

#### REQUEST FOR: CEO ENDORSMENT PROJECT TYPE: FULL-SIZED PROJECT TYPE OF TRUST FUND: GEF TRUST FUND

#### FOR MORE INFORMATION ABOUT GEF, VISIT THEGEF.ORG

#### **PART I: PROJECT INFORMATION**

Project Title: Mainstreaming situ implementation in four A	the use and conservation of agrobiodiversity in public ndean Highlands provinces.	policy through integrated strate	gies and in
Country(ies):	Ecuador	GEF Project ID:1	4777
GEF Agency(ies):	FAO	GEF Agency Project ID:	615694
Other Executing Partner(s):	Autonomous National Institute of Agricultural Research (INIAP)	Submission Date:	April 23, 2014
GEF Focal Area (s):	Biodiversity	Project Duration(Months)	48
Name of Parent Program (if applicable):  ➤ For SFM   □	N/A	Project Agency Fee (\$):	125,000

A. FOCAL AREA STRATEGY FRAMEWORK<sup>2</sup>

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Co- financing (\$)
BD-2	Outcome 2.1: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation	Output 2.2 Three (3) national and sub-national land-use plans that incorporate biodiversity and ecosystem services valuation Output 2.3: Certified production landscapes and seascapes (1,900)	GEF TF	1,102,241	6,163,128
BD-2	Outcome 2.2: Measures to conserve and sustainable use of biodiversity incorporated in policy and regulatory frameworks	Output 2.1: Policies and regulatory frameworks for production sectors (1 national policy and 3 provincial regulations)	GEF TF	121,460	337,500
BD-4	Outcome 4.1: Legal and regulatory frameworks and administrative procedures established that enable access to genetic resources and benefit sharing in accordance with the CBD provisions	Output 4.1: One (1) access and benefit-sharing agreement that recognizes the core ABS principles of Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT), including the fair and equitable sharing of benefits	GEF TF	26,299	95,607
		Total project costs		1,250,000	6,596,235

 $<sup>^1</sup>$  Project ID number will be assigned by GEFSEC.  $^2$  Refer to the <u>Focal Area/LDCF/SCCF Results Framework</u> when completing Table A.

#### B. PROJECT FRAMEWORK

Project Objective: to integrate the use and conservation (ex situ and in situ) of agro-biodiversity in policies, farming systems and education and awareness programs of Ecuadorian highland provinces of Loja, Chimborazo, Pichincha and Imbabura with the aim of contributing to the sustainable management and resilience of agro-ecosystems in the Andean and other similar mountain dry-land regions.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Co- financing (\$)
1 Integrating the sustainable use and conservation of agro-biodiversity in public policies and their implementation	TA	Outcome 1.1 Public policies and national plans incorporate measures for the conservation and sustainable use of agro- biodiversity. Target: One (1) policy, one (1) action plan and three (3) related instruments developed and under initial implementation	Output 1.1.1. National Action Plan for the implementation of the agrobiodiversity component of the National Biodiversity Strategy, including provisions for monitoring its progress.  Target: One (1) Action Plan developed.  Output 1.1.2. Mechanism for the coordination and strategic partnerships among INIAP, MAGAP, MAE, SENPLADES and Decentralized Autonomous Governments on policies for the promotion and conservation of agro-biodiversity.  Target: One (1) Coordination  Mechanism established and operational.  Output 1.1.3. Proposal for national public policy addressing the conservation and utilization of agrobiodiversity.  Target: One (1) proposal developed and validated.  Output 1.1.4. Methodology for the assessment of diversity in traditional biodiversity-based farming systems and its role in food security and rural livelihood, to underpin public policies on agro-biodiversity.  Target: One methodology developed and validated in the province of Chimborazo.	GEF	90,920	317,807
		Outcome 1.2 Progress in the implementation at national level of the International Treaty on Plant Genetic Resources for Food and Agriculture (IT-PGRFA), which facilitates access and benefit sharing of genetic resources. Target: Article 9 of IT- PGRFA on Farmers' Rights under implementation.  Outcome 1.3 Land managed under Development and Land Use Plans (DLUP) and GAD regulations that	Output 1.2.1. Analysis of the implementation of Farmers' Rights in Ecuador, identification of options to expand this implementation, and proposal of programme for the implementation of Farmers' Rights by relevant governmental authorities.  Target: One study and one proposal developed.  Output 1.2.2. Information campaign on Farmers' Rights in consistency with the IT-PGRFA addressed to farmers and indigenous organizations.  Target: One campaign implemented.  Output 1.3.1. Proposals for provincial regulations on conservation and sustainable use of agro-biodiversity.  Target: Three (3) proposals formulated			

		integrate the value, sustainable use and conservation of agro- biodiversity. Target: Three (3) DLUP and three (3) GAD regulations in Loja, Chimborazo and Imbabura managing 9,000 hectares.	in Loja, Chimborazo and Imbabura  Output 1.3.2. Provincial Development and Land Use Plans (DLUP) integrating the value, sustainable use and conservation of agro-biodiversity. Target: Three (3) DLUP (Loja, Chimborazo and Imbabura) integrating the conservation and use of agro- biodiversity.			
2 Scaling up of good practices in the in situ and ex situ conservation and sustainable use of agrobiodiversity	INV	Outcome 2.1 Coverage of Andean diversity at the National Genebank has been increased taking into account abiotic and biotic stress factors, important to overcome future climate challenges, and exchange of materials between the Genebank and farmers has been strengthened. Target: 210 accessions collected, new material of fifteen (15) major crops important to respond to stress factors in the Andean region and similar systems accessible to local farmers and research centres in Ecuador and other countries.  Outcome 2.2 Farmers and indigenous organizations incorporate the sustainable use and management of agrobiodiversity in agricultural systems, thus increasing agro-biodiversity in the farms and the living standards of rural families. Target: Five (5) organizations incorporating the management of agrobiodiversity in fifteen hundred (1,500) hectares, increasing the diversity by 40% and the living standards for men and women (measured through qualitative surveys disaggregated by gender).	Output 2.1.1. Crop collections, including of under-utilized species, with relevant traits of resistance to stress, established or expanded through collecting expeditions.  Target: Collections of fifteen (15) crops established or expanded, and their characteristics identified  Output 2.1.2. Collaboration agreements on agro-biodiversity between five farmers'/indigenous organizations, INIAP and other partners, including actions for ex situ conservation and in situ management, and with participatory and gendersensitive approaches.  Target: Five (5) agreements signed with local organizations UNORCAC, CEPCU, La Esperanza Water Board, Corpopuruhua and UCOCP.  Output 2.2.1. Rural families trained on in situ management and utilization of agro-biodiversity, based on the needs identified in the farming systems.  Target: 3,000 families (30% of which are led by women) managing approximately 1,500 are trained in the project intervention areas of four provinces (Imbabura, Pichincha, Chimborazo and Loja).  Output 2.2.2. Local inventories of agro-biodiversity and its related traditional knowledge, and community registers of crop diversity in family farms developed through participatory research.  Target: Three inventories in Chimborazo, Loja and Otavalo-La Esperanza developed, and five hundred (500) community registers established in four provinces (Imbabura, Pichincha, Chimborazo and Loja).  Output 2.2.3. Local seed fairs formalized.  Target: Three (3) seed fairs formalized in La Esperanza, Guamote and Paltas.  Output 2.2.4. Bio-knowledge and Agriculture Development Centres	GEF	933,711	5,682,028

(BADC) and community seed banks established or strengthened to multiply and restore local representative species in the farms.

Target: (i) Six (6) BADC established and operational in Guamote, Paltas, Saraguro, Cotacachi, Ibarra and Riobamba, (ii) one (1) community bank established in Colta, (iii) one (1) community bank strengthened in La Esperanza, and (iv) twenty local representative species multiplied and restored in farmers' fields.

Outcome 2.3

Productive lands under Participatory Guarantee Systems (PGS) ensuring the cultivation under good practices of in situ management of agrobiodiversity, supported and sustained by local networks of indigenous small and medium farmers and producers.

Target: Nincteen hundred (1,900) hectares of productive land (representing 7% of the agricultural area of the cantons covered by the project) under PGS with the support of five (5) local networks. Women participation at least 50%.

Outcome 2.4

Increased family income by increasing the added value of products derived from the agrobiodiversity and other economic activities related to agrobiodiversity. Target: The average annual income from crop production of the 1000 participating families will be increased by 15% at the end of the project (measured through questionnaires filled out by all the participating families at the beginning

Output 2.3.1 Standards of good practices of in situ management of agro-biodiversity, and PGS issuing distinctive labels for the implementation of good practices, managed by local farmers' networks and indigenous organizations.

Target: Three (3) PGS developed with defined standards, in the provinces of Imbabura, Pichincha, Chimborazo and Loja.

Output 2.3.2. Smallholders trained and producing under PGS of organic and biodiversity-based farming practices, some of which sell their products.

Target: 3,800 households (of which at least 30% are led by women) trained, of which 800 sell their products under local PGS

Output 2.3.3. Proposal of quality label at national level for products from biodiversity-based farming systems, based on the experiences of local guarantee systems.

Target: One (1) proposal of quality label based on the local guarantee systems developed and validated.

Output: 2.4.1. Local weekly market fairs strengthened.

Target: Seven fairs strengthened in Catacocha, Saraguro, Colta, Hope, Avocados, Guamote, Otavalo and Cotacachi

Output 2.4.2. Community micro enterprises generate new products increasing the use of the agrobiodiversity from the farms of participating families.

Target: Four community micro enterprises, generating 10 new products

Output 2.4.3. Agrotourism routes expose and promote local agrobiodiversity.

Target: Two agrotourism routes

		and the end of the project	developed in Paltas (Loja) and Colta			
		and disaggregated by	Lake (Chimborazo).			
		gender).				
3 Education and awareness of decision-makers, teachers and consumers about the environmental, nutritional, cultural and economic value of agrobiodiversity	TA	Outcome 3.1 Governmental decision- makers are informed and aware of the ecological, nutritional, cultural and economic values of agro- biodiversity. Target: 60 decision- makers (at least 40% are women) of four (4) governmental agencies (National Assembly, MAGAP, Ministry of Education and MIES) informed and aware.  Outcome 3.2 Strengthened capacities of local and technical schools for providing education and awareness raising in the importance and use of local agro- biodiversity in local diets. Target: Thirty (30) schools educating and creating awareness among two thousand (2,000) students.	Output 3.1.1. Information and awareness-raising program for decision makers including one national workshop, training workshops and dissemination events on the importance of agro-biodiversity.  Target: One information and awareness-raising program implemented, including one national workshop, four local training workshops, and two dissemination events, with at least 30% participation of women.  Output 3.2.1. Methodological Guide for integrating agro-biodiversity and its values in the education systems at school and high school levels.  Target: One (1) Guide developed.  Output 3.2.2. School teachers trained on the many values of local agro-biodiversity and the application of the Methodological Guide.  Target: Ninety (90) teachers of thirty (30) schools in the four provinces trained.  Output 3.2.3. Schools integrating agro-biodiversity issues using the Methodological Guide.  Target: Thirty (30) schools (of which 70% are in rural areas and 30% in main towns) in the four provinces.	GEF	116,370	329,600
		Outcome 3.3 Urban and rural population of the intervention areas recognizes the value of local agro-biodiversity and consume products derived from it.  Target: 28,5% increase in the sales of 7 local market fairs of agro-biodiversity derived products (achieved jointly with outcomes 2.3 and 2.4).	Output 3.3.1. Dissemination materials (publication and video) on the value of agro-biodiversity.  Target: One (1) publication and one (1) video developed.  Output 3.3.2. Document integrating all project experiences.  Target: One (1) document developed and published.  Output 3.3.3. Promotional campaign on the importance of food security and sovereignty and the benefits of the conservation and use of agrobiodiversity.  Target: One (1) promotional campaign implemented		1,141,001	6,329,435
					108,999	266,800
			Project management Cost (PMC) <sup>3</sup>			
			Total project costs		1,250,000	6,596,235

<sup>&</sup>lt;sup>3</sup> PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below GEF5 CEO Endorsement-Template-January 2013.doc

#### C. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Please include letters confirming co-financing for the project with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Co- financing	Co-financing Amount (\$)
National Government	INIAP	Cash	136,800
National Government	INIAP	In-kind	515,460
CSO	Heifer	Cash	400,000
CSO	Heifer	In-kind	200,000
GEF Agency	FAO	Cash	350,000
GEF Agency	FAO	In-kind	317,000
Local Government	GAD Loja - DEPROSUR	Cash	30,000
Local Government	GAD Loja - DEPROSUR	In-kind	400,000
Local Government	GAD Chimborazo	Cash	550,000
Local Government	GAD Chimborazo	In-kind	600,000
Local Government	GAD Imbabura	Cash	60,000
Local Government	GAD Imbabura	In-kind	440,000
National Government	MAGAP	In-kind	95,207
CSO	UNORCAC	Cash	60,000
CSO	UNORCAC	In-kind	20,000
Other – Research Institution	ESPOCH	Cash	30,000
Other - Research Institution	ESPOCH	In-kind	321,800
Local Government	Alcaldía de Guamote	Cash	45,000
Local Government	Alcaldía de Guamote	In-kind	600,000
Local Government	Alcaldía de Saraguro	In-kind	30,300
Other – Research Institution	UTPL	Cash	215,200
Other – Research Institution	UTPL	In-kind	599,900
Other – Research Institution	PUCE-SI	Cash	105,000
Other – Research Institution	PUCE-SI	In-kind	360,000
CSO	CEPCU	Cash	21,448
CSO	CEPCU	In-kind	47,300
CSO	CEDEIN	In-kind	45,820
Total Co-financing			6,596,235

#### D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL, AREA AND COUNTRY<sup>1</sup> N/A

I In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

<sup>2</sup> Indicate fees related to this project

#### F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount (\$)	Co-financing (\$)	Project Total (\$)
Local consultants	488,070	500,000	988,070
International consultants	0	150,000	150,000

#### G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? NO

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

#### PART II: PROJECT JUSTIFICATION

- A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF4
- A.1 <u>National strategies and plans</u> or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Updates Reports, etc.

In 1992, Ecuador ratified the United Nations' Convention on Biological Diversity and in 2000, in compliance with its commitments, the National Biodiversity Policy and Strategy 2001-2010 (Politica y Estrategia Nacional de Biodiversidad, PENB) and its Action Plan were adopted. Both are currently in force while the new Strategy for the period 2014-2020 is being developed. The PENB, in its strategy "Strengthening and supporting sustainable productive activities based on the use of native biodiversity", addresses the sustainability of agricultural and livestock production, the enhancement of diversification in agricultural production, the adoption of environmentally safe technologies and the efficiency of genebanks, in order to ensure the conservation of agro-biodiversity. Also, the PENB includes the sharing of the benefits derived from the sustainable use of biodiversity in local communities through, for example, the expansion of the sustainable community-based tourism. This project will contribute to the diversification of production based on the native agro-biodiversity by supporting its management in farms, local seed exchange fairs, local markets for products from agro-biodiversity, and agro-tourism, with the view to facilitating an increased added value of products of agro-biodiversity. In addition, the project will support the expansion of the coverage of the collections conserved in the INIAP National Genebank.

A.2 GEF focal area and/or fund(s) strategies, eligibility criteria and priorities.

No changes from PIF

#### Project contribution to Aichi Targets

The project will contribute to the following Aichi Biodiversity Targets: Target 7 "By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity"; Target 13 "By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socioeconomically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity", and Target 18 "By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels."

#### A.3 The GEF Agency's comparative advantage:

FAO has developed a great working experience in the sustainable use of agricultural biodiversity as a means to improve food and nutritional security, improve soil conditions and resilience of agroecosystems in the face of climate change, pest and disease pressures and market volatility. The Division of Plant Production and Protection of FAO (AGP) has extensive experience in sustainable intensification of agricultural production based on the diversity of crops and the use of the genetic characteristics of resistance to different pressure factors that native varieties offer. FAO's mandate in plant genetic resources for food and agriculture includes the promotion and exchange of seeds and plant genetic material of traditional varieties, improved varieties, crop wild relatives, and other wild species, which form the biological basis for food and nutritional security at local and global levels. Its objective is to integrate the concepts of conservation and sustainable use in national policies and strategies to ensure an inclusive response to the needs of farmers and serve as a basis for the sustainable intensification of crop production.

<sup>&</sup>lt;sup>4</sup> For question A.1-A,7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question

FAO has a role as a world leader in the development and implementation of policies and policy instruments in support of the conservation and sustainable use of the agrobiodiversity and the consolidation of human and institutional capacities in this area. The Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture, developed by the FAO's Commission on Genetic Resources for Food and Agriculture approved by the FAO Council in 2011, is a strategic framework for the conservation and sustainable use of the genetic diversity of plants used in food and agriculture. All project activities contribute to the implementation of the Second Plan. In addition, FAO hosts the negotiations of the TIRFAA and offers technical support to the signatory states in the development of capacities for its effective implementation.

FAO has been chosen as GEF agency for its active involvement with the central theme of the project in Ecuador. FAO has been active part of the process for the establishment of proposals and studies that have led to a national biodiversity policy and strategy with an emphasis in the policies of agrobiodiversity. In addition, FAO has supported numerous projects aimed at strengthening agricultural systems and farmers through better use and management of agrobiodiversity. These include: the plan MAGAP-FAO for the management of mountain areas and the development of economic activities which are compatible with the integrated management of the Cutuchi and Toachi river basins; support for the rehabilitation and enrichment of the forest structure necessary for agroforestry systems; project GCP/RLA/ 163/NZE "Recovery and valuation of the ancestral knowledge" related to the use and management of agrobiodiversity; the project TCP/ECU/3203 "Management of high mountain areas for the sustainable development of the watershed of UNOCANC", under which manuals were developed for organic production of Andean crops, and the draft MTF /ECU/ 001/ECF "Agroforestry Gardens Family" which objective was to improve the profitability of the orchards and food security of farm families of Chimborazo, Imbabura and Azuay, through agroforestry gardens.

In addition, the FAO Representation in Ecuador has worked on several projects under the "Telefood" mechanism in support of family farming: TFD-01/ECU/001 community marketing of healthy agricultural products TFD-01/ECU/002 agro-industrial Rural Artisanal for women farmers; TDF-06/ECU/004 Strengthening of the processes of production, post-harvest and marketing organic quinoa made by The corporation of organic producers of Bio Taita Chimborazo (COPROBICH); TDF-07/ECU/001 Production of Organic Vegetables, and TDF-08/ECU/001 Production of barley in the communities Casa Quemada, Vaqueria, Chami of Zumbahua, in Cotopaxi.

#### A.4 The baseline project and the problem it seeks to address:

The baseline project and barriers that the project seeks to address have been further analyzed and detailed during the full project preparation. Please see the FAO-GEF Project Document section 1.1.1 a) *Initiatives and baseline projects including sources of co-financing and remaining barriers*.

A.5 <u>Incremental / Additional cost reasoning:</u> describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The incremental investment of GEF resources will, in component 1, finance: the development and validation in target areas of a methodology to value the biodiversity of diversity-based farming systems in terms of agricultural, food security and socio-economic values. This methodology and the data generated will serve as the basis for the formulation and implementation of a public policy proposal at the national level focused on the conservation and sustainable use of the agrobiodiversity. It will be incremental to the current legislation base line which has a very general approach. The proposal will include measures and precise norms and regulations for *in situ* and *ex situ* agrobiodiversity conservation; promotion, use and consumption of agrobiodiversity based products; institutional strengthening and capacity building;

<sup>&</sup>lt;sup>5</sup> The Conference of the FAO, in 1997, established the Special TeleFood Fund (TSF) to fund micro-projects at the grassroots level in developing countries to assign "in its entirety, the proceeds collected through the call for the TeleFood funding for specific projects at the grassroots level" were designed to improve the livelihoods of poor families to increase agricultural production and to promote the value-added, so that they can produce more food and generate actual income, thus enabling them to better access to food. (Http://www.fao.org/getinvolved/telefood/en/)

and farmers' participation in the implementation of the related policies. At the same time, the study on the value of agrobiodiversity will inform the implementation of a regulatory framework that ensures Farmers' Rights. Finally, the experience of Pichincha in developing provincial regulation on sustainable use and conservation of agrobiodiversity, will be scaled up to the provinces of Loja, Chimborazo and Imbabura to develop regulations and their integration into their provincial Development and Land Use Plans.

The incremental resources of the project will, in component 2, finance the scaling up of agroecosystems based on conservation and sustainable use of native agrobiodiversity supported by a better link to and in combination with systematic ex situ conservation through the BADCs. The ex situ collections will also be expanded with an emphasis on studying and identifying species and varieties having tolerance traits to stresses such as changing climatic conditions, land degradation and other agronomic conditions. These characteristics and their conservation in plant genetic resources will have an incremental value for other regions with the same challenges facing Ecuador. Likewise, supplemented by the co-financing of INIAP, Heifer, FAO, MAGAP, GADs, and indigenous and farming organizations GEF incremental financing will be invested to consolidate the local socio-economic benefits of the sustainable use of agrobiodiversity to sustain and expand in time the incremental benefits achieved for the global environment. This will include strengthening and scaling-up local fairs initiatives for the sale of agrobiodiversity-based products and exchange of seeds, participatory guarantee systems and a proposal for a national label for agrobiodiversity-based products, and agritourism routes and community agribusinesses.

In component 3 for education, the incremental activities, funded by GEF resources as well as resources from the GADs, Heifer and universities partners, will be based mainly on the experiences developed by UNORCAC in Cotacachi. This experience, in the participatory development and implementation of a teaching guide on conservation and sustainable use of agrobiodiversity, will be upscaled through further development of the contents of the guide and expanding its implementation in educational centers, including the urban educational centers, in the provinces participating in the project.

## A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

The risk analysis for the success of the project has been further developed during the full project preparation and mitigation measures have been incorporated in the project design as per the below table.

Project risks, their rating and mitigation measures

Risks	Rating	Mitigation measures
Lack of coordination among the many project stakeholders	Medium	Close cooperation among the many institutional stakeholders and partners involved in the project, both from public institutions and civil society and small farmers and indigenous organizations is crucial for the success of the porject. Their commitment to support the project, demonstrated during the preparation and design phase, is backed by a significant co-financing, including from some small farmers and indigenous organizations. This cooperation will be realized through the participation of these institutions in the project committees (Steering Committee, Technical Committee, Local Committees). The project implementation arrangements (see section 4 of the FAO Project Document and section B.1 below) will ensure the proper definition of roles and responsibilities and the coordination and cooperation among the parties for the effective implementation of the activities. The Project Management Office will also have a crucial role in the coordination of activities.
New provincial governments after the 2014 elections, which may lead to changes in local	Medium	Participatory methodologies to involve local communities in the development of policy proposals at provincial level will contribute
policies related to the management of agro- biodiversity		to sustain changes in policies beyond changes in provincial administration. Workshops with GAD officials to explain the
		importance of agro-biodiversity, disseminate the project outputs and

		establish agreements on future commitments.
Lack of motivation and commitment among local stakeholders to undertake <i>in situ</i> agrobiodiversity management and other project activities	Low	Development of awareness raising activities and involvement of a high number of local partners and decision makers in implementation of project activities. Training actions at local level to reinforce the understanding of the multiple values of agrobiodiversity.
Low interest of producers to participate in Participatory Guarantee Systems or to meet onfarm agro-biodiversity standards	High	Strengthening the Participatory Guarantee System approach, taking into consideration the traditional practices of indigenous communities. Designation of responsibilities for implementing project activities among farmers' organizations, in particular the implementation of Participatory Guarantee Systems for on-farm agro-biodiversity management and strengthening of market links for the products under guarantee via local fairs and awareness raising among consumers. Training farmers' organizations, communities and producers on agricultural biodiversity, organic agriculture and institutional empowerment.
Lack of recognition by consumers of the distinctive value of products from agrobiodiversity farms	Medium	Awareness campaigns on the importance of food sovereignty and security and the benefits offered by the conservation and sustainable use of agro-biodiversity. Capacity building of local and technical schools in education and awareness raising on the importance and use of agro-biodiversity in local diets. Publication of information materials about the importance of agro-biodiversity, addressed to a wide range of audience. Promotion of agro-biodiversity and its values in the weekly agro-ecological fairs and annual seed fairs in the canton seats.
Climate change risk	High	Several experiences (among others documented by FAO) show that agro-ecosystem resilience is closely related to their degree of diversity. Agro-ecosystems with high diversity and high vegetation cover integrating local and traditional varieties are less impacted by extreme weather events and they also recover faster after such events. This has among others been demonstrated in relation to the hurricane Mitch that hit Central America in 1998 and also the prolonged drought that hit the Uruguayan grasslands in 2008 where grassland with a diversity of native grass varieties was less affected and recovered significantly faster than grassland with high yielding introduced grass varieties. As such the resilience of agroecosystems is at the core of this proposed project aiming at increasing the agro-biodiversity managed by farmers based on indigenous knowledge and local varieties.  The Project will promote the resilience of agro-ecosystems by supporting the implementation of agro-ecological principles building on diversity in farmers fields. This approach will allow for increased soil stability and fertility which supports: increased crop resistance to diseases and posts; increased capacity for regulating shortage or excess of water; establishment of microclimates that mitigate extreme temperatures by using living hedges, greater diversity and dynamics between different crops and varieties in crop rotation schemes that ensures continuous management and adaptation of biodiversity. The experienced Heifer technical team will, with technical backstopping from FAO, support the implementation of biodiversity agro-ecological plots in selected areas in four provinces and articulate the process of adaptation and seed multiplication in community banks in close collaboration with INIAP and the BADCs. INIAP has a training program and a validated technical assistance support system in the field that ensures the formation of groups of farmers managing the multiplication of seeds and planting material in each community that is reinfor

seed exchange	fairs.
---------------	--------

In summery the Project will seek to enhance agro-ecosystem resilience to climate change by:

- Expanding ex situ collections with an emphasis on studying and identifying species and varieties with traits important for the resistance to climate change introduced risks
- Establishing seed banks and BADCs in selected areas of four provinces to support the recovery of varieties that are being lost, and adaptation, and identification of species and varieties with important climate resilience characteristics.
- Providing technical assistance to seed producing farmers to facilitate their incorporation of this diversity and promising species in their seed multiplication systems, their management of records to validate the processes of adaptation, and their participation in an inventory of agro-biodiversity to look for characteristics important for climate resilience.

H= High (greater than 75% probability that the result will not be achieved)

S =Substantial (50-75% probability that the result will not be achieved)

M =Moderate (25-50% probability that the result will not be achieved)

L=Low (less than 25% probability that the result will not be achieved)

#### A.7 Coordination with other relevant GEF financed initiatives

The FAO, INIAP, MAGAP and Heifer will collaborate with executing agencies of other projects to identify opportunities and facilitate mechanisms to achieve synergies between relevant GEF as well as with other donor-supported projects. This collaboration will be using: (i) informal communications between GEF agencies and execution partners of other programs and projects; (ii) exchange of information and dissemination materials between the projects; (iii) participation in forums and inter-agency coordinating mechanisms on policies and action plans for the promotion and conservation of agro-biodiversity, with representatives of national and provincial institutions, local community-based organizations and civil society organizations. In order to ensure coordination and collaboration among the different initiatives, specific coordination tasks have been added to the tasks of the Project Management Office (see section 4.2 in the FAO Project Document), and the implementation and results of these tasks should be reflected explicitly in the six-monthly project progress reports (PPR).

Among others, the project will develop a close collaboration with:

- 1) The project "Management of Chimborazo's Natural Resources", funded by the GEF, implemented by the FAO, and executed by the Provincial GAD of Chimborazo (GEF ID 3266). One of the objectives of this project is to conserve water resources produced by the paramo ecosystem. This objective will have a significant indirect impact in the conservation of agrobiodiversity, considering that water is usually the limiting factor in the Andean agro-ecosystems. The community organization and leadership processes to adopt conservation practices and management of natural resources will also provide mutual benefits between the two projects in Chimborazo. The coordination of the planning and implementation of project activities will be insured by the GAD of Chimborazo, which will be involved in the execution of both projects. Through the technical support of FAO, the monitoring of synergies to avoid duplication will also be insured.
- 2) The Small Grants Program of the GEF, SGP, focuses on the communities that live in the buffer zones of protected areas. During the fifth operational phase, the SGP is running the FSP "Our corridors for a good living", which goal is to promote economic and social connectivity (GEF ID 4375). In Sierra Centro, the SGP is currently working in identifying project proposals that support, among other topics, sustainable livelihoods through diversity-based crops systems.
- 3) The project "National Strategy for Biodiversity", funded by the GEF, implemented by UNDP Ecuador and executed by the Ministry of the Environment of Ecuador (GEF ID: 4863), which goal is to update the National Biodiversity Strategy including its Action Plan and report on the state of biodiversity. To ensure the coordination between the two proposals, steps have been taken to ensure that the present project will support some implementation activities of the

Action Pan related to agro-biodiversity. The relationship between the two projects could become the space through which the Ministry of Environment and MAGAP have a dialogue at the technical level on agrobiodiversity.

4) FAO is also the GEF agency for the Bolivia project "Conservation and sustainable use of the agro-biodiversity to improve human nutrition in five macro eco-regions" (GEF ID 4577). This project is in the process of the final review by the GEF Secretariat before the endorsement by the CEO and will be implemented at the same time of the present project. The Bolivia project is different in its approach. It does not include the *ex situ* conservation and is led by the Ministry of Environment and Water (MMAyA,). However, both projects share some objectives: to develop mechanisms to generate added value, create marketing channels and develop labels and a guarantee system for local diversity-based crop systems. FAO will facilitate the exchange of approaches and lessons learned between the two projects, and, if it is feasible and desirable, cross site visits.

#### B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

#### B.1. Describe how the stakeholders will be engaged in project implementation:

The project has four instances in its arrangements for project implementation:

- Project Steering Committee (PSC).
- Project Management Committee (PMC).
- Local Committees (LC)
- The coordination of the project based in INIAP (INIAP/PC).

The Project Steering Committee (PSC) will oversee and coordinate the planning of the implementation of the project, will be composed of the Director General of INIAP (or his/her designee) who shall preside the PSC, the director of Heifer (or his/her designee), the Minister of the MAGAP (or his/her designee), and the FAO representative (or his/her delegate). The PSC will take decisions on the overall management of the project and will be responsible for maintaining the strategic approach of the project's specific operational tasks. The PSC will hold at least one meeting a year, and its functions will include: (i) general supervision of the progress of the project and the achievement of expected results through the semiannual PPR; (ii) make decisions with regard to the organization, coordination and execution of the project; (iii) facilitate the cooperation between INIAP, Heifer and MAGAP and the parties involved in the project and the support of the project at the local level; (iv) bring to the attention of INIAP/PC other activities underway or planned to facilitate the collaboration between the project and other programs, projects and initiatives related to the *in situ* and *ex situ* conservation and management of agrobiodiversity, especially in the areas of the project; (v) facilitate that the co-financing is provided in a timely and effective manner; and (vi) review the PPR and semi-annual financial reports and approve the Annual Work Plan and Budget (AWP/B).

Project Management Committee (PMC) will be responsible for planning project activities, accompanying the execution of components and the specific products of the project, making operational decisions which give directions to the INIAP/PC (see below), and supervising the actions of the INIAP/PC. The PMC will be composed of technical staff from INIAP (Department of Genetic Resources -DENAREF), Heifer (Sierra Coordination), MAGAP (Direction of International Cooperation), and the FAO (GEF Project Task Manager). The PMC will give technical advice to the PSC and direct INIAP/PC and will keep INIAP/PC updated on other activities underway or planned to facilitate the collaboration between the project and other programs, projects and initiatives related to the *in situ* and *ex situ* conservation and management of agrobiodiversity, in particular in the project intervention areas. The PMC may also intervene in the evaluation of the technical progress and outputs of the project, and in the identification of possible solutions and/or changes in project activities when technical issues occur during the project implementation. The main functions of the PMC are: (i) direct the project; (ii) timely implement activities to achieve outputs and outcomes assigned; y (iii) effectively and efficiently utilize project resources assigned in accordance with the FAO Project Document.

Local Committees (LC). Three LCs will be established, one in each of the project areas (Imbabura-Pichincha for the cantons of Otavalo and Cotacachi and the parish La Esperanza; Chimborazo for the cantons of Guamote and Lago

Colta; and Loja for the cantons of Saraguro and Palta). The composition of the LCs will include representatives of the provincial and municipal GADs, indigenous and farmer's organizations and universities. The mandate of the LCs shall include: (i) general supervision of project activities implementation in their area particularly with regard to component 2; (ii) provide advice on public policies, actions and measures at the local level, in particular with regard to component 1; and (iii) promote communications between local and provincial institutions, local and indigenous organizations, universities, research institutions and civil society organizations.

The Project Coordination (INIAP/PC). The technical execution of the project will be located in the DENAREF at INIAP central office in Quito and with three other offices in the provinces of: Loja, Heifer; Chimborazo, INIAP; and Imbabura/Pichincha, INIAP/MAGAP. The executing partners, as co-financiers, will provide the necessary equipment for the activities of INIAP/PC personnel at the provincial level. INAP/ DENAREF will appoint an officer responsible for the technical supervision of the project and the review of the financial reports in conjunction with the Administrative and Financial Direction of INIAP. INIAP, in coordination with MAGAP and Heifer, shall prepare and send to the FAO Office in Ecuador semi-annual PPRs, AWP/B, and all the necessary documentation for the preparation of the PIR (see section 4.5.3 of the FAO project document).

At the field level, the project will be carried out together with local indigenous and small farmers' organizations, in order to maximize the impact and effectiveness of actions and strengthen local capacities in management and conservation of agrobiodiversity. The active participation of civil society ensures the sustainability of the project, given that their involvement allows project execution to respond to their needs and expectations. The local organizations that will collaborate in the project are as follows:

- Union of Peasant and indigenous Organizations of Cotacachi (UNORCAC), an organization formed by indigenous communities, mestizo and afro-Ecuadorian in the western zone of Imbabura, with extensive experience in conservation and recovery of agrobiodiversity. It is working with 45 communities of the parishes of St Francis, Tabernacle, Imantag and Quiroga, in the canton Cotacachi. The organization has a history of more than 35 years. The activities of the project will link to the association of agro-ecological producers, "Pachamama nos alimenta", the central committee of women, the Association of Producers Samak Mikuy, and the Saramama Cotacachi Association.
- The Center for Multicultural Studies (CEPCU), an indigenous NGO with headquarters in Otavalo. It has been working since 1992 through agreements with NGOs and national and international Cooperation in the Imbakucha watershed (San Pablo Lake) coordinating its activities with farmer organizations in the area. They support the weekly fair for marketing agroecological products of Imbabio, consisting of about 45 women producers linked to the agroecological fair from the city of Otavalo. It has 8 years of experience in agroecological production in the parishes of Quichinche, Espejo, González Suárez, and Darios Egas, in the canton of Otavalo.
- La Esperanza Water Board, a farmers' organization that brings together 858 families in the parish. Founded 33 years ago, it includes several working groups including a cooperative of agroecological gardens, and a school and local fair for agroecology.
- Center for Indigenous Development (CEDEIN), an indigenous Kichwa foundation with extensive experience in implementation of rural development projects. It supports the agroecological production of some 290 families in 32 communities of the cantons Colta and Guamote.
- CORPOPURUHA, a peasant organization. It has worked since 2010 in the parishes of St Peter and the canton Mushucpacari Guamote, in the production and management of seed in community banks. It has 250 members.
- Cantonal Union of Peasant Organizations Palta (UCOC-P), a second level farmer organization that brings together 11 organizations based in the parishes of the Catacocha Lourdes in the canton of Palta, covering 220 families. It has 9 years of experience.
- The Agroecological Network of Loja (RAL) is a collective with a track record of more than 10 years in the province of Loja. It consists of 9 grassroots organizations and has 125 families of agroecological farmers. Currently, 25 producers sell their products on a rotational basis in three weekly agroecological fairs in public spaces in coordination with the Municipality of Loja.

The project also includes the participation of three academic institutions:

- The Faculty of Natural Resources at the **Polytechnic Higher Education School of Chimborazo (ESPOCH)** through its schools of Agronomy and Ecotourism promotes education in areas of knowledge related to native crops of the region and to the rural tourism in the area.
- The Technical University of Loja (UTPL) has an area of research in biology and biomedical research programs in biodiversity and utilization, quality and safety of the food, food security, functional foods and nutrition, diversity and ecosystems and agricultural research
- The Pontificia Catholic University of Ecuador, Headquarters Ibarra (PUCE-SI) in its academic structure it has the School of Agricultural and Environmental Sciences, one of the most important components of which is the PUCE-IF genebank.

These institutions will all be directly involved in project activities and will be represented in the LCs, as described above, to insure their involvement in the planning and execution of the project at the local level. For further information please see the FAO project document sections 1.1.3, 4.1, and 4.2

# B. 2. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

The project will seek to generate benefits related to the local economy and to food and nutrition security in order to provide incentives and sustainability to the activities on management and sustainable use of agro-biodiversity after the project implementation. These include: significant progress in the implementation of Article 9 of the TIRFAA on Farmers' Rights that facilitate access and benefit-sharing in relation to plant genetic resources; five (5) peasant and indigenous organizations incorporating the management of agrobiodiversity in thousand five hundred (1 500) hectares, increasing the diversity by 40% and the standard of living for women and men (measured through qualitative surveys disaggregated by gender); the average annual income of the 1000 peasant and indigenous participating families has been increased by 15% at the end of the project (measured through questionnaires disaggregated by gender and filled out by all of the participating families at the beginning and at the end of the project) through increased added value of agrobiodiversity products and other economic activities related to agrobiodiversity.

The social and local benefit sustainability of project activities will be achieved through a participatory strategy to strengthen the role of local communities and farmers and indigenous organizations in *in situ* agro-biodiversity conservation and management activities, capacity building and monitoring. In particular, the project will support:

- A gender approach and the respect for indigenous cultures at all stages of decision-making and project activities.
- The active participation and empowerment of indigenous and local communities in the expansion and accreditation of good practices for *in situ* conservation and management of agro-biodiversity and in income generating activities (organic food fairs, small food processing companies, agro-tourism routes).
- The active participation of communities in the process of development of regulations at the provincial level (regulations and DLUP), under the approach of food security and sovereignty.
- The capacity-building of farmers' and indigenous organizations to enhance their administrative and technical capacity.
- The facilitated access to seed and planting materials of traditional varieties adapted to the agro-ecological production areas.

Another factor of social sustainability will be the co-financing contribution of the farmers' organizations UNORCAC, CEPCU, and CEDEIN, which will reinforce the empowerment of the project outputs and outcomes by the communities.

#### B.3 Explain how cost-effectiveness is reflected in the project design:

The most important aspect of the cost effectiveness strategy of the project is the focus on the cooperation between the public sector at different levels (agricultural research, MAGAP, provincial and local governments) and the civil society

(agricultural development NGOs, farmers and indigenous organizations) in promoting organic and diversity-based agriculture and other complementary activities. Another major focus of the strategy will be the strengthened linkages, interaction and feedback between *in situ* agro-biodiversity management and use systems and the *ex situ* plant genetic resources conservation, research and development system, seeking synergies and mutual benefits. With the participation and collaboration of a range of stakeholders providing their knowledge of different systems, it is possible to save costs by avoiding duplication and filling the gaps in knowledge and materials in one system with inputs from other systems.

Some alternative strategies considered but discarded because of their lower cost effectiveness were:

- 1. Addressing the problems only with field actions, through technical assistance and financial support to the *in situ* management of agro-biodiversity in the farms, would have been unsustainable without the support of important complementary actions of alternative income generation, awareness of consumers and decision-makers and development of policies and legislation for the promotion of *in situ* conservation.
- 2. Addressing the problems only with measures to strengthen INIAP and its work on ex situ conservation, research and development of plant genetic resources, even if supported by the development and implementation of policies and legislation, would have also been unsustainable, since it would not have been accompanied by actions to strengthen in situ management and conservation systems which provide local knowledge and practices on the use and characteristics of the local crop species. Also, the research to obtain and release new crop varieties would lose a direct linkage with the needs of diversity-based crop systems, especially in the highland Andean systems under important climatic pressures like the increasing water scarcity.

In the three years of the project, the cost of the direct investment of GEF resources is USD 456 per hectare cultivated under organic and diversity-based production practices (the amount of GEF investment in outcomes 2.2 and 2.3 divided by 1,500 hectares directly supported). This value includes the provision of inputs such as seeds, fertilizer, small animals and seedlings, as well as support for irrigation infrastructures, Bio-knowledge and Agricultural Development Centres and community banks, and the preparation of inventories, among others. It also includes training on the Participatory Guarantee System and its implementation. Comparing these costs with those of a conventional green certification for organic production (USD 1,800 per year per 1-10 hectares including training<sup>6</sup>) it is evident that in this aspect the project is cost-efficient.

The investment cost including the indirect project coverage by incorporating the sustainable use and conservation of agro-biodiversity in public policies and Provincial Development and Land Use Plans and awareness actions is USD 139 per hectare (1.25 million USD / 9 000 hectares). These costs are reasonable compared to similar interventions.

#### C. DESCRIBE THE BUDGETED M&E PLAN

The below is the summery of the budgeted M&E plan for further details please see the FAO Project Document sections 4.5 and 4.6

Type of M&E Activity	Responsible Parties	Time -frame	Budget costs
Inception Workshop	INIAP/PC; FAO (PTM with support from LTO BH & FAO- GEF coordination unit)	Two months after the beginning of the project.	USD 3 000
Project Inception Report	INIAP/PC, FAO, PSC approved by LTO, BH & FAO-GEF coordination unit.	Immediately after the inception workshop	
Field based impact monitoring	INIAP/PC; Farmers and indigenous organisations participating in the project	Continually	USD 36 960 (10% of the time of the project coordinator, technical workshops on the identification of indicators, monitoring and fallow up workshops)
Supervision visits and rating of progress in PPRs and PIR	INIAP/PC; FAO (PTM, LTO and FAO-GEF coordination unit)	Annual or as required	The visits of the FAO LTU/LTO and the GEF Coordination Unit will be paid by GEF agency fee. The visits of the INIAP/PC and other PC

<sup>&</sup>lt;sup>6</sup> Cost per year of organic banana production certification under EU and USA systems, for farms between 1 and 10 hectares. Information provided by BCS Öko Garantie Cía. Ltda. Ecuador.

Type of M&E	Responsible Parties	Timeframe	Budget costs
Activity			members (not including FAO) will be paid from the project travel budget and their co-financing
Project Progress Report	INIAP/PC, with contributions from Heifer and other institutions participating in project execution	Six-monthly	USD 8 230 (5% of the time of the project coordinator)
Project Implementation Review Report	FAO (LTO and PTM) with the support from INIAP/PC and Heifer, and cleared and submitted by the GEF Coordination Unit to the GEF Secretariat	Annually	Paid by GEF Agency fee
Technical Reports	INIAP/PC; FAO (LTO and PTM)	As appropriate	-
Co-financing Reports	INIAP/PC and Heifer with inputs from other co-financing partners	Annually	USD 1 800 (2% of the time of the project coordinator)
Mid-Term Review	External Independent Consultant, in consultation with the project team including the GEF Coordination Unit and other partners	At mid-point of project implementation	USD 15 000 for external consultant. In addition, either FAO staff time and travel or an additional consultant will be paid through the agency fee
Final Evaluation	External Consultant, FAO independent evaluation office in consultation with the project team and other partners	At the end of project implementation	USD 30 000 for external consultant. In addition, either FAO staff time and travel or an additional consultant will be paid through the agency fee
Terminal Report	INIAP/PC; FAO (PTM, LTO FAO-GEF Coordination Unit, TSCR report unit)	At least two months before the end of the project	-
Total Budget		1988 4 E 1985 4 E 198	USD 94 990

## 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(s) with this template. For SGP, use this OFP endorsement letter).

Name	Position	MINISTRY	DATE (MM/dd/yyyy)
Mrs. Marcela Aguiñnaga Vallejo	GEF Operational Focal Point	Ministry of environemnt	November 25, 2011

#### B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Gustavo Merino, Director Investment Centre		April 23, 2014	Stefano Diulgheroff	+39 0657055544	Stefano.Diulgheroff@fao.org
Division Technical Cooperation Department	Q.	7	and Rikke		
FAO Viale delle Terme di Caracalla (00153) Rome, Italy			Olivera .	+390657055701	Rikke.Olivera@fao.org
TCI- Director@fao.org			. + '		

Please see Appendix 1 of the FAO GEF Project Document.

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

#### Response to STAP comments

1.1. There appears to be a slight disconnect between the title of the project and the project objective insofar as the focus of the project is concerned. It seems that the objective is too narrowly defined and thus misses the project's intended contributions to policy reforms at multiple levels.

Response: The project objective has been revised in order to make explicit reference to the areas in which the project will have an impact. The revised objective is to: "Integrate the use and conservation (ex situ and in situ) of agro-biodiversity in the policies, farming systems and education and awareness programs of Ecuadorian highland provinces of Loja, Chimborazo, Imbabura and Pichincha with the aim of contributing to the sustainable management and resilience of agro-ecosystems in the Andean and other similar mountain dryland regions."

1.2. While the logic behind the project is basically sound, the direct links between the threats to agrobiodiversity and their root causes and the proposed outcomes and outputs are not always clear. Thus, they appear to be more intuitive than substantiated by evidence or an array of facts in the logic chain. While the design defines some of the principal deficiencies or gaps, what is missing is the definition of barriers to mainstreaming the use and conservation of agro-biodiversity and this clearly is something that must be addressed in further project development. The focus of the outcomes and outputs should be indicative of efforts at barrier removal.

**Response**: The analysis of threats and causes has been further detailed during project preparation and is presented in the FAO Project Document section 1.1. Subsequently the barrier analysis is further developed in section 1.1.1.a linked to each intervention area of the project components and outputs aimed at removing those barriers.

1.3. Global biodiversity benefits are still presented in a rather general manner. Local economic benefits are more easily evident and could be tracked. The incremental benefits and reasoning section has also been revised, but essentially re-states the expected project outcomes. It is noted that in recent years related project activity has taken place in the areas covered by the project and thus the specific increment could be more sharply defined.

Response: The baseline projects and investments addressing the identified threats to agro-biodiversity are now described to a large extent (section 1.1.1.a of the FOA Project Document). The incremental reasoning of the GEF resources has also been revised to reflect more specifically how the project will build on existing initiatives towards the conservation and utilization of agro-biodiversity in the project intervention areas (section 1.1.1.b of the FOA Project Document). The project strategy is justified by the fact that the in situ dynamic conservation of genetic resources and the access provided to a variety of characteristics of such resources are necessary to overcome future challenges related to climate and other pressures.

1.4. The definition of risks is generally adequate although there has been no reaction to the suggestion of ranking the risks as high, medium or low. Doing this remains advisable. Concerning the risks stemming from climate change, more consideration could be given to its implications in the Andean highlands that are markedly more susceptible to projected impacts. Selecting species that can survive in a climate modified environment, however, cannot be seen as a mitigation measure or one that builds ecosystem resilience. The potential for using incentives could also be considered under the mitigation measures addressing possible lack of motivation and commitment among local stakeholders.

Response: The risk analysis for the success of the project has been further developed during the full project preparation and is summarized in the table in section A.6 in this document including their rating, as well as

mitigation measures incorporated in the design of project components. Regarding risks related to climate change, the project will seek to enhance agro-ecosystem resilience based on diversity as one important element in a risk reduction strategy and based on activities aimed at the multiplication and distribution/diffusion of species and varieties with greater resilience characteristics. Regarding incentives for adoption of diverse farming systems, the project will support the implementation of on-farm agro-biodiversity standards by the provision of training and inputs to farmers, but the main incentive, contemplated and supported by the project, for the adoption of such standards, is the high market demand for farming products from guaranteed organic and diverse production systems (outcome 2.3 and 2.4 and related outputs).

1.5. Since a multitude of actors will be involved, it will be important to ensure efficient and effective coordination. A central management committee and local management committees are envisaged. This arrangement could potentially become rather cumbersome and unwieldy and thus this aspect should be assessed further addressing the mechanism, procedural elements, as well as associated resource requirements. Coordination with other projects will also require sufficient effort and support.

Response: The role, mandate and composition of both the Project Steering Committee and the Local Committees are defined in the FAO Project Document Section 4.1 and 4.2 and also described in section B.1 in this document. These committees are very important to insure the participation of beneficiaries and local project partners in each province as well as national project partners in the planning and execution of project activities and in taking ownership of the outputs and outcomes achieved. This ownership has already been initially built during the project preparation demonstrated by all the cofinancing commitments made to the project. The strength of this project is that it builds on a broad partnership which brings together both local farmers and indigenous community organizations, research institutions, NGOs and local, provincial and national government partners needed to coordinate and complement each other in the removal of the identified barriers for agrobiodiversity conservation. The resources allocated to the project coordination will enable the effective coordination of the project decision-making mechanisms as well as the coordination with other ongoing and planned related initiatives as described in section A.7 above.

#### Response to comments from Germany

2.1. It does not seem possible to generate visible impacts at all of the proposed levels of intervention in three years and with the proposed budget. We suggest instead reducing the scope of the project; this could be achieved, for instance, by not focusing on the training of technical staff (who should generally already have adequate knowledge and skills), or not implementing territorial planning through the project itself.

Response: The recommendations have been taken into consideration in the formulation of the project document. The output related to strengthening the capacity of the INIAP genebank to achieve international standards, including training of personnel, improvement of procedures and infrastructure, and acquisition of equipment, has been taken out but will to some extend be financed by INIAP financing to be leverage during project execution. Similarly, the target area of productive land to be certified for the good production practices of in situ conservation of agro-biodiversity with support of the project has been reduced to a more realistic figure considering the size of the GEF grant provided (from 9,000 to 1,900 hectares). The project will not be doing territorial planning. The provincial Development and land use Plan are already required by law to be done by provincial governments. The project will contribute with facilitating that agrobiodiveristy conservation are included in these plans, which would bring more financing to the conservation and sustainable use activities.

2.2. The Agricultural Ministry (Ministerio de Agricultura, Ganadería y Pesca, MAGAP) should be integrated into the project, as it is the national political authority in this issue. MAGAP is a key actor based on its competence within the seeds and plans production system, into which they are very interested to integrate agrobiodiversity elements.

Response: MAGAP has been incorporated as a partner of the project, with defined tasks and responsibilities in the planned activities. Specifically, MAGAP will be represented in the project Steering Committee and will be the responsible institution of three subcomponents and outputs and co-responsible for three additional subcomponents and outputs (please see table 4.1 in the FAO Project document). Three MAGAP departments will play key roles in the project: the Agro-biodiversity Division, the Commercial Networks Department, and the Innovation Department.

2.3. One of the priorities of the current government is the availability of seeds and plants at producer's level. Therefore, it is necessary to establish alliances with local stakeholders such as the Provincial Governments (Gobiernos Provinciales), technical schools and training centers as well as universities, which are needed in order to widen and maintain the ABD use and conservation programs.

Response: The project will support the establishment of six Bio-knowledge and Agricultural Development Centres (BADC) in the intervention areas. BADCs are technology transfer units managed jointly between INIAP and provincial governments, with a high level of participation of beneficiary farmers. The BADC strategy is to organize farmers with interest in the conservation of agro-biodiversity, support them in the controlled multiplication of germplasm of interest obtained in the area or restored from the National Genebank for subsequent transfer to farmers, and disseminate and transfer knowledge and methodologies for conservation and sustainable use of agro-biodiversity. One of the main functions of the BADCs will be the production of quality seed of varieties chosen by farmers in the area. Also provincial technical schools and universities and research institutions are involved in the project and are providing co-financing. They will participate in the BADCs, the development of the national agrobiodiversity policy, the methodology to valuate agrobiodiversity, in education and awareness raising and in the expansion and analysis of the collections in the National Genebank.

2.4. GIZ experiences in Ecuador have shown that ABD initiatives work much better when they are related to food security and climate change. We suggest therefore that the proposal should integrate more aspects of food security and also the design of adaptation measures towards climate change.

Response: The project justification describes how the on-farm conservation and use of a diversity of crops and crop varieties contribute significantly to the food and nutrition security of rural households. The income generation component of the project supports as well the food security aspect. With regard to adaptation measures towards climate change, the project activities will seek to enhance agro-ecosystem resilience by activities aimed at the multiplication and distribution/diffusion of species and varieties with greater resilience characteristics and at enabling production systems to adapted to climate variability and to environmental conditions through the use of a diversification risk reduction strategy.

### ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS $^7$

A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

	GEF/LDCF/SCCF/NPIF Amount (\$)		
Project Preparation Activities Implemented	Budgeted Amount	Amount Spent To date	Amount Committed
5011 Salaries Professional (Parent)	3859.00		
5012 Salaries General Service (Parent)			
5013 Consultants (Parent)	46141.00	52370.25	
5020 Locally Contracted Labour			1344.00
5014 Contracts (Parent)			
5021 Travel (Parent)	10182.00	7028.76	
5023 Training (Parent)	8000.00	3458.29	2876.73
5024 EXPENDABLE PROCUREMENT		2.14	
5028 General Operating Expenses (Parent)		1101.83	
Total	68182.00	63961.27	4220.73

<sup>&</sup>lt;sup>7</sup> If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent funds, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for activities.

ANNEX D: CALENDAR	OF EXPECTED REFLOWS	(if non-grant instrument is used)
-------------------	---------------------	-----------------------------------

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)