



## Development of an enabling environment for sustainable businesses based on the native biodiversity of Ecuador

### Part I: Project Information

**GEF ID**

10219

**Project Type**

FSP

**Type of Trust Fund**

GET

**CBIT/NGI**

CBIT

NGI

**Project Title**

Development of an enabling environment for sustainable businesses based on the native biodiversity of Ecuador

**Countries**

Ecuador

**Agency(ies)**

CAF

**Other Executing Partner(s)**

**Executing Partner Type**

**Other Executing Partner(s)**

Ministry of Environment of Ecuador

**Executing Partner Type**

Government

**GEF Focal Area**

Biodiversity

**Taxonomy**

Focal Areas, Biodiversity, Species, Wildlife for Sustainable Development, Mainstreaming, Agriculture and agrobiodiversity, Financial and Accounting, Conservation Finance, Influencing models, Transform policy and regulatory environments, Stakeholders, Private Sector, Financial intermediaries and market facilitators, SMEs, Gender Equality, Gender Mainstreaming, Beneficiaries, Capacity, Knowledge and Research, Learning, Theory of change

**Rio Markers****Climate Change Mitigation**

Climate Change Mitigation 0

**Climate Change Adaptation**

Climate Change Adaptation 1

**Duration**

48 In Months

**Agency Fee(\$)**

280,734

**Submission Date**

10/11/2019

**A. Indicative Focal/Non-Focal Area Elements**

<b>Programming Directions</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
BD-1-1	GET	3,119,266	20,500,000
	<b>Total Project Cost (\$)</b>	<b>3,119,266</b>	<b>20,500,000</b>

**B. Indicative Project description summary**

**Project Objective**

Ecuador has basic conditions that facilitate the development of businesses that sustainably use native biodiversity

<b>Project Component</b>	<b>Financing Type</b>	<b>Project Outcomes</b>	<b>Project Outputs</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
--------------------------	-----------------------	-------------------------	------------------------	-------------------	-----------------------	--------------------------

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Enabling conditions for the development of sustainable businesses based on native biodiversity	Technical Assistance	<p data-bbox="510 331 779 544">Outcome 1. Institutional arrangements that support the development of businesses based on the sustainable use of native biodiversity.</p> <p data-bbox="510 576 779 791">Outcome 2. Improved capacities for the development of sustainable value chains based on native biodiversity</p>	<p data-bbox="815 331 1173 432">1.1. Environmental regulations that facilitate the sustainable use of native biodiversity.</p> <p data-bbox="815 464 1173 639">1.2. Relevant norms and regulations that support the development of businesses based on the sustainable use of native biodiversity.</p> <p data-bbox="815 671 1173 847">1.3. Interagency coordination mechanism for the promotion of businesses based on the sustainable use of native biodiversity</p> <p data-bbox="815 879 1173 1015">2.1. Baseline and information integration of business initiatives based on the sustainable use of native biodiversity.</p> <p data-bbox="815 1046 1173 1150">2.2. Guidelines to promote businesses based on native biodiversity</p> <p data-bbox="815 1182 1173 1398">2.3. Mechanism for capacity building and business support based on (i) self-directed online courses and (ii) technical assistance and mentoring to harness business development.</p> <p data-bbox="815 1430 1173 1562">2.4. Applied research in support of promissory business initiatives based on the sustainable use of native biodiversity</p>	GET	717,625	5,000,000

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
2. Increase availability of financing	Technical Assistance	Outcome 3. Financial mechanisms and instruments in support of business ventures based on the sustainable use of native biodiversity	3.1. Analysis of market-demand for sustainable products from native biodiversity 3.2. Green financing lines for businesses based on native biodiversity	GET	1,650,000	11,000,000
3. Demonstration pilot interventions	Technical Assistance	Outcome 4. Optimised demonstration sustainable supply chains	4.1. Three optimised demonstration supply chains (community, public-private, private models) 4.2. Learning and good practice from demonstration sustainable supply chains	GET	603,105	4,000,000
<b>Sub Total (\$)</b>					<b>2,970,730</b>	<b>20,000,000</b>
<b>Project Management Cost (PMC)</b>						
				GET	148,536	500,000

**Project Management Cost (PMC)**

---

**Sub Total(\$)**

**148,536**

**500,000**

---

**Total Project Cost(\$)**

**3,119,266**

**20,500,000**

**C. Indicative sources of Co-financing for the Project by name and by type**

<b>Sources of Co-financing</b>	<b>Name of Co-financier</b>	<b>Type of Co-financing</b>	<b>Investment Mobilized</b>	<b>Amount(\$)</b>
Government	Government of Ecuador	In-kind	Recurrent expenditures	13,000,000
Private Sector	National financial institutions	Loans	Investment mobilized	3,000,000
Beneficiaries	To be defined during PPG	In-kind	Recurrent expenditures	3,000,000
GEF Agency	CAF	Loans	Investment mobilized	1,500,000
			<b>Total Project Cost(\$)</b>	<b>20,500,000</b>

**Describe how any "Investment Mobilized" was identified**

[1] It was identified that the government of Ecuador through several agencies (e.g., ministries of environment, production and foreign trade) will be able to contribute through a range of ongoing initiatives (recurrent expenditures). [2] The present project includes the development of specific credit lines to support biodiversity-based businesses (output 3.2) and a revolving fund to finance applied research and development (output 3.3). National financial institutions (e.g., Banco del Pacífico, Banco Pichincha, CORPEI Capital) and CAF will support the development of these credit lines with matching funds. This project will invest GEF resources to catalyse that financial institutions facilitate credit lines. CAF will mobilise resources to ease access to the new credit lines. [3] Beneficiaries will contribute in several forms like cost-sharing of training activities, loan match and direct in-kind contributions. [4] During project preparation executing partners will be identified and confirmed (e.g., IUCN, CORPEI Capital) and the indicative co-financing will be reviewed and further developed.



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

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
CAF	GET	Ecuador	Biodiversity	BD STAR Allocation	3,119,266	280,734	3,400,000
<b>Total GEF Resources(\$)</b>					<b>3,119,266</b>	<b>280,734</b>	<b>3,400,000</b>

**E. Project Preparation Grant (PPG)**

**PPG Amount (\$)**

100,000

**PPG Agency Fee (\$)**

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>	
CAF	GET	Ecuador	Biodiversity	BD STAR Allocation	100,000		<b>100,000</b>	
					<b>Total Project Costs(\$)</b>	<b>100,000</b>	<b>0</b>	<b>100,000</b>

**Core Indicators****Indicator 3 Area of land restored**

<b>Ha (Expected at PIF)</b>	<b>Ha (Expected at CEO Endorsement)</b>	<b>Ha (Achieved at MTR)</b>	<b>Ha (Achieved at TE)</b>
-----------------------------	---	-----------------------------	----------------------------

0.00	0.00	0.00	0.00
------	------	------	------

**Indicator 3.1 Area of degraded agricultural land restored**

<b>Ha (Expected at PIF)</b>	<b>Ha (Expected at CEO Endorsement)</b>	<b>Ha (Achieved at MTR)</b>	<b>Ha (Achieved at TE)</b>
-----------------------------	---	-----------------------------	----------------------------

--	--	--	--

**Indicator 3.2 Area of Forest and Forest Land restored**

<b>Ha (Expected at PIF)</b>	<b>Ha (Expected at CEO Endorsement)</b>	<b>Ha (Achieved at MTR)</b>	<b>Ha (Achieved at TE)</b>
-----------------------------	---	-----------------------------	----------------------------

--	--	--	--

**Indicator 3.3 Area of natural grass and shrublands restored**

<b>Ha (Expected at PIF)</b>	<b>Ha (Expected at CEO Endorsement)</b>	<b>Ha (Achieved at MTR)</b>	<b>Ha (Achieved at TE)</b>
-----------------------------	---	-----------------------------	----------------------------

--	--	--	--

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

<b>Ha (Expected at PIF)</b>	<b>Ha (Expected at CEO Endorsement)</b>	<b>Ha (Achieved at MTR)</b>	<b>Ha (Achieved at TE)</b>
-----------------------------	---	-----------------------------	----------------------------

--	--	--	--

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

<b>Ha (Expected at PIF)</b>	<b>Ha (Expected at CEO Endorsement)</b>	<b>Ha (Achieved at MTR)</b>	<b>Ha (Achieved at TE)</b>
-----------------------------	---	-----------------------------	----------------------------

7000.00	0.00	0.00	0.00
---------	------	------	------

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

<b>Ha (Expected at PIF)</b>	<b>Ha (Expected at CEO Endorsement)</b>	<b>Ha (Achieved at MTR)</b>	<b>Ha (Achieved at TE)</b>
-----------------------------	---	-----------------------------	----------------------------

7,000.00			
----------	--	--	--

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

Ha (Expected at PIF)

Ha (Expected at CEO Endorsement)

Ha (Achieved at MTR)

Ha (Achieved at TE)

Type/Name of Third Party Certification

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

Ha (Expected at PIF)

Ha (Expected at CEO Endorsement)

Ha (Achieved at MTR)

Ha (Achieved at TE)

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

Ha (Expected at PIF)

Ha (Expected at CEO Endorsement)

Ha (Achieved at MTR)

Ha (Achieved at TE)

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

Title

Submitted

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

Number (Expected at PIF)

Number (Expected at CEO Endorsement)

Number (Achieved at MTR)

Number (Achieved at TE)

Female

2,500

Male

2,500

Total

5000

0

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

The area correspond to the sites were the pilots operate. This corresponds to areas within and outside protected areas. Mortiño is collected inside protected areas (Cotacachi – Cayapas is the protected area where the pilot will intervene) and in private farming land. Caña guadua is found in areas of small farmers / communal land and plantations; plantations account for ca., 2,700 ha. During project preparation the areas that will be linked to the project will be mapped.

## Part II. Project Justification

### 1a. Project Description

#### Global environmental problem

1. Ecuador is one of the 17 megadiverse countries of the world. It has a total land surface of 257,217.08 km<sup>2</sup> which accommodate 91 types of continental ecosystems (MAE, 2013) and is part of the Tumbes – Chocó – Magdalena and the Tropical Andes Biodiversity Hotspots (Myers et al., 2000; Mittermeier et al., 2005).
  2. It has long been recognised that biodiversity is a strategic resource for the country (Ecuador’s constitution article 313) (MAE, 2001; MAE, 2016). Native biodiversity has long sustained the economic and social systems. For example, (1) native potatoes and Andean roots and tubers have long maintained the livelihood of rural communities, (2) cocoa (*Theobroma cacao*), whose centre of origin is in Ecuador (Zarrillo et al., 2018), was the basis of an economic boom in the early 1900, and (3) cultivation and export of native shrimps currently represent ca., USD3,000 million per year.
  3. There have been significant advances to conserve native biodiversity. For example, the 2008 constitution recognized the rights of nature (articles 71 to 74) (Pietari, 2016), environmental regulations were recently updated through the Organic Code of the Environment of 2017 (COA) and a programme to offer economic incentives to land owners to conserve native forest has been established (Socio Bosque Programme). However, loss of biodiversity continues to be a severe problem. The main drivers are habitat change (degradation, transformation), pollution and overexploitation.
  4. Part of the strategy to address biodiversity loss has been to promote that the population recognise its value and the benefits derived from its sustainable use (MAE, 2001; MAE, 2016). Two important factors have been (i) bringing to the market new products and services based on native biodiversity and (ii) the global trend of market transformation.
  5. A range of new products are now in the market, like BIRM an immune response modulator produced from extracts of Amazonian plants (Dandekar et al., 2003; Ravalji et al., 2015; Gallmeir, 2017), chips from Andean potatoes, Guayasa (*Ilex guayusa*) tea (Crespo, 2013; Villacis, 2017), and commercially bred live frogs and toads for the international pet market (Anon, 2017; Gibbens, 2017).
  6. International markets are changing. In past decades there has been a sustained trend of demanding products and services from sustainable and responsible sources. This has motivated that supply chains mainstream environmental and social good practice and sustainability certification. Consequently, a range of Ecuadorian local and export businesses have certified their products and services. Along these lines, Ecuador has adopted a national policy for export of green products<sup>[1]</sup> (MCE, 2016) and fair trade as a national policy (Ministerial Agreement 3 published in the National Registrar 945 of 10 March 2017), and has included bioeconomy in the national development plan (SENPLADES, 2017).
-

7. Over the years, local entities and international cooperation have promoted the development of biodiversity-based businesses. A key milestone was the Andean biotrade project[2]<sup>2</sup> which added to catalyse businesses that simultaneously contribute to biodiversity conservation and to generate wealth and opportunities for local producers (CAF, 2015). However, new initiatives from individuals and small and middle-sized businesses face strong difficulties to initiate and endure. Consequently, damaging practices prevail like (i) overharvest of wildlife (e.g., native plants from the Amazon, mortiño from paramos and protected areas, fish and frogs for the pet market) and (ii) replace natural areas with marketable crops and monocultures (e.g., African palm oil).

### **Main problem**

8. This project proposal focusses on the global problem of biodiversity loss in Ecuador which is caused by habitat deterioration and destruction, overexploitation and unsustainable use, pollution from a range of sources, invasive alien species, and climate variability and climate change. To address this complex scenario requires a comprehensive approach. An element of this long-term strategy is fostering sustainable biodiversity-based businesses. This action is mainstreamed along the national biodiversity strategy (MAE, 2016) and the Ministry of Environment (MAE) in collaboration with other public entities has been advocating the development of “bioemprendimientos” (bioendeavours). The long-term goal of the Ecuadorian government is that the national economy changes to be based, as much as possible, on the sustainable use of native biodiversity.

9. The main problem to advance on this direction is a limited enabling environment, which restrains the development and strengthening of businesses based on the sustainable use of native biodiversity.

### **Root causes**

10. The root causes of this problem are:

i. Regulation gaps that limit sustainable commercial use of native biodiversity. The existing environmental regulations are primarily focused on protecting nature and biodiversity. Requesting permission to use non-traditional biodiversity resources generally is a complex matter in which often there are no clear procedures to follow. The same occurs in other fields, that cannot deal with unforeseen situations (e.g., permits to farm insects). The most common answer is to deny authorisations, this in turn contributes to the development of illegal practices.

ii. Limited knowledge of the situation of wildlife. There is limited information about the ecology and population status of most biodiversity resources. Therefore, MAE cannot easily approve requests to use native biodiversity for commercial purposes and, based on uncertainty, mostly postpone approval until sufficient information is available.

iii. The public sector is not focused on the promotion of sustainable ventures based on native biodiversity. The present support to develop sustainable businesses is centred on mainstreaming good practices into existing enterprises, for example certification of seafood, aquaculture and coffee production or to foster production of organic chocolate. New biodiversity-based business ideas have difficulties to obtain support in the present institutional government structure. MAE is advocating the development of this kind of enterprises but does not have a specialized unit or group to address biodiversity business issues.

iv. Limited access to financing for biodiversity businesses. Financial institutions consider this type of new enterprises as high-risk and therefore new biodiversity-based businesses have serious difficulty to access credit. Some Ecuadorian banks have established “green credit lines” but these are focused on more conventional needs like energy-efficient home appliances and machinery.

v. Preconception that biodiversity-based businesses should be small-scale artisanal enterprises based on associative or community business models. Development assistance, non-governmental organizations and public institutions have long stimulated sustainable enterprises, but their main focus for conservation-related businesses has been small family or associative activities in rural areas to fight poverty. Typical enterprises have been the production of honey, marmalade, handicrafts, or native fruits. However, there is large evidence that these conservation-oriented businesses mostly fail after external assistance ceases, because fundamental barriers are not sufficiently addressed (e.g., market access). Business oriented endeavours (which might be one entrepreneur or a small company) are usually out of the scope of technical assistance and support from development and conservation support.

vi. Applied research is expensive and inaccessible to small and medium producers. New biodiversity-based enterprises need to develop knowledge and production methods, like domestication of wild animals and plants, development of specialised machinery or improving production processes. Government funded research agencies and universities do not invest in this kind of business-oriented research and there are no credit lines to finance research and development activities in non-traditional fields. Consequently, entrepreneurs must depend mostly on empirical evidence and trial and error. This in turn, limit business development.

vii. Insufficient business-oriented organization of producers. Entrepreneurs usually are reluctant to share their ideas and knowledge and to collaborate with other businesses (there are several cultural and organizational barriers). Also, community organisations of producers generally lack business skills. These factor limit clustering, development of collaborative supply chains and scaling-up.

viii. Limitations on supply and demand. In some cases, new products have no demand and face the challenge of developing the market, which is very difficult task for small start-ups. In other cases, there is high demand (e.g., exotic pets, shark fins) which incentive overexploitation and bad practices.

#### **Main barriers that need to be addressed**

11. The main barriers that limit the development of sustainable biodiversity-based businesses in Ecuador are:

##### **Barrier 1. Biodiversity is not yet fully considered a strategic resource.**

12. There are several documents that propose opportunities to take advantage of native biodiversity (Onore, 1997; Ríos et al., 2007; Ríos et al., 2008; Vasco et al., 2008; Alvarez, 2012; Costa-Neto, 2015; Gutiérrez et al., 2015; Jadán et al., 2015). Even the national research agenda on biodiversity (INABIO, 2017) includes as an objective to study the potential use of flora and fauna for different purposes like cosmetics, food and nutraceuticals (objective 3.2). However, when commercial enterprises are proposed, there is apprehension and even opposition to new forms of direct use of native biodiversity.

##### **Barrier 2. Environmental regulations have a restrictive approach focused mainly on protection of biodiversity.**

13. The present environmental regulations do not consider non-traditional or new uses of biodiversity. For example, there are several groups that harvest mortiño<sup>[3]</sup> (*Vaccinium meridionale*) from protected areas. But, formalising this activity has turned complicated, because of legal gaps and ambiguities that prevent issuing proper permits.

**Barrier 3. Existing policies and regulations do not facilitate the development of biodiversity-based businesses.**

14. Ecuador has complex regulations (e.g., labour and taxes) that, in general, limit the development of start-ups. The World Bank's Ease of Doing Business Score rank Ecuador 123 out of 190 countries analysed (World Bank, 2019). Within Latin America and the Caribbean, Ecuador is number 21 out of 32. It was estimated that in 2017 Ecuadorian businesses had to dedicate 17 weeks per year to process and pay taxes. In addition, Lasio et al., (2018) found that ninety percent of new businesses close within two years.

15. Because biodiversity-based businesses are small and make a small contribution to the national economy, government entities and the finance sector do not give them sufficient relevance (prefer to give attention to well-developed industries like shrimp farming and cocoa production) and do not comprehend (i) how this new type of businesses function, (ii) the linkages of their supply chains which can be cumbersome, and (iii) their potential economic and social value. Current public policies and regulations are not adjusted and coordinated to incentive the development of biodiversity-based businesses.

**Barrier 4. Lack of information about existing production incentives.**

16. In the past years new laws were developed to incentive production and investments<sup>[4]</sup>. Specialised entities like the Ministry of Industries and Productivity and the Corporation for the Promotion of Exports and Investments (CORPEI) consider that, in general, start-ups do not realise and take advantage of the range of tax benefits and incentives that are available.

**Barrier 5. There are no suitable financial instruments for entrepreneurship or start-ups with high uncertainty.**

17. 1. As mentioned before, bio-endeavours new enterprises are considered high-risk and have very limited access to credit. In general, this is a main limitation for start-ups. Entrepreneurs indicate that the main reason of business failure is access to credit (Lasio et al., 2018). In addition, existing green credit lines are focused on energy efficiency and clean energy production. The Andean biotrade project channelled some financial resources to mobilise support to production ventures, but it had little impact in the availability of credit for this kind of businesses.

**Barrier 6. Emerging supply chains have difficulties to develop and mature.**

18. Biodiversity- based businesses tend to have fragmented supply chains, facing difficulties to find adequate suppliers, intermediaries and distributors. Communication, cooperation and coordination among supply chain partners is weak, which contributes to development and integration problems in the supply chains.

**Barrier 7. Lack of advice and support.**

19. In general, entrepreneurs have limited access to advice and support to initiate and develop their businesses.

---



## 2) the baseline scenario and any associated baseline projects

20. Without an intervention to address existing limitations it is unlikely that biodiversity-based sustainable businesses develop and contribute to overcome key environmental pressures like land use change, pollution and overexploitation. The Andean biotrade project made significant contributions, but since (i) many of the businesses that benefited from it have not endured or been able to expand, and (ii) the enabling environment has not improved.

21. Significant elements of the present scenario are:

[1] There are ongoing efforts to foster entrepreneurship. For example:

- The “Alliance for Entrepreneurship and Innovation of Ecuador” (AEI) was established 2014 with support of CAF and UNCTAD and since has launched a strategy to develop an ecosystem of entrepreneurship and innovation (AEI, 2014), a platform to support entrepreneurship development, and a proposal of an organic law of promotion for entrepreneurship and innovation.
- Some municipalities have established programmes to foster business development like Quito (economic development agency ConQuito) and Guayaquil (centre for entrepreneurship and innovation Guayaquil Emprende).
- The Ministry of Industry and Productivity in collaboration with local governments have established Centres for Business Development and Support for Entrepreneurship across the country. These centres provide training and technical assistance for business development.

However, this kind of platforms are general and cannot cover all the needs at the country level.

[2] Green financing lines exist, but they do not include biodiversity-based businesses. Traditional credit lines consider this type of enterprises to be high-risk. At the regional level, IFC (2017) found that banks’ priorities for the development of green products are sustainable agriculture and energy. Banks that offer green products mostly channel resources to sustainable agriculture and concentrate on traditional crops (main targets are coffee and sugar cane).

Among the green financial products offered by financial entities are:

- Banco Bolivariano – Green credit, that finances the purchase of energy efficient air conditioning, solar panels and hybrid solar systems to generate electricity.
- ProCredit Bank – EcoCredit that finances energy efficiency measures (e.g., high efficiency machinery), renewable energy resources (e.g., solar panels) and environmentally friendly measures (e.g., wastewater treatment systems). Ecocredit received funds from The Andean biotrade project (GEF ID 2391) to finance biotrade projects in Ecuador<sup>[6]</sup>, it was a pilot with a limited amount of resources (USD500,000 credit line).
- Produbanco - Green Lines that finances energy efficiency and clean technologies.
- Mutualista Pichincha – “Credito hipotecario SEA" and "Crédito al Constructor SEA", that finance green constructions to home buyers and constructors (constructions with sustainable building certification SEA).

- Banco Pichincha – Biorcrédito that finance energy-efficient vehicles (e.g, hybrid, electric), purchase or build of green constructions (with green building certification like EDGE or LEED).

- EcoMicro programme which has just started to work in Ecuador. EcoMicro is a regional technical cooperation programme to mainstream environmental dimensions in microfinance (green microfinance). It is a joint initiative of the Inter-American Development Bank, Global Affairs Canada, and the Nordic Development Fund. The focus is sustainable low-cost energy (e.g., solar panels) and technologies for adaptation to climate change (e.g., water reservoirs, solar water pumps). In Ecuador, EcoMicro will channel USD17 million in credit to farmers, between 2019 and 2021, through the Network of Development Financial Institutions (RFD).

Other banks are developing green lines. For example, Banco del Pacífico with CAF’s collaboration is developing green credit lines to be available by the end of 2019. Banco del Pacífico also has a credit line for entrepreneurs<sup>[7]</sup><sup>6</sup> (persons and small enterprises) which is backed by the National Financial Corporation’s National Guarantee Fund<sup>[8]</sup><sup>7</sup> (NGF). The NGF is a tool to facilitate the delivery of loans to micro, small and medium-sized businesses that do not have sufficient collateral to support an operation in the formal financial system; the fund acts as a joint and several guarantor. The National Guarantee Fund cover credit from 16 banks and cooperatives (including ProCredit and Banco del Pacífico). The NGF has priority products and supply chains: processed cocoa, processed coffee, processed seafood, dairy products, oil derivatives, metalworking, chemicals and pharmaceuticals, paper and cardboard, plastics and rubber, information technology, tourism, logistics, processed farm products, clothing, manufacture of footwear and leather goods, and furniture manufacturing.

[3] There are no government- funded initiatives aimed at the development of biodiversity-based businesses.

22. The project includes intervention on three ongoing businesses (component 3). The baseline situation of these endeavours is found in paragraphs 42 to 45. These small businesses generate positive contributions to biodiversity conservation but struggle to maintain their operation because of the existing enabling conditions.

(i) Mortiño is a wild endemic plant collected in the Andean paramos that is subject to overharvesting due to increasing demand. It is an open access resource and several groups collect the berries from protected areas, open areas and private land. Sumak Mikuy applies self-imposed harvest strategies to sustain their production and want that their products be recognised in the market as originated from a sustainable source. But legal gaps prevent that the Ministry of Environment issue harvest permits and recognise sustainable harvest strategies.

(ii) Andean frogs are threatened by illegal harvesting and trade for the international pet market. Wikiri produce captive bred frogs that are sold to supply the growing international demand for exotic pets. But they face several barriers including the issuing of export permits and funding to support research on reproduction and raising in captivity of other frog species.

(iii) The caña guadua has important ecological functions like water cycle regulation and carbon sequestration. Makisami is using caña guadua leaves to produce plates that replace one-use plastics and the Ecuadorian branch of International Bamboo and Rattan Organisation (INBAR) is producing construction materials. However, they struggle to access credit for applied research (e.g., development of tailor-made machinery), working capital and machinery.

### **Baseline projects**

23. There is valuable national and regional experience to build upon. The Andean biotrade project (GEF ID 2391) generated significant lessons that will be useful for the present project. Another project that has important lessons is “climate, biodiversity and sustainable development” (ProCamBío) (implemented between 2013 and 2016) which addressed valorisation of biodiversity and worked with producers on preservation of critical ecosystems and climate-resilient production systems.

24. The following projects are relevant to the present proposal:

- Increasing resilience to climate change through the protection and sustainable use of fragile ecosystems – ProCamBío II, to be implemented between 2017 and 2020 and funded by the German Federal Ministry for Economic Cooperation and Development (BMZ)). It includes implementation of productive biodiversity-preserving measures and fostering financing for conservation and sustainable use of biodiversity.
- Protection and sustainable use of natural resources to be implemented between 2018 – 2021 and funded by BMZ. It includes backing to implementation of bioeconomy through support to six value chains of biodiversity products or services from the buffer zones of protected areas.
- Amazon comprehensive program of forest conservation and sustainable production (PROAMAZONIA) which channel resources from the GEF[9]<sup>8</sup> and the Green Climate Fund[10]<sup>9</sup> (GCF). The GEF project will stimulate biodiversity-compatible sustainable production of coffee, cocoa, African oil palm and livestock. The intervention includes training, technical assistance and financial and market incentives to encourage sustainable production practices. The GCF project contribute to implementation of the Ecuadorian REDD+ action plan. It includes support to optimise the existing financial and economic mechanisms to implement agriculture and livestock production that reduce deforestation.
- Sixth operational phase of the GEF small grants program in Ecuador (GEF ID 9460) which includes developing sustainable products and marketing networks based on agroecosystems.
- Conservation of Ecuadorian amphibian diversity and sustainable use of its genetic resources (GEF ID 5534) which includes the development of captive breeding of threatened species and research on active compounds for biomedicine from skin secretion of amphibians.

### **3) The proposed alternative scenario with a brief description of expected outcomes and components of the project.**

#### **Alternative scenario**

25. The contribution of the GEF will bring advances for the current conditions that limit the development of businesses based on sustainable use of biodiversity in Ecuador. The proposed project can not address all root causes and barriers. Therefore, it is proposed to focus on key elements of the enabling conditions: the regulatory framework, capacity building and development of financial instruments.

---

26. The key contributions will be:

- To facilitate institutional arrangements and mechanisms to enable the development of biodiversity-based businesses including environmental regulations and associated norms and institutional interagency coordination (outcome 1).
- To improve capacities for the development of biodiversity-based businesses and value chains and to generate basic knowledge to support promissory business initiatives (outcome 2).
- To build specific financial mechanisms and instruments to support business development and applied research (outcome 3). For this, GEF resources will be invested to mobilise resources from private banks.
- To support existing experiences of small-medium level businesses to extract lessons that will contribute to a further understanding of key issues in biodiversity-based business as well as to improve their conditions (outcome 4).

27. The proposed alternative scenario will be that entrepreneurs can develop varied successful sustainable businesses based on native biodiversity. These businesses in turn: (i) demonstrate economic and social value of biodiversity, (ii) sustain and enforce actions that alleviate main threats (e.g., land use change, pollution, overexploitation) and (iii) contribute to sustain local livelihoods and to strengthen the Ecuadorian economy.

28. The alternative scenario for the interventions on three ongoing businesses will be:

- (i) Harvesting of wild mortiño populations is regulated using the experience of Sumak Mikuy with self-imposed harvest strategies. In addition, the company secure market recognition as a producer of sustainable and socially responsible mortiño products.
- (ii) An increased source of farmed frogs to supply the international pet market. Wikiri will have access to funding for applied research and develop captive breeding for more species.
- (iii) An increased demand for caña guadua from sustainable sources. Makisami and INBAR strengthen their capacities and apply sustainable supply policies to encourage suppliers to incorporate sustainability into their operations.

#### **Expected outcomes and components of the project**

29. This project is organized into three components, four outcomes and 12 outputs. To address the key barriers previously mentioned, the project elements have been organized in the following graph 1, annexed to the PIF.

30. The project will not directly address barrier 1, but all the outcomes will somehow contribute to increase recognition of biodiversity as a strategic asset of the country.

#### **Component 1. Enabling conditions**

31. This component will focus on building institutional arrangements and capacities to support the development of biodiversity-based businesses and supply chains. To improve the enabling environment the project will (i) improve regulations and procedures, (ii) construct mechanisms of inter-agency coordination and (iii) contribute to strengthen capacities in public entities, financial institutions and entrepreneurs. Two outcomes are expected:

*Outcome 1. Institutional arrangements that support the development of businesses based on the sustainable use of native biodiversity.*

32. The project will support the identification of legal gaps and loopholes in environmental regulations and the preparation of secondary norms and procedures (i.e., instruments that can be issued and enforced by the Ministry of Environment) (outcome 1.1). The implementation of the new procedures will be monitored to identify improvements. Complementarily crucial gaps in associated policies, norms and regulations (e.g., food safety, export regulations) will be identified and recommendations for improvement will be discussed with the pertinent agencies (output 1.2).

33. Finally, an inter-agency coordination mechanism will be developed (output 1.3). To start, a working group will be formed with key entities -- e.g., MAE, Ministry of Agriculture and Animal Husbandry (MAG), Ministry of Industries and Productivity (MIPRO), AGROCALIDAD -- to identify barriers and opportunities, as well as main agencies that need to contribute to the development of biodiversity-based businesses. Lastly, an inter-agency coordination mechanism will be designed and implemented. Its design will be based on existing lessons from sectoral roundtables and public-private platforms.

*Outcome 2. Improved capacities for the development of sustainable value chains based on native biodiversity*

34. The project will support the preparation of an inventory of existing business initiatives (baseline information) (output 2.1). MAE has identified about 300 initiatives, ranging from ideas to fully functional businesses. This inventory will include the identification of key barriers from the perspective of the entrepreneurs. In addition, figures and statistics from existing information platforms (e.g., MAG, Superintendence of Companies, Securities and Insurance, Superintendence of Popular and Solidarity Economy) will be integrated to have a comprehensive perspective.

35. A participatory process will be implemented to develop guidelines to promote businesses based on native biodiversity (output 2.2). First, sectoral meetings will be organised (e.g., financial institutions, agriculture, export commerce). The establishment of communities of practice will be promoted, and through them key actors will (i) have information to understand the opportunities of biodiversity-based businesses, (ii) identify sectoral barriers and (iii) pinpoint specific guidelines to be developed (e.g., risk assessment, MRV system). Afterwards, intersectoral meeting will be organised to bring together the various perspectives and lessons and to develop more general comprehensive guidelines.

36. A capacity building process will be developed building upon existing platforms and initiatives to ensure long-term sustainability (output 2.3). The topics to be addressed will come from the baseline inventory (output 2.1). It is envisioned that specific actions will include (i) online self-guided courses and (ii) technical assistance (e.g., product design, marketing strategy, certification) and mentoring for enterprise development.

37. Finally, a small fund will be invested in applied research to advance promissory business initiatives (output 2.4). Research investments will be identified during project preparation and further refined upon the results of the baseline inventory.

## **Component 2. Increase financing availability**

38. This component will focus on developing instruments to finance biodiversity-based businesses and supply chains. The project will develop and implement green financing lines.

*Outcome 3. Financial mechanisms and instruments in support of business ventures based on the sustainable use of native biodiversity.*

39. First, the project will support the development of an analysis of market condition and demand for promising biodiversity products that were identified during the baseline inventory. This product, in turn, will be an input for the development of guidelines (output 2.2) and capacity building strategy (output 2.3).

40. GEF funds will be used to develop specific credit lines to support biodiversity businesses (output 3.2). STAR resources will be invested (i) to design the credit instruments and financial products, (ii) to develop guidelines and operational procedures, (iii) to train personnel from financial institutions, and (iv) to fund the credit lines[11]. Resources will be dedicated to standard credit to ongoing businesses and new well structured projects and bio-enterprises. Direct work with financial institutions will facilitate that existing green lines are adapted to include biodiversity-based enterprises[12].

### **Component 3. Demonstration pilot interventions**

42. This component will generate practical lessons from direct support to three supply chains: mortiño (fresh and dehydrated), life pet frogs, and products of caña guadua (*Guadua angustifolia*) (output 4.1). The project will provide technical assistance and direct financial support to address key problems that hinder their advance. Lessons and good practice will be systematically documented (outcome 4.2); these will be inputs to improve actions in the other project outcomes.

43. The mortiño supply chain is community-based enterprise. Sumak Mikuy is a community agroindustry, established in 2007, that belong to the "Unión de organizaciones Campesinas e Indígenas de Cotacachi" (Union of Farmer and Indigenous Organizations of Cotacachi, abbreviated UNORCAC). The union integrate 45 communities -- which comprise about 3,500 families -- from Imbabura province. Sumak Mikuy process native Andean crops from a community supply network of local farmers. Their main products are uvilla (*Physalis peruviana*) (fresh and dehydrated), mortiño (fresh and dehydrated) and rocoto (*Capsicum pubescen*) (paste and dehydrated powder). In the case of mortiño it is harvested in the highlands of the Reserva Ecológica Cotacachi Cayapas.

44. The life pet frogs supply chain raise native species that are sold, mostly, in the international market under the ECUAFROG brand. Wikiri[13]<sup>10</sup> is a private company that pioneered amphibian captive breeding and raising of native frogs and toads. Seventeen species are produced, including *Gastrotheca riobambae* (listed as “endangered” in IUCN’ red list), *Ceratophrys stolzmanni* (listed as “vulnerable”), and *Epipedobates tricolor* (listed as “vulnerable”). On the one hand, captive bred frogs and toads counteract the illegal trade of wildlife. On the other hand, the development of captive breeding techniques allows to protect species that are seriously threatened in the wild. Chytridiomycosis and habitat destruction have produced massive amphibian population declines of Andean frogs.

45. Wikiri also raise native crickets (*Gryllus* sp.) to feed the amphibians. This activity has great potential to expand for the production of animal feed and human consumption. Sainsbury's now stock cricket snacks[14]<sup>11</sup> in the United Kingdom (Horton, 2018).

46. The caña guadua supply chain has two components: biodegradable plates and construction materials. The first component is produced by Makisami, a family business based in Ambato (Tungurahua province) that produce plates using caña guadua leaves under the LeafPacks[15]<sup>12</sup> brand. The raw material is collected in Bunche (coastal zone of the Esmeraldas province) by community groups. The second component is a public - private venture to supply construction materials for houses. It has been demonstrated that caña guadua is an excellent material, but the demand is very limited because reed houses are considered poor man's houses. On the contrary caña guadua houses can be high quality, durable, antiseismic and affordable. The Ecuadorian branch of International Bamboo and Rattan Organisation (INBAR) and the municipality of Santa Ana (Manabi province) will strengthen the supply chain to align production and processing with residential construction companies.

#### **4) Alignment with GEF focal area**

47. The present project is in line with GEF 7 programming directions. The project is consisting with objective 1 of the biodiversity focal area strategy "mainstream biodiversity across sectors as well as landscapes and seascapes", and its entry point 1: "biodiversity mainstreaming in priority sectors".

48. The intention of the proposed intervention is to establish an enabling environment that facilitate the development of biodiversity-positive businesses. It will focus on improving the regulatory framework, development of financial instruments and mechanisms, and building technical capacity.

49. In addition, the project will indirectly contribute to entry points 2 and 5. The pilot on frog farming will contribute to prevent the extinction of high-conservation value amphibia (entry point 2). The project will contribute to inclusive conservation (entry point 5) by working with the rural and indigenous people that produce the inputs for mortiño processing, biodegradable plates and caña construction materials.

**50. Regarding the global GEF core indicators, this project will contribute to sustain production of commercial biodiversity products in 7,000 ha. This surface corresponds to the areas where mortiño is collected and caña guadua is cultivated.**

51. The GEF funding will support the Ecuadorian efforts to achieve the following Aichi Biodiversity Targets:

§ Target 4. By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

§ Target 7. By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

#### **5) Incremental / additional cost reasoning and expected contribution from the baseline, the GEFTF, LDFC, SCCF, and co-financing.**

---

52. In Ecuador, without an adequate enabling environment biodiversity-based business will not develop. Considering the increasing anthropogenic pressures that impact native biodiversity in the current scenario, this will lead to further deterioration of valuable ecosystems and loss of biodiversity.

53. The GEF support will contribute to establish the foundation for biodiversity-based businesses. There are other interventions that work with farmers and businesses to mainstream good practice, but this project will tackle the root causes that impede that local groups develop robust biodiversity-based businesses (i.e., the enabling environment). At the end, these businesses will contribute to conserve valuable resources (e.g., threatened Andean frogs and agrobiodiversity), strengthen local livelihoods and strengthen the national economy.

54. This project will take advantage and build upon current investments and initiatives of several public and private entities. For example, the proposed credit lines will be channelled through financial institutions that have experience with green financing and positive impact reporting. Also, it is foreseen, to capitalise on the experience of CORPEI capital supporting the development of start-ups.

55. The government of Ecuador, beneficiaries and private sector organisations have agreed to provide the shown indicative co-financing for this project. During project preparation these amounts will be further refined and other parties interested in supporting the project will be identified and their contributions negotiated.

56. The GEF support to the three ongoing businesses will allow to better understand the key barriers that limit sustainable biodiversity-based endeavours. In the case of mortiño and frogs, GEF support allows to tackle legal barriers that restrain sustainable harvest of wild plants and trade of farmed wildlife. In the case of frogs and caña guadua, the project will facilitate access to credit to develop non-traditional uses of native biodiversity. Finally, in the case of caña guadua, GEF support will allow to develop and incorporate sustainable supply policies in small enterprises.

## **6) Global environmental benefits (GEFTF)**

57. In the long term, the project will contribute to establish the foundation for sustainable biodiversity-based businesses as a key tool to confront biodiversity loss in a megadiverse country. The global benefits will be demonstrated through enhanced protection of biodiversity. Specific actions on strengthening the supply chains for pet frogs and mortiño will directly contribute to safe from extinction threatened Andean frogs and to conserve the populations of a wild native fruit which has not been domesticated.

58. This project will contribute to GEF 7 targets 4 and 11 with 7,000 ha and 5,000 persons, respectively.

## **7) Innovation, sustainability and potential for scaling-up**

### *Innovation*

59. The main elements of innovation are: (i) to explore new approaches to increase private sector involvement and contribution to biodiversity conservation and (ii) to develop financial instruments to support biodiversity-based enterprises..

### *Sustainability*



60. Environmental sustainability. The project aims to facilitate the development of businesses that have positive impacts on native biodiversity and address key issues that threaten biodiversity (e.g., overharvesting of wild populations, illegal trade of wildlife). This is in line with existing national policies and regulations.

61. Social sustainability. The project is based on a participatory approach and emphasises the involvement of key stakeholders including women and indigenous people. It is expected that the project will foster social capital to sustain multi-level collaborative actions.

62. Institutional sustainability. The project is anchored in the national environment authority and will work with key ministries, established financial institutions and long-established and experienced entities like **Banco Pichincha, Banco del Pacífico and CORPEI**.

63. Financial sustainability. This is guaranteed by the annual investment of MAE and other government agencies that will incorporate, as part of their duties, the support to biodiversity-based businesses. In addition, the financial institutions that manage the credit lines will recover the loans to sustain financial availability to entrepreneurs. Also, CFN's National Guarantee Fund will cover the credit operations. ~~GEF non-grant resources will be fundamental to ensure sustainability of the credit lines.~~

#### *Potential for scaling-up*

64. The experience and lessons from this project will be useful to other countries interested in the development of biodiversity-based enterprises. The lessons that will generate the use of GEF non-grant resources to capitalise credit lines for biodiversity-based businesses will be useful worldwide.

65. The lessons from the pilots will have immediate application in other parts of the country and will be of interest to countries that face similar challenges. For example, the procedures and methods to manage mortiño harvest in the Cotacachi – Cayapas reserve will have immediate application in other sites where mortiño is also collected

---

[1] The strategy focusses on coffee, cocoa and marine fisheries.

[2] Project “facilitation of financing for biodiversity-based businesses and support of market development activities in the Andean region” (GEF ID 2391). The project was executed between 2010 and 2014.

[3] This is a wild plant endemic of Ecuador and Colombia which has a high antioxidant capacity (Vasco et al., 2008; Coba et al., 2012). It has not been domesticated and all the production is from harvesting wild populations.

[4] For example, the organic code of production, trade and investment (published in the official registrar 056 of 12 August 2013) and the organic law for the reactivation of the economy, strengthening dollarization and modernization of financial management (published in the official registrar 150 of 29 December 2017).

[5] The Andean biotrade project channelled USD685,000 to CORPEI Capital, USD 500,000 to PROCREDIT and USD 590,000 for direct investment into seven ventures.

[6] <https://www.caf.com/es/actualidad/noticias/2013/09/ecocredit-un-producto-verde-con-el-apoyo-de-caf/>

[7] <https://www.bancodelpacifico.com/empresas/creditos/emprededor-pacifico>

[8] <https://www.caf.com/en/currently/news/2006/04/caf-and-cfn-expand-access-to-financing-for-ecuadorian-smes-and-microenterprises/?parent=16142>

<https://www.caf.com/es/conocimiento/blog/2017/09/programa-progresar-creando-oportunidades/?parent=14258>

<https://www.cfn.fin.ec/fondo-nacional-de-garantia/>

[9] Project sustainable development of the Ecuadorian Amazon: integrated management of multiple use landscapes and high value conservation forests (GEF ID 9055). Implemented by the United Nations Development Programme (UNDP).

[10] Project priming financial and land-use planning instruments to reduce emissions from deforestation. Implemented by UNDP.

[11] It is proposed to use **blended finance** to establish a revolving fund to be maintained with the proceeds of the loans. During the project preparation phase this idea will be further developed.

[12] Credit criteria for biodiversity-based enterprises will be developed during the project preparation phase. **The starting point will be the assessment tool that is currently used by Banco del Pacifico. This instrument cover seven topics: (i) biodiversity conservation, (ii) use of biodiversity, (iii) benefit sharing, (iv) economic efficiency, (v) fulfilment of national regulations and international agreements, (vi) stakeholder rights (e.g., human rights, gender, indigenous people rights), (vii) clear land tenure and natural resources use rights. The above-mentioned tool (in Spanish) is attached to the present document.**

[13] [www.wikiri.com.ec](http://www.wikiri.com.ec)

[14] [www.eatgrub.co.uk](http://www.eatgrub.co.uk)

[15] [leafpacks.com](http://leafpacks.com)

## **1b. Project Map and Coordinates**

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

See Annex A in the file PIF

## **2. Stakeholders**

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

**Indigenous Peoples and Local Communities** No

**Civil Society Organizations** Yes

**Private Sector Entities** Yes

**If none of the above, please explain why:** No

Not Applicable

**In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.**

1. The following table summarizes key stakeholder engagement during project preparation. Nonetheless, a full stakeholder analysis will be conducted during PPG, with focus on the key stakeholders of the pilot projects.

<b>Stakeholder</b>	<b>Role pertinent to the project</b>	<b>Expected engagement</b>
<b>Government agencies</b>		
Ministry of Environment	Executing agency for the project. Regulate and conserve biodiversity; administer protected areas. Focal Point for the Convention of Biological Diversity.	Direct participation in project preparation. Direct participation in project implementation.
Other related ministries: production, agriculture; foreign trade.	Regulate and administer various topics related to biodiversity based supply chains.	To be consulted/engaged as needed

Stakeholder	Role pertinent to the project	Expected engagement
National Export Agencies: SENA (Customs authority); AGROCALIDAD (phytosanitary authority); SRI (internal revenue service) PROECUADOR (Institute of promotion of exports), FEDEXPOR (Federation of exporters)	Regulate, Control, and promote exportations.	To be consulted/engaged as needed
<b>International Organizations</b>		
International Network for Bamboo and Rattan (INBAR).	Associated in the execution of a pilot intervention	Direct Participation in project preparation/ Direct participation in project implementation.
<b>Local governments</b>		
Decentralized Autonomous Governments where pilot interventions will be developed (GAD Santa Ana, GAD Muisne)	Manage local planning, environmental management and development, decentralized participation.	To be consulted/engaged as needed
<b>Civil society organizations</b>		
UNORCAC - Union de Organizaciones Campesinas Indigenas de Cotacachi	Owner of Sumak Mikuy, operate within project area	To be consulted/engaged as needed

Stakeholder	Role pertinent to the project	Expected engagement
Local communities (biodiversity collectors): Bamboo from Asombambú (Esmeraldas province);  Mortiño from Piñan and Guanani communities (Imbabura province)	Operate within project area	To be consulted/engaged as needed
<b>Universities</b>		
Universities related projects: Universidad Laica de Eloy Alfaro, Universidad San Francisco de Quito, Pontificia Universidad Catolica del Ecuador, Espe- IASA, Universidad Católica de Santiago de Guayaquil.	Develop research related to biodiversity value chains.	To be consulted/engaged as needed
<b>Private sector</b>		
Sumak Mikuy	Community- based business. Associated in the execution of a pilot intervention	Direct Participation in project preparation/ Direct participation in project implementation.
Wikiri	Private business. Associated in the execution of a pilot intervention	Direct Participation in project preparation/ Direct participation in project implementation.
Leaf Packs	Private business. Associated in the execution of a pilot intervention	Direct Participation in project preparation/ Direct participation in project implementation.
Association of Private Banks of Ecuador (ASOBANCA)	Represent private banks	To be consulted/engaged as needed

Stakeholder	Role pertinent to the project	Expected engagement
Corporation for the Promotion of Exports and Investments (CORPEI)	Provides services to promote productive competitiveness and better insertion of the country and its companies in international markets.	Direct Participation in project preparation/ Direct participation in project implementation.
CAF	GEF implementing agency. Will channel financial resources through private banks	Direct participation in the project implementation.

Banco Pichincha and Banco del Pacífico	Have green financing lines	Direct participation in project preparation/ Direct participation in project implementation.
--	----------------------------	--

2. The following indigenous people groups were identified to be linked to the project:

- § Mortiño value chain: farmers and indigenous people from Cotacachi (Imbabura province) and the communities of Piñan (located within the Cotacachi – Cayapas reserve) and Guanani.
- § Caña guadua value chain: a) farmers and afro-Ecuadorian population from Bunche (Muisne municipality, Esmeraldas province); b) farmers in Santa Ana municipality (Manabi province).

3. During PPG, the specific linkages and roles of these and other key stakeholders will be identified. Those groups whose livelihoods have direct connection with project action, will be incorporated during the project preparation process. In addition, project design will incorporate appropriate culturally-sensitive measures according to GEF policies.

### 3. Gender Equality and Women's Empowerment

**Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).**

69. Biodiversity is a support element for rural areas livelihoods and its uses are determined by gender roles. In the case of the direct use of products derived from biodiversity, they are associated with the reproductive roles of women, namely for subsistence, food, medicine, exchange, among others.

70. In general terms, in value chains based on biodiversity, women have been identified as collectors of primary resources, as well as producers of a diverse range of small and artisanal products; however, there are cases of women leading in biodiversity-based businesses.

71. Women in this topic, as well as in others, face barriers related to access to decision-making, legal barriers to land ownership, limited access to credit, employment restrictions, limited access to technical training, among others.

72. Biodiversity-based products are ideal resources for rural women as they grow abundantly in many parts and can be used to make a wide range of goods that tap women's skills. Women are considered critical agents for organization in society and they play an important role in sustainable development and biodiversity conservation.

73. A gender sensitive project can contribute to improve women's participation, as well as generating socio-economic benefits for them and their families, in biodiversity-based value chains.

74. The mortiño value chain intervention will be developed in communities with very limited economic conditions. These areas are composed by indigenous and farmers families; men have temporal jobs and women are in charge of daily subsistence of their families. These communities have severe conditions of alcoholism, violence and harsh economic conditions. The difficult access to the communities sharpens the limitations for getting economic alternatives, especially to women. Mortino harvest can be alternated with the traditional gender roles of women, contributing and providing economic options while supporting their homes. In this sense, the project intervention will focus on finding suitable mechanisms for equitable distribution of the benefits derived from mortiño harvesting to benefit women, their families and the community as a whole.

75. The caña guadua intervention will be developed in different farming communities on the coast of Ecuador. The production of caña guadua is conceived as a masculine activity, although there are relevant aspects carried out by women (e.g., harvesting of leaves, processing of resources and commercialization of derived products). Therefore, women's contribution to the caña guadua value chains is invisible.

76. This pilot intervention has two components:

(i) The first component of production of biodegradable plates is identified as an activity for gender mainstreaming. The harvest, handling and processing of the caña guadua leaves is activity primarily carried out by women. The material is collected at the community level in Esmeraldas (Bunche) which has precarious economic and social conditions. The processing of the leaves as a biodiversity-based income activity gives economic options for families in the area, especially to women.

(ii) The second component uses the caña guadua as a construction material for housing. As mentioned before, in this supply chain, activities are mostly intended for male producers. However, it is important to identify the contributions of women and find opportunities for their integration.

77. **iii) The intervention about frog farming does integrate social aspects that can bring the following positive impacts: (a) Increased sources of formal labour; b) Change of Ecuadorian society in the way biodiversity-based products are perceived as an alternative source of income; and (c) Expansion of nutritious**

food sources for the Ecuadorian population and abroad. Regarding the Gender mainstreaming, during the execution it will be applied a gender-based approach, encouraging women to participate in amphibian-watching workshops and training courses. It should be emphasized that this can be difficult to carry out in communities where roles between women and men are clearly marked. In some communities, important decisions are made by women. For this reason, although many employment opportunities will be generated for men, women will be encouraged to participate in the different activities of the project. For instance, the inclusion of women in the tourist guidance activity in areas of influence of natural amphibian populations. At least 50% of participants are expected to attend training and action plan development workshops, and socialization events in the community are expected to be women

Every effort will be made to advance gender equality in the project, to incorporate gender sensitive actions and (i) specific indicators that will ensure a technical integration of gender aspects during PPG, (ii) a gender analysis, (iii) a gender action plan will be prepared to identify needs and opportunities to mitigate potentially adverse effects of the project on men and women, and specially to promote gender equality to foster their participation within the project activities and receive their benefits, and (iv) pilot interventions will be designed integrating gender equality through specific results, in addition to the verification that the derived benefits are equitable for men and 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;**

**improving women's participation and decision-making; and/or Yes**

**generating socio-economic benefits or services for women. Yes**

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

Yes

#### **4. Private sector engagement**

**Will there be private sector engagement in the project?**

Yes



**Please briefly explain the rationale behind your answer.**

71. The project focus on biodiversity-based businesses which are developed by private sector enterprises (e.g., individual or family businesses, small and medium-sized companies). Also, the proposed credit lines will be channelled through financial institutions (private banks and cooperatives).

**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 (table format acceptable)**

72. The main risks that the project might face are presented in the table below:

Risk	Level	Mitigation measure
Change of central government in Ecuador in May 2021 [political]	High	Present project and advances to the new authorities
Changes of parish, municipal and provincial governments in Ecuador in May 2023 [political]	High	Present project and advances to the new authorities
El Niño Southern Oscillation[1] (ENSO) [natural]	Medium	ENSO is a natural recurring climate pattern that have direct impact on the biodiversity and society. During PPG and project implementation climate conditions will be monitored, mainly through NOAA climate prediction centre.
Climate change [natural]	Medium	Climate change might result in stronger and more frequent climate fluctuations. During PPG and project implementation the potential impacts of climate change will be always considered into planning and decision making.
Entrepreneurs not interested in developing biodiversity-based businesses [social]	Low	Provide information about the market opportunities for sustainable products and services.
Entrepreneurs reluctant to use the new credit lines [social]	Low	Provide information about advantages of using loans to finance the enterprise, rates, loan requisites and loan process. Include educational material about financial education.

---

[1] By 14 March 2019 a weak El Niño was present, weak El Niño conditions were likely to continue through the Northern Hemisphere spring 2019 (~80% chance) and summer (~60% chance). It is probable that during the implementation of the project another ENSO event will occur. This will have direct impact on populations that are vulnerable to flood and landslides.

## 6. Coordination

**Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.**

81. For project implementation, it is foreseen to have a project board, a technical committee and a project team.
82. The project board will provide strategic guidance and oversee project implementation. The Project Board will be formed with representatives from the Ministry of Environment, the executing partners and the implementing agency.
83. The technical committee will facilitate coordination and analysis of key matters. Its main role will be to provide overall technical orientation to achieve the project outcomes.
84. The project team will be responsible for day-to-day execution of project activities. It is foreseen that this team will be composed by:
  - A project coordinator which will be in charge of project execution and will ensure the achievement of the outcomes set in the PRODOC.
  - A financial specialist which will be in charge of the development of financial instruments and credit lines.
  - A gender and participation specialist which will guarantee the integration of a gender approach and adequate stakeholder engagement in project activities. This person will be in charge of overseeing the effective application of the gender inclusion and stakeholders' plans (to be developed during PPG).
  - A monitoring and evaluation specialist who will be responsible for monitoring project progress and will guarantee the application of the GEF monitoring and evaluation policy.
  - Communication and knowledge management specialist which will be responsible for ensuring adequate communication among partners and key stakeholders. This person will be in charge of documenting the project lessons.
  - Administrative and financial assistant which will provide administrative, logistic and financial support.
85. A member of the project team will oversee the support to the three pilot interventions (this project member will be decided during PPG). In addition, a working group will be formed with beneficiaries and project partners to facilitate cross-fertilization and the exchange of learnings.
86. During project preparation institutional arrangements and roles and responsibilities will be fully designed.

87. The present project will coordinate with the following GEF-financed projects:

- Amazon comprehensive program of forest conservation and sustainable production (PROAMAZONIA) which channel resources from the GEF (GEF ID 9055) and the Green Climate Fund and is implemented by UNDP.
- Sixth operational phase of the GEF small grants program in Ecuador (GEF ID 9460) which is implemented by UNDP.
- Conservation of Ecuadorian amphibian diversity and sustainable use of its genetic resources (GEF ID 5534) which is implemented by UNDP.
- Promotion of Climate-smart Livestock Management Integrating Reversion of Land Degradation and Reduction of Desertification Risks in Vulnerable Provinces<sup>[1]</sup> (GEF ID 4775) which is implemented by the Food and Agriculture Organization (FAO).

88. The project will seek coordination with the following projects: (i) ProCamBio II, (ii) protection and sustainable use of natural resources, and (iii) EcoMicro.

89. Finally, the project will coordinate with the pertinent initiatives that promote entrepreneurship and the range of local organizations that work in the project intervention sites. During PPG a precise identification of these organizations will be prepared.

---

[1] In particular, their experience developing a microfinance mechanism for producers.

## **7. Consistency with National Priorities**

### **Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions**

Yes

**If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc**

- National Action Plan for Adaptation (NAPA) under LDCF/UNFCCC
- National Action Program (NAP) under UNCCD
- ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury
- Minamata Initial Assessment (MIA) under Minamata Convention
- National Biodiversity Strategies and Action Plan (NBSAP) under UNCBD
- National Communications (NC) under UNFCCC
- Technology Needs Assessment (TNA) under UNFCCC
- National Capacity Self-Assessment (NCSA) under UNCBD, UNFCCC, UNCCD

- National Implementation Plan (NIP) under POPs
- Poverty Reduction Strategy Paper (PRSP)
- National Portfolio Formulation Exercise (NPFE) under GEFSEC
- Biennial Update Report (BUR) under UNFCCC
- Others

90. The present project is consistent with the national biodiversity strategy (MAE, 2016). It is also consistent with the national development plan (SENPLADES, 2017) and the national policies and regulations for protected areas and wildlife.

91. The project is consistent with the Organic Law of Popular and Solidarity Economy (Ley Orgánica de la Economía Popular y Solidaria) - issued in 2011 and modified in 2014 – which in application of article 283 of the constitution establishes the conditions of popular and economic solidary systems, profit, accumulation, social capital components, all of them focused on the concept of “good living”.

92. The Project is also consistent with the national policies and regulations regarding gender equality and local stakeholders participation:

§ The constitution (article 70), establish that the State is the executor of policies that guarantee equality between men and women and will formulate and implement policies that incorporate gender approach into plans and programs as well as provide appropriate technical assistance for its mandatory application in the public sector. Also, according to article 395, the state guarantees active and permanent participation of individuals, communities and indigenous peoples in planning, implementing, and decision making regarding activities with potential environmental impacts.

§ The National Agenda for Women and Gender Equality (2014-2017) of the National Council for Gender Equality in its axes of production, employment and environment proposes public interventions to overcome gender inequality and achieve a life free of violence; access to education and knowledge; production and employment; environment, power and decision making, among others. The aim is to implement mainstreaming strategies both in the sectorial level as well as in articulation with the Decentralized Autonomous Governments (GADs in Spanish).

93. Finally, the project is consistent with the following international instruments regarding gender equality and key stakeholders participation:

§ Convention on the elimination of all forms of discrimination against women (CEDAW), a Convention of the United Nations which is legally binding and states the internationally accepted principles on women's rights. Ecuador, in compliance with its obligations and provisions must submit every four years a report on progress made in complying with the provisions of this Convention.

§ Convention 169 of the International Labour Organization (ILO) "on indigenous and tribal peoples in independent countries", which establishes the rights for indigenous peoples to live in accordance with their culture and traditions, not to be discriminated against, and to participate in consultation processes. The states are committed to generating national

regulations to make it operational. The realization of the rights of indigenous peoples lies in the creation of adequate channels of participation, both in the definition of priorities and development strategies and in the implementation of plans, programs and projects

## **8. Knowledge Management**

**Outline the Knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.**

94. Component 3 will focus on knowledge management. Lessons will be systematically documented and shared through the project's website, national and regional websites. The project's website will be developed and maintained following the GEF guidance.

95. The project will (i) develop and maintain an electronic platform (e.g., website, social networks) to facilitate communication and information exchange, and (ii) support working groups and systematically document and disseminate lessons to key stakeholders in the country and the region.

96. The documents to be produced will be gender and culturally sensitive. Documents with appropriate language will be prepared for decision makers and key stakeholders. Technical documents will have English summaries to facilitate international access.

97. All learning documents and lessons will be mainstreamed into CAF's Environmental and Social Management Program for Financial Institutions (PGASIF) ([pgasif.org](http://pgasif.org)) which is focused on strengthening the capacities of the financial sector and CAF publications website "SCIOTECA" <http://scioteca.caf.com/>.

**Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)**

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).**

<b>Name</b>	<b>Position</b>	<b>Ministry</b>	<b>Date</b>
Banco del Pacifico	Strategic Co-Finance Partner	Private Sector	4/9/2019
Pedro Liut	Coordinador Nacional de Planificación Ambiental y Gestión Estratégica	Ministry of Environment of Ecuador	4/9/2019
CORPEI CAPITAL	Strategic Co-Finance Partner	Private Sector	8/6/2019
Pedro Liut	Coordinador Nacional de Planificación Ambiental y Gestión Estratégica	Ministry of Environment of Ecuador	4/9/2019
Maria Belen Duran	Punto Focal GEF Ecuador	Ministry of Environment	11/14/2019

**ANNEX A: Project Map and Geographic Coordinates**

Please provide geo-referenced information and map where the project intervention takes place

see the map in the following link:

<https://wetransfer.com/downloads/7a6b20def2ab7520ef567e68254ebdf220190815020104/3cdff1325fe52f4726c7add8f39901cf20190815020104/c77d88>