



## **Conservation and sustainable use of crop wild relatives (CWR) and edible wild species (EWS), under an institutional framework and the development of rural community initiatives in Ecuador**

### **Part I: Project Information**

#### **GEF ID**

10855

#### **Project Type**

MSP

#### **Type of Trust Fund**

GET

#### **CBIT/NGI**

CBIT **No**

NGI **No**

#### **Project Title**

Conservation and sustainable use of crop wild relatives (CWR) and edible wild species (EWS), under an institutional framework and the development of rural community initiatives in Ecuador

#### **Countries**

Ecuador

#### **Agency(ies)**

FAO

#### **Other Executing Partner(s)**

To be determined

#### **Executing Partner Type**

Others

#### **GEF Focal Area**

Biodiversity

#### **Taxonomy**

Focal Areas, Biodiversity, Mainstreaming, Certification -National Standards, Agriculture and agrobiodiversity, Species, Crop Wild Relatives, Plant Genetic Resources, Protected Areas and Landscapes, Community Based Natural Resource Mngt, Terrestrial Protected Areas, Productive Landscapes, Influencing models, Convene multi-stakeholder alliances, Transform policy and regulatory environments, Strengthen institutional capacity

and decision-making, Demonstrate innovative approaches, Stakeholders, Beneficiaries, Type of Engagement, Consultation, Information Dissemination, Partnership, Participation, Local Communities, Civil Society, Community Based Organization, Academia, Non-Governmental Organization, Communications, Behavior change, Awareness Raising, Indigenous Peoples, Private Sector, Individuals/Entrepreneurs, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Women groups, Gender results areas, Access and control over natural resources, Participation and leadership, Capacity Development, Capacity, Knowledge and Research, Learning, Knowledge Generation, Knowledge Exchange

**Rio Markers**

**Climate Change Mitigation**

Climate Change Mitigation 0

**Climate Change Adaptation**

Climate Change Adaptation 0

**Duration**

36 In Months

**Agency Fee(\$)**

82,008.00

**Submission Date**

9/10/2021

**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	863,242.00	5,150,000.00
<b>Total Project Cost (\$)</b>		<b>863,242.00</b>	<b>5,150,000.00</b>

## **B. Indicative Project description summary**

### **Project Objective**

Strengthen institutional systems for the implementation and compliance of measures for the registration, conservation, and sustainable use of CWR and EWS in Ecuador, as a complementary scope for the incorporation of CWR and EWS in local, national plans and strategies and global measures for agrobiodiversity conservation, and its contribution to improving the quality of life of rural populations.

<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>
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Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Improved institutionalilty for the definition of conservation areas for crop wild relatives (CWR) and wild edible species (EWS).	Technical Assistance	<p>1.1. CWR and EWS are identified and conserved in pilot sites of the Amazon (Napo) and the northern highlands (Imbabura), based on the analysis of roles and priorities of use and conservation by men and women in the conservation areas and pilot sites.</p> <p><i>Indicators:</i></p> <p>- 2000 ha of conservation of CWR and EWS established in Napo (1000 ha) and Imbabura (1000 ha) according to the zoning of the PAs (Core Indicator 1.2)</p> <p>- 1000 ha of CWR and EWS conservation in private areas of Napo (500 ha) and Imbabura (500 ha) (Core Indicator 4.3)</p> <p>1.2. Strengthening and implementing the regulatory framework and conservation</p>	<p>1.1.1. Methodological guide and toolbox for the definition of species and conservation areas of CWR and EWS, based on the Voluntary Guidelines of the Commission on Genetic Resources, gender and cultural belonging approach, and national conditions.</p> <p>1.1.2. Inventory and conservation status of priority wild species, for the two pilot areas developed.</p> <p>1.1.3. Definition of areas of conservation and sustainable use of CWR and EWS, according to the zoning of protected areas and private areas.</p> <p>1.2.1. Secondary</p>	GET	430,000.00	2,605,500.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
2. Implementation of in situ conservation measures and sustainable use of CWR and EWS	Investment	<p>2.1. Areas of conservation and use of prioritized CWR and EWS are constituted in demonstrative scenarios and community learning for the conservation, and sustainable utilization of local agrobiodiversity.</p> <p><i>Indicators:</i></p> <p><i>Conservation level of the CWR and EWS in the managed areas reported by the information system.</i></p>	<p>2.1.1. Management plans for CWR and EWS conservation areas implemented and evaluated in Napo and Imbabura, based on the the project completion strategy and community participation and training processes for men and women.</p> <p>2.1.2. Guide for the sustainable utilization of CWR and EWS based on voluntary guidelines and national regulations, on the approach of gender and cultural belonging.</p> <p>2.1.3. Plans of use and exploitation of CWR and EWS approved and implemented, considering each of the links in the prioritized chains of the associative enterprises of Napo's producers, in coordination with national incentives and</p>	GET	312,000.00	1,864,600.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
3 Information monitoring, evaluation and dissemination system	Technical Assistance	<p>3.1. Knowledge management and M&amp;E to inform project results and lessons learned on conservation from CWR and EWS to stakeholders and communities</p> <p><i>Indicators:</i></p> <p><i>Results of the measurement of sustainability criteria that demonstrate comparatively, and at different times, the achievements of the project.</i></p>	<p>3.1.1. Establishing the baseline - TAPE tool.</p> <p>3.1.2. Monitoring and evaluation of the project to achieve the results.</p> <p>3.1.3. Project evaluation.</p> <p>3.1.4. Publications of results developed and disseminated among interested parties.</p> <p>3.1.5. Disclosure and communication of the project actions (corporate image, merchandising, campaigns, App, social networks, among others)</p>	GET	80,135.00	398,948.00
<b>Sub Total (\$)</b>					<b>822,135.00</b>	<b>4,869,048.00</b>

**Project Management Cost (PMC)**

GET	41,107.00	280,952.00
<b>Sub Total(\$)</b>	<b>41,107.00</b>	<b>280,952.00</b>

**Project Management Cost (PMC)**

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**Total Project Cost(\$)**

**863,242.00**

**5,150,000.00**



**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>
Recipient Country Government	Ministry of the Environment and Water of Ecuador (MAAE)	In-kind	Recurrent expenditures	350,000.00
Donor Agency	GCF project executed by Ministry of the Environment and Water of Ecuador (MAAE) ?Promotion of financial instruments and land use planning for the reduction of emissions and deforestation?	Grant	Investment mobilized	1,200,000.00
Recipient Country Government	Ministry of Agriculture and Livestock (MAG)	In-kind	Recurrent expenditures	350,000.00
Recipient Country Government	Ministry of Agriculture and Livestock (MAG)	Grant	Investment mobilized	1,200,000.00
Recipient Country Government	National Autonomous Institute of Agricultural Research (INIAP)	In-kind	Recurrent expenditures	350,000.00
Recipient Country Government	Local Governments (provincial and parochial) of Napo	In-kind	Recurrent expenditures	250,000.00
Recipient Country Government	Local Governments (provincial and parochial) of Imbabura	In-kind	Recurrent expenditures	250,000.00
GEF Agency	FAO	Grant	Investment mobilized	300,000.00
Other	Regional University IKIAM	In-kind	Recurrent expenditures	50,000.00
Other	University T?cnica del Norte	In-kind	Recurrent expenditures	50,000.00

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Other	University Católica Sede Ibarra	In-kind	Recurrent expenditures	50,000.00
Beneficiaries	Enterprises of associations of local producers and producers' associations	In-kind	Recurrent expenditures	750,000.00
<b>Total Project Cost(\$)</b>				<b>5,150,000.00</b>

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

The MAAE is executing a project of "Promotion of financial instruments and land use planning for the reduction of emissions and deforestation" financed by the Green Climate Fund with a high synergy potential in component 2 "Transition to sustainable production system" with an amount of \$1,200,000. Also, the Ministry of Agriculture (MAG) is financing a "Program for the Amazon Productive Transformation and Sustainable Agro-productive Reconversion in the Amazon", with public resources. (\$1,200,000 componente 2, through the provision of incentives framed in the integral productive planning of each farm. Both initiatives contemplate the definition of conservation areas, institutional strengthening, conservation of agrobiodiversity and development of innovative associative ventures. FAO Ecuador executes related and complementary projects, such as the Mechanism for Forests and Farms (approximately 100,000 USD from component especially from the Component 2 "Increased entrepreneurship, access to markets and financing, through gender equitable value chains produced by new capacities to offer sustainable business incubation systems"). Also, the Project "Implementation of conservation, restoration and sustainable land management mechanisms in forest and productive landscapes", financed by European Union which contemplate the strengthening of associative enterprises, definition of conservation agreements and the conservation of agrobiodiversity. Cofinancing of this project will be approximately USD 200,000 USD from component 2.

**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>
FAO	GET	Ecuador	Biodiversity	BD STAR Allocation	863,242	82,008	945,250.00
<b>Total GEF Resources(\$)</b>					<b>863,242.00</b>	<b>82,008.00</b>	<b>945,250.00</b>

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

PPG Required **true**

**PPG Amount (\$)**

50,000

**PPG Agency Fee (\$)**

4,750

<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>
FAO	GET	Ecuador	Biodiversity	BD STAR Allocation	50,000	4,750	<b>54,750.00</b>
<b>Total Project Costs(\$)</b>					<b>50,000.00</b>	<b>4,750.00</b>	<b>54,750.00</b>

## Core Indicators

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
2,000.00	0.00	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)
2,000.00	0.00	0.00	0.00

Name of the Protected Area	WDP A ID	IUCN Category	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
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Name of the Protected Area	WDP A ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Akula National Park Colonso Chalupas	125689 55559 3903	Select Strict Nature Reserve	1,000.00						
Akula National Park Cotacachi Caya pas	125689 55569 8082	Select Strict Nature Reserve	1,000.00						

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1000.00	0.00	0.00	0.00

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

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

**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)
1,000.00			

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

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

**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)
<b>Female</b>	600			
<b>Male</b>	600			
<b>Total</b>	1200	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 basic indicators were calculated with primary information from the local organizations of Napo and Imbabura, for the approximate coverage of CWR and EWS in the buffer zones of the protected areas and in private areas. The proposed goals have high feasibility to be achieved by the project. The calculation of beneficiaries includes the number of partners from the UNORCAC organizations in Imbabura and the Corporation or Network of Associations of the Amazon Chakra of Napo, which will intervene directly in this project.

## Part II. Project Justification

### 1a. Project Description

#### **1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description);**

Ecuador constitutes, together with Peru and Bolivia, one of the eight world centers of origin of cultivated plants. For centuries in these centers of origin, species have been domesticated, and the knowledge related to their management has been part of the culture of the indigenous peoples and nationalities of Ecuador. However, according to GEF, there are five main direct drivers of biodiversity loss worldwide: habitat change (loss, degradation and fragmentation), overexploitation or unsustainable use, invasive alien species (particularly in island ecosystems), climate change and pollution. These critical drivers of biodiversity loss are intensifying, particularly habitat loss driven by the expansion of agriculture, as well as the ongoing implementation of conventional production practices, which increase vulnerability and reduce the resilience of local biodiversity. In Ecuador, being one of the countries with the greatest biodiversity in the world, the challenges of biodiversity conservation are similar to those identified at the global level. In addition, due to its location in the tropical Andes and high population density, the pressures on the remaining ecosystems are permanent. The high biodiversity is also reflected in the great variety of species that local communities use for their food. This important agrobiodiversity is cultivated or collected by farmers, especially peasants in the four natural regions of the country.

Although Ecuador does not have detailed information on the distribution and current status of wild species and local cultivars, it is clear that the destruction of habitats by deforestation processes; changes in land use for agricultural activities, aquaculture, industrial monocultures, opening of roads and other infrastructures; changes in the population's eating patterns; the tendency in markets and trading companies to prefer homogeneous products; migration and abandonment of the rural environment; are, among other factors, causing the loss of populations of wild relatives and genetic erosion.

Since the dawn of agriculture, CWRs and EWSs have been used to improve the yields and nutritional quality of crops. Farmers often plant these relatives alongside domesticated crops to promote the natural crossing of beneficial traits. Genes from wild plants have also provided cultivars resistance against pests and diseases and have improved tolerance to abiotic stresses. Genetic transfer of beneficial traits from wild varieties has been so widespread that most modern crop cultivars contain some genes derived from a wild relative.

Among the natural vegetation of the country, the various geographical regions are very rich in CWR and EWS related to the cultivated species. For example: the wild materials of potatoes, beans, tomatoes, tropical and subtropical fruit trees. The country's natural forests also contain wild relatives of species such as avocado (*Persea* spp.), Papaya (*Carica* spp.), Cocoa (*Theobroma cacao*) among others.



Only a very small part of the diversity that exists in the country is being utilized. As an example of the use of germplasm is the genetic material of native Ecuadorian tomatoes *Solanum lycopersicum* var. *cesariforme*, *S. habrochaites* and *Solanum pimpinellifolium*, that have been used to improve the content of vitamin C and soluble solids, as well as to expand the range or crop coverage of domesticated varieties. *Solanum cheesmani*, endemic to the Galapagos Islands, tolerates high levels of soil salinity, drought, and its genotypic characteristics facilitate mechanical harvesting when introduced into commercial varieties. The same situation occurs with medicinal species, which with a wide diversity, are routinely used for the treatment of innumerable ailments and diseases, thanks to traditional knowledge that has been developed over millennia and advances in ethnobotany (Estrella et al., 1995).

Despite the high richness of agrobiodiversity existing throughout the country and the efforts made to improve the processes of conservation and sustainable management *in situ* and *ex situ*, barriers still persist that have not reduced by initiatives and/or programs of the Ecuadorian Government and other national and cooperation organizations; barriers that are most evident when it comes to the conservation and management of CWR and EWS.

Specifically, this project initiative has identified and is focusing on mitigating the following three main barriers:

***Barrier 1. In Ecuador there are no defined sites for the conservation of CWR and EWS populations in situ.***

Ecuador has developed an important work in the declaration of protected areas at national level, a total of 61 areas cover approximately 20% of the territory. However, these conservation areas have focused on the protection of species and ecosystem services, in which there has been no incorporation of sites for the conservation of CWR and EWS populations. There is no methodology or tools to define these sites at the national level and/or characterize the CWRs and EWSs. Therefore, there is a lack of methodologies for monitoring populations and agreements on their management options within protected areas (PA) and other conservation spaces in community or private areas.

***Barrier 2. Limited knowledge of the conservation status of CWR and EWS populations.***

Ecuador maintains an important registry of plant species at the national level. However, INIAP and other national institutes have limited knowledge about the conservation status of the CWR and EWS populations, and in many cases, there are only specific collections, in the genebanks that have concentrated on collections and information on cultivated species. On the other hand, the intermittent or reduced institutional priorities and investment of resources for research processes of CWR and EWS, have caused the scarce information available and the lack of programs and initiatives for their conservation. This problem also affected the work interaction with communities and indigenous peoples and nationalities, registering a slight assessment of the wealth of existing ancestral knowledge and knowledge on the use of CWR and EWS; therefore, it is necessary to establish participatory processes and knowledge exchange, to record, systematize and socialize this knowledge.

All this information is very important to collect through the comprehensive inventory of CWR and EWS species, in order to contribute to making appropriate decisions for the management and protection, both *in situ* and *ex situ* of CWR and EWS.

***Barrier 3. There are no specific regulations and procedures for the conservation and sustainable utilization of CWR and EWS.***

Ecuador has developed laws and regulations for the conservation of agrobiodiversity, which have focused mainly on the use and management at the level of areas destined for agricultural production and on the farms of producers. The conservation of CWR and EWS within public protected areas and in sites with other conservation categories is partially regulated, including in forest remnants or other natural ecosystems in agricultural landscapes. Therefore, there is no specific regulatory framework that promotes the identification, registration, management, conservation, use and monitoring of the status of the CWR and EWS. Currently there are guides, procedures or protocols for the conservation, use and exploitation of Non-Timber Forest Products (NTFP) and other biotrade products, some of which may belong to CWR and EWS. In this sense, it is necessary to generate specific regulations and procedures to facilitate the development of the enterprises of local producers that live in the buffer and sustainable use zones of protected areas.

**2) the baseline scenario and any associated baseline projects;**

**Legal and institutional framework**

Since 2008, the Constitution of Ecuador has recognized the rights of nature as a fundamental element for the protection of biodiversity and ecosystem services, and in this context, Ecuador has developed specific manuals, regulations and legal frameworks for the management of Protected Areas (PA), the inclusion of agrobiodiversity in public policies, the sustainable management of agriculture, climate-smart strategies for livestock, strengthening sustainable practices that help reduce pressure on natural resources, and territorial planning, among others. The Ecuadorian State has proposed to have an efficient management model of the State Subsystem of Protected Areas (SEAP) that meets the conservation objectives, take into account social participation and ensure the sustainable use of environmental goods and services, as well as through the identification of opportunities, the development of capacities and the promotion of conditions to ensure stable and long-term financing.

Regarding agrobiodiversity, specifically Article 14 of the Constitution establishes the right to live in a healthy and ecologically balanced environment, it also declares the preservation of the environment, the conservation of ecosystems, biodiversity and the integrity of the country's genetic heritage. In paragraph 12 of article 57 it recognizes the collective right of communities, peoples and nationalities to maintain, protect and develop collective knowledge; their sciences, technologies and ancestral wisdom; genetic resources that contain biological diversity and agrobiodiversity; in addition to prohibiting all forms of appropriation of their knowledge, innovations and practices. Article 281 establishes that food sovereignty constitutes a strategic objective and an obligation of the State to guarantee that individuals, communities, peoples and nationalities achieve self-sufficiency in healthy and culturally appropriate

food, on a permanent basis. Numeral 6 of the aforementioned article 281 establishes the state responsibility to promote the preservation and recovery of agrobiodiversity and the ancestral knowledge linked to it; as well as the use, conservation and free exchange of seeds. Finally, in article 400, it establishes that the State will exercise sovereignty over biodiversity, whose administration and management will be carried out with intergenerational responsibility, while declaring the conservation of biodiversity and all its components of public interest, in particular the agricultural and wild biodiversity and the genetic heritage of the country.

In 2011, the Government of Ecuador approved through Decree 905 the National Regulation to the Common Regime on Access to Genetic Resources in Application to Decision 391 of the Andean Community. The main objective of this regulatory framework is to ensure that the application of the terms of access to genetic resources associated or not with traditional knowledge of Indigenous Peoples and Local Communities, and the distribution of the benefits derived from its use is carried out in the terms specified in the Nagoya Protocol of the Convention on Biological Diversity. The competent national authority in this matter is the Ministry of Environment and Water (MAAE) and the Ministry of Agriculture and Livestock (MAG), through INIAP, is designated as the competent evaluating entity on the genetic resources of cultivated and domesticated organisms, as well as species and wild varieties related to crops. From this scope, the species and varieties that are listed in Annex 1 of the International Treaty on Plant Genetic Resources for Food and Agriculture are excluded (ITPGRFA).

In 2017, the National Assembly of Ecuador approved the Law of Agrobiodiversity, Seeds and Promotion of Sustainable Agriculture, after a pre-legislative consultation that involved the participation of 812 organizations and around 5,000 people. The regulation aims to contribute to food sovereignty, strengthen agrobiodiversity, conservation and seed production, the germplasm bank, as well as supporting small and medium producers. This law recognizes the Rights of the Farmer agreed in the ITPGRFA, and allows the exchange of traditional smallhold farmer seeds, recognizes areas for the conservation of agrobiodiversity, and legally separates traditional smallhold farmer varieties from the seeds of certified commercial varieties that require specific regulations for their production and commercialization. The agrobiodiversity conservation areas proposed in the aforementioned law are a strategy under construction in Ecuador, which still requires regulatory approval for its execution. In a study carried out by INIAP in 2018, areas where environmental characteristics allow the best development and conservation of some native varieties are prioritized. With this information, national and local actors have the possibility of developing actions to promote the conservation of agrobiodiversity.

Ecuador approved a new national regulation, the Organic Code of the Environment (CODA), which entered into force in April 2018. This new CODA and its Regulation unifies and updates the country's environmental legal framework and seeks to guarantee the right of people to live in a healthy and ecologically balanced environment, as well as to protect the rights of nature recognized by the Ecuadorian Constitution. Among others, the CODA addresses issues such as: climate change, protected areas, fauna, forest heritage, environmental quality, waste management, environmental incentives, coastal marine areas, mangroves, access to genetic resources, biosecurity and bio trade. The CODA defines new scenarios for the management of protected areas (PA) and the communities within them, including aspects such as the contribution that PAs make to development and their integration into the

Development Plans and Territorial Ordering (PDOT) of local governments; regularization of land tenure within PAs; recognizing the importance of a more active participation of the inhabitants to ensure conservation; the recognition that the livelihoods of the inhabitants of the PAs must be sustainable and in accordance with the zoning of the areas, among others.

The approval of the CODA represents an important opportunity to develop integrated territorial management approaches, which address both the newly defined sustainable use areas within the SEAP, as well as their now legally recognized buffer zones. This also represents an opportunity to build on recent GEF-supported initiatives related to protected area designation and effective management.

Within the scope of the National Agricultural Authority, ministerial agreement No. 095 stands out, which establishes the administrative and technical guidelines and procedures for the registration, use, circulation, import and export of timber and non-timber forest products from forest plantations for commercial purposes and agroforestry production systems, as well as applicable regulations for the processes of conservation, use and utilization of agrobiodiversity in production areas.

### ***In situ* and *ex situ* conservation processes of agrobiodiversity**

In Ecuador, the conservation of agrobiodiversity is carried out *in situ* and *ex situ*, to prevent genetic erosion and loss of biodiversity for food and agriculture. In these two conservation modalities, various actors and institutions participate. Regarding *ex situ* conservation, INIAP, for more than 30 years, has worked in the consolidated National Genebank, in which has been able to conserve the genetic material of cultivated species and their wild relatives, of about 29,000 collections, of which 18,885 are conserved as seeds in the Base Bank (INIAP, E.E. Santa Catalina), where approximately 300 accessions of wild relatives are conserved. In addition to initiatives from some universities, in which it is reported that some 6,719 collections are preserved. This material serves to maintain the germplasm of the native species and varieties of Ecuador, which, if applicable, can be multiplied to be used again, or genes can be obtained from them to make more resistant varieties.

As a complement to this, INIAP, together with other local actors such as universities and local governments, has developed some Centers for Bio-knowledge and Agrarian Development (CBDA). These spaces allow the conservation of agrobiodiversity, through: restitution of vegetative material, obtaining seeds, participatory research, training, validation and transfer of technologies, among others. The CBDA seek to consolidate the relationships between nature, culture and individual and collective identities; In these spaces local species and varieties of interest for agriculture and food are managed and cultivated, the same ones that are delivered to local smallhold family farmers, who have an interest in cultivating them as part of their food sovereignty. The Genebank and this CBDA strategy was included as an action of the National Biodiversity Strategy (Goal 15.3) and in the Law of Agrobiodiversity, Seeds and Promotion of Sustainable Agriculture; these spaces are in the process of strengthening and development in different places in the four regions of the country.

In relation to *in situ* conservation, there are several initiatives for the conservation of agrobiodiversity led by INIAP, NGOs and smallhold farmer organizations, in which the exchange of seeds is promoted at seed fairs, the training of local seed guardians (farmers conservationists), the recovery of ancestral management practices and the conservation of food heritage, among other activities. One of the most

important initiatives in the country was the Agrobiodiversity project, which was financed by the GEF and executed by INIAP, FAO and Heifer Foundation, in coordination with the Ministry of Agriculture and Livestock of Ecuador (MAG), local governments, universities and smallhold farmer organizations. This project supported the conservation of approximately 90 native varieties with the participation of more than 4,000 families of peasant family farmers. Contributing with these initiatives to the fulfillment of goal 15.4 of the National Biodiversity Strategy.

In Ecuador, *in situ* conservation has been related to the alternative agriculture movement led by NGOs and smallhold farmer organizations. Where the transition to more sustainable agricultural management systems is sought, based on principles of: organic agriculture, agroecology, permaculture, among others. For some years now, these actions have received government support from MAG and MAAE, the latter through initiatives to adapt to climate change for the agricultural sector, and in the management of buffer zones in protected areas.

In recent years, the role of provincial and parish Decentralized Autonomous Governments (GAD), thanks to their competences in the field of conservation, production and environmental quality at the local level, constitute relevant actors for the management of this project, thanks to the various programs and projects with producers, community organizations and enterprises; including the availability of technical and extension staff, and various incentives such as machinery, tools, supplies, logistics, etc. The coordination with the GADs carried out in GEF projects demonstrates the relevant institutional and management base that the GADs represent for the mobilization of resources under co-financing and the achievement of results.

In the province of Imbabura, Cotacachi canton, project intervention area, The Union of Indigenous Smallhold Farmers Organizations of Cotacachi (UNORCAC) has been developing in recent years a plan of activities aimed at the management and conservation of agrobiodiversity in the communities with a view to their food security. With the collaboration of INIAP, Heifer and other cooperation organizations, agroecological plots have been implemented with an emphasis on the conservation of native crops. In the last twelve years, nearly 400 families have been trained in the management of the components of agroecological plots and the conservation of agrobiodiversity. The production of these plots is marketed in a weekly fair in the city of Cotacachi, where more than 200 women producers participate, selling the diversity of smallhold farmer production directly to consumers. In addition, for fourteen years a seed exchange fair has been developed in Cotacachi with the participation of at least 150 producers, of which 80% are women. UNORCAC also manages an ethnobotanical garden where more than a hundred species of crops and medicinal plants are conserved, and it is a teaching center for agrobiodiversity conservation and a tourist attraction visited by at least a thousand people per year, mainly students. Together with INIAP, an agrobiodiversity inventory was carried out in the Cotacachi canton and an agrobiodiversity catalog was published, both as instruments to sensitize farmers and community leaders about the values of agricultural diversity. This program of activities has generated a 40% increase in the availability of food for self-consumption in the families that implement agrobiodiverse production in the plots. In addition, community participation has improved, especially of women within the peasant organization.

UNORCAC in association with INIAP and the Universidad T?cnica del Norte are currently executing the project Strengthening the indigenous communities of Cotacachi -Ecuador in the conservation and

use of RFAA as a mechanism for the fair and equitable distribution of benefits, with the financing of the benefit-sharing fund the International Treaty on Plant Genetic Resources for food and agriculture, aims to support 1500 farmers to strengthen the use and conservation of their agrobiodiversity.

In addition, UNORCAC has developed several food processing activities such as the production of maize chicha from local varieties in a processing plant managed by women, the dehydration of native fruits and vegetables (uvilla, morti?o, aj?) and the dehydration and conditioning of medicinal plants. All these industrial micro-enterprises use native species and varieties for their production processes and incorporate traditional knowledge of food preparation and preservation. Management is community-based, with a high participation of women, and most of the initiatives mentioned generate direct jobs (4 people, on average). The processed products are marketed in the communities and at the weekly agro-ecological fairs, and in some cases there are also fixed wholesale clients.

In the province of Napo, there is an important network of associative enterprises that produce and commercialize a variety of products with added value from local agrobiodiversity, one of the most representative instances is the Network of Associations of the Amazonian Chakra of Napo, initially made up of the Kallari, Wi?ak and Tsatsayaku associations, which integrate about 1,200 families, managing the value chains of cocoa, guayusa, vanilla, banana, among others; with products that are commercialized in the national and international market, for which they have organic certification of their production processes and the recognition of the management of good manufacturing practices (GMP) in the processing of finished products such as chocolates, cocoa, nibs, dried pods, vanilla powder, crushed guayusa, beverages, among others.

In this process, local organizations have managed and obtained environmental licenses for the management of value chains from the perspective of biotrade, the generation of guides for the use and mobilization of non-timber forest products (NTFP), among other procedures related to the policy of revitalization of the bioeconomy from the renewed approaches of the MAAE.

On the other hand, in this Amazonian province it is important to highlight the development of cooperation and co-management alliances with initiatives aligned with the conservation and sustainable use of local agrobiodiversity, such as the project "Conservation and sustainable use of biodiversity, forests, soil and water as a means to achieve Good Living/Sumak Kawsay in the province of Napo GCP/ECU/082/GFF" the Provincial Government of Napo, MAAE and FAO; the MAG Inclusive and Sustainable Value Chains project, the Italian CEFA foundation and the German cooperation (GIZ), the collaboration of NGOs such as Maquita Cushunchic, the Ecuadorian Fund for Development Cooperation (FECD), the Italian cooperation (ENGIM), and the work that is being carried out at the IKIAM Regional University through the areas of linkage and the agroecology career.

In the two project intervention areas (Imbabura and Napo) the mechanism for the Forest and Farm Facility (FFF) is in operation, which focuses on the direct strengthening of forest agricultural producer organizations (OPFA) as the main agents of change to achieve climate-resilient landscapes and better livelihoods. Capacity building for OPFAs occurs in several areas: governance and social organization; access to markets and financing; adaptation/mitigation/resilience to climate change practices; and access to social and cultural services. This initiative will be valid until 2022. The FFF has funding from countries such as Finland, Sweden, Germany and the United States and is operated in Ecuador by FAO

and the Ministry of Environment and Water. The landscape management experiences of the FFF will provide lessons learned in the implementation of this proposal.

Due to the exceptional characteristics of the biocultural production systems of Imbabura and Napo, these two sites have developed pioneering initiatives for the recognition of the Andean Chakra (Imbabura) and the Amazonian Chakra (Napo) as Globally Important Agricultural Heritage Systems (GIAHS). In this process, the procedures for preparing the application files have been completed; the presentation and endorsement from the Ministry of Agriculture and Livestock; presentation of the file to the FAO GIAHS secretariat; and the submission of the first observations of the Scientific Committee of GIAHS, as well as the planning of a mission of the Committee for the verification of the systems in Ecuador. The project will interact with this recognition process, by providing relevant information on the management of CWR and EWS within these traditional use and production systems, as well as with the development of processes and regulations to ensure the conservation, promotion and sustainability of GIAHS.

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

#### ***Objective, strategies and intervention approaches***

Strengthening policies and institutions in the field of conservation, use and sustainable utilization of CWR and EWS is a priority need in the country, for which the Government of Ecuador extends the request for support to the GEF in order to achieve the objective of the project ?Strengthen institutional systems and the development of measures for the conservation and sustainable utilization of CWR and EWS in Ecuador, as a complementary scope for the fulfillment of local, national and global strategies for the conservation of agrobiodiversity, and its contribution to the improvement of the quality of life for the rural population?

To achieve this objective, the project bases its actions on the analysis of the opportunities represented by the current political and institutional context, thanks to the ratification of the international treaty on plant genetic resources; to the management of constitutional guidelines on biodiversity, agrobiodiversity, ecosystem services and food security; to the generation of policies and laws from the national authority (MAAE and MAG); work on proposals for secondary laws and regulations related to the management of wild species, non-timber forest products, compliance with agroecological production standards, among others.

Therefore, in the face of the barriers identified to advance in the sustainable management of CWR and EWS, the following operational strategies are proposed from this project initiative: i) develop intersectoral and inclusive spaces for analysis and strengthening of the institutional framework of Ecuador, for the generation and/or updating of laws and regulations that regularize and facilitate conservation, sustainable use and exploitation of CWR and EWS, with procedures that can be managed by the producers themselves, and their organizations or enterprises, with the permanent support and support of the entities in charge of monitoring their compliance; ii) establish participatory

methodologies and instruments for the definition and recognition of sites or areas of conservation of CWR and EWS, both in protected areas and in other important sites; procedures that will be validated in pilot management areas, for their subsequent promotion or expansion in Ecuador, both in the short and medium term.; iii) strengthen the capacities of the entities and human talents in charge of the management of CWR and EWS, through training processes, exchange of experiences and integration in local, national and regional management platforms; and iv) develop measures and systems / protocols to monitor the practices of conservation, use and sustainable utilization of priority CWRs and EWSs, based on the experiences and initiatives of local enterprises that have developed value chains for agrobiodiversity products, in order to boost the local bioeconomy and contribute to improving the quality of life of the local population.

To achieve broad participation and empowerment of local actors, the project will apply cross-sectionally and with the definition of precise activities and with financial investment the gender, generational and intercultural approaches, thanks to the recognition of the transcendent role of women and indigenous populations in the access, control and management of productive systems and in the local conservation of agrobiodiversity; and the need to facilitate intergenerational dialogue so that children and young people continue to apply these cultural values of conservation and sustainable use of biodiversity. Likewise, the guidelines and procedures of the Free and Informed Prior Consent (FIPC) will be applied with the indigenous peoples and nationalities involved, motivating their active participation in the management, decision-making and development of the different strategic and operational actions of the project.

The objectives, strategies and intervention approaches of the project directly address the identified barriers that prevent improving the processes of conservation, use and sustainable use of CWR and EWS, establishing the following theory of change diagram, which links the chain of products, results and impacts of the project:

Problem	Cause	Barriers	Solutions	Strategies - project products	Results	Components	Assumptions	Intermediate status	Impact	
Agrobiodiversity of CWR and EWS is lost in Ecuador	Low priority and resources to collect information from CWR and EWS	Barrier 2. Limited knowledge of the conservation status of CWR and EWS populations	Increase knowledge about CWR and EWS	<ul style="list-style-type: none"> <li>*Methodological guide and toolbox for the definition of species and conservation areas of CWR and EWS, based on the Voluntary Guidelines of the Commission on Genetic Resources, gender and cultural belonging approach, and national conditions.</li> <li>*Inventory and conservation status of priority wild species, for the two pilot areas developed</li> <li>*Definition of areas of conservation and sustainable use of CWR and EWS, according to the zoning of protected areas and private areas.</li> </ul>	CWR and EWS are identified and conserved in pilot sites of the Amazon (Napo) and the northern highlands (Imbabura), based on the analysis of roles and practices of use and conservation by men and women in the conservation areas and pilot sites.	<ul style="list-style-type: none"> <li>Improved institutional capacity for the definition of conservation areas for crop wild relatives (CWR) and wild edible species (EWS).</li> <li>Strengthening and implementing the regulatory framework and conservation information of CWR and EWS.</li> <li>National, institutional and local government capacities strengthened for the conservation, use, registration, management and reporting of CWR and EWS.</li> <li>Areas of conservation and use of prioritized CWR and EWS are constituted in demonstration scenarios and community learning for the conservation, and sustainable utilization of local agrobiodiversity.</li> <li>Recognition and promotion of CWR and EWS products.</li> <li>Knowledge management and M&amp;E to inform project results and lessons learned on conservation from CWR and EWS to stakeholders and communities</li> </ul>	<ul style="list-style-type: none"> <li>Developed knowledge is incorporated into institutional procedures for the conservation, use and utilization of CWR and EWS</li> </ul>	National institutional and capacities for the conservation and monitoring of CWR and EWS	Ecuador conserves in situ agrobiodiversity of CWR and EWS, contributing to food security and rural livelihoods	
	Limited institutional development for the conservation and use of CWR and EWS	Barrier 3. There are no specific regulations and procedures for the conservation and sustainable use of CWR and EWS	Improve regulations and institutional capacities	<ul style="list-style-type: none"> <li>*Secondary regulations for the conservation and sustainable use of CWR and EWS, generated and/or updated within the capacity of the MAAG and MAG</li> <li>*Process for digital, geographic and statistical monitoring of the conservation status of priority CWR and EWS developed.</li> <li>*Geographic and statistical information system of CWR and EWS developed.</li> <li>*National biodiversity strategy incorporates guidelines for the conservation and sustainable utilization of CWR and EWS.</li> <li>*Regional exchange experiences on creation and management of reserves of CWR and EWS (triangular cooperation), established.</li> <li>*Report on progress and products of the project, through the national report on biodiversity related to Aichi goal 13 (CWR and EWS).</li> <li>*Technicians of MAAG, the Department of Plant Genetic Resources of INIAP, and the Environment Directorate of local GAD trained</li> </ul>	<ul style="list-style-type: none"> <li>Strengthening and implementing the regulatory framework and conservation information of CWR and EWS.</li> </ul>		<ul style="list-style-type: none"> <li>Regulations facilitate the development of procedures for the conservation, use and utilization of CWR and EWS</li> </ul>			New capacities allow the availability of talents and resources for the sustainable management of CWR and EWS
	The CWR and EWS have not been a decision factor to define biodiversity conservation areas	Barrier 1. In Ecuador there are no defined sites for the conservation of CWR and EWS populations in situ	Define CWR and EWS use and conservation sites based on community initiatives as demonstration scenarios	<ul style="list-style-type: none"> <li>*Management plans for CWR and EWS conservation areas implemented and evaluated in Napo and Imbabura, based on the project completion strategy and community participation and training processes for men and women</li> <li>*Tools for the sustainable utilization of CWR and EWS based on voluntary guidelines and national regulations, on the approach of gender and cultural belonging.</li> <li>*Plans of use and exploitation of CWR and EWS approved and implemented, considering each of the links in the prioritized chains of the associative enterprises of Napo's producers, in coordination with national technicians and those of the GADs.</li> <li>*Recognition and logo of the products of enterprises applying plans of sustainable utilization, and conservation of CWR and EWS.</li> <li>*Publication of materials, educational and communicative mechanisms for the dissemination of the importance and positioning of the products of CSP and ESC enterprises.</li> <li>*Establishing the baseline - TAIR tool</li> <li>*Monitoring and evaluation of the project to achieve the results</li> <li>*Project evaluation</li> <li>*Publications of results developed and disseminated among interested parties</li> <li>*Disclosure and communication of the project actions (corporate image, merchandising, campaigns, App, social networks, among others)</li> </ul>	<ul style="list-style-type: none"> <li>Areas of conservation and use of prioritized CWR and EWS are constituted in demonstration scenarios and community learning for the conservation, and sustainable utilization of local agrobiodiversity.</li> </ul>		<ul style="list-style-type: none"> <li>Implementation of in situ conservation measures and sustainable use of CWR and EWS</li> </ul>			

(Image also uploaded as project supporting document)



### ***Project intervention areas***

The project's direct intervention areas include the provinces of Imbabura, Cotacachi canton in the Andean region, and the Archidona, Tena and Arosemena Tola cantons of the Napo province in the Amazon region of Ecuador. These two provinces present important biophysical constraints and institutional and socioeconomic processes, which position them as demonstrative scenarios to expand the conservation processes of wild and cultivated diversity in other provinces and regions of Ecuador.

Both provinces are located in biomes of global importance (Andean and Amazon), for which they contemplate important areas with protected areas. The project will intervene in the Cotacachi Cayapas ecological reserve in Imbabura; and in the Sumaco - Napo Galeras, Colonso Chalupas and Llanganates parks and reserves in the Napo province; including other spaces with conservation categories that are producing a variety of provisioning ecosystem services for local populations.

Likewise, the two provinces configure exceptional and particular biocultural zones, as a product of the harmonious interaction between native peoples and nature, highlighting the development of systems of cultural values, knowledge and unique social structures, that have allowed ancestral and contemporary processes of conservation and sustainable use of ecosystems and agrobiodiversity, such as the Andean Chakra and Amazonian Chakra systems.

At the institutional and governance level, the two sites have been working on the development of plans and projects applied from the competences of local governments (GAD), which are strengthening the processes and experiences of agrobiodiversity management, highlighting seed fairs, agritourism and community tourism systems, the development of spaces to stimulate short circuits for the exchange of agricultural products, the positioning of bio-enterprises with products with added value commercialized in special markets at the national and international level.

### ***Components and expected results***

#### **Component 1. Institutional and definition of reserves of wild relatives (CWR) and edible wild species (EWS).**

Within Component 1, the project seeks to develop the institutional framework, regulations, and national capacities to establish CWR and EWS conservation sites. In this process the following three results are raised:

1.1. CWR and EWS are identified and conserved in the pilot sites of the Amazon (Napo) and the northern highlands (Imbabura), taking as a basis for analysis the roles and priorities of use and conservation of men and women in the conservation areas and pilot sites

The products that add to the achievement of this result are:

1.1.1. *Methodological guide and toolbox for the definition of species and conservation areas of CWR and EWS prepared, based on the Voluntary Guidelines of the Commission on Genetic Resources, the gender and cultural relevance approach, and national circumstances:* Based on the procedures and recommendations of the voluntary guidelines of the genetic resources commission, and the particular circumstances of Ecuador, the project will support the MAAE and the MAG in the definition of an adequate methodology that allows identifying and prioritizing the CWR and EWS species to be conserved in the pilot areas of implementation, as well as the procedures to define and delimit the sites where CWR and EWS are identified and distributed. This methodology will be applied and validated in the pilot intervention sites, which will be approved by the MAAE and the MAG for its subsequent application in other areas of the country.

1.1.2. *Inventory and conservation status of priority wild species, for the two pilot areas developed:* Following the methodology generated in product 1.1.1., a comprehensive list of CWR and EWS taxa will be drawn up for the two project implementation sites, by consulting available secondary information and interviews with key informants, assessing traditional knowledge and knowledge and the gender perspective. Next, the prioritization of the CWR and EWS species will be carried out, through the definition of criteria and indicators for prioritization and evaluation. The detailed development of the inventory will be applied to the prioritized species applying internationally accepted data collection standards, both secondary and field information. Information at taxon level will be obtained from the relevant bibliography, such as: monographs, field guides, flora inventories, distribution maps, soil atlas, and biophysical and climatic information. At the population level, information will be obtained from herbarium specimens and from the databases of the national germplasm bank and other banks in the country. The inventory development will include the following information: nomenclature and taxonomic descriptions; use; degree of threat and state of conservation; socio-economic data and information about the site and the ecosystem or agroecosystem.

1.1.3. *Definition of areas of conservation, and sustainable utilization of CWR and EWS, according to the zoning of protected areas and in private areas:*

Based on the inventory data, conservation status and distribution of the CWR and EWS species, the *in situ* conservation areas will be defined for the two pilot provinces. These sites will meet minimum requirements for the maintenance of gene pools in the long term. Minimum requirements or quality standards include definition of location, spatial structure, taxa of interest, populations, and management of the gene pool. The definition of the conservation area will be carried out by the competent authority, in accordance with the zoning of the PAs and the specific regulations that will be strengthened with this project, with special focus on areas of sustainable use and buffering.

1.2. Strengthening and implementation of the regulatory framework and information on conservation of CWR and EWS.

The products that contribute to the achievement of this result are:

1.2.1. *Secondary regulations for the conservation, sustainable utilization of CWR and EWS, generated and/or updated under the powers of the MAAE and MAG.*

The institutionalization of the processes of conservation and sustainable use of CWR and EWS will be achieved through the generation of a normative body that facilitates its application at the national level; for this, the project will contribute to the development of processes and spaces for analysis and updating of laws and secondary regulations that are currently being reviewed for the application of the CODA. Among the main bodies to review are the standard for the sustainable management of non-timber forest products (NTFP), the standard of technical guidelines for the conservation and sustainable use of biodiversity and its genetic heritage, the guidelines for the management of CWR and EWS associated with biotrade, among others. Likewise, proposals for regulations and zoning information will be generated to facilitate the incorporation of CWR and EWS conservation sites.

When the reserve is located outside of protected areas, a recognition and other legal guidelines for legal protection will be established and the recognition of reserve sites outside of protected areas under a conservation agreement by incentives, nationals of the MAAE and MAG, and local from the competences of the GAD, whether community or private, that allows to improve the situation and the long-term security of the conserved populations. The technical-legal document of the conservation agreement will establish the conservation action plan and the incentives for the owner of the area.

#### *1.2.2. Protocol for digital, geographic and statistical monitoring of the conservation status of priority CWR and EWS developed.*

To facilitate the management of the genetic reserve, an action plan will be developed, in which surveillance activities, monitoring, protocols for the use of the species, activities to promote the role of local communities in the conservation and sustainable management of plant diversity. If the genetic reserve is established within a protected area, it must be integrated into the policies, guidelines and programs of the protected area management plan.

A system and protocol for the permanent monitoring of the diversity and populations of CWR and EWS will be elaborated and validated, systematically collecting data to detect changes, determine the direction of these changes and measure their magnitude; allowing to make decisions and evaluate the relevance, effectiveness, efficiency, impact and sustainability of conservation and sustainable use measures.

For the development of the monitoring process, a sampling system will be applied in the conservation sites, prioritizing variables and indicators that contribute, not only to measuring the effectiveness of the conservation processes, but also the generation of national reports in contribution to the targets and indicators of international treaties on biodiversity and its genetic resources.

#### *1.2.3. Geographic and statistical information system of CWR and EWS developed.*

With all the information collected and generated by the project, such as: the CWR and EWS lists, inventories of prioritized species, the description of the conservation status including the information generated by the permanent monitoring system, a geographic and statistical information system of CWR and EWS will be generated, which will include the following information: i) population field eco-geographic data and genetic data, ii) data related to *in situ* and *ex situ* conservation management, and iii) characterization and evaluation data.

All these types of data will be collected using standard descriptors. The official characterization and evaluation descriptors will be related to various standard lists of crop descriptors published by FAO (Bioversity International) and the International Union for the Protection of New Varieties of Plants (UPOV).

The main objective of this information system is to facilitate access and exchange of information based on standardized and consistent data, raising the quality of the country's reports, and thereby contribute to the sustainable use of CWR and EWS.

1.3. Capacities of national institutions and local governments strengthened for the conservation, use, utilization, management and reporting of CWR and EWS.

The products that contribute to the achievement of this result are:

1.3.1. *National biodiversity strategy incorporates guidelines for the sustainable conservation, use and utilization of CWR and EWS.*

In order to advance in the institutionalization of the management of CWR and EWS, based on the results of this project, a process of socialization of the importance, priority and progress of the conservation processes of CWR and EWS in Ecuador will be carried out, in order to generate priority guidelines for the management of CWR and EWS, as inputs to be incorporated into the national biodiversity strategy, in order to facilitate the development of public policy, regulations and other initiatives that become umbrella instruments for the sustainable management of CWR and EWS in Ecuador.

This process will be facilitated by the leadership of the MAAE in the national biodiversity strategy and its action plan.

1.3.2. *Regional exchange network on experiences of creation of reserves and management of CWR and EWS (triangular cooperation) established.*

The project will facilitate the generation of a regional network or space for the management of CWR and EWS, based on the use of ICT or virtual spaces, in order to establish mechanisms for the exchange of experiences and permanent innovation, which allow processes of adaptation of instruments and conservation and sustainable use mechanisms; as well as scaling initiatives and management guidelines at the regional level; including the opening of processes of southern and triangular cooperation.

In addition, the management in these regional spaces will allow co-organizing and developing training events on the treaties, guidelines, experiences and lessons learned from the process of sustainable conservation, use and utilization of the CWR and EWS in the region.

1.3.3. *Report on the processes and products of the project, through the national report on biodiversity related to Aichi goal 13 (CWR and EWS).*

All the information, instruments and processes generated by the project will become the main inputs for the generation of the national biodiversity report related to goal 13. In addition, the monitoring and

information system that the project will establish will allow the institutionalization and generation of systematic and continuous consistent information for the periodic reporting of the national biodiversity report and other local and regional reports.

*1.3.4 Technicians from the MAAE, the Department of Plant Genetic Resources of the INIAP, and the Environmental Directorates of the GAD, trained.*

The human talents of the departments involved in MAAE, INIAP and GAD will be trained as a result of their active participation in the development of the actions and processes of the project for the sustainable conservation, use and utilization of CWR and EWS, both in the generation of information and inventories, review and strengthening of regulations, regional exchange spaces, national reports, declaration of conservation areas, implementation of management plans for areas and species, development of educational and communication materials. In addition, complementary and continuous training workshops will be developed to reinforce the learning processes.

## **Component 2. Implementation of *in situ* conservation measures and sustainable utilization of CWR and EWS.**

Once the conservation sites, the regulatory framework and better national capacities have been defined, this component proposes to develop practical processes for the implementation of conservation measures and sustainable utilization of CWR and EWS, based on the strengthening of local community bio-enterprises that are currently contributing to boost the bioeconomy in the project implementation areas.

This component is composed of the following two results:

2.1. Areas of conservation, use and utilization of prioritized CWR and EWS are constituted in demonstration scenarios and community learning for the conservation and sustainable use of local agrobiodiversity.

The products that add to the achievement of this result are:

*2.1.1. Management plans for CWR and EWS conservation areas implemented and evaluated in Napo and Imbabura, based on the project's exit strategy and community participation and training processes for men and women.*

The project will support the initial implementation of the management plan defined for the CWR and EWS conservation areas in the two project coverage sites; what the development of site surveillance activities involves; the implementation of the monitoring system; the development of training activities for MAAE staff and local communities; the application of the protocols for the use and exploitation of CWR and EWS from local communities and associative enterprises; the development of required adaptations or equipment; the socialization and comprehensive training of the personnel of the Provincial and Parish Decentralized Autonomous Governments, civil society organizations, NGOs, universities and other local entities.

On the other hand, an exit strategy will be defined that will be applied from the beginning of the implementation of the management plans, in such a way that from the start the search for allies, alliances, joint ventures and processes and capacities is consolidated; and that in addition, and as a result of the information from the monitoring system, relevant findings are identified, and actions are corrected in a timely manner.

#### *2.1.2. Guide for the sustainable use and exploitation of CWR and EWS based on voluntary guidelines and national regulations, and on the gender and cultural relevance approach.*

Based on the development and guidelines of the national regulations for the management of CWR and EWS, a practical guide will be developed in a participatory manner with national authorities, public and private institutions, and the active participation of community organizations and their undertakings, for the sustainable use and utilization of CWR and EWS, integrated or in complement to the current formats of the management plans of NTFP, biotrade products or other related plans.

The purpose is that this guide and its format are integrated into a single guide approved by the competent institutions, that complies with the institutional requirements, but that in turn is viable and friendly for its fulfillment from the different circumstances and capacities of the families and local organizations, thanks to the importance of their participation to achieve an effective and sustainable process of conservation of the CWR and EWS.

#### *2.1.3. Plans of use and utilization approved and implemented of CWR and EWS, considering each of the links of the prioritized chains of the associative enterprises of Napo producers, in coordination with national incentives and the GAD.*

Based on the CWR and prioritized wild species and articulated to a value chain of ventures of the Consortium or Network of Associations of the Amazon Chakra of Napo, the project will support the comprehensive development of at least two plans for the use and exploitation of CWR and EWS species, as well as the approval process in the MAAE and the implementation.

The implementation process will be carried out by establishing co-management agreements between the local enterprise, the Provincial Government (thanks to its competence in production and commercialization), the project and other interested support entities; in order to facilitate support incentives for the fulfillment of the actions foreseen in the plan of use of the species in the short and medium term.

Support incentives include: training processes, technical advice, basic adjustments, development of traceability systems, support in generating reports to the MAAE, provision of supplies, among others.

In the case of the province of Imbabura, the management of this product will be complemented with the activities of use and utilization in the value chains prioritized and supported by the Biodiversity Business project, which contemplates the strengthening of the enterprises of the Union of Smallhold Farmer Organizations of Cotacachi (UNORCAC).

## 2.2. Recognition and promotion of the products conserved by the CWR and EWS.

The products that add to the achievement of this result are:

*2.2.1. Recognition and logo of differentiation of the products of the enterprises that apply plans of use and sustainable utilization and conservation of CWR and EWS.*

In order to promote and/or encourage the processes of conservation, use and sustainable utilization of CWR and EWS, the project will generate an institutional instrument of recognition for community enterprises that have use plans duly approved by the MAAE or MAG, which will be materialized through a special distinctive logo that makes visible the products with added value that contribute directly to the conservation of the CWR and EWS.

This recognition will be articulated with the current Green Point of the MAAE and the seal of the Smallhold Farmer Family Agriculture (AFC) of the MAG, which will facilitate access to the institutional incentives of these national public entities.

Project management will focus on supporting entrepreneurs and value chains in the province of Napo (which will be prioritized during the project document preparation phase), and actions will be coordinated with the Biodiversity Business project, which is managed by the MAAE with support from the CAF and the GEF in the province of Imbabura, in order to achieve recognition and differentiation in one of the value chains of CWR or EWS products managed by UNORCAC.

*2.2.3. Generation of educational and communicative materials and mechanisms for the dissemination of the importance and positioning of the products of the enterprises maintained by CWR and EWS.*

Based on the systematized information, the processes developed, and results generated by the project, edu-communicative material will be generated such as: advertising videos (spots), infographics and content for websites and social networks, to strengthen the product positioning process with added value of the enterprises that are conserving CWR and EWS.

This material will be disseminated through the communication media of the project's partner entities, the websites and social networks of local enterprises, as well as in the stands and spaces of local, national and regional fairs for the promotion of products.

### **Component 3. Information monitoring, evaluation and dissemination system**

This component establishes the procedures, instruments and operational strategies to ensure the effective management of the project objectives, which includes the system for monitoring, evaluating and communicating the results, products and lessons learned.

The main result of this component is:

**3.1. Knowledge management and M&E to inform project results and lessons learned on conservation from CWR and EWS to stakeholders and communities.**

The products that add to the achievement of this result are:

### 3.1.3. *Establishing the baseline - TAPE tool*

The project baseline will be established to compare the progress and achievements of the project's products and results, based on the application of the FAO TAPE[1]<sup>1</sup> tool.

### 3.1.2 *Monitoring and evaluation of the project to achieve the results*

An internal monitoring and evaluation system of the project will be established, which will ensure the continuous record of the actions carried out, progress in the achievement of indicators and goals; in line with the logical framework of the project and operational plans.

In addition to the registration instruments, permanent meetings for the analysis of requirements, progress and monthly planning will be established at the technical team level of the project, in which the necessary inputs will be generated for the monthly monitoring process of the FAO program area. Other spaces for progress analysis and decision-making are the quarterly meetings of the Project Management Committee (PMC) and the semiannual meetings of the Project Steering Committee (CWR), as the main spaces of the project's governance structure.

Linked to the monitoring and evaluation of the project, missions and/or periodic field visits will be carried out to verify progress, in which representatives of the different partner entities of the project will participate.

As part of the process of monitoring and evaluating progress, based on the requirements of the FAO - GEF unit, the semi-annual PPR reports and the annual PIR reports of the project will be generated.

### 3.1.3 *Project evaluation*

In order to triangulate perceptions and objectively verify the progress and achievements of the project, the external evaluation of the project will be planned and developed, in which all the stakeholders, partners and beneficiaries of the project, will participate, following the guidelines of evaluation of the FAO - GEF unit. The recommendations of this process will make it possible to manage operational innovations and strengthen the sustainability strategies of the results and effects of the project, which will be complemented with a coherent and effective ?exit strategy?, for the continuity and scaling of the results from the competent public authorities, local governments and other strategic partners of the project.

### 3.1.3 *Publications of results developed and disseminated among interested parties*

An integral process of systematization of the processes, experiences and lessons learned from the project will be developed, which will be edited, designed and published to be shared with all related and interested actors. In digital format, it will be shared through the various digital platforms or websites of the project's partner institutions.

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In addition, this activity will be coordinated with other instances of the Ministry of the Environment and Water, particularly with the Unified Environmental Information System (SUIA) and the National Forest Monitoring System, in order to continuously disseminate the information, products and results of the project, and count on the participation of these instances in the monitoring of the process.

3.1.4 *Disclosure and communication of the project actions (corporate image, merchandising, campaigns, App, social networks, among others).*

The project will develop a comprehensive communication strategy and will have the assistance of a communication specialist for the construction of the different educommunication instruments, ensure the link with the media, lead the management of websites and social networks, as well as the development of dissemination and awareness campaigns.

#### **4) alignment with GEF focal area and/or Impact Program strategies;**

The proposed project is directly aligned with the GEF biodiversity focal area, specifically objective BD1: Integrate biodiversity across different sectors as well as within productive and marine landscapes; through entry point BD-1-4: sustainable use of plant and animal genetic resources. Therefore, it focuses on the protection/reserves *in situ* of CWR and EWS; and to the conservation and management of farms *in situ* (Vavilov centers); that is, in the creation of the national institutional framework and the necessary processes for the establishment of reserves of CWR and EWS, complemented with the implementation of conservation, use and sustainable utilization measures, generated from the initiatives of local community enterprises.

#### **5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing;**

The support of the GEF constitutes a strategic, dynamic and highly incremental/additional investment, to integrate, complement and strengthen the current political and regulatory framework and the institutional capacities of Ecuador, that allow the development of a systematic and articulated process of conservation and sustainable utilization of CWR and EWS, as a transcendental segment of biodiversity and a strategic pillar for the sustainability of local and regional food security programs.

This initiative will also generate synergies between the MAAE and the MAG from an intersectoral landscape and management perspective, by integrating areas under conservation or protected categories with agroecosystems rich in agrobiodiversity and their wild relatives. In this sense, a co-financing valued of US \$ 863,242.00 is established thanks to the combination of concurrent investments mobilized through complementary programs of initiatives of the governing public bodies and other partner institutions of the project.

In component 1, the GEF investment will contribute to address barrier #1, complementing the regulations and technical procedures to establish national guidelines and the first conservation sites for

CWR and EWS, both in protected areas and other forms of conservation. In addition, this component addresses barrier #2, generating sufficient information on the state of conservation of the CWR and EWS, establishing institutionalized information and monitoring systems of species and conservation processes, with the support of INIAP, Academia and other local NGOs.

In component 2, the GEF investment will contribute to addressing barrier #3, specifically by establishing and developing practical guidelines and procedures for the conservation, use and sustainable utilization of CWR and EWS, based on the experiences and capacity reached by the associative enterprises of producers in the two intervention sites of the project, mobilizing national and local incentives to strengthen compliance with agroecological and quality standards, including strategies to make visible the contribution of the sustainable management of value chains in the conservation of CWR and EWS for their access to special markets. The role of the competences and financial resources managed by the Provincial and Parish Decentralized Autonomous Governments will allow defining and complementing technical support plans and the sustainability of the incentives in the medium and long term.

In addition, the incremental financing from the GEF will support component 4, which establishes: i) monitoring and evaluation of the project to achieve results; ii) development of the external evaluation of the project; iii) the generation of publications of results developed and disseminated among interested parties; as well as iv) the dissemination and communication of the actions of the project (corporate image, merchandising, campaigns, App, social networks, among others). This component involves an important financing counterpart from the communication areas of the MAAE, the MAG and the GAD.

## **6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)**

The project will allow, from the performance and development of local and demonstrative scenarios of sustainable management of CWR and EWS, to scale towards the generation of national policies, norms and capacities, to complement the conservation systems of the agrobiodiversity of Ecuador; establishing institutionalized processes, conservation areas and monitoring systems as inputs to contribute to the achievement of global environmental benefits.

Ecuador, being one of the countries with the greatest biodiversity in the world and being part of the centers of origin of cultivated plants, is home to a great wealth of diversity of CWR and EWS that is part of the heritage of world agrobiodiversity, a basic source for food security and livelihoods of rural and urban populations.

In this sense, establishing reserves or conservation areas for CWR and EWS in the system of protected areas and in other areas of interest, represents an innovative process and mechanism to ensure the sustainable management of agrobiodiversity. The project establishes the following quantitative indicators of global environmental benefits:

**Core indicator 1: Protected terrestrial areas created or under improved management for conservation and sustainable use: 2,000 ha**

Indicator 1.2: Protected land areas with improved management efficiency: 2,000 ha

**Core indicator 4: Area of landscapes under improved practices (hectares; excluding protected areas): 1,000 ha**

Indicator 4.3: Landscapes area under sustainable land management in productive systems: 1,000 ha

**Core indicator 11: Number of direct beneficiaries disaggregated by gender as a co-benefit of GEF investment: 1,200**

Indicator 11: 1,200 direct beneficiaries based on capacity development and value chains (50% women)

In addition to the scope of the noted indicators, the achievement of the products, results and objectives of the project will directly contribute to the generation of the following co-benefits: development of value chains of innovative products from local associative enterprises; assessment of the CWR and EWS from the supply and demand of food from smallhold farmer family agriculture; make visible and revalue the knowledge and wisdom of indigenous peoples and nationalities; establish spaces for regional exchange and training; among others.

**7) innovation, sustainability and potential for scaling up.**

**Innovation:** The project is highly innovative for the conservation processes of Ecuador, since it constitutes the first initiative to generate the normative framework, the institutional capacities and the processes to define the conservation sites of CWR and EWS, both in protected areas and other important sites (landscape management approach). In addition, it will establish the development of guides and the application of the first measures for the sustainable use and utilization of prioritized CWR and EWS, through the establishment of inter-institutional platforms for coordination and management of incentives, under the leadership and experience of representative enterprises of local community organizations of Napo and Imbabura; allowing a more horizontal approach in biodiversity conservation processes.

**Sustainability:** The project defines several strategies to ensure the sustainability of the processes and results proposed, on the one hand the generation of the appropriate policy and/or regulatory framework, such as: the standards for the sustainable management of non-timber forest products (NTFP), the standard of technical guidelines for the conservation and sustainable use of biodiversity and its genetic

heritage, the guidelines for the management of CWR and EWS associated with the bioeconomy. A process that is complemented by the strengthening of capacities in the governing entities of Ecuador (MAAE and INIAP/MAG); support for inter-institutional spaces linked to the national biodiversity agenda; the regional exchange space; and mainly to the definition of conservation areas of the CWR and EWS in the protected areas and their buffer zones; and the development of information and monitoring systems for CWR and EWS. The monitoring system will allow the generation of updated information for national and international reports on the conservation status of CWR and EWS, which will facilitate the authorities and their allies, make decisions and continuously innovate strategies and actions for conservation, use and sustainable utilization of CWR and EWS. During the process of formulating the project in its PPG phase, those responsible for carrying out the monitoring will be defined which will allow the generation of updated information for the national and international reports on the state of conservation of CWR and EWS.

From the social and economic pillars of sustainability, the project will facilitate the management of incentives from national programs and the competences of the provincial and cantonal GADs, the strengthening of community associative ventures that contemplate representative value chains and/or with a high degree of consolidation, based on current processes of compliance with agroecological certification standards, good manufacturing practices (GMP), traceability and other quality standards; to which will be added the conservation, use and sustainable utilization of the priority CWR and EWS, which will allow them to innovate the offer towards the special markets, and generate additional benefits to the producers associated with the associative enterprises.

The addition of value to products from CWR and EWS, from compliance with environmental regulations of use and the application of quality standards in their processing; it will make it possible to strengthen green production technologies and the diversification of products offered in special markets; constituting an articulated strategy for the reactivation of production in the face of the health crisis of COVID-19.

#### **Potential for scaling up:**

The project is defined as a complementary phase in the process of conservation and sustainable use of CWR and EWS, for which the generation of national regulations, the validation of methodologies for the definition of conservation sites, the approval of guidelines for the use and utilization of CWR and EWS, the systematization of experiences and the generation of other operational systems and instruments will allow to expand or scale the impact of the project towards other regions and areas of importance of Ecuador, both in the short, medium and long term.

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[1] More information at: <http://www.fao.org/agroecology/tools-tape/en/>

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

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

Area 1: Imbabura province, Cotacachi canton, in the landscapes of sustainable production and protected area Cotacachi - Cayapas

Area 2: Napo province, Archidona, Tena and Arosemena Tola cantons; in the landscapes of Chakras and protected areas of Colonso Chalupas, Sumaco - Napo - Galeras and Llanganates.

Figure 1: Map of project intervention areas, provinces of Imbabura and Napo

**MAPA DE UBICACIÓN DE LA PROVINCIA DE IMBABURA EN EL CANTÓN COTACACHI Y EN LA PROVINCIA DE NAPO EN LOS CANTONES DE ARCHIDONA, TENA Y AROSEMENA TOLA.**



Simbología.	
División Provincial.	Limite Internacional.
□	—
División Cantonal.	
■ COTACACHI	
■ ARCHIDONA	
■ TENA	
■ CARLOS JULIO AROSEMENA TOLA	

Proyecto INIAP - FAO - MAG. Parientes Silvestres	
MAPA DE UBICACIÓN DE LA PROVINCIA DE IMBABURA EN EL CANTÓN COTACACHI Y EN LA PROVINCIA DE NAPO EN LOS CANTONES DE ARCHIDONA, TENA Y AROSEMENA TOLA.	
Fuente: CONALI 2016.	Realizado por: Ing. Msc. Pablo Moncayo
Fecha de elaboración: Enero, 2021	Formato de impresión: A4

## 2. Stakeholders

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

**Indigenous Peoples and Local Communities** Yes

**Civil Society Organizations** Yes

**Private Sector Entities**

If none of the above, please explain why:

**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**

This project profile is the product of a gradual process of coordination and consultation with different stakeholders, both of national and local incidence. From a national approach, initially the scope and general objectives were defined from the coordination between the Ministry of Environment and Water (MAAE), the Ministry of Agriculture and Livestock (MAG), the National Institute of Agricultural Research (INIAP) and FAO as the implementing agency.

Based on the analysis of contextual information and the establishment of the intervention areas, the participation with relevant actors of the territory was expanded, for which an information and consultation process was carried out, following the guidelines of free, Prior and Informed Consent (FPIC), generating as a result a space for feedback and the contribution of information and key action guidelines from the original community organizations representative of the provinces of Imbabura and Napo.

In addition, socialization and coordination meetings have been held with the Provincial and Parish Decentralized Autonomous Governments of the area of influence, and with representatives of the Universities: Regional IKIAM, T?cnica del Norte and Cat?lica University, Ibarra.

The table below identifies the key stakeholders that will be involved in project design and their respective role:

Institution	Role	Responsibilities in the project
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Ministry of Environment and Water of Ecuador (MAAE)	<p>GEF Focal Point and National Environmental Authority</p> <p>- Implementing partner, member of the project management and steering committee</p>	<p>It will be responsible for convening the institutions to participate in the strategic, operational and governance design processes of the project. In addition, it will have a leadership role in the review of regulations, approval of methodologies and guides, and in the management of monitoring and information systems for the establishment of conservation sites in protected areas and the use and sustainable utilization of CWR and EWS.</p>
Ministry of Agriculture and Livestock (MAG)	<p>Authority in Agriculture and Livestock</p> <p>- Implementing partner, member of the project management and steering committee</p>	<p>It will facilitate the strengthening of regulations for the establishment of conservation sites outside protected areas and their buffer zone, based on agroecological production standards. It will participate in the expansion of productive incentives, aligned with the seal of smallhold farmer family agriculture and other related programs.</p>
National Autonomous Institute of Agricultural Research (INIAP)	<p>Public research institute</p> <p>- Implementing partner, member of the project management and steering committee</p>	<p>It constitutes the main entity of technical support and accompaniment of the project in the development of each one of the components, results, products and activities; facilitating available technical information and institutional spaces for the management of plant genetic resources, as well as the development of instruments and information systems, action plans, and the interrelation in regional spaces for the management of agrobiodiversity.</p>
Local Governments (provincial and parochial)	<p>Governments and Local Authorities</p> <p>- Project partners</p>	<p>Based on their competences in the field of conservation, sustainable production, land use planning and local planning, they will facilitate technical support and the management of incentives to strengthen and sustain local initiatives for alternative production, certification processes, development of value chains, management of marketing circuits and recognition of traditional systems.</p>
FAO	<p>GEF Implementing Agency, Member of the Project Steering and Management Committee.</p>	<p>In charge of monitoring the coordination of the project's governance spaces, as well as the technical, administrative-financial execution of the project by the executing entity. In addition, it will ensure the generation of methodologies and procedures based on voluntary guidelines and other international agreements and standards, including the facilitation of spaces for the exchange of experiences at the national and regional level, and the development of a capacity-building process.</p>



Universities: Regional IKIAM, T?cnica del Norte and Cat?lica Sede Ibarra	Academia  - Project partners	Key academic entities in the coordination and support processes in the information gathering-research work, generation and maintenance of information and monitoring systems, and in the development of capacity-building events; as well as in the application of plans and guides for the use and sustainable utilization of CWR and EWS.
Entrepreneurship of associations of producers and local producers: UNORCAC and Napo Amazon Chakra Associations Network (Kallari, Wi?ak and Tsatsayaku)	- Partners and Beneficiaries of the project	They constitute the key actors for the exchange of traditional and innovative knowledge, wisdom and practices in the management of CWR and EWS. In addition, they will participate in the processes of prioritization and development of site management plans and the use and exploitation of CWR and EWS, based on the experiences of their associative ventures and the value chains developed, exchanging and promoting agroecological certification processes, good manufacturing practices, and access to special markets.

### 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).**

The Project establishes in a strategic and operational way the application of the gender approach, recognizing the differentiation of access and control of biodiversity that is maintained between women and men, for which an analysis process will be established to make visible the transcendent role of women in the conservation and use of local agrobiodiversity, systematizing their knowledge, wisdom and related cultural values. The application of gender will be based on national policies aimed at gender equality, the application of the FAO - GEF gender application manuals, and other guidelines on social safeguards.

In the project's areas of action, the prominent role of women in the collection of various species of CWR and EWS is recognized for their medicinal, condiment, food or ornamental properties; as well as in the domestication processes and in the management of the traditional production system "Chakra?"; in the transmission of knowledge and in the recreation of the local culture. In the territories of the Kichwa nationality of Cotacachi in Imbabura, and of the Amazonian Kijus and Kichwas of Napo, the productive systems are largely managed by women (50 to 60% or more), from the preparation of the chakra, the cultivation, harvest, postharvest and in the commercialization in the short circuits (local markets); it is necessary to analyze how this leadership of women is maintained and manifested in the associative processes (associative enterprises) of collection, processing and commercialization in national and international markets.

Specifically, the project will establish actions and financial resources for the application of the gender approach, both in the inventory and/or information gathering processes of the CWR and EWS; in the development of management methodologies and guides; in the review and definition of regulations; ensuring the broad participation of women in capacity building processes; facilitating spaces for participation in the processes of strengthening value chains and in management and decision-making in the associative enterprises benefiting from the project. In addition, measures will be established to ensure equal access to local and national incentives, as well as to the services of partner community organizations.

To measure the impact of the application of the approach, the logical structure of the project will establish indicators and concrete results, which will facilitate the systematic monitoring and reporting of the scope.

**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; 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.**

The private sector will be a key actor and partner in the development of the following project activities: in component 1, agreements will be established with universities and other private actors that have ecological information, management, distribution, use and utilization of CWR and EWS. In addition, cooperation and incentive management agreements will be defined to declare conservation sites in strategic areas that contain CWR and EWS within private areas.

In component 2, work will be done directly with private associative enterprises, for the development of the sustainable use plans of the CWR and EWS; which includes the establishment of commercial alliances that promote the value chain towards a differentiated market that recognizes the processes of biodiversity conservation. Potential partners from the private sector include actors from the popular and solidarity economy, agroecological certifiers, local suppliers, national and international stores, among others.

## 5. Risks to Achieving Project Objectives

**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)**

Probability	Potential risks	Mitigation measures
Medium	<p>Political:</p> <p>Potential change of authorities in MAAE, MAG, INIAP and GAD affect the priority of the revision of regulations and the management of CWR and EWS</p>	<p>Development of political advocacy actions with the new authorities to maintain the priority of the regulatory review processes and the management of CWR and EWS.</p> <p>Empowerment and intensive work with the technical focal points of MAAE, MAG, INIAP and GAD as direct support to the new authorities and technical leadership in the implementation of the project.</p>
Low	<p>Institutional:</p> <p>The current regulations and the zoning system in protected areas can generate limitations for the incorporation of conservation areas of CWR and EWS, and particularly to sustainable use initiatives.</p>	<p>Development of capacity building processes and the generation of spaces for reviewing the regulations and the zoning system of protected areas, to include management and conservation strategies for CWR and EWS in the corresponding current zoning, including procedures and guides to facilitate sustainable use processes from producer organizations' undertakings.</p>

Medium	<p>Institutional:</p> <p>Lack of awareness to sign conservation agreements under the management of incentives, by owners of private areas rich in CWR and EWS.</p>	<p>Information sharing on national and local incentives and their benefits. In addition, technical assistance will be provided to facilitate access to them. The environmental awareness of the owners of the areas will be promoted, and the development of activities to comply with the conservation agreements.</p>
Low	<p>Socioeconomic:</p> <p>Market fluctuations or variations affect the development of the value chains of the associative ventures supported by the project.</p>	<p>Prioritization of enterprises in a high degree of consolidation and value chains developed in all their links. Support for compliance with quality standards and certification. Facilitation of product access to special markets where the conservation value of CWR and EWS is recognized.</p>
Medium	<p>Socioeconomic:</p> <p>Isolation, distancing and biosecurity measures due to the Covid19 pandemic continue to affect the dynamics of agricultural production systems and marketing circuits.</p>	<p>Application of biosafety protocols in the implementation of management plans for CWR and EWS conservation areas, as well as in each of the links in the value chains of associative enterprises.</p>

<p>Medium</p>	<p><b>Environmental:</b></p> <p>Large climate variation and the exposition of intervention zone to climate change impacts increase the vulnerability of agricultural production and natural CWR and EWS ecosystems.</p>	<p>A preliminary climate change risk screening (attached to ESS as supporting document) was developed for this projects (Annex D). The recommendations of this preliminary analysis will be adjusted and validated during PPG phase to ensure that capacities developed at the national and local level for both technicians and inhabitants in the intervention zones are translated into adaptation climate change measures based on the context of wild relatives and edible species ecosystems to improve the management of vulnerability and risks, and also for building resilience condition, to climate change during the implementation of the project's activities. In this way, the integration of climate change approach on project activities will facilitate the selection of sustainable production practices and generation of relevant climatic information for designing management plans and decision making process. In coordination with other national initiatives, climate information and future projections are going to be considered during management planning process and to design training materials for communities and technicians.</p>
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## 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.**

The organizational structure of the project will consist of: 1) a National Project Steering Committee (CWR), made up of MAAE (Minister or his delegate), MAG (Minister or his delegate), INIAP (Director or his delegate), FAO (Representative of Country or its delegate), with the functions of guiding the general implementation of the project, verifying and approving the annual operating plan, approving financial and technical reports, and providing strategic guidance for the achievement of results and objectives; FAO is the implementing agency and INIAP is the executing entity; 2) a Project Management Committee (PMC) will be established, which will support the integral technical management of the project, inter-institutional coordination, and the monitoring and evaluation of the project, which will be made up of technical delegates from MAAE, MAG, INIAP and FAO; in addition, 3) the project's technical team will be formed in Quito, Imbabura and Napo, which will ensure the daily and effective implementation of the operational plans and the management of planned

investments; ensuring compliance with the activities, indicators, verifiers, products, results and the objectives established in the proposal. The technical team will be made up of a Project Coordinator, an Administrative Assistant, an M&E Specialist, and several technical specialists with experience in the project topics: facilitation in the revision of regulations; information gathering of CWR and EWS; development of methodologies and guides; generation of information and monitoring systems; capacity building; development of value chains and quality standards; among others. In addition, specialists in participation and gender, and in the area of communication will be included.

Coordination with the TAPE experts at FAO headquarters will be carried out to establish the baseline.

The GEF has funded several projects whose experiences and lessons will be integrated into the project design for implementation:

The project *?Incorporation of the use and conservation of agrobiodiversity in public policies through integrated strategies and in situ and ex situ implementation in three high Andean provinces?:* this project focused on integrating agrobiodiversity practices into policies, developing sustainable agricultural systems, strengthening capacities; obtaining as resulting important experiences in the management of the conservation of agrobiodiversity and its sustainable use. One of its areas of attention was the province of Imbabura. The project was executed by the Ministry of Agriculture and Livestock, and financed by the GEF.

The project *?Conservation and sustainable use of biodiversity, forests, soil and water as a means to achieve Good Living/Sumak Kawsay in the province of Napo GCP/ECU/082/GFF?:* this initiative generated the development of technical and financial instruments and mechanisms to improve the institutional framework and environmental governance in the province of Napo; developed demonstration scenarios for the application of good agricultural practices, productive forest restoration processes, implementation of co-management plans in protective forests, instruments for traceability of wood; In addition, it applied management and value chain plans for biotrade products, community tourism, development of the participatory system to guarantee the chakra seal, and the nomination of the chakra system for its recognition as an ingenious system of world agricultural heritage. The project was executed by the Provincial Government of Napo, the Ministry of Environment and Water, FAO and financed by the GEF.

The project *?Promotion of landscape approaches in the SNAP to improve the conservation of globally threatened fauna?:* the input of this project is related to plans for the sustainable use of wildlife in protected areas and regulations for land use that protect key ecosystems from dispersal of wildlife.

In addition, the project will coordinate and provide feedback with the processes of projects in execution such as:

The project *?Integrated management of multipurpose landscapes of high conservation value in the Amazon?:* this project is developing guides, manuals and training plans for sustainable production, the generation of participatory monitoring systems; and integration of the landscape approach in PDOTs. Its budget is USD 12,462,550 and its duration will be until 2021.

Currently in preparation, the execution of the project is expected from 2021 *Conservation and sustainable use of biodiversity within the sustainable use areas of the State Subsystem of Protected Areas (SEAP) of Ecuador and its buffer zones?*, which will develop processes for the integral management of protected areas, establishing sustainable use areas and management of buffer zones; develop and strengthen regulations and management instruments for their application from the MAAE and local institutional partners; will manage land tenure regulation processes under the new CODA, and will generate processes to strengthen productive initiatives and value chains for sustainable production. The project will be implemented by FAO, executed by CONESAN, and financed by GEF.

Additionally, MAAE and CAF are developing the GEF proposal *Development of an environment conducive to sustainable companies based on the native biodiversity of Ecuador?*. With this initiative, the development of joint activities will be coordinated since both proposals have similar points of interest. CAF's proposal will promote the use of native biodiversity and support enabling conditions. At the territorial level there are areas of common interest in the area of the Cayambe Coca and Cotacachi-Cayapas National Parks.

#### **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**

General provisions of the **International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)** Article 5.d) shall promote the in situ conservation of wild plants related to cultivated ones and wild plants for food production, including in protected areas, supporting, among other things, the efforts of indigenous and local communities. **Global Plan of Action on Plant Genetic Resources for Food and Agriculture (PGRFA)**, Priority activity: Promotion of in situ management of wild species related to cultivated and edible wild plants. **Genetic Resources Commission**.- Voluntary guidelines for the national conservation of wild species related to cultivated plants and edible wild plants

The project is aligned with the objectives of the **Convention on Biological Diversity (CBD)**, of which Ecuador is a signatory. The project intervention seeks to contribute to the achievement of Aichi goal 13, established by the CBD and represented in Ecuador's National Biodiversity Strategy 2015-2030.

**National Biodiversity Strategy 2015-2030:** Strategic objectives 2.- Reduce the pressures and inappropriate use of biodiversity to levels that ensure its conservation. Policy 12: Promote the management, use and complementary conservation (ex situ - in situ) of agrobiodiversity by promoting sustainable agrobiodiversity production systems in the Ecuadorian territory. Result 9: Ecuador ensures the sustainable management of agricultural, agroforestry and silvicultural production systems through the use of clean technologies and energy, guaranteeing the conservation of biodiversity. Result 15:

Ecuador makes sustainable use of its genetic resources, linked to the change in the productive matrix and food sovereignty.

The processes, experiences, results and information generated by the project will allow the generation of inputs for the generation of national reports for the following international protocols and conventions: **Nagoya Protocol** on access to genetic resources and the fair and equitable sharing of the benefits derived from their use; to the national communication and biannual update report (BUR) of the **United Nations Framework Convention on Climate Change**, including communication on the scope of the **Determined Contributions** at the National level of Ecuador, on the measures taken to reduce its emissions of greenhouse gases (GHG) for the sectors: Land Use, Land Use Change and Forestry (LULUCF), and Agriculture; in order to achieve the objectives of the Paris Agreement.

**National Development Plan 2017-2021:** *Territorial guidelines for territorial cohesion with environmental sustainability and risk management: section d) Boosting productivity and systemic competitiveness from the empowerment of the roles and functionalities of the territory: d.1) ?Plan economic development based on the compatibility of uses and the territorial vocation, its cultural diversities and its socio-environmental dynamics?, and d.2) ?Promote alternative productive initiatives that sustain the base and food sovereignty, generating employment and inclusive economic circuits; guaranteeing or promoting the conservation of existing agrobiodiversity in the country and promoting research and innovation?.*

**Organic Environmental Code.** Art. 5: Right of the population to live in a healthy environment, section 1 ?The conservation, sustainable management and recovery of natural heritage, biodiversity and all its components, with respect for the rights of nature and the collective rights of communes, communities, peoples and nationalities?. Art. 31: On the conservation of biodiversity ?Biodiversity conservation *will be carried out in situ or ex situ*, depending on its ecological characteristics, levels of endemism, category of species threatened with extinction, to safeguard the biological heritage from genetic erosion?.

**Law of agrobiodiversity, seeds and promotion of sustainable agriculture. Art. 18:** On the conservation and sustainable use of plant genetic resources: a) Promote and encourage the conservation and sustainable use of plant genetic resources, in order to reduce vulnerability and genetic erosion; b) Execute agrobiodiversity research programs with public, private and community entities for the improvement, classification, conservation and generation of cultivars appropriate to the requirements of producers and the market; c) Design incentives in favor of agricultural producers to promote the preservation, conservation and use of plant genetic resources; d) Provide assistance and training to farmers to recover seed production systems and their agrobiodiversity in the event of natural disasters or the effects of climate change; e) Execute joint programs to conserve and implement genebanks.

At the local level, the project is aligned with the **Development Plans and Territorial Organization (PDOT)** of the provinces of Imbabura and Napo, which establish objectives and programs to improve the quality of life of their populations, socio-economic development based on sustainable production, without threatening the environment and respecting the socio-cultural particularities of the peoples and nationalities that inhabit the provinces.



## 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.**

As part of the project's comprehensive governance and management system, a systematic process of interaction will be developed between partner entities, beneficiaries and other related actors, facilitating the generation of spaces and mechanisms for the exchange of information, experiences, knowledge and wisdom, including the development of a structured training and capacity-building program.

In the innovative field of conservation, use and sustainable use of CWR and EWS, the development of an integrated and institutionalized information and monitoring system is established, which will allow the permanent availability of information on these biodiversity resources, allowing the exchange and dissemination or dissemination of information with different related actors and interested parties in the country and at the regional level.

At the same time, a monitoring and evaluation system will be established to facilitate quantitative and qualitative analysis of the implementation process, allowing feedback from each of the actors and the thematic areas of application (inter-institutional and interdisciplinary management), in order to generate learning and its application in the adaptation and permanent innovation of the development of the actions and the strategic orientations of the project.

In addition, a broad and inclusive communication and dissemination strategy of the results, good practices and products achieved will be established; as well as the development of the systematization and publication of the processes, experiences and lessons learned from the project, to facilitate the promotion and scale-up of the proposal to other regions of the country.

## 9. 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/Approva l	MTR	TE
Medium/Moderate			

**Measures to address identified risks and impacts**

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

This is a biodiversity conservation focused project that aims to strengthen the institutional framework for the registration, conservation and sustainable use of Crop Wild Relatives (CWR) and Wild Food Plants (WFP) in conservation areas in Ecuador, particularly in the pilot sites of the Amazon (Napo) and northern highlands (Imbabura). The project will not introduce any new or alien species, will not promote the use of agrochemicals or agronomic practices that may negatively affect natural resources and communities and will not implement any infrastructure works in the protected areas or their buffer zones.

Based on the above the project's Environmental and Social Risk is reclassified from High to **Moderate** and a risk management plan will be required. Regarding ESS9, a Free Prior Informed Consent process is required for all activities involving IP directly or indirectly. An IPP will be required if a substantial number of beneficiaries are indigenous peoples. ESM-Unit reminds project proponents to ensure that project-level grievance redress mechanism is developed adjusted to local circumstances and project disclosure made at least 30 days before the project becomes operational. Please consult ESM-Unit for any further guidance.

Safeguard Triggered	Risk Identified	Answer	Risk Classification	Reference Guidance	Additional Description (if any)
2	2.1 - Would this project be implemented within a legally designated protected area or its buffer zone?	Yes	High	A full environmental and social impact assessment is required. Please contact the ESM unit for further guidance.	

<p>2</p> <p>2.5 - Would this project involve access to genetic resources for their utilization and/or access to traditional knowledge associated with genetic resources that is held by indigenous, local communities and/or farmers?</p>	<p>Yes</p>	<p><b>Moderate</b></p> <p>Ensure that the following issues are considered and appropriate action is taken. The issues identified and the action taken to address them must be included in the project document and reported on in progress reports.</p> <p><b>For plant genetic resources for food and agriculture (PGRFA) falling under the Multilateral System of Access and Benefit-sharing (MLS) of the International Treaty on Plant Genetic Resources for Food and Agriculture (Treaty), ensure that Standard Material Transfer Agreement (SMTA) has been signed and comply with SMTA provisions.</b></p> <p><b>For genetic resources, other than PGRFA falling under the MLS of the Treaty:</b></p> <p>?1.?Ensure that, subject to domestic access and benefit-sharing legislation or other regulatory requirements, prior informed consent has been granted by the country providing the genetic resources that is the country of origin of the resources or that has acquired the resources in accordance with the Convention on Biological Diversity, unless otherwise determined by that country; and</p> <p>?2.?Ensure that benefits arising from the utilization of the genetic resources as</p>
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9	9.1.1 - Do the project activities influence the Indigenous Peoples living outside the project area?	Yes	<b>Moderate</b>	<p>A Free, Prior and Informed Consent Process is required. Project activities should outline actions to address and mitigate any potential impact. Please contact the ESM/OPCA unit for further guidance.</p>
9	9.2 - Are there indigenous peoples living in the project area where activities will take place?	Yes	<b>Moderate</b>	<p>A Free Prior and Informed Consent process is required. <b>If the project is for indigenous peoples,</b> an Indigenous Peoples' Plan is required in addition to the Free Prior and Informed Consent process. Please contact the ESM/OPCA unit for further guidance. In cases where <b>the project is for both, indigenous and non-indigenous peoples,</b> an Indigenous Peoples's Plan will be required only if a substantial number of beneficiaries are Indigenous Peoples. project activities should outline actions to address and mitigate any potential impact. Please contact ESM/OPCA unit for further guidance.</p>

**Supporting Documents**

Upload available ESS supporting documents.

**Title**

**Submitted**

**Climate Change screening 702505**

**ESS 702505**

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

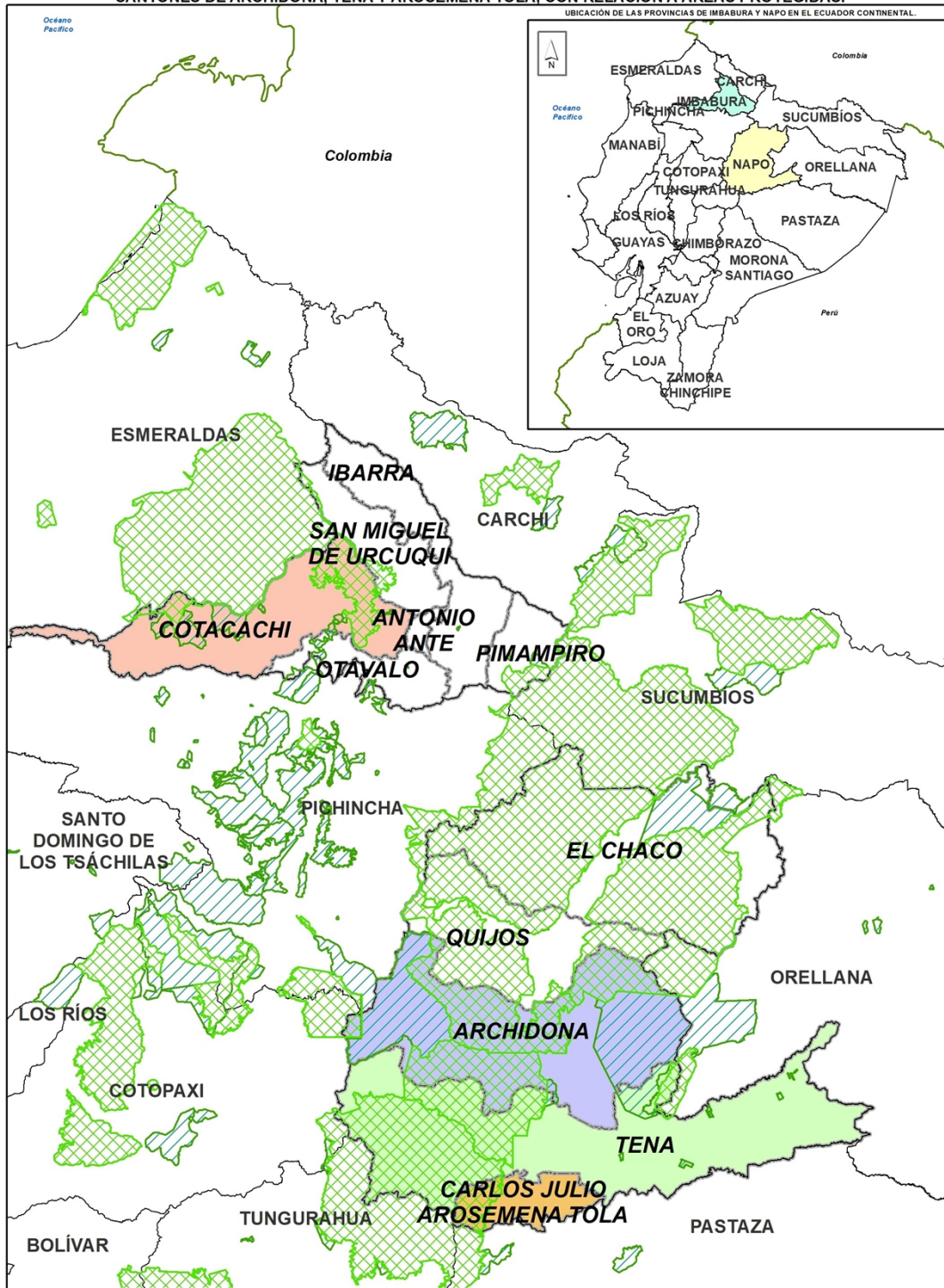
**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).**

<b>Name</b>	<b>Position</b>	<b>Ministry</b>	<b>Date</b>
Jose Luis Naula Naula	GEF Focal Point	Ministry of the Environment and Water of Ecuador	8/4/2021

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

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

**MAPA DE UBICACIÓN DE LA PROVINCIA DE IMBABURA EN EL CANTÓN COTACACHI Y EN LA PROVINCIA DE NAPO EN LOS CANTONES DE ARCHIDONA, TENA Y AROSEMENA TOLA, CON RELACIÓN A ÁREAS PROTEGIDAS.**



Simbología.	Legenda.
División Provincial.	Sistema Nacional de Áreas Protegidas.
División Cantonal.	Bosques Protectores.
COTACACHI	
ARCHIDONA	
TENA	
CARLOS JULIO AROSEMENA TOLA	
Límite Internacional.	

Proyecto INIAP - FAO - MAG. Parientes Silvestres	
MAPA DE UBICACIÓN DE LA PROVINCIA DE IMBABURA EN EL CANTÓN COTACACHI Y EN LA PROVINCIA DE NAPO EN LOS CANTONES DE ARCHIDONA, TENA Y AROSEMENA TOLA CON RELACIÓN A ÁREAS PROTEGIDAS	
Fuente: CONALI 2016, MAAE 2018.	Realizado por: Ing. Msc. Pablo Moncayo
Fecha de elaboración: Enero, 2021	Formato de impresión: A4



