, and participate in the training. They are empowered and apply the knowledge and experience exchanged on sustainable and	PTC, Specialist in Management Instruments for AP, Specialist in Sustainable Forest Management and Restoration, Specialist in Biological Diversity for AP, Specialist in M&E, a specialist in gender and indigenous

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	Number of people (differentiated by gender and age range) from indigenous communities with strengthened capacities in sustainable landscape management, with a gender, generational, and intercultural approach (Core indicator 11)	ties have little knowledge of the value of the biological diversity and ecosystem services of the Caron? river basin.	At least 120 indigenous people trained in sustainable landscape management with at least 40% participation of women.	At least 200 indigenous people with strengthened capacities in sustainable landscape management with at least 40% participation of women (at least 10 workshops).	age range, and institution /community to which they belong, photographic memories, and data disaggregated by gender.	integrated management of the landscape and the conservation of biological diversity.	communities. MINEC and INPARQUES.

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
Output 1.1.2: Geospatial monitoring and evaluation system formulated and developed for sustainable and integrated landscape management, incorporating hydro-meteorological/hydrological elements, ecosystem services, biological diversity, and environmental threats[1]	Design and development percentage [2] of the geospatial assessment monitoring system	The MINEC has the National Integrated Forest Information System (SINIIF) created by the GEF ID 5410 project with interoperability to migrate or receive information.	100% progress in the design and development of the geospatial evaluation monitoring system	Geospatial monitoring and evaluation system for sustainable and integrated landscape management formulated and developed, and validated 100%, incorporating hydrometeorological/hydrological elements, ecosystem services, biological diversity and environmental threats.	Annual progress reports on module design and development, including technical tests and assessments (years 1, 2, and 3). Protocols and guides prepared for the implementation and effective use of the system.	National and regional institutions, together with the general public and according to their role, appropriate the system, generate, and manage information, consult and download information and use it for sustainable and integrated landscape planning and management, considering elements related to the water, biological diversity, and ecosystem services.	PTC, Specialist in Management Instruments for PA, Specialist in Sustainable Forest Management and Restoration, Specialist in Biological Diversity for PA, Specialist in Production Systems and Livelihoods, Specialist in Environmental Monitoring and Geomatics, M&E, specialist in gender and indigenous communities.
	Percentage of development of the Hydrometeorological and Hydrological Monitoring and Evaluation Module.	For the Caron? River basin, multiple studies and quality scientific information have been generated and carried out by the different	100% progress in the development of the module.	A validated and implemented Hydrometeorological and Hydrological monitoring and evaluation Module that integrates, processes, and generates information for sustainable and integrated landscape management and is operational, functional, and interoperable, if necessary.	Databases created and data collection protocols established. Detailed reports on the training workshops carried out.		

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	Percentage of development of the module for monitoring and evaluation of ecosystem services and biological diversity	institutions that manage the area. This information is dispersed, outdated, and not systematized in a unified database. INAMEH and CORPOELEC manage around 80 hydrometeorological and hydrological stations in the project area; although	100% progress in the development of the module.	A Monitoring and Evaluation Module for ecosystem services and biological diversity developed, validated, and 100% implemented, which integrates, processes, and generates information for sustainable and integrated landscape management and is operational, functional, and interoperable, if necessary.	Protocols for updating and feeding data into the system, together with guides adapted to the needs of different users		MINEC, INPARQUES, INAMEH and CORPOELEC.

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	<p>Number of multipurpose permanent plots established and generating information on ecosystem services and biological diversity of the Caron? river basin.</p>	<p>many are inoperative, they can be recovered. For the survey of permanent multipurpose plots and the monitoring of forest cover, there is a</p>	<p>At least 24 multipurpose permanent plots were established and generated information on ecosystem services and biological diversity of the Caron? River basin.</p>	<p>At least 24 multipurpose permanent plots were established and remeasured, generating information on ecosystem services and biological diversity of the Caron? River basin.</p>			

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	<p>Number of officials (differentiated by sex) from Ministries and institutions at the national, regional, and local levels trained in the management and application of the geospatial monitoring and evaluation system for sustainable and integrated landscape management (Core indicator 11)</p>	<p>methodology developed by MINEC through the GEF ID 5410 project, which can be adapted to the needs of this output. There are also protocols developed for updating and monitoring forest cover that were used in the Imataca Forest Reserve (RFI). A methodology was used to estimate the carbon stocks and flows of the RFI.</p>	<p>50 officials (differentiated by sex) from Ministries and institutions at the national, regional, and local levels trained in the management and application of the geospatial monitoring and evaluation system for sustainable and integrated landscape management, 40% of which are women</p>	<p>150 officials (differentiated by gender) from Ministries and institutions at the national, regional, and local levels trained in the management and application of the geospatial monitoring and evaluation system for sustainable and integrated landscape management, 40% of which are women</p>			

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
<p><u>Output 1.1.3:</u></p> <p>Module of participatory monitoring for the control and surveillance of environmental threats developed, implemented, and integrated into Output 1.1.2</p> <p>-</p> <p>-</p> <p>-</p>	<p>Percentage of the design and development of the Participatory Monitoring Module for the control and surveillance of environmental threats [3].</p>	<p>In the area of intervention of the project, there is a lack of previous experience in early warning systems at the local level. However, current technological advances, accessibility and economic will facilitate</p>	<p>100% design and development of the participatory monitoring module for the control and surveillance of environmental threats in the validation process</p>	<p>100% of the development of the participatory monitoring module for the control and surveillance of environmental threats, validated and implemented that integrates, processes, and generates information for sustainable and integrated landscape management and is operational, functional, and interoperable with Output 1.1.2</p>	<p>Annual progress reports on the design and development of the participatory surveillance and control monitoring module for environmental threats, including technical tests and evaluations (year one).</p>	<p>The local communities and institutions involved show active and sustained commitment to the process of participatory monitoring, control, and surveillance, which allows the development, implementation, and success in the integration</p>	<p>PTC, Specialist in Management Instruments for AP, Specialist in Biological Diversity for AP, Specialist in Environmental Monitoring and Geomatics, M&E, a specialist in gender and indigenous</p>

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
-	Number of members (differentiated by sex) of local communities (monitors) trained in participatory monitoring, control, and surveillance of environmental threats <i>(Core indicator 11)</i>	the rapid and efficient implementation of mechanisms to monitor in a participatory manner and report potential threats in the ABRAEs within the area of influence of the project.	10 members (differentiated by sex) of local communities (monitors) trained in participatory monitoring, control, and surveillance of environmental threats.	At least 20 members (differentiated by sex) of local communities (monitors) trained, participating in the gathering of information in the field of environmental threats	Protocols and guides prepared for the implementation and effective use of participatory monitoring, control, and surveillance of environmental threats.	of the Participatory Monitoring Module for the Control and Surveillance of Environmental Threats to Output 1.1.2.	communities, MINEC and INPARQUES.

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	Number of institutional managers trained in participatory monitoring, control, and surveillance of environmental threats <i>(Core indicator 11)</i>		2 institutional administrators trained in participatory monitoring, control, and surveillance of environmental threats.	At least 4 trained institutional administrators participating in the management of field information on environmental threats	Detailed reports on the training workshops carried out. Protocols for updating and feeding data into the module, together with guides adapted to the needs of different users.		

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
Output 1.1.4: Support tools for management, planning, and agreements within a multi-level and participatory governance framework for comprehensive landscape management	Number of agreements on a territorial articulation platform that leads to a participatory model of multilevel governance involving the central, state, and municipal levels, and the local organization structures of the Pem?n people and criollo communities	Currently, there is no inter-institutional coordination and governance strategy for the basin by the institutional bodies of the state and the criollo communities. In the Pem?n indigenous people, there are well-structured and functioning grassroots	At least two agreements formulated on the territorial articulation platform leads to a participatory model of multilevel governance.	At least five agreements implemented on the territorial articulation platform that leads to a participatory model	Technical documents and maps. Document with the multilevel governance strategy agreed with the institutional actors of the state, the Pem?n indigenous people, and the criollo communities.	Pem?n indigenous people actively support and collaborate in the project; National and local governments provide support and collaboration to the Pem?n indigenous people and criollo communities. Conflicts between key actors can be resolved. The political will to incorporate key	PTC, Specialist in Management Instruments for AP, Specialist in Sustainable Forest Management and Restoration, Specialist in Biological Diversity for AP, Specialist in Productive Systems and Livelihoods, Specialist in M&E, a specialist in gender and

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	Comprehensive environmental study on natural physical aspects, base and thematic cartography, socioeconomic-cultural, institutional, and legal for the Caroní River basin.	organizations that allow them to have control and management of the territories where their socioeconomic, political, and other activities are carried out; however, there is no instance of articulation between the institutional actors of the state, the criollo communities and the Pemón	Comprehensive environmental study with updated information referring to aspects: natural physics, base and thematic cartography, socioeconomic-cultural, institutional and legal for the Caroní river basin. 100% prepared, with a gender, generational and intercultural approach	Comprehensive environmental study 100% prepared with updated information referring to aspects: natural physics, base and thematic cartography, socioeconomic-cultural, institutional and legal for the Caroní river basin. 100% prepared, with a gender and intercultural approach, incorporated into the PORU		stakeholders, with an emphasis on the Pemón society and criollo communities, and improve their participation capacities for land use planning based on the integrated landscape management approach, develop regulations, and monitor compliance of plans and regulations.	indigenous peoples. Simón Bolívar Geographical Institute, MINEC, and INPARQUES.

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	<p>Environmental economic valuation study of biological diversity in the Caron? River basin.</p>	<p>indigenous people. The Caron? River basin has studies that cover different topics ranging from natural physical, socioeconomic, institutional</p>	<p>A 100% prepared study on economic - environmental valuation of biological diversity in the Caron? River basin.</p>	<p>A 100% prepared study on economic-environmental valuation of biological diversity in the Caron? River basin.</p>			

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	Number of government institutions, by type and level that participate in a coordinated manner in the governance processes and mechanisms for the management of ABRAEs	nal, and legal considerations, base and thematic cartographic representations, and information collected in previous studies and available in different institutions that have intervened in the basin. This information will be updated and systematized to make it available	At least 8 national institutions participate in the governance processes and mechanisms for the management of ABRAEs. At least 5 state, municipal, and local institutions participate in the governance processes and mechanisms for the management of ABRAEs	At least 15 national institutions participate in the governance processes and mechanisms for the management of ABRAEs. At least 8 state, municipal, and local institutions participate in the governance processes and mechanisms for the management of ABRAEs			

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	<p>Number of general and communal captaincies of the indigenous communities (disaggregated by gender and age range) that participate in a coordinated manner in the governance processes and mechanisms for the management of the ABRAEs</p>	<p>for the preparation of the PORU of the ABRAEs.</p> <p>There are initiatives and dispersed information on the environmental economic valuation of the biological diversity of the basin, but there is no comprehensive study in this regard.</p> <p>Indigenous communities have their organizational form.</p> <p>It is important to point out that in the indigenous communi</p>	<p>At least 3 general captaincies and at least 50 communal captaincies participating in a coordinated manner in the governance processes and mechanisms for the management of the ABRAEs</p>	<p>At least 6 general captaincies and at least 100 communal captaincies participate in a coordinated manner in the processes and governance mechanisms for the management of the ABRAEs.</p>			

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>ties of the Pem?n people, there is a customary procedure or protocol to enter to carry out some community work, which consists of first contacting the General Captaincy of the sector, then the Communal Captaincy, and then the interest groups, families or community instances . It is a progressive process.</p> <p>The Pem?n people divide their territory into 8 sectors, of which sectors 2,</p>					

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>3, 5, 6, 7 and 8 are mostly within the municipality of Gran Sabana.</p> <p>There are general captaincies in each sector and communal captaincies.</p>					
<p>Component 2: Integrated landscape management for the sustainable use of biological diversity and increased provision of ecosystem services.</p>							

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
<p><u>Outcome 2.1:</u></p> <p>The MINEC, sectoral institutions at different levels, and indigenous and criollo communities have managed the landscapes of the ABRAEs in an integrated and sustainable manner, contributing to the restoration, recovery, and conservation of landscapes and biological diversity</p>	<p><u>Core Indicator 3:</u></p> <p>13,879 ha of land areas to be restored (Sub-indicator 3.2. Areas of forest and forest land 1,798 ha and Sub-indicator 3.3. Areas of natural pastures and scrublands 12,081 ha)</p> <p><u>Core Indicator 6:</u></p> <p>- 13,302,275 tCO₂-e [4]Mitigated GHG emissions . Sub-indicator 6.1 Carbon sequestered (-1,714,484 tCO₂-e) and</p>	<p>The three Natural Monuments of the Tepuyes chain, the Ikarab? Hydraulic Reserve, the South Protected Zone of Bolívar State, and the La Paragua Forest Reserve do not have PORU; Canaima National Park has an outdated PORU.</p> <p>a) The forest cover for the year 2020 in the project intervention area is 82.9% (6,394,009 ha), while the savannas is 15.3%</p>	<p>At least 2,776 ha of degraded areas are restored.</p> <p>- 11,820,929 tCO₂-e of GHG mitigated as a result of carbon sequestration of 2,776 ha of restored areas (-343,275 tCO₂-e), and emissions avoided through a 6% reduction in deforestation, 1% forest degradati</p>	<p>13,879 ha of degraded forest, forest land, savannah, and shrubland restored.</p> <p>-13.302.275 tCO₂-e of GHG mitigated as a result of carbon sequestration of 13,879 ha of restored areas (-1.714.484 tCO₂-e), and emissions avoided through a 6% reduction in deforestation, 1% forest degradation and 1 to 2 years of fire frequency (-11,587,791 tCO₂-e) in the area of influence of the project.</p>	<p>Quarterly reports on the progress of the outputs to be developed .</p> <p>GIS of the project with the shapefiles of the restored areas, community initiatives , etc.</p> <p>Application of the Ex-Act tool at medium and term.</p> <p>A cumulative list of project beneficiaries according to the activities carried out in each result, disaggregated by gender and age range.</p>	<p>The processes of involvement and participation of local stakeholders have been successful and have allowed the implementation of restoration strategies.</p>	<p>PTC, Specialist in Management Instruments for PA, Specialist in Sustainable Forest Management and Restoration, Specialist in Biological Diversity for PA, Specialist in Production Systems and Livelihoods, Specialist in M&E, a specialist in gender and indigenous peoples.</p> <p>MINEC and INPARQUES.</p>

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	emissions avoided (-11,587,791 tCO ₂ -e) in the AFOLU sector.	(1,180,077 ha); b) In the last 20 years, an annual forest loss of -94,800 ha is estimated with an average annual deforestation rate of -0.07%; c) the average annual emissions caused by changes in use in the last 20 years were 2.81 Mt CO ₂ eq year ⁻¹ ; d) In the last 20 seasons, vegetation fires have affected approximately 6% (464,775 ha) of the project implementation area, 96% of these have originated in	on and from 1 to 2 years of the frequency of fires (-11,477,654 tCO ₂ -e) in the area of influence of the project.				

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		savannahs.					
<p><u>Output 2.1.1.</u></p> <p>Five (5) Participatory and Consensus-based Management Plans and Regulations of Use (PORUs) formulated: Canaima National Park, National Monuments of the Tepuyes Chain, La Paragua Forest Reserve, Ikabar? Hydraulic</p>	<p>Percentage of progress in the stages of design and participatory formulation of the 5 PORU of the ABRAEs [5].</p>	<p>Ikabar? Hydraulic Reserve and the South Protected Zone of the Bol?var State, and the La Paragua Forest Reserve do not have PORU.</p> <p>The Canaima National Park has an outdated</p>	<p>100% progress in stages 1 and 2 of formulation and design of the 5 PORU.</p> <p>75% progress in stage 3 of formulation and design of the 5 PORU</p>	<p>100% progress in the formulation and design of each of the 5 PORUs, which have been agreed upon and delivered to the counterpart for implementation.</p>	<p>Documents with the results of the design and socialization of the PORU.</p> <p>Reports of design workshops, socialization workshops of the PORU</p> <p>Attendance list formulation and socialization</p>	<p>State agencies, institutions, and indigenous communities demonstrate their willingness to coordinate and jointly define and implement land use planning with a focus on sustainable and integrated landscape</p>	<p>PTC, Specialist in Management Instruments for PA, Specialist in Sustainable Forest Management and Restoration, Specialist in Biological Diversity for PA, Specialist in Production Systems and Livelihood</p>

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
Reserve, South Protected Zone of Bolívar State.	Number of institutions, by type and level that participate in the PORU formulation and consensus process within the framework of governance mechanisms (Output 1.1.4)	Management Plan and Use Regulations (Decree No. 140 of July 18, 1991, Official Gazette No. 34,758) for the Eastern sector of said Park (La Gran Sabana). The MINEC is the national environmental authority and is responsible for formulating and implementing environmental policy through environmental planning and land	At least 8 national institutions participate in the PORU formulation process. At least 5 state, municipal, and local institutions participate in the formulation of the PORU.	At least 15 national institutions participate in the PORU formulation process. At least 8 state, municipal, and local institutions participate in the formulation of the PORU.	workshops Document with the demonstrative pilot programs formulated. Follow-up reports on the goals of the pilot programs. Reports resulting from the socialization of the PORU,	management.	s, Specialist in M&E. MINEC, INPARQUES, IGVSB, IFLA, and UNEG.
	Number of demonstrative pilot programs formulated and implemented within the framework of the PORU in two ABRAEs		At least 1 demonstrative pilot program designed and implemented in a pilot manner within the framework of the PORU agreed in two ABRAEs.	At least 3 demonstration programs designed and implemented on a pilot basis within the framework of the PORUs agreed upon in two ABRAEs.			

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	<p>Number of indigenous and criollo people (disaggregated by sex, age range, and type of community - indigenous/criollo-) that benefit from the implementation of territorial planning processes (<i>Core indicator 11</i>)</p>	<p>use instruments; and gives direction to the forest resource conservation policy in Venezuela.</p> <p>The 211 communities of the Pem?n people are in the sectors of the upper and middle basin of the Caron? River and the lower and upper basin of the La Paragua River, specifically in the municipalities of Gran Sabana and Angostura. These indigenous communities</p>	<p>At least 11,523 women and men see their capacities in integrated landscape management strengthened and/or benefit from the implementation of territorial planning processes (at least 40% are women).</p>	<p>At least 23,047 women and men see their capacities in integrated landscape management strengthened and/or benefit from the implementation of territorial planning processes (at least 40% are women).</p>			

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>ties recognized by the Venezuelan State, both in their existence, as well as in their social, political and economic organization, their cultures, uses and customs, languages and religions, as well as their habitat and original rights.</p> <p>The criollo communities are made up of 20 communities, located in Santa Elena de Uairén, capital of the Gran Sabana municipality.</p>					

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
<p><u>Output 2.1.2:</u> Degraded areas are restored within the project intervention area with a gender, generational, and intercultural approach.</p> <p>-</p>	<p>Surface (ha) of restored areas of forests and grasslands and/or savannahs according to the restoration strategy implemented.</p>	<p>Within the demonstrative area of the project, specifically in savannah ecosystems, there is an experience in agroforestry systems, which has to do with the installation of productive patios carried out by a non-governmental organization "La Cosecha" implemented for 10 years (CAKY, 2021).</p> <p>In the formulation of the project document, two documents were prepared: "Degraded areas and those with the</p>	<p>At least 2,776 hectares of forests have been restored in a participatory manner with indigenous and criollo institutions and communities in the area:</p> <p>a) 244 ha of restored forests (60 ha for passive restoration, 65 ha for reforestation, 116 ha for agroforestry [6], and 4 ha for demonstration of SLM practices to reduce land degradation in areas of illegal mining),</p> <p>b) 116 ha of moriches</p>	<p>13,879 ha of forests have been restored in a participatory manner with indigenous and criollo institutions and communities in the area:</p> <p>a) 1,220 ha of restored forests (300 ha by passive restoration, 323 ha of reforestation, 579 of agroforestry [7], and 18 ha demonstrating SLM practices to reduce land degradation in areas of illegal mining,</p> <p>b) 578 ha of moriches restored (328 ha by passive restoration and 250 ha by reforestation),</p> <p>c) 12,081 ha of savannas restored (12,081 ha by passive restoration)</p>	<p>Map of degraded areas, map of prioritized areas for restoration, a document of risks for restoration, and restoration options, including strategies. Field monitoring plots, activity progress reports, training programs, training reports, attendance records, photographic memories, and data disaggregated by gender.</p>	<p>Communities and institutions are empowered and promote the use of sustainable practices, appropriation, and proper functioning and implementation of a monitoring system for environmental threats (fires, deforestation, mining)</p>	<p>PTC, Specialist in Sustainable Forest Management and Restoration, Specialist in Biological Diversity for AP, Specialist in M&E, Specialist in gender and indigenous peoples.</p> <p>MINEC, INPARQUES, and ETAs.</p>

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		greatest potential for restoration (based on physical-natural factors and appreciation of key institutional actors)" and Analysis of biophysical	restored (66 ha by passive restoration and 50 ha by reforestation), c) 2,416 ha of savannahs restored (2,416 ha by passive restoration)				

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	<p>Metric tons of equivalent carbon dioxide (CO₂-e) sequestered by the restoration strategy in the restored forest and grassland and/or savannah areas.</p>	<p>indicator: elaboration of maps of uses and degradation of the land, and estimation of GHG emissions through the 'EX-ANTE CARBON BALANCE TOOL' (EXACT), which serve as support in the definition of the sectors to be restored and the communities involved, as well as the data, referred to carbon estimation.</p> <p>There are institutions in the area of intervention of the</p>	<p>The 2,776 ha of areas restored in the medium term will mitigate-343,275 tCO₂-e:</p> <p>a) -39.010 tCO₂-e from forest restoration (-17,591 tCO₂-e from passive restoration,</p> <p>-19.057 tCO₂-e from reforestation,</p> <p>-878 tCO₂-e from agroforestry [8]and</p> <p>-1,485 tCO₂-e demonstration of SLM practices to reduce land degradation in areas of</p>	<p>The 13,879 ha of restored areas will mitigate at the end of the project.</p> <p>-1,714,484 tCO₂-e:</p> <p>a) -193.764 tCO₂-e from forest restoration (-87,953 tCO₂-e from passive restoration, -94,697 CO₂-e from reforestation, -4,433 CO₂-e from agroforestry [9]and</p> <p>-6.681 CO₂-e demonstrating SLM practices to reduce land degradation in illegal mining areas,</p> <p>b) -191.057 CO₂-e for restoration of moriches (-117.762 CO₂-e for passive restoration and -73,295 CO₂-e for reforestation),</p> <p>c) -1,329,663 CO₂-e due to savannah</p>			

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>project that have installed capacities and experience to support the development of activities, for example, CORPO ELEC, which bases its operations in the energy sector on the power extracted from the water resources of the Caron? basin. The entities attached to the MINEC are equally important :</p> <p>Inparques, CONARE, IFLA, and other</p>	<p>illegal mining,</p> <p>b) - 38.355 tCO₂-e due to restoration of moriches (-23.696 tCO₂-e due to passive restoration and -14,659 tCO₂-e due to reforestation),</p> <p>c) - 265.911 tCO₂-e due to savannah restoration (-265.911 tCO₂-e due to passive restoration).</p>	<p>restoration (-1,329,663 CO₂-e due to passive restoration).</p>			

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	Number of workshops with the participation of the indigenous and criollo population, for the design and participatory monitoring of restoration strategies.	national entities: Ministry of Popular Power for Indigenous Peoples, The Venezuelan Corporation of Guayana, the Bolívar State Government,	At least 4 workshops with the participation of the indigenous and criollo population for the design and participatory monitoring of restoration strategies	At least 8 workshops with the participation of the indigenous and criollo population for the design and participatory monitoring of restoration strategies		Communities are motivated and receptive to incorporating landscape restoration approaches.	

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	<p>Number of indigenous and criollo people (differentiated by sex and age) in the project that incorporate the restoration approaches/strategies promoted by the project, from the participatory design process to implementation and monitoring (<i>Core indicator 11</i>)</p>	<p>Municipal Governments.</p>	<p>At least 2,000 indigenous and criollo people (differentiated by sex and age) incorporate restoration approaches/strategies, from the participatory design process to implementation and monitoring.</p>	<p>At least 5,000 indigenous and criollo people incorporate restoration approaches/strategies, from the participatory design process to implementation and monitoring (differentiated by sex and age)</p>			

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	<p>Number of Agricultural Technical Schools (ETAs) that make up the Network of Indigenous Productive Open Classrooms incorporated into the restoration strategies with gender approach.</p>		<p>At least 5 technical schools trained and incorporated into the restoration strategies.</p>	<p>At least 7 Agricultural Technical Schools that comprise the Network of Indigenous Productive Open Classrooms incorporated into restoration strategies.</p>		<p>The young students at the technical schools are motivated and willing to get involved in all stages of the restoration process, including the production of plants in their nurseries, the establishment of agroforestry</p>	

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	<p>Number of technical school students trained in restoration approaches/strategies, including restoration plan design content, active and passive restoration techniques, and monitoring, among others <i>(Core indicator 11).</i></p>		<p>At least 1,000 technical school students trained in restoration approaches/strategies, including restoration plan design content, active and passive restoration techniques, and monitoring, among others.</p>	<p>At least 3,000 technical school students trained in restoration approaches/strategies, including restoration plan design content, active and passive restoration techniques, and monitoring, among others.</p>		<p>systems, and leadership in the formation and operation of a network of classrooms?indigenous productive open.</p>	

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	Number of fire management programs designed and implemented as a key mechanism to guarantee the restoration process.		Fire management program designed and with at least 30% of its implementation as a key mechanism to guarantee the restoration process.	Fire management program designed and implemented as a key mechanism to guarantee the restoration process.		Communities are incorporated into fire management activities, and the incidence of fires is minimized. Fire prevention and management make it possible to maintain and replicate restoration strategies.	
<u>Output 2.1.3:</u> Formulated financial plan complements the management effectiveness of the system of the 5 ABRAEs in the Caron? River basin.	Number of documents on financial management of the ABRAEs of the basin.	The basin does not have alternative financial instruments apart from the national budget and the	A document on financial management of the ABRAEs, 100% prepared	1 financial sustainability analysis document and financial plan proposal to strengthen the management of the ABRAEs in the basin.	Technical documents with the results of the financial sustainability studies and the financial plan.	The ABRAEs have financial instruments, and there is political will on the part of the decision-makers to assume	PTC, Specialist in Management Instruments for AP, Specialist in Sustainable Forest Management and

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	Number of protocols for the financial management and sustainability of the ABRAEs prepared.	<p>small contributions derived from the collection of fees from some areas of the Canaima National Park, which support the management of the ABRAE.</p> <p>In the area, there are INPARQUES facilities for monitoring unauthorized activities and which also serve as a center for the attention of tourists who visit the area.</p>	1 protocol for financial management and sustainability, 100% prepared	2 protocols for financial management and sustainability, 100% prepared a) a protocol for the Payment System for Environmental Services of the Caron? river basin, and b) a protocol on environmental and ecological taxes [10].	Reports of the endowment and improvements, photographic memories ,	financing alternatives that help improve the management of the ABRAEs.	<p>Restoration, Specialist in Biological Diversity for AP, Specialist in Productive Systems and Livelihoods, Specialist in gender and indigenous peoples.,</p> <p>M&E Specialist</p> <p>MINEC, INPARQUES.</p>
<p>Component 3: Diversification of livelihoods in indigenous and criollo communities for sustainability in landscape management with a gender, generational, and intercultural approach</p>							

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
<p><u>Outcome 3.1:</u> Indigenous and criollo communities have implemented resilient, diversified, and sustainable livelihoods in the Caron? River basin.</p>	<p>Number of indigenous and criollo women and men (disaggregated by sex and by type of community - indigenous/criollo-) beneficiaries of the implementation of resilient and diversified livelihoods (<i>Core indicator 11</i>)</p> <p>Number of gender-responsive socio-productive co-management pilot projects implemented in the ABRAEs.</p>	<p>The indigenous population of the area has always taken advantage of various resources offered by the plant formations (forests and moriches) for their daily life, which are a source of Timber Forest Products (PFM) and Non-Timber Forest Products (NTFPs). Conuco production continues to be essential for the subsistence of the indigenous population.</p> <p>The Pem?n population</p>	<p>At least 6,500 women and men from indigenous and criollo communities benefited through the implementation of resilient and diversified livelihoods (of which at least 40% are women)</p> <p>At least 1 gender-responsive socio-productive co-management pilot project implemented in the ABRAEs.</p>	<p>At least 13,000 women and men from indigenous and criollo communities benefited through the implementation of resilient and diversified livelihoods (of which at least 40% are women)</p> <p>At least 1 gender-responsive socio-productive co-management pilot project implemented in the ABRAEs.</p>	<p>Quarterly reports on the progress of the outputs to be developed .</p>	<p>Indigenous and criollo communities improve their living conditions and implement sustainable socio-productive practices, where women play a leading role in the leadership of the initiatives developed.</p>	<p>Project Coordinator/Specialist in Production Systems and Livelihoods/. Specialist in Management Instruments for PA., Specialist in Biological Diversity for PA, Specialist in Monitoring and Evaluation .. Specialist in Gender and indigenous peoples</p>

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>traditionally uses many of the wildlife resources for their daily diet, and in recent years there has been an increase in the sale of some wildlife products in the municipal market.</p> <p>There are important initiatives in terms of community-based tourism, strengthened by the declaration of the Canaima National Park as Natural Heritage of Humanity.</p>					

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
<p><u>Output 3.1.1:</u></p> <p>Participatively formulated and implemented community plans integrate sustainable economic activities related to ecotourism, timber and non-timber forest products, and family farming</p>	<p>Number of community plans for sustainable economic activities oriented towards ecotourism development, added value of NTFPs and family farming identified, selected, and implemented.</p>	<p>In the project area, in sectors 5 and 6 there are experiences of families organized according to ecotourism, the added value of NTFPs and agriculture. There are experiences of indigenous communities organized around ecotourism. The use of NTFPs by the local criollo population is the elaboration of incense with the resin of the Tacamajaca (<i>Protium heptaphyllum</i>), in El Pauj?, on the</p>	<p>At least 1 community plan for sustainable economic activities developed.</p>	<p>3 community plans for sustainable economic activities oriented towards ecotourism development, added value of NTFPs and family farming identified, selected and implemented. At least one of the plans is led by women (NTFPs).</p>	<p>Cartographic expression of the location of the conucos and productive patios that incorporate agroecological practices.</p> <p>Photographs and reports of activities that show progress. Program of training activities to be implemented in the ETAs.</p> <p>Lists of participants in the different activities (gender, age)</p> <p>Records of visitors to tourist sites managed by families in sector 5.</p>	<p>Socio-productive initiatives with forest products, while at the same time raising awareness about the valuation and conservation of natural resources.</p>	<p>Project Coordinator / Specialist in Production Systems and Livelihoods / Specialist in Biological Diversity for PA /. Monitoring and Evaluation Specialist, gender and Indigenous Peoples Specialist</p>

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>Santa Elena-Ikabar? Road, together with the elaboration of therapeutic soaps and ointments.</p> <p>Conuco production is mostly used for subsistence, either with fresh products or by making cassava, <i>kachiri</i> (a fermented drink made from the squeezed juice of cassava and sweet potato) and <i>kumache</i> (spicy sauce made from chili peppers), bachacos and small fish from the rivers in the area). The</p>			<p>Attendance records and photographic memory of workshops and training events.</p> <p>Records of production and commercialization of the NTFPs enterprises developed by the families.</p>		

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		complementary part of the production is destined for commercialization in the municipal market of Santa Elena, to the mines, or to tourism when this public can be accessed.					
<p><u>Output 3.1.2:</u></p> <p>Designed and implemented program for the sustainable use of wildlife enables the reduction of pressure on biological</p>	Number of sustainable wildlife use programs implemented.	In the area, there are precedents of experiences of sustainable use of wildlife. For example, a	1 program for the sustainable use of wildlife designed and implemented.	At least 1 sustainable wildlife use program implemented	Photographs and reports of activities and records of production and commercialization of the	The indigenous and criollo communities? advance initiatives in the sustainable use of wildlife that	Project Coordinator / Specialist in Production Systems and Livelihoods / Specialist in Management

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
diversity and improvement in livelihoods.	Number of initiatives for the sustainable use of wildlife with a gender, generational and intercultural approach implemented.	traditional activity in the town of El Pauj? and its surroundings is Apiculture. This activity began in the 50's of the last century, when the first beehives were introduced and takes advantage of the area's pollutant-free environments to produce very good quality honey, which has been recognized in national level contests. In this sense, it is highlighted that the Pem?n population traditional	At least 1 sustainable use of wildlife initiative implemented.	At least 3 initiatives for the sustainable use of wildlife have been implemented, of which 1 is led by women.	production. Program documents. Workshop reports with attendance list (registration of gender and age). Report on workshops to prioritize experiences of sustainable use of wildlife. Training programs, attendance lists, protocols, and work guides for each experience. GIS of the areas/communities that implement initiatives.	generate economic income. Sustainable use programs produce economically viable benefits, superior to informal trade. There is an increase in local interest and support for applied programs.	nt Instruments for PA /. Monitoring and Evaluation Specialist, Gender and Indigenous Peoples Specialist.

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>lly knows some species of native stingless bees, producers of honey with an exquisite flavor and medicinal properties, which are just beginning to be seen as a possibility of important use.</p> <p>The trade of wild fauna and flora from the Caron? river basin is weakly documented. Only the extraction of orchids, bromeliads, and, in the case of birds, is indicated in a very generic way, especiall</p>					

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>y the family of Venezuelan Psittacidae. These activities do not have much regulation.</p> <p>Existence of two ponds for breeding fish out of use in the communities of San Ignacio de Yuruan? and San Antonio del Morichal.</p>					

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
<p><u>Output 3.1.3:</u> Socio-productive co-management agreements in ABRAEs designed and implemented.</p>	<p>Socio-productive co-management pilot project agreements signed and implemented.</p>	<p>In the project area, specifically in indigenous sector 5, most of which is included in the Canaima National Park, for many years tourism has been carried out along the Luepa - Kavanay?n and Luepa - Santa Elena de Uair?n highways . In this sense, during the years 2003 to 2016, the community-based ecotourism experience implemented by the Pem?n E'masens ?n II indigenous cooperative was</p>	<p>1 socio-productive co-management pilot project agreement 100% elaborated.</p>	<p>At least 1 socio-productive co-management pilot project in protected areas signed and implemented.</p>	<p>Model co-management agreement , attendance records, photographic memories , data disaggregated by gender, reports.</p>	<p>The communities reach a co-management agreement that allows them to implement socio-productive plans.</p>	<p>Project Coordinator/Livelihood Specialist. Monitoring and Evaluation Specialist. / . Specialist in Management Instruments for PA, Specialist in Biological Diversity for PA, Specialist in gender and Indigenous Peoples.</p>

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>developed, offering accommodation, food, transportation, guiding, and experiences of the native culture in different points. of the Luepa-Kavanay ?n highway axis, along which the communities of San Luis de Awarakay, Liwo Riv?, Kavanay ?n, and other populated centers such as Karuay, Unatey and Mowak.</p> <p>The development of ecotourism in the Canaima</p>					

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>National Park, currently, has been carried out mainly through the community-based tourism program, where INPARQUES seeks to generate economic benefits for local populations to reduce pressures on natural values.</p> <p>At present, there is no socio-productive organization that takes advantage of the tourism potential in the basin.</p> <p>In the project</p>					

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>area, a group called "Guardians of the Forest" was identified, who live in the area and protect an 1800-hectare forest that constitutes a Municipal Park called Piedra Kanaima, located in the vicinity of the town of Santa Elena de Uare, capital of the Gran Sabana Municipality and was decreed as such by the Gran Sabana Municipal Council in 1995. This forest has ecotourism potential. This</p>					

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		could be an opportunity for a co-management alliance between criollo communities-civil associations-mayor.					

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
Output 3.1.4: Models and business plans support and enhance the development of socio-productive initiatives in the indigenous and criollo communities identified in Outputs 3.1.1 and 3.1.2.	Number of business models and plans developed and implemented through output development 3.1.1. and 3.1.2., in accordance with the socio-productive initiatives of the indigenous and criollo communities and productive organizations in the project's area of influence.	In ecotourism: in the recent past, sectors 5 and 6, according to the indigenous delimitation, indicate that tourist activities have been established and developed in the area, with a significant flow of both national and international tourists, with an incipient community	At least 2 business models and plans developed 100% through output development 3.1.1. and 3.1.2., in accordance with the socio-productive initiatives of the indigenous and criollo communities and productive organizations in the project's area of influence.	At least 3 models and business plans prepared and implemented through the development of Outputs 3.1.1. and 3.1.2., in accordance with the socio-productive initiatives of the indigenous and criollo communities and productive organizations in the project's area of influence. At least 1 of the business models and plans is led by women (example: casaberas)	Consulting contracts signed; programmatic contents of the areas of knowledge designed. Training reports, attendance records, photographic memories, and data disaggregated by gender. Technical documents with the results of the models and business plans prepared and in the hands of the	The communities implement the business plans in their socio-productive activities.	Project Coordinator/, Project Coordinator/Livelihood Specialist. Monitoring and Evaluation Specialist. /. Specialist in Management Instruments for PA, Specialist in Biological Diversity for PA, Specialist in gender and Indigenous Peoples.

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
	Number of rural savings banks established.	<p>organization for the management of the ecotourism business, ignoring economic figures regarding the commercial flow of the activity, but with clear local interests on the part of the indigenous community for the management of ecotourism.</p> <p>In recent years, in the upper basin of the Caron?, Meliponi culture has been developed, in El Pauj? and also in the surroundings of Santa Elena de Uair?n,</p>	At least one rural bank was established as a development alternative to promote productive activities and to support the implementation of business plans in organized and productive communities.	At least two rural savings banks established as a development alternative to promote productive activities and to support the implementation of business plans in organized and productive communities.	<p>participating communities, organizations, or micro-enterprises, photographic reports.</p> <p>Copies of constitutive acts of rural savings banks. Copies of Minutes of shareholders' meetings.</p>	The communities will adopt the rural banks as a good practice to promote their productive activities.	

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>especially for the use of Propolis, a therapeutic substance produced by bees from resins and exudates. vegetables. Likewise, on a small scale, apiculture is in the town of El Pauj? and its surroundings, located in sector 7. Due to its production methods, apiculture or meliponi culture turns out to be an economically viable activity, very simple, easy to implement and maintain, which makes its</p>					

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
		<p>use more attractive .</p> <p>For aquaculture, according to the information from the communities, in the recent past there were experiences of aquaculture management in the intervention area.</p> <p>There are no experiences in the area of intervention on the promotion or support of the production and maintenance of productive activities as livelihoods.</p>					

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
Component 4: Knowledge management, monitoring, and evaluation with a gender, generational, and intercultural approach							
<u>Outcome 4.1:</u> Project results are monitored based on adaptive management and with a gender, generational, and intercultural approach, evaluated, transferred, and embraced by stakeholders.	Global percentage of progress of outputs and results of the project, according to the application of the monitoring and evaluation system	Does not apply	Between 80 and 100% of the medium-term objectives achieved	Between 80 and 100% the final objectives achieved, meeting the requirements of monitoring, evaluation, and knowledge management, delivery of expected results, and documenting evidence of sustainability and ownership by stakeholders.	Periodic reports on the application of the Project Monitoring and Evaluation System PIRs Mid-Term Evaluation Report Final Evaluation Report	Project partners have the political will to advance towards an integrated management of the landscape of the Caron? river basin, it is appropriate the outputs and results of the project to ensure its sustainability.	Project coordinator/, PMU/ Monitoring and Evaluation Specialist, Knowledge Management Specialist, Communication Specialist, Gender and Indigenous Peoples Specialist, MINEC, DNP, and FAO.

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
<p><u>Output 4.1.1:</u> M&E strategy developed and implemented with stakeholders.</p> <p>-</p>	<p>Number of progress reports that contain progress in achieving results and outputs and incorporate monitoring of gender plans, indigenous peoples, and social and environmental safeguards,</p>	Does not apply	<p>8 progress reports (5 PPR and 3 PIR), including the gender, generational and intercultural considerations</p>	<p>15 semi-annual reports of advance (10 PPR and 5 PIR), including the gender considerations and interculturality</p>	<p>Periodic reports from the monitoring tool integrating elements of gender plans, indigenous peoples, and social and environmental safeguards.</p> <p>Reports and maps generated from the GIS tool for the project (tracking and monitoring of surface variables and other spatial variables)</p> <p>PIR</p> <p>PPR</p>	N/A	<p>Project coordinator, PMU/</p> <p>Monitoring and Evaluation Specialist, Knowledge Management Specialist, Communication Specialist, Gender and Indigenous Peoples Specialist</p>

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
<u>Output 4.1.2:</u> Mid-term review and final evaluation conducted. -	Number of reviews/evaluations carried out during the project.	Does not apply	1 Mid-Term Review	1 Mid-term review 1 final evaluation	Mid-Term Review Report Final Evaluation Report.	N/A	Project coordinator, PMU/ Monitoring and Evaluation Specialist.

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
Output 4.1.3: Mechanisms implemented for knowledge management and exchange of best practices and lessons learned contribute to the replication and scaling of project results, with a focus on gender, generational, and intercultural aspects	Number and type of mechanisms for the dissemination and exchange of best practices and lessons for the replication and scaling of project results with gender, generational and intercultural approach.	Does not apply	<p>Knowledge management plan</p> <p>gender-focused, generational and intercultural designed and validated with key actors, which includes activities and outputs translated into native languages</p> <p>At least 4 posts systematizing experiences and lessons learned disseminated.</p> <p>At least 2 national and international</p>	<p>management plan</p> <p>knowledge with a gender, generational and intercultural approach, which includes activities and outputs translated into native languages implemented.</p> <p>At least 8 documents and publications systematizing experiences and lessons learned disseminated.</p> <p>At least 6 national and international exchanges of knowledge of the indigenous and criollo population for the dissemination and feedback of restoration experiences, sustainable management of natural resources and sustainable production, with a gender, generational and intercultural approach.</p>	<p>management plan</p> <p>Knowledge,</p> <p>Strategy of</p> <p>Communication,</p> <p>Knowledge exchange plan,</p> <p>advocacy plan,</p> <p>Technical documents</p> <p>Publications</p> <p>Videos</p> <p>Website</p> <p>Social networks, Community radio program,</p> <p>brochures, webinars,</p> <p>press clippings,</p> <p>Memories of</p>	<p>The people of the indigenous and criollo communities are motivated and talk about their experiences and life experiences, as well as how their ancestral customs have contributed to the implementation of the project.</p> <p>Institutional actors have strengthened their capacities and disseminated their knowledge.</p>	<p>Project coordinator, PMU/ Monitoring and Evaluation Specialist, Knowledge Management Specialist, Communication Specialist, Gender and Indigenous Peoples Specialist</p>

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
			<p>exchange of knowledge of the indigenous and criollo population for the dissemination and feedback of restoration experiences, sustainable management of natural resources and sustainable production, with a gender, generational and intercultural approach.</p> <p>At least 1 international exchange</p>	<p>At least 3 international exchanges on forest restoration and ecology, landscape conservation and management, and forest fire early warning systems, which include institutional actors at the national/regional level of the country.</p> <p>Advocacy plan for sustainability and scalability of results and lessons learned from implemented project, and documentation of evidence of sustainability and appropriation by stakeholders.</p>	<p>exchange events.</p>		

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
			<p>on forest restoration and ecology, landscape conservation and management, and early warning systems for forest fires, which includes institutional actors at the national/regional level of the country.</p> <p>Advocacy plan for sustainability and scalability of results and lessons learned from the agreed project with partners, executors (MINEC,</p>				

Results Chain	Indicator s	Baseline	Mid-term goal	Goal	Means of Verification	Assumpti ons	Responsib le for data collection
			INPARQ UES) and key actors.				

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
			<p>Communication strategy and plan, which considers the different stakeholders of the project such as the public, the gender, generational and interculturality, designed and validated with key actors.</p> <p>At least 2 systematized and published life histories translated into native languages</p>	<p>Communication strategy with a gender approach, and generational interculturality implemented.</p> <p>At least 5 systematized and published life histories translated into native languages. The outputs communication includes testimonies of women and men, indigenous and criollo communities, and institutional actors.</p> <p>Project website disseminating the results of the project.</p>			

Results Chain	Indicators	Baseline	Mid-term goal	Goal	Means of Verification	Assumptions	Responsible for data collection
			The web page of the project is enabled and working.				

[1] Referring to unregulated tourist activities, unauthorized mining, logging and fires of vegetation and anarchic occupation of the land that result in the loss of biodiversity.

[2] Development in the context of the modules of this output includes requirements analysis, database design, database management system selection, implementation and configuration, development of applications and data access tools, data migration and integration, testing and validation, commissioning, and launch. Having done this, the system must have maintenance and support, and monitoring and improvement during the implementation phase of the project.

[3] It includes the app to collect information in the field, the web mapping to manage the information collected, the interoperability with Output 1.1.2 and the response protocols.

[4] Estimation made with the Ex- Act V 9.1 tool.

[5] The stages in the design and formulation of the PORU: 1) Homogenization of aspects (It is based on the existing base information, as well as the field verifications that are carried out, taking aspects such as: Cartography, physical-natural, socioeconomic, legal information, institutional and administrative, field information, linking communities to the planning process, general structure of the information, basic concepts, zoning criteria, territorial units); 2) Identification and analysis of the central problems (valuation of resources, population dynamics, socioeconomic profile, orientations of development and conservation of biological diversity, proposed profile); 3) Systematization and analysis of the information (cartographic series, definition of criteria for zoning the management units, territorial valuations, conservation options and management of the ABRAEs); 4) Socialization of the preliminary

project of the PORU (requires detailed planning and a broad, previously informed and timely call, seeking the largest and best possible participation. The general structure of the PORU under discussion will be developed, emphasizing the category or categories of zoning that are directly related to each community, as well as the possible assigned uses); 5) Preparation of the decree, final zoning map and final technical report (The process of formulating the PORU project ends with the elaboration of the decree, the zoning map and the final report, which includes the diagnosis, the thematic cartography and the zoning map, the socialization and the conclusions that give rise to promotion).

[6]80 ha of conucos and stubble and 36 ha in productive yards.

[7]401 ha of conucos and stubble and 178 ha in productive yards.

[8]80 ha of conucos and stubble and 36 ha in productive yards.

[9]401 ha of conucos and stubble and 178 ha in productive yards.

[10]Identified and prioritized through an analysis of mechanisms, presented in the Progress Report Output 1 "Public and private instruments and mechanisms for the mobilization of financial resources for the conservation of biological diversity, Caron? River basin" (Supplementary consulting documents)

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).

Comments	Response
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Comment by Jennifer Novotney (DOS-OES-ENV):

The proposal mentions several regions of focus, some of which are occupied by armed guerrilla groups that carry out illicit mining activities in protected lands. The proposal does not discuss how these security concerns will be mitigated. There is no reason to believe such efforts would have the backing and support necessary to safely operate in these territories, and more information is needed to understand how the project expects to accomplish its aims and these significant risks.

In addition, waterways in this region have been found to be highly polluted with mercury; due to runoff from illicit mining activity. There are documented cases of mercury poisoning in downstream communities. This is an additional risk that impacts biodiversity in the region, and the whole beyond the scope of this project, will impact the success of this work.

In sectors 5 and 6, where the main activities of the project will take place, there is no evidence of guerrilla occupation in the specific project intervention area. Likewise, the Pem?n community is very well organized, with effective control over the territory, making it very difficult for outsiders to settle in. Illegal mining is an issue that is addressed in the socio-environmental risks section. The project seeks to diversify and strengthen livelihoods to reduce the pressure and dependence on activities such as illegal mining, so it is expected to generate an alternative context that allows the strengthening of sustainable productive activities for indigenous and Criollo communities.

Regarding the comment on mercury contamination of water resources, the 2004 Caroni River Basin Master Plan study, in the section on water quality, states that "the physical, chemical and biological characteristics of the surface water bodies and reservoirs of the Caroni River basin are similar throughout its entire length and have remained within the same orders of magnitude over time". Also, the results of the mercury analysis do not allow for an evaluation of the impacts on water quality in the basin. At present, the information that exists is obtained from private initiatives and Non-Governmental Organizations. Thus, for the determination of mercury in water, sediments, and fish, studies have been carried out in an isolated and dispersed manner, without a global consideration of the problem, concentrated in the lower part of the basin, where the number of samples analyzed is generally not very representative, so it is considered that the lack of systematization of the determinations, as well as the variety of the results obtained, does not allow a complete diagnosis to be made. There is only evidence that there is mercury contamination in the sites where intense mining activity is carried out, but the levels in water, sediments, or fish cannot be established globally for the extension of the rivers and tributaries of the Caron?.

Comment by Annette Windmeisser, GEF Council member:

Germany welcomes the project proposal and would like to raise the following points for improvement

Under component 1, the proposal states that the participation of IPLCs shall be promoted based on Venezuelan legislation. However, the fair equitable engagement of indigenous peoples and local communities in the management of Pas (e.g. through community-based management) can achieve better conservation outcomes. It is not clear what is meant with the term 'promoting' participation of IPLCs. We would therefore like to suggest that the participation of IPLCs is ensured in the process of Component 1, rather than promoted, which may not necessarily result in their effective participation.

According to the commentary, the project's approach has deepened the approach to the participation of indigenous and criollo communities in the PIF. This approach ensures effective participation with a gender, generational, and intercultural approach in each component. Likewise, in the Plan for Indigenous Peoples, the participation of the communities in the project is guaranteed through Free, Prior, and Informed Consent.

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STAP Comments		Response
STAP Overall Assessment	<p>Minor issues to be considered during project design. Our assessment concluded that this was a reasonably well-written proposal but required some improvements. We identified a number of minor issues throughout the proposal that should be rectified as part of the next step of project development. These include: improving the consistency of the description for the project objective with the problem statement; an overall review and simplification of the language used throughout the proposal, which was found to be unnecessarily complex and laden with jargon; and a revision of the theory of change and list of stakeholders, which were found to be lacking in specific aspects that are further described below.</p>	<p>In accordance with STAP considerations. In the preparation of the Prodoc, the statement of the general objective was modified to achieve greater concordance with the problem. The wording of the document was modified to simplify the language. The list of stakeholders was modified and enriched. Based on the observation, the Theory of Change was improved and expanded, incorporating the assumptions, barriers, and drivers of change that will enable the achievement of the expected results.</p>

<p>Project Objective</p>	<p>Is the objective clearly defined, and consistently related to the problem diagnosis?</p> <p>The objective is defined clearly enough but it is not entirely consistent with the problem diagnosis. Having read the proposal in full it is obvious that the problem diagnosis has been well-researched and is also clearly consistent with the rest of the content in the document, whereas the project objective described on page one of the PIF is not. STAP recommends that the project objective is rephrased to ensure that it is consistent with the problem diagnosis and reflective of or directly related to the activities that this PIF is proposing to implement.</p>	<p>According to the observation, the PIF's objective was unclear. This was revised, adjusted, and stated as follows: "Improve management and governance and enhance institutional and communities capacities for the integrated and sustainable use of the landscape, the conservation of biological diversity and provision of ecosystem services, to generate socio-economic and environmental benefits in the Caron? River Basin and global environmental benefits (SDGs 2.4, 6.6, 13.1 and 15.4)".</p>
<p>Project components</p>	<p>A brief description of the planned activities. Do these support the project's objectives?</p> <p>The planned activities are well-described and thoroughly researched, they also fit well into a coherent framework that would in turn support a coherent set of objectives. However, rather disappointingly, it was not possible to find anywhere in the PIF a section where the project objectives were clearly articulated all in one place. The same applies to the Theory of Change (ToC), which describes expected project impacts and results, but not its objectives. STAP recommends that the PIF should be revised to include a clear set of objectives for the project and that these should be drafted carefully to ensure that they are consistent with the proposed activities as well as the expected project results and impacts described in the ToC. The project objectives should also be incorporated in the ToC diagram.</p>	<p>Based on the observation, the project's general objective was reviewed and adjusted according to the environmental problem and the components and products that structure it.</p> <p>Likewise, the Theory of Change was revised and expanded, incorporating the main elements that make it possible to outline the focus and structure of the project, including the main objective.</p>

Outcomes

A description of the expected short-term and medium-term effects of an intervention.

Do the planned outcomes encompass important adaptation benefits?

The PIF provides a list of outcomes, which are integrated into a clearly articulated hierarchical framework structure comprising the following elements: **project components, project outcomes and outputs.** However, the language used to articulate the outcomes was not always very clear as in the case of outcome 1.1 and 2.1. The technical narrative provided in sub-section 3 (Proposed alternative scenario with a brief description of the expected results and project components) of Part II (Project Justification) of the PIF gives a good explanation that helps put all outcomes into better context, but the language used to phrase the actual outcomes could still be significantly improved. **STAP recommends** that the language used to phrase the project outcomes should be revised to ensure these are free of jargon and more reflective of the outputs and activities they encompass.

Following STAP's suggestion, the language throughout the document was revised and simplified to ensure correct interpretation. The changes made to the wording of components, outcomes, and outputs can be found in section 8) Summary of changes in the alignment of the project design with the original FIP.

	<p>Are the global environmental benefits/adaptation benefits likely to be generated?</p> <p>Yes, the PIF makes a solid case in support of a range of GEBs, which cut across three of the GEF focal areas (i.e. Biodiversity, Climate Change Mitigation and Land Degradation). However, the language used to describe the GEBs and how they will be achieved was not always very linear and the GEBs could have been described more clearly than they were in the PIF. STAP recommends either a partial rephrasing of the section of the PIF on GEBs (part II/6) or that the GEBs are clearly listed either in a table or as a simple list.</p>	<p>Based on the STAP's observation. The overall environmental benefits were revised and expanded. A table describing the direct project beneficiaries by component/outcome/output as well as the Kunming-Montreal 2030 Performance Targets was also incorporated.</p>
<p>Outputs</p>	<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>Yes, for the whole project as a whole, although the logical flow between some of the outputs and the corresponding outcome(s) was more tenuous in some cases (e.g. outputs 1.1.1 and outcome 1.1; output 2.1.3 and outcome 2.1). We also noticed that the outputs and outcomes were not labelled consistently in the ToC diagram.</p>	<p>According to STAP comments. In drafting the document, special attention was paid to strengthening the flows between outputs and outcomes. Also, outcomes and outputs were incorporated into the Theory of Change.</p>
<p>Part II: Project justification</p>	<p>Is the problem statement well-defined?</p>	<p>In accordance with the suggestion, current sources of information have been used to define the problem, especially in the aspects related to biological diversity. In addition, the information</p>

<p>1. Project description. Briefly describe:</p> <p>1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)</p>	<p>Yes, as already outlined, the problem statement section of the PIF was well-researched and appears to be adequately supported by evidence and data from quoted sources (it should be noted that the references do not appear in the PDF version either as footnotes or as a bibliography). Some of the data sources also need to be updated, e.g. identification of threatened mammals and birds relies on data from 1999-2000 whereas all the species listed in the table have been assessed on the IUCN Red List from 2014-2021.</p>	<p>on environmental pressures and threats was expanded and updated.</p>
	<p>Are the barriers and threats well described, and substantiated by data and references?</p>	<p>The barriers were modified to provide greater clarity. The wording of barrier #1 was modified, and its rationale was expanded. Barriers #2 and #4 were not modified. Finally, barrier #3 was reformulated in its wording, the rationale was modified, and its text was expanded.</p>
<p>2) the baseline scenario or any associated baseline projects</p>	<p>Is the baseline identified clearly?</p>	<p>This section was modified, expanded, and adjusted under the PRODOC GEF format.</p>
<p>3) the proposed alternative scenario with a brief description of expected outcomes and components of the project</p>	<p>Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?</p>	<p>According to STAP's comments, the Theory of Change was modified. The assumptions and drivers of change, among other elements that structure the project, were incorporated in an articulated manner.</p>

	<p>Is there a recognition of what adaptations may be required during project implementation to respond to changing conditions in pursuit of the targeted outcomes?</p>	<p>Based on the observation, this was modified and expanded. Component 4 will focus on ensuring project monitoring, evaluation, and knowledge management for the sustainability and scalability of results. An advocacy plan for sustainability and scalability (project exit strategy) is envisaged. These plans will seek to promote dialogue, trust, and participation so that key stakeholders are aware of the project and take ownership of it and will be aimed at contributing to public policy advocacy and other initiatives that promote the sustainability, replicability, and scalability of the project's experiences and results.</p>
	<p>Is there a clearly-articulated vision of how the innovation will be scaled-up, for example, over time, across geographies, among institutional actors?</p>	<p>The Project seeks to lay the foundations through all its components for the replicability and scaling up of its results.</p>
	<p>Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?</p>	<p>Section 7) Innovation, sustainability, scaling potential, and development capacity describes the concrete possibilities for scaling and sustainability of the project's results. This section also considers the need for the project to combine incremental adaptation and transformational change strategies to ensure its long-term sustainability.</p>
<p>2. Stakeholders. Select the stakeholders that have participated in consultations during the project identification phase: Indigenous people and local communities; Civil Society Organizations (CSO); Private sector entities.</p>	<p>Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?</p>	<p>The list of stakeholders was reviewed and adjusted, clarifying the roles of each actor. For example, STAP has doubts about the relevance of the MPPD in the project. In this regard, it is important to note that it plays a fundamental role since the project will be developed in a border area, so the MPPD is an active actor in the territorial processes of the area, acting as a facilitator, providing security and contributing from its vision to the guidelines for the preparation of the PORU.</p>

<p>5. Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design</p>	<p>Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project's control?</p> <p>Are there social and environmental risks which could affect the project?</p> <p>For climate risk, and climate resilience measures:</p> <p>? 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?</p> <p>? Has the sensitivity to climate change, and its impacts, been assessed?</p> <p>? Have resilience practices and measures to address projected climate risks and impacts been considered? How will these be dealt with?</p> <p>? What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures?</p>	<p>The risk section was reviewed and adjusted. A climate risk analysis was also carried out, concluding that, without the project, the area presents a medium climate risk, while once the project is implemented, the risk would be low.</p>
<p>6. Coordination. Outline the coordination with other relevant GEF-financed and other related initiatives</p>	<p>Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects?</p>	<p>In accordance with STAP's observation, this section was expanded, incorporating experiences of other projects.</p>

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

<p>PPG Grant Approved in the PIF: (\$) 200,000</p>
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<i>Project preparation activities implemented</i>	<i>Amounts GETF/LDCF/SCCF (\$)</i>		
	<i>Amount budgeted</i>	<i>Amount spent to date</i>	<i>Committed amount</i>
5570			
5013 Consultants	138,889	73,279	65,610
5020 Locally Contracted Labour	3,000	0	3,000
5021 Travel	30,385	28,280	2,105
5023 Training	27,726	12,088	15,638
TOTAL ? PPG	200,000.00	113,647	86,353

ANNEX D: Project Map(s) and Coordinates

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

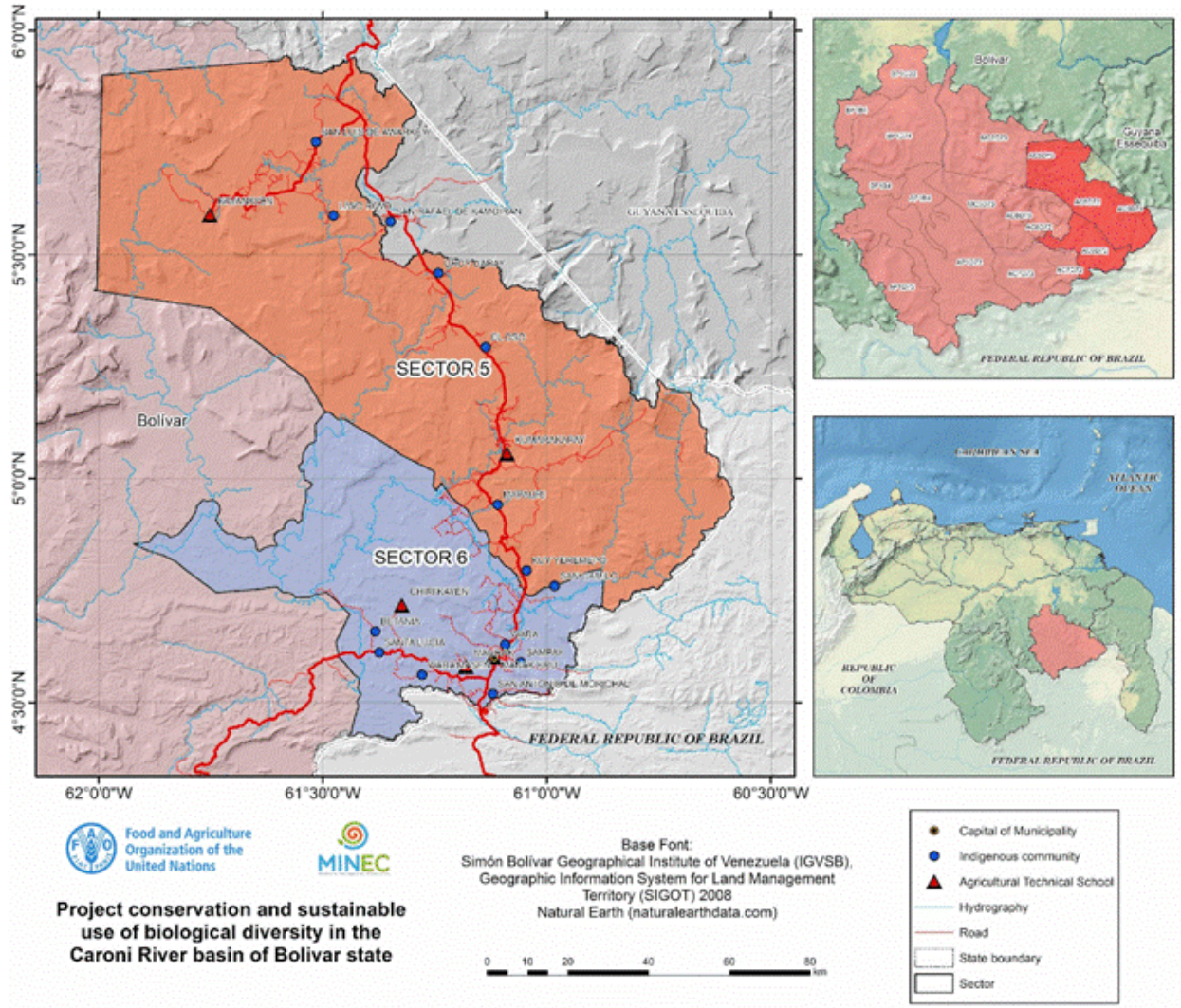


Figure 20. Area of influence and demonstration of the project.

Source: Original elaboration based on Prodoc analysis

ANNEX E: Project Budget Table

Please attach a project budget table.

	Component 1	Component 2	Component 3	Component 4	M&E	PMC	Total (USD eq.)
	Total	Total	Total	Total			
5013 Consultants (5570)							
Restauración y ecología de bosques tropicales	-	4,650					4,650

Especialista en Control y Manejo del Fuego		4,650					4,650
Conservaci?n y manejo del paisaje	4,650	-					4,650
Sub-total internacional Consultants (5542)	4,650	9,300	-	0	0	0	13,951
Project coordinator	-	-	-			188,397	188,397
Asistente Administrativo-Financiero y de Operaciones	-	-	-			150,718	150,718
Especialista en Biodiversidad de Areas Protegidas	5 2,333	52 ,333	52 ,333				156,998
Especialista en Instrumentos de Gesti?n de Areas Protegidas. Componente 1	11 7,750	19 ,624	19 ,624				156,998
Especialista en gestion del conocimiento			-	150 ,718			150,718
Especialista en Monitoreo y Evaluaci?n		-	-	83 ,689	73,309		156,998
Especialista en Género y Pueblos Indígenas	1 0,381	7,785	11 ,729	108 ,263			138,158
Asistente de Comunicaciones	1 0,381	7,785	11 ,729	108 ,263			138,158
Dise?o y mantenimiento de la pagina Web del proyecto		-	-	42 ,039			42,039
Especialista en mecanismos de monitoreo ambiental y geom?tica (sistemas de alertas tempranas)	1 0,276	-	-				10,276
Especialista para Arquitectura de software desarrollo y DevOps para sistemas de monitoreo	3 7,368	-	-				37,368
Especialista para Desarrollo de la APP de levantamiento de Campo	8,221	-	-				8,221

Especialista en Planes de Ordenamiento territorial	-	47,271	-				47,271
Especialista en Levantamiento de los aspectos socioeconomicos y culturales con enfoque de g?nero e interculturalidad, incluyendo el plan de genero.	4 7,271	-	-				47,271
Especialista en Ecologia vegetal, clasificaci?n de tierras, zonificaci?n y cartografia de cobertura y uso de la tierra	4 7,084	-					47,084
Especialista en aspectos jur?dicos y normativos orientado al manejo de ABRAE y temas ambientales	3 0,829	-					30,829
Manejo intercultural biling?e)	4 9,326	-	-				49,326
Especialista en SIG en el ?rea ambiental, cartografia e interpretacion digital de im?genes satelitales	4 9,326	-	-				49,326
Facilitaci?n y manejo para la gobernanza con pueblos indigenas	3 0,829	-	-				30,829
Especialista en Bioinsumo	-	26,718	-				26,718
Especialista en finanzas, econom?a y /o econom?a de recursos naturales y finanzas para la inversion en biodiversidad para la sostenibilidad financiera y el plan financiero de las ABRAE	-	18,497	-				18,497

Especialista en economía ambiental	1 8,497		-				18,497
Especialista en el área de tributos ambientales		12 ,331	-				12,331
Especialista en diseño de sistemas de pago por servicios ambientales	-	20 ,552	-				20,552
Especialista en Manejo Forestal Sustentable y restauración . Componente 2	1 9,624	77 ,850	59 ,523				156,997
Restauración ecológica y silvicultura		49 ,326					49,326
Especialista en Producción de plantas y manejo de viveros forestales y frutales		49 ,326	-				49,326
Técnicos Extensionistas (3) en restauración, Participación comunitaria y pueblos indígenas		87 ,711	-				87,711
Especialista en Manejo y control de incendio forestales		36 ,994	-				36,994
Especialista en Estimación y Monitoreo de carbono en bosques		24 ,663	-				24,663
Especialista en Piscicultura		-	42 ,039				42,039
Especialista en Conservación de la Diversidad Biológica		42 ,039					42,039
Ecología de bosques y sabanas		42 ,039	-				42,039
Especialista en Manejo del fuego en comunidades indígenas		13 ,452	-				13,452
Especialista en ornitofauna para diseño de corredores ecológicos		12 ,331	-				12,331

Especialista en Sistemas productivos y Medios de Vida, Componente 3	1 7,905	14 ,532	124 ,560				156,998
Participaci?n intercultural y comunitaria con enfoque de genero .			36 ,993				36,993
T?cnicos Extensionistas Productos Forestales no maderables y Bioemprendimientos		-	20 ,241				20,241
Especialista en Agricultura sustentable		-	42 ,039				42,039
Especialista en Propagaci?n y Cultivo de especies vegetales amenazadas (Orqu?deas y Bromelias)		-	10 ,276				10,276
Especialista en Etnobotanica y saberes ancestrales		-	24 ,663				24,663
Especialista en Meliponicultura		-	49 ,326				49,326
Especialista en Areas Protegidas		-	49 ,326				49,326
Extensionista en Turismo de base comunitaria		-	35 ,624				35,624
Especialista en Modelo de negocios sustentables en comunidades indigenas		-	21 ,487				21,487
Especialista en Salvaguardas Ambientales			9,342				9,342
Especialista en aspectos legales y juridicos para conformaci?n de asociaciones y cooperativas		-	10 ,276				10,276
Creaci?n de cajas rurales		-	20 ,552				20,552

Consultor para Dise?o y elaboraci?n de material audiovisual (Videos, material de difusi?n)		-	-	30,829			30,829
Traductor		-	-	20,760			20,760
Mid-Term Review (MTR)		-	-		41,520		41,520
Final Report		-	-		6,650		6,650
Final Evaluation (FE)		-	-		72,912		72,912
Sub-total national Consultants (5543)	557,399	663,160	651,681	544,561	194,391	339,115	2,950,307
5013 Totalconsultants (5570)	562,049	672,461	651,681	544,561	194,391	339,115	2,964,258
5014 Contracts (5650)	0						
Implementaci?n de planes y estrategias de restauraci?n en bosques, morichales y sabanas (reforestaci?n, sistemas agroforestales, patios productivos)		450,000					450,000
Cartografia y levantamiento de informaci?n de depositos de carbono	100,000	-					100,000
Levantamiento de informaci?n socioeconomica, cultural , aspectos fisico- ambientales de las 5 ABRAE e informaci?n de servicios ecosistemicos de la biodiversidad con enfoque de g?nero e interculturalidad	150,000	-					150,000

Capacitaci?n servicios ecoturísticos a las comunidades indígenas y promoci?n de los servicios que ofrecen dichas comunidades con enfoque de género e interculturalidad	-	480,000				480,000
Dise?o e implementaci?n del programa de control de incendios forestales y manejo del fuego en comunidades indígenas	350,000	0				350,000
Producci?n de plantas forestales frutales y silvestres en viveros comunitarios y en las escuelas t?cnicas	300,000	150,000				450,000
Implementaci?n de planes socio productivos en los sectores 5 y 6 con enfoque de género e interculturalidad	-	200,000				200,000
Capacitaci?n y manejo t?cnico de datos espaciales generados por los satélites generados por los sat?lites venezolanos de percepci?n remota	200,000	-	0			200,000
Implementaci?n del programa del fortalecimiento de capacidades institucionales en temas relacionados con la gesti?n integrada del paisaje con enfoque de género e interculturalidad.	250,000	-	0			250,000

Implementaci?n de ferias gastron?micas y promoci?n de los productos PFM elaborados por las comunidades con perspectiva de g?nero e interculturalidad	-	200,000				200,000
Acondicionamiento del mercado local indigena para la venta de productos tradicionales producidos por las comunidades indigenas	-	129,820				129,820
Socializaci?n, promoci?n y acuerdos de gobernanza de los PORU	100,000	0				100,000
Estudios de bioprospecci?n de PFM	-	25,000				25,000
Monitoreo y registro de informaci?n hidrometeorol?gica e hidrol?gica	100,000	0				100,000
Implementaci?n del programa de capacitaci?n de comunidades indigenas e intercambio de saberes con enfoque de g?nero	-	0	200,000			200,000
Dise?o e implementaci?n de jornadas de aprendizaje sobre el valor de la biodiversidad en la Cuenca del Rio Caroni, con enfoque intercultural y de g?nero.	100,000	0				100,000

Reacondicionamiento y equipamiento del centro de Guarda Parques en la comunidad de Paraitepuy de Roraima como apoyo al Programa del Manejo Integral del fuego y al Turismo.		100,600					100,600
Costos del Sistema de Gestión de Riesgos Ambientales y Sociales (SGAS)					10,390		10,390
Fortalecimiento y equipamiento del Centro de Operaciones Aponwao de INPARQUES;		-	120,000				120,000
5014 Sub-total Contracts (5650)	800,000	1,400,600	1,304,820	200,000	10,390	0	3,715,810
5021 Travel (5900)	0						
International travel consultants	9,000	9,000	9,000				27,000
Local travel	28,354	45,000	100,000	100,000			528,540
5021 Sub-total travel (5900)	29,254	54,000	109,000	100,000	-	-	555,540
5023 Training (5920)	0						
Taller sobre manejo de datos geoespaciales hidrometeorológicos, hidrológicos	15,000	-					15,000
Taller sobre gestión datos, de servicios ecosistémicos para la planificación, desarrollo y seguimiento de la biodiversidad	15,000	-					15,000
Talleres de capacitación en el monitoreo de las áreas quemadas mediante imágenes de sensores remotos	15,000	-					15,000

Talleres de capacitaci?n en el monitoreo de las unidades de paisaje para determinar la din?mica de los ecosistemas, la diversidad biol?gica y el balance de carbono	15,000	-					15,000
Talleres de capacitaci?n en estimaci?n de flujos y stocks de GEI por cambios de uso de la tierra	15,000	-					15,000
Taller para el manejo y conservaci?n de la Flora y la Fauna nativa de la Cuenca del r?o Caron?	10,000	-					10,000
Taller para la aplicaci?n de mecanismos de monitoreo de la diversidad biol?gica	10,000	-					10,000
Taller sobre medidas de mitigaci?n y adaptacion ante el cambio clim?tico, para la biodiversidad	10,000	-					10,000
Taller para Coordinaci?n interinstitucional y gobernanza para la gesti?n ambiental en ABRAE	10,000	-					10,000
Taller para Ordenaci?n y planificaci?n territorial, uso de herramientas para el an?lisis (marco l?gico, ?rbol de problemas, causa efecto, teoria del cambio aplicada a la planificaci?n de recursos naturales)	10,000	-					10,000

Talleres de Herramientas para la restauraci?n, conservaci?n y manejo de bosques degradados	10,000	-					10,000
Taller sobre valoraci?n econ?mica de bienes y servicios ambientales,	10,000	-					10,000
Taller sobre mecanismos de sostenibilidad financiera para la gesti?n de las ?reas protegidas con enfoque de g?nero e interculturalidad		10,000					10,000
Talleres de capacitaci?n para la restauraci?n y preservaci?n de los bosques y morichales con enfoque de g?nero e interculturalidad		10,000					10,000
Talleres de capacitaci?n para el manejo de sistemas agroforestales con enfoque de g?nero e interculturalidad		10,000					10,000
Talleres de capacitaci?n para la recuperaci?n de las ?reas degradadas por miner?a		10,000					10,000
Talleres de capacitaci?n de manejo del fuego en comunidades indigenas		19,000					19,000
Talleres de capacitaci?n de operaciones, prevenci?n y control de incendios forestales		10,000					10,000

Talleres-foros de socializaci?n e intercambios de saberes entre comunidades indigenas de distintos espacios territoriales		-		40,000			40,000
Talleres de intercambios a nivel indigenas		-		10,000			10,000
Talleres de taxonom?a b?sica y parataxonom?a; reconocimiento e identificaci?n de ?rboles; reconocimiento y manejo de la fauna silvestre, monitoreo comunitario de la diversidad biol?gica	10,000	-					10,000
Capacitaci?n integral para las comunidades ind?genas en la conservaci?n de la biodiversidad	10,000	-					10,000
Capacitaci?n con enfoque de g?nero: corresponsabilidad en los cuidados e interculturalidad, autoestima, autocuidado y empoderamiento, violencia basada en g?nero (VBG).	10,000	-					10,000
Talleres de Estrategias para la participaci?n social (toma de decisiones, facilitaci?n de di?logos para la resoluci?n pac?fica de conflictos, otras herramientas como oratoria, redacci?n	10,000	-					10,000

Capacitaci?n en comunicaci?n y producci?n audiovisual (fotograf?a, ilustraci?n/c?mics, manejo de redes sociales) con perspectiva tur?stica, intercultural y de g?nero.		-		9,000			9,000
Talleres-foros e intercambios entre comunidades indigenas de otras localidades		-		30,000			30,000
Talleres sobre los planes de negocio y ?reas de contabilidad y de administraci?n de microempresas	10,000	-					10,000
Talleres sobre aprovechamiento de PFNM y Bioemprendimientos con enfoque de g?nero e interculturalidad	10,000	-					10,000
Talleres participativos, para la integraci?n y planificaci?n del aprovechamiento ecotur?stico dirigida a los prestadores de servicios ecotur?sticos de las comunidades ind?genas y locales	10,000	-					10,000
Talleres de Capacitaci?n sobre monitoreo participativo para el control y vigilancia participativo de amenazas ambientales	10,000	-					10,000

Talleres de capacitaci?n en manejo de plantas ornamentales nativas en viveros, y manejo de abejas nativas sin aguij?n (ANSA);	10,000	-					10,000
Talleres para el manejo acuicola	10,000	-					10,000
Startup Workshop and project startup report		-			35,000		35,000
Talleres anuales de planificaci?n/mesa redonda con actores y socios/incidencia politica y promoci?n de resultados		-		50,000			50,000
Taller de cierre del proyecto		-		40,000			40,000
5023 Sub-total training (5920)	245,000	69,000		179,000	35,000	0	528,000
5024 Expendable procurement (6000)							
Suministro e insumos de gabinete	8,000	6,000	6,000	7,000			27,000
Dise?o, edici?n, impresion documentos t?cnicos		-	20,000	20,000			40,000
Herramientas y materiales de construcci?n	8,000	8,000	36,000	0			52,000
Herramientas Agr?colas	45,000	40,000	15,000	0			100,000
Publicaci?n de lecciones y experiencias del proyecto.		-	0	50,000			50,000
Suministro de materiales y equipos para las actividades de campo	12,000	40,000	10,000	0			62,000
plantas y semillas, envases de poletileno		150,000	30,000	0			180,000
Equipamiento para formaci?n de brigadas contra incendios		100,000	50,000	0			150,000

Establecimiento sistemas locales de agroforesteria	5,000	45,000	0	0			50,000
Otros suministros de campo	22,832	55,120	9,908	0			87,860
Suministro alimentos acuicultura		-	20,000	0			20,000
5024 Sub-total expendable procurement (600)	100,832	444,120	196,908	77,000	0	0	818,860
5025 Non-expendable procurement (610)			0				
Equipos Unidad de gest?on del Proyecto	20000	20,000	5000				45,000
Computadoras, Laptops y Perif?ricos	8000	8,000	4000	4,000			24,000
Equipos para datos hidrol?gicos e hidrometereologicos	0	-	17450				17,450
Mobiliario de oficina de campo	14000	16,500	12000	4,000			46,501
5025 Sub-total Non-expendable procurement (610)	2,000	44,500	38,450	8,000	-	-	132,951
5030 - CASH AND FINANCIAL ASSISTANCE							
Subsidios Beneficiarios Directos		-	50,000				50,000
5030-Sub-Tota ICASH AND FINANCIAL ASSISTANCE	-	-	50,000	-	-	-	50,000
TOTAL	2,042,421	2,684,681	2,350,859	1,108,561	239,781	339,115	8,765,418

ANNEX F: (For NGI only) Termsheet

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

N/A

ANNEX G: (For NGI only) Reflows

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

N/A

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

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies' capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).

N/A