

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

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

Project Title: MULTIPLYING ENVIRONMENTAL AND CARBON BENEFITS IN THE HIGH ANDEAN								
ECOSYSTEMS OF ECUADOR	ECOSYSTEMS OF ECUADOR AND PERU							
Country(ies):	Ecuador and Peru	GEF Project ID: <sup>1</sup>	4750					
GEF Agency(ies):	UNEP	GEF Agency Project ID:	00810					
Other Executing Partner(s):	CONDESAN	Resubmission Date:	25/02/2014					
GEF Focal Area (s):	Multifocal Area	Project Duration(Months)	48					
Name of Parent Program (if		Project Agency Fee (\$):	479,636					
applicable):								
$\succ$ For SFM/REDD+								
➢ For SGP								
➢ For PPP								

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

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Cofinancing (\$)
BD-2	2.1. Measures to conserve and sustainably use biodiversity incorporated in policy and regulatory frameworks.	<ul> <li>1.1 Five Integrated Land Use Plans developed and strengthened at each intervention site that incorporate biodiversity conservation and carbon benefits valuation.</li> <li>1.2 At least two policies formulated or strengthened by the project to be formally adopted by the Governments to enhance sustainable biodiversity, forest and land management practices.</li> </ul>	GEFTF	1,647,898	3,259,826
CCM-5	5.1. Restoration and enhancement of carbon stocks in forests and non-forest lands, including peatlands.	<ul> <li>5.1.1 Five protocols for monitoring biodiversity, carbon stocks and key ecosystem dynamics adapted, validated and applied at intervention sites.</li> <li>5.1.2 At least 8 science-based studies on ecosystem dynamics along environmental and degradation gradients and synergies between biodiversity, carbon and SLM/SFM practices.</li> <li>5.1.3 One monitoring system established at each project intervention site to account carbon, biodiversity and changes on environmental services.</li> </ul>	GEFTF	726,979	2,160,000
CCM-5	5.2. Good management practices in LULUCF adopted both within the forest land and in the wider landscape.	5.2.1 At least 27,000 Ha of forest and non-forest lands under good management practices.	GEFTF	484,650	1,640,000
LD-3	3.1: Enhanced cross- sector enabling environment for integrated landscape management	<ul> <li>3.1.1 Ten integrated land management plans strengthened and implemented; two for each intervention site.</li> <li>3.1.2 At least 30 national and local decision makers attend continued and specific training program in on the conservation and sustainable management of high Andean Ecosystems and its link to land use planning,</li> <li>3.1.3. At least 5 extension programs focus on IRNRM operated by local governments or counterpart organizations strengthened.</li> </ul>	GEFTF	226,580	780,000

<sup>&</sup>lt;sup>1</sup> Project ID number will be assigned by GEFSEC.

<sup>&</sup>lt;sup>2</sup> Refer to the <u>Focal Area Results Framework and LDCF/SCCF Framework</u> when completing Table A.

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LD-3	3.2. Integrated landscape management practices adopted by local communities	<ul> <li>3.2.1 At least 2 policy decision support systems/tools based upon new knowledge, environmental scenarios &amp; economic valuations developed and adopted by stakeholders at intervention sites.</li> <li>3.2.2 At least 6 assessments or INRM tools to support ongoing national efforts on conservation, land restoration and climate change strategies</li> <li>3.2.3 Information on INRM technologies and good practice guidelines disseminated.</li> </ul>	GEFTF	198,260	1,515,000
LD-3	3.3. Increased investments in integrated landscape management	3.3.1 Appropriate actions to diversify the financial resource base	GEFTF	141,625	2,000,000
SFM/REDD-1	1.2. Good management practices applied in existing forests.	<ul><li>1.2.1 Forest area (8,000 ha) under</li><li>sustainable management, separated by forest type.</li><li>1.2.2 Types and quantity of services generated through SFM.</li></ul>	GEFTF	801,396	2,670,000
SFM/REDD-2	2.2. New revenue for SFM created through engaging in the carbon market.	1.1 National MRVs programs and at least 3 financial incentive programs of Ecuador and Peru strengthened	GEFTF	340,600	1,480,000
			4,567,988	15,504,826	
		GEFTF	228,376	655,000	
			4,796,364	16,159,826	

### **B. PROJECT FRAMEWORK**

**Project Objective**: To protect critical high-Andean ecosystems at selected intervention sites by mainstreaming scientifically-validated and integrated SLM tools and practices that preserve and enhance biodiversity and carbon stocks while contributing to the mitigation of climate change.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Cofinancing (\$)
1. Knowledge and tools	ТА	<ul> <li>1.1: Knowledge base expanded on high Andean ecosystem dynamics and the effects that GEC have on biodiversity and carbon stocks and on the multiple environmental and social benefits they provide.</li> <li>1.2: DM accessed increased to knowledge base and practices for SM Andes.</li> </ul>	<ul> <li>1.1.1 Five protocols for monitoring biodiversity, carbon stocks and key ecosystem dynamics adapted, validated and applied at intervention sites.</li> <li>1.1.2 At least 8 science-based studies on ecosystem dynamics along environmental and degradation gradients and synergies between biodiversity, carbon and SLM/SFM practices.</li> <li>1.1.3 One monitoring system established at each project intervention site to account carbon, biodiversity and changes on environmental services.</li> <li>1.2.1 At least 6 assessments or INRM tools to support on-going efforts on conservation and climate change strategies at different scales.</li> <li>1.2.2 At least 2 policy decision support systems/tools based upon new knowledge, environmental scenarios &amp; economic valuations developed and adopted by stakeholders at intervention sites.</li> </ul>	GEF TF	1,201,506	3,600,000

		Outcome 2.1: Enabling environment in place to integrate multiple benefits in cross- sectoral planning tools at the wider landscape.	<ul> <li>1.2.3 At least 1 innovative agroforestry system proposed and scientifically validated per intervention site.</li> <li>At least 1 land restoration system proposed and scientifically validated per intervention site.</li> <li>2.1.1 Five Integrated Land Use Plans developed and strengthened at each intervention site.</li> <li>2.1.2 Ten local development plans formulated or strengthened.</li> <li>2.1.3 At least two policy instruments formulated or strengthened by the project to be formally adopted by local governments to enhance sustainable biodiversity, forest and land management practices.</li> </ul>			
2. Mainstreamin g sustainable land management	ТА	Outcome 2.2: Institutional capacities enhanced to apply knowledge and INRM tools that support policies, integrated land use plans and ongoing programs for the conservation and sustainable management of critical high-Andean ecosystems, including Andean forests.	<ul> <li>2.2.1 At least 60 technicians attend continued and specific training program in management and restoration practices focus on SLM/SFM and rangeland management on high Andean ecosystems, 45 in Ecuador and 15 in Peru.</li> <li>2.2.2 At least 2 sustainable financing plans designed and implemented to support INRM/SFM and diversify the financial resource base at intervention sites.</li> <li>2.2.3 At least 30 national and local decision makers attend continued and specific training program in on the conservation and sustainable management of high Andean Ecosystems and its link to land use planning, 20 in Ecuador and 10 in Peru</li> <li>2.2.4 At least 2 extension programs operated by local governments or counterpart organizations strengthened, 1 for each intervention site</li> </ul>	GEF TF	1,099,943	2,799,826
3. Intervention sites	ТА	Outcome 3.1: Sustainable livelihood strategies and key productive value chains strengthened at interventions sites to address barriers and support SLF/SFM practices. Outcome 3.2: Biodiversity, carbon and social benefits enhanced through SLM/SFM investments and	<ul> <li>3.1.1 One baseline assessment addressing critical barrier developed and proper actions implemented at each intervention site.</li> <li>3.1.2 At least 3 start-up programs in key production chains implemented and incorporating SFM/SLM practices at intervention sites.</li> <li>3.1.3 At least 10% of participating families' income diversified by activities promoted by the project.</li> <li>3.2.1 five thousand ha of Upper Montane Forest under conservation or sustainable forest management.</li> <li>3.2.2 Ten thousand ha of Páramo, Punas and Wetlands under conservation or sustainable land management</li> </ul>	GEF TF	1,387,943	7,955,000

	Project management Cost (PMC) <sup>3</sup>				228,376	655,000
			Subtotal	GEF	<b>7</b> ,507,500	13,304,820
4. Upscaling and outreach	ГА	environmental authorities in Ecuador and Peru incorporate science based knowledge and tools developed by the project into their MRV systems and financial incentive programs. <b>Outcome 4.2:</b> Knowledge, tools and lessons learned disseminated among other local governments and key stakeholders outside the project intervention sites.	<ul> <li>investments effectiveness.</li> <li>4.1.2 National MRV systems of Ecuador and Peru strengthened for monitoring climate change and land use impacts.</li> <li>4.1.3 At least 4 thematic working groups (including the participation of national authorities) formed or strengthened to replicate project actions in areas beyond intervention sites.</li> <li>4.2.1 At least one publication of lessons learned on SLM/SFM practices disseminated among key stakeholders, including local communities.</li> <li>4.2.2 Tool kit produced of project findings (lessons learned and SLM/SFM practices) produced for use by participating regional governments for promoting conservation and sustainable management of Andean ecosystems.</li> <li>4.2.3 At least 3 local governments outside project intervention sites are aware of validated actions to promote conservation and sustainable management Andean ecosystems management.</li> </ul>	GEF TF	878,596 4,567,988	1,150,000 15,504,826
		practices on forest and non-forest lands in the high Andes. Outcome 4.1:	<ul> <li>3.2.3 Three thousand ha of improved rangeland under good management practices.</li> <li>3.2.4 Four thousand ha of community plantations and agroforestry systems using native tree species (85% survival rate).</li> <li>3.2.5 Two thousand ha of commercial plantations using native and exotic tree species (85% survival rate).</li> <li>3.2.6 Three thousand ha of degraded land under sustainable land management practices other than tree plantations.</li> <li>3.2.7 Three-Five % increase of population of ecosystem health indicator species at intervention sites.</li> <li>3.2.8 Three-Five % increase of a population of ecosystem health indicator species at intervention sites.</li> <li>4.1.1 At least four financial incentive</li> </ul>			

<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.

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

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount (\$)
National Government	Ministerio del Ambiente Ecuador	Cash	4,500,000
National Government	Ministerio del Ambiente Ecuador	In-kind	2,500,000
National Government	Ministerio de Ambiente Perú	In-kind	1,622,826
Other Multilateral Agency (ies)	PRODERN – Belgium Cooperation	Cash	690,000
Other Multilateral Agency (ies)	PRODERN – Belgium Cooperation	In-kind	120,000
Foundation	CONDESAN	Cash	1,750,000
Foundation	CONDESAN	In-kind	820,000
GEF Agency	UNEP	In-kind	3,450,000
Others	FMPLPT	Cash	100,000
Others	FMPLPT	In-kind	100,000
Local government	GORE - Huancavelica	Cash	127,000
Local government	GORE - Huancavelica	In kind	380,000
Total Co-financing	16,159,826		

Please include letters confirming cofinancing for the project with this form

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

	Type of		Country Name/	(in \$)			
GEF Agency	Trust Fund	Focal Area	Global	Grant	Agency Fee $(1)^2$	Total	
				Amount (a)	(0)	c=a+b	
UNEP	GEF TF	Biodiversity	Ecuador	1,730,284	173,028	1,903,312	
UNEP	GEF TF	Land Degradation	Ecuador	594,785	59,479	654,264	
UNEP	GEF TF	Climate Change	Ecuador	393,113	39,311	432,424	
UNEP	GEF TF	Climate Change	Peru	879,091	87,909	967,000	
UNEP	GEF TF	SFM-REDD		1,199,091	119,909	1,319,000	
Total Grant Resources			4,796,364	479,636	5,276,000		

<sup>1</sup> 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 (\$)	
International Consultants	0	2,000,000	2,000,000	
National/Local Consultants	736,000	5,500,000	6,236,000	

# 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 PIF<sup>4</sup>

- A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.: No change.
- A.2. <u>GEF</u> focal area and/or fund(s) strategies, eligibility criteria and priorities: Same as PIF in principle. Detail added here on investment specifics per focal area as requested and including hard data and references to sites.

This project contributes directly to GEF's strategic goals #1, #2 and #3: Conserve, sustainably use, and manage biodiversity, ecosystems and natural resources globally, taking into account the anticipated impacts of climate change; Reduce global climate change risks by stabilizing atmospheric GHG concentrations through emission reduction actions, and assisting countries to adapt to climate change, including variability; and Build national and regional capacities and enabling conditions for global environmental protection and sustainable development. In particular, the project is in accordance to SO # 2 in Biodiversity Focal Area, SO # 5 in the Climate Change, SO # 3 in Land Degradation and SO # 1 and SO # 2 in Sustainable Forest Management. Strengthening the existing linkages between focal areas is the basis of the proposal, and synergies regarding conservation and restoration of biodiversity and carbon stocks in forest and non-forest lands (BD, CCM, SFM, LD) will be pursued. Furthermore, the SFM funding will be implemented through outcome 3.2 of component 3: Biodiversity, carbon and social benefits enhanced through SLM/SFM investments and practices on forest and non-forest lands in the high Andes. Based on this component the following outputs related to forest lands will be achieved: (1) 5,000 ha of Upper Montane Forest under conservation or sustainable forest management; (2) 4,000 ha of community plantations and agroforestry systems using native tree species (85% survival rate); and (3) 2,000 ha of commercial plantations using native and exotic tree. These outcomes contribute to several indicators of the Tracking Tool for SFM (see TT-SFM for details). A fundamental aspect to accomplish these outcomes relies on the counterpart funding of the Project. The National Incentive Program for Reforestation of MAE will invest up to US \$ 3 million dollars for SFM and LD in forested lands at the wider landscape in Ecuador's intervention sites. In the same way the joint program PRODERM-MINAM (Belgium cooperation) together with the Regional Government of Huacavelica will invest up to US \$ 610 thousand dollars for forest management in the Huancavelica intervention site. Finally, the Regional Government of Piura together with the local NGO NCI will contribute with cofinancing resources to implement SFM practices at the Ayabaca intervention site.

### A.3. The GEF Agency's comparative advantage: No change.

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

The fundamental rationale of this project was presented in the PIF and during the preparatory phase it was further defined in consultation with governments at multiple scales. The rationale states that by incorporating applied research findings, scientifically validated and integrated land planning tools and Sustainable Land Management (SLM) and Sustainable Forestry Management (SFM) practices into existing national and local policy instruments, major knowledge gaps and barriers will be addressed and significant improvements in the conservation and sustainable management of high Andean ecosystems will be attained, delivering important global benefits. In order to assist in the development and validation of the tools and land management practices mentioned, it was decided that the project would set up **3 intervention or demonstration sites in Ecuador and 2 in Peru**. Also, to ensure that institutional capacities are strengthened and country ownership secured, activities in all intervention sites will be implemented in close partnership with local governments and selected rural communities.

The project will contribute with scientific knowledge on high Andean ecosystem dynamics and the effect global environmental changes (GEC) have on biodiversity and carbon stocks and on the multiple environmental and social benefits they provide. New knowledge will be produced through robust, cost-effective monitoring systems established on each intervention site, and linked to national Monitoring, Reporting and Verification (MRV) systems.

<sup>&</sup>lt;sup>4</sup> For questions 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.

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This project seeks to develop an enabling environment for integrated ecosystem management in the high Andean ecosystems of Ecuador and Peru, and likewise to develop and validate the application of integrated land management approaches through selected demonstration practices in the wider landscape at the 5 intervention sites. It recognizes as its ultimate goal that ecosystem-based management must contribute to preserving or restoring the integrity of ecological systems as the base upon which socio-economic development and human wellbeing depend. The project will mainstream biodiversity conservation and its multiple benefits into cross-sectoral planning tools and policy instruments at the wider landscape as well as into relevant productive sector practices (i.e. agriculture, forestry). Likewise, the Project will guarantee that decision makers at different levels have increased access to science-based knowledge and SLM/SFM strategies through decision support tools that enable conservation and sustainable management of high-Andean Ecosystems. In this sense, intervention sites include specific areas of direct and indirect influence of the Project; in the direct areas of influence specific research activities and SFM /SLM practices will be implemented; whereas the areas of indirect influence, include entire political administrative territorial units, that will be affected by the project mainstreaming and up-scaling activities directed towards local governments and their local policy frameworks.

This project will address current resource use and management practices, taking into consideration the different roles of local stakeholders, including men and women, in such key areas as agriculture, forestry, and tourism, with a view to developing robust policy and cross-sectorial regulatory frameworks, targeted training and capacity building, and management guidance that will enable local governments to put in place an ecosystem-based management strategy. The primary outcome of this line of work will be to ensure that institutional capacities are improved to apply knowledge and resource management tools which support policies, integrated land use plans and incentive programs (i.e. the Socio Bosque Programme in Ecuador) for the conservation and sustainable management of High Andean ecosystems.

A central rationale of this project is to foster important synergies between GEF focal areas as a strategy to accomplish the project's goal. The project will address land-use and cover change trends, which are a major driver of biodiversity loss and GHG emissions in Ecuador and Peru, maintaining and enhancing carbon stocks in high Andean ecosystems through SLM/SFM practices and policies. The project will contribute to the creation of an enabling environment in both countries to mainstream biodiversity conservation, promote climate change mitigation and upscale SLM/SFM in the wider landscape. National and local capacities will be strengthened to include environmental benefits in land use planning and policies, and foster economic incentives. Given the interdependence between soil organic carbon (SOC), biodiversity, and hydrological functions, this project will have an impact on maintaining critical ecological functions which contribute to sustain local rural livelihoods. Onthe-ground activities will be developed and executed in demonstrative sites in alliance with local governments and up-scaled into the wider landscape. Sustainable land management practices that address land degradation trends will also generate key cross-focal gains including: i) reduction in the use of synthetic pesticides and fertilizers, leading to improved watershed water quality, and associated ecological and public health benefits; ii) control of fire and cattle grazing regimes thereby limiting the reduction of biomass and soil degradation; iii) forestation with native species in suitable places to recover microhabitat conditions, improve soil infiltration and water holding capacity, and enable species colonization and facilitation for their establishment. Finally, strengthening national capacities for carbon monitoring and evaluation will facilitate the participation of governments in international carbon markets, provided these markets develop positively.

As a result of discussions during PPG, the project has now four inter-dependent components (Figure A4). **Component 4** now calls for the insertion of project findings and tools by key actors at national, regional and local levels outside the direct coverage area in their decision making processes. Thus, outreach and up-scaling activities are key means to achieve it. At the national levels, the project expects to support national environmental authorities into their Measuring, Reporting and Verification (MRV) systems and incentive programs through a process of constant collaboration with will incorporate clear guidelines based on research and on-ground-activities at intervention sites. Additionally, this component aims to increase public awareness of project results and outreach findings of validated good management practices to promote conservation and sustainable use of High Andean ecosystems among local governments and key stakeholders surrounding the project's direct intervention area. By incorporating these changes, Component 4 has amended any level of overlapping with Component 1 as identified by STAP, while an integrated M&E system will measure suitable impact indicators to be tracked through the lifetime of the project and beyond.



Figure A4: Goals and Outcomes of the Project by each component

A. 5. Incremental /Additional cost reasoning: 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 principle presented in the PIF was maintained. What is added here is some specificity based on hard data gained during the PPG.

**Baseline analysis:** Current resource use and management practices at the intervention sites present important shortcomings that are translated in greater impacts on the structure and function of high Andean ecosystems and the environmental benefits they generate. The main problems associated to current practices are related to the over use of natural and semi-natural ecosystems, human altered disturbance regimes (e.g. burning of natural grasslands) that affect key environmental goods and services and unsustainable production practices in the broader landscape that generate pressure for conversion of forest and non-forest ecosystems. The specific configuration of the land use regimes and their impacts changes across the intervention sites, and the Project is designed to the specific shortcomings of the resource use and management practices, their root causes and direct and indirect impacts (Please refer to sections 2.3, 2.4 and 2.6 of the PRODOC for details).

National and local authorities in both countries are undertaking efforts to overcome this situation, within a framework of decentralization of environmental governance targeted at increasing participation, transparency, efficiency and equity of interventions from the public and private sectors. This includes the strengthening of national MRV systems, establishment of incentive programs and other interventions that have resulted in important financial resources—up to 7.0 M US\$ in Ecuador and 2.43 M US\$ in Peru— earmarked for related activities in the project's intervention sites. Yet, unless critical barriers described in section 2.3 are properly addressed, the available funding will not ensure the provision of multiple benefits from the conservation of biodiversity and the

maintenance or enhancement of carbon stocks. Addressing such knowledge, political and institutional barriers requires developing a sound science and practice base to support policy-making and enhancing local and national capacities to support biodiversity conservation, climate change mitigation, SLM and SFM in the high Andes.

In Ecuador, the National baseline programs upon which this Project is built are the National Incentive Program for forest conservation in private and communal lands (i. e. Programa SocioBosque), the National Forests Inventory (FAO/Finlandia), the National REDD+ programs and their MRV system, and the two reforestation Programs from the Ministry of Agriculture (MAGAP) and the Ministry of Environment (MAE). In Peru, the key programs to which this project aims to strengthen are the National Forest Conservation Program (NFCP), the REDD+ mechanism and the National Forests Inventory (FAO/Finlandia).

Without GEF's intervention, these on-going national programs will not be provided with a solid scientific base and appropriate tools to support decision making and implementation tailored to the social and environmental context of high Andean landscapes (Please refer to Appendix 3 of the PRODOC). Due to emphasis in forest low land ecosystems, it is very likely that national MRV systems in both countries—when finally in place—will be less suited to include biodiversity and carbon stocks dynamics of high Andean ecosystems. Therefore, it is expected that impacts of land use and land cover changes over carbon stocks, fluxes and land degradation dynamics in the highlands will continue to be underrepresented within monitoring efforts thus missing key opportunities for environmental benefit financing. Furthermore, subnational land use plans will be based on static and non-integrated approaches without explicit strategies to create and maintain key land planning and intervention capacities by local governments. These plans will also continue to lack clear environmental criteria that guide the prioritization of interventions. It is foreseen that without this project, a proper mechanism to mainstream SLM/SFM practices and to systematize and incorporate lessons learned from on-the-ground interventions will be lacking. Thus, current resource management approaches and investments will not be able to optimize the provision of multiple benefits, target critical areas within land-use planning, or redirect investments to diversify the financial resource base to promote sustainable land and forest management in the high Andes.

**GEF Alternative:** The GEF alternative will help bridge the gaps between knowledge and practice that undermine the conservation and sustainable management of high Andean ecosystems. The knowledge base on the relationships between structure and function in high Andean ecosystem and the effects of global environmental changes will be expanded. Such knowledge will be transferred to decision makers by strengthening environmental monitoring procedures (including national MRV systems) and providing tools to support integrated land use planning by local governments. GEF support will also help to build the institutional capacity at different levels on both countries. Furthermore, local governments will be assisted to undertake integrated approaches to effectively integrate conservation and SLM/SFM practices in the design and implementation of land use plans.

Locally, communities and land managers will be directly involved in on-the-ground activities and direct investments to provide global and local benefits. Such activities will offer feasible—socially, economically, institutional and ecological—alternatives and address key livelihood barriers that undermine sustainable management. Throughout the project implementation, lessons learned will be identified, disseminated and incorporated to support further actions. This will be the basis to outreach the project findings with key stakeholders beyond the direct intervention areas. Ultimately, the project aims to upscale such findings at the national scale by supporting environmental authorities to incorporate science based knowledge and tools developed by the project into their MRV systems and financial incentive programs. In sum, GEF contribution would remove critical barriers—through technical advice and strategic investments at multiple scales—in order to maximize the provision of global and local benefits that are currently being encouraged through national programs.

**Global Benefits:** The global benefits of this project include the protection of high Andean ecosystems in the Tropical Andes, considered one of the world's hotspots of biodiversity. The project will offer direct benefits in 5 intervention sites (3 in Ecuador and 2 in Peru) covering a total area of approximately 1'080,000 hectares. Within those areas, SLM and SFM activities will be implemented in direct intervention areas with a global target of roughly 27,000 hectares in forest and non-forest lands across the five sites. Activities will include conservation of ecosystem areas critical for the provision of environmental benefits, restoration of ecosystem structure and functions and promotion of SLM/SFM practices (e.g. improved management of native pastures).

To generate a rough estimation of global carbon benefits derived from the project activities, the historical ecosystem conversion rates for montane forests and paramos were calculated for the Ecuadorian sites using the

Historical Deforestation Map generated by the Ministry of the Environment (MAE 2010). Using these rates, the area in risk of conversion was projected for each type of ecosystem within the four year period of the forest. No historical Land Use and Land Cover Change (LUCC) data is available for the sites in Peru, so the same rates were used to generate an initial estimate of conversion. Carbon stocks for montane forest and paramos were estimated for biomass (above and below ground) and soils using literature for the Andean region. A conservative target of 15% of the carbon in risk of being emitted was estimated as an indication of the potential contribution of the Project in the five intervention sites. Table 1 shows indicative figures related to the global benefits that will be provided by the project.

Direct Benefits in Pilot Sites	Land Area (ha)	Mean C stored (t C/ha*yr)	Expected Benef	Global ïits	Observations	
			194,325	t C	Estimate of carbon accumulated in above ground biomass in areas conserved during the direct	
Carbon captured in forest and non-forest lands within pilot sites	15,000	-	3-5 % increase of population of ecosystem health indicator species at intervention sites		lifetime of the project. Accurate SOC estimates will be generated through activities in Component 1(Knowledge and tools)	
Non-forest lands (paramo, puna)	10,000	4.97	124,815	t C	Values based on: Phillips et al., 2011; Hall et al., 2012; Hofstede & Aguirre, 1999; Zimmermann et	
Forest lands (Polylepis, Alnus and upper montane forest)	5,000	4.71	69,510	t C	al., 2010; Rhoades et al., 2000;Ramsay & Oxley, 2001; Fehse et al., 2002; Girardin et al., 2010; Hofstede, 1995; Moser et al., 2011; Gibbon et al., 2010	
C stocks enhanced through sustainable land management	6,000	-	3-5% increase of tons of carbon over baseline in work areas		Includes rangeland under good management practices and degraded lands under restoration practices other than reforestation	
C stocks enhanced through sustainable forest management	6,000	-			Includes reforestation for restoration of ecosystem structure and function and commercial plantations.	

## Table 1. Global benefits that will be provided by the project

Global benefits in terms of carbon sequestration are also expected through the implementation of SLM/SFM practices in the intervention sites, especially those related to restoration of high Andean ecosystems through active (e.g. reforestation) and passive (e.g. grazing and fire exclusion) strategies. Estimates of these benefits cannot be provided given the lack of systematic assessments of carbon fluxes associated to these practices. In this context, a key global contribution of the Project will be the development and validation of robust protocols to quantify carbon stocks in different reservoirs in high Andean ecosystems and the impact of different SFM/SLM practices in terms of carbon sequestration. This is particularly important for high elevation wetlands which have been found to store quantities as high as 1,400 Mg C / ha in Soil Organic Carbon (Chimner y Carberg 2008). The generation of more accurate and detailed historical LUCC baselines in the intervention sites will also allow a better estimation of the global carbon benefits expected by the implementation of 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: A more in depth risk analysis and corresponding mitigation options including adoption of SLM/SFM practices has been carried out and added since the PIF. Please refer to section 3.5 in the ProDoc.
- **A.7. Coordination with other relevant GEF financed initiatives:** Coordination has advanced during preparation phase and will be further developed during implementation to ensure that synergies are maximized, redundancy

avoided and lessons learned find continued application. For the status at present refer to section 2.7 in the ProDoc. Also, the Stakeholder mapping and analysis in Section 2.5 provides a comprehensive overview in this regard as a result of the PPG.

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

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

During the preparation phase potential stakeholder's involvement in the project was examined at different levels, with special attention given to existing programs that could support project activities. Possible synergies and inter-institutional alliances promoting greater efficiency and effectiveness in the use of project resources are explained in the tables below. Key stakeholders who can contribute to project implementation in both countries are listed in Table 3. It is highly likely that other contributing stakeholders will be identified and included during project execution phase.

# Table 3: Alliances, synergies and contributions in Ecuador, Perú and international

Stakeholders	Current impact in project area	Potential impact	Synergies with the project	Potential contributions to the project
		ECUADOR GOVERNMENT AGENCIES		
Ministry of Environment (MAE)— National Reforestation Incentive Program	MAE has recently launched the national incentive program to promote reforestation of deforested lands through direct payments. No implementation activities being developed at intervention sites yet.	High	Facilitate the establishment of reforestation areas with native species to recover degraded lands on forested high Andean ecosystems.	Provide economic incentives (USD 830/ha) for community reforestation areas at intervention sites.
Ministry of Environment (MAE)—Socio Bosque PáramoChapter & Restoration Chapter	Socio Bosque is the national incentive program promoting biodiversity conservation operating since 2008. An estimate of ~11,000 ha of Paramos (64%) and Andean forests (36%) are currently under protection of incentive programs at intervention sites. No implementation activities regarding land restoration have yet being developed at intervention sites or other areas beyond intervention sites.	High	Incorporate new areas of Paramos and Andean forests into Socio Bosque incentive program at intervention sites. Define technical criteria to develop indicators and monitoring systems of ecological and social impacts of Socio Bosque. Start operating activities in the field also targeting the recovery of degraded lands.	Provide economic incentives (up to USD 30/ha) to conserve Andean ecosystems and recover degraded lands at intervention sites.
Ministry of Environment (MAE)— Monitoring and Evaluation Unit	Initial activities to design and implement an MRV system at national scale have started and are based in National Forestry Inventory (closing at the end of 2013) and the Historical Deforestation Map (1990-	High	Monitor biodiversity dynamics and carbon stocks & fluxes in Andean ecosystems; comprehensive forest and carbon inventory in high Andean ecosystems; map deforestation and land degradation at intervention	Participate of technical staff in workshops and tools development.

	2000-2008-2013).		sites.	
Ministry of Environment (MAE)—State Natural Areas Patrimony (PANE)	PANE Program seeks to improve management in the national protected areas system (PANE). All intervention sites in Ecuador are within the influence of protected areas.	Medium	Design biological corridors and promote institutional arrangements to support its implementation in or around intervention sites.	Provide funding for establishing biological corridors at intervention sites.
Ministry of Agriculture (MAGAP)— National Reforestation Program	Complementary to MAE's National Reforestation Incentive Program, MAGAP is in charge of the reforestation program promoting productive/commercial tree plantations. No implementation activities are being developed at intervention sites yet.	Medium	Establish tree plantations for productive and commercial purposes. Define technical criteria and guidelines to develop tree plantations in forested areas in the high Andes.	Provide economic incentives (USD 1,558/ha) for the establishment commercial tree plantations at intervention sites.
National Secretariat for Planning and Development (SENPLADES)	Planning and development policies and activities of subnational governments are subject to approval and monitoring of SENPLADES. Regional offices have been establish and are supposed to be support local governments planning efforts. Generic guidelines had been established and cross- sectoral actions require further support.	Medium	Incorporate environmental criteria and monitoring systems within land use plans. Promote cross- sectoral dialogue at subnational levels.	Facilitate dialogue among governmental agencies related to planning.
Climate Change Intersectoral Committee (CICC)	Cross-sectoral discussions and agreements among governmental agencies	Medium	Provide technical inputs to cross-sectoral discussions and agreements relevant for SLM/SFM management practices and investments in the high Andes.	Facilitate dialogue among governmental agencies to enhance cross-sectoral linkages in key policies and national programs being implemented.
SUBNATIONAL	GOVERNMENTS			
Municipal Government of Quito (MDMQ)	The MDMQ has a Secretary of Environment encouraging the protection of high Andean ecosystems surrounding Quito. On- going efforts include the municipal reforestation program and municipal protected areas. Additionally, through Quito-Tourism Program, funding to promote and	High	Establish a biological corridor, including developing appropriate cross-sectoral land use plans and mobilize resources to support newly protected areas at the intervention site. Define technical criteria and guidelines to establish reforestation areas. Foster tourism entrepreneurs as a local livelihood alternative	Provide personnel, equipment and funding for establishing biological corridors and SLM/SFM practices at <b>Pichincha</b> <b>intervention site</b> .

	enhance technical capacity is available.		within the intervention site. Possible replication of activities beyond the intervention site within the province.	
Provincial Government of Tungurahua (GPT)	GPT—including land use plans design—has driven its intervention efforts on the basis of broad local participation. Cross-sectoral working groups have been promoted (called <i>Parlamentos</i> ), including water-irrigation- productivity-and-paramo issues. GPT have also been supportive to the establishment of the <i>Paramo Fund</i> of Tungurahua, a fiduciary fund to support the protection of paramos.	High	Support conservation on- going efforts within the province with technical criteria and guidelines to avoid further land degradation, promote good management practices and recover degraded areas of paramo. Establish monitoring systems to support policy making. Implement the province Environmental Agenda and propose regulatory instruments ( <i>ordenanzas</i> ) to declare community protected areas.	Provide personnel, equipment and funding for land use plans implementation and SLM/SFM practices at <b>Tungurahua</b> <b>intervention site</b> .
Provincial Government of Carchi (GPC)	The GPC has an Environmental Unit that is promoting reforestation activities, has launched a research agenda, and has established formal agreements with MAE national programs. Land use plans of the province have been designed, but they do not have a monitoring system incorporated to assess impacts. Additionally, the Productivity Unit has made investments to promote new entrepreneurships in the province for the last 3 years (CARCHI EMPRENDE Program).	High	Establish a biological corridor to secure key water sources in the intervention sites. Support the environmental research program of the regional government and monitoring system of the province. Define technical criteria to promote SLM/SFM practices. Encourage green/sustainable entrepreneurs as local livelihood alternative in the intervention site. Possible replication of activities beyond the intervention site within the province.	Provide personnel, equipment and funding for establishing biological corridors and SLM/SFM practices at <b>Carchi</b> <b>intervention site</b> .
LOCAL CONSERVATION AND WATER FUNDS				
Water Fund for Quito (FONAG)	Established in 2000, FONAG runs with an annual budget of ~1.7 million of a diversified mix of funding sources. FONAG develops research, educational, reforestation and restoration activities in surroundings areas of Quito, particularly in the water	High	Monitor and evaluate of water, biodiversity and carbon dynamics. Train community leaders in watershed management. Train technical staff with protocols and tools developed by the project. Facilitate collaboration with Secretary of Environment of	Possible support in the development of the <i>Atacazo-Nono biological</i> <i>corridor</i> in the <b>Pichincha</b> <b>intervention site</b> .

	sources.		MDMQ.	
Paramo Fund of Tungurahua	Established in 2008, the Fund (with a fiduci2 million) has an annual budget of approximately USD 600,000. Over ten land use plans in paramo (with up to US\$140,000 available per year) have been developed throughout the province with participating indigenous organizations and communities.	High	Technical advice and support for the implementation of Paramo Land Use Management Plans. Increase the effectiveness of current investments. Train community leaders in watershed management. Train technical staff with protocols and tools developed by the project.	Possible support in the development of the <i>Paramos Sur-</i> <i>Occidentales</i> in the <b>Tungurahua</b> <b>intervention site</b> .
		OTHER	S	
ЈОСОТОСО	National NGO with fifteen years of experience. They have protected over 12000 ha in private reserves. They own Reserve Yanacocha (1200 ha) which is within the Pichincha intervention site and where research efforts by CONDESAN have been undertaking to monitor environmental changes.	High	Monitor and evaluate of water, biodiversity and carbon dynamics.	Possible support in the development of the <i>Atacazo-Nono biological</i> <i>corridor</i> in the <b>Pichincha</b> <b>intervention site</b> .
JATUN SACHA JATUN I JATUN SACHA JATUN JATUN SACHA JATUN SACHA JATUN JATUN SACHA SACHA SACH		High	Research, monitor and evaluate of water, biodiversity and carbon dynamics in paramo and native Andean forests. Train technical staff with protocols and tools developed by the project. Train community leaders SFM practices.	Possible support in the implementation of research activities related to biodiversity and conservation of native forests in <i>Paramos y</i> <i>Bosques Orientales</i> de <b>Carchi intervention site</b> .
ALTROPICO	Local NGO with twenty five years of experience supporting communities in the Andes. Active presence in the province of Carchi.	Medium	Promote participatory rural development, gender and sustainable agriculture and land management practices. Train community leaders in the good management practices.	Possible support in elaboration and implementation of community development plans.
RANDI- RANDI	Fifteen years of experience supporting rural communities in the Andes. Previous work in Carchi with communities and local governments.	Medium	Implement participatory development methodologies and gender analysis of conservation efforts in Páramo conservation.	Possible support in the development of planning tools in intervention site.
Ecuadorian Centre of Agricultural	National NGO working in sustainable rural development with	Medium	Train community leaders in the establishment and management tree plantations	Possible support in the implementation of rural development and natural

Services (CESA)	communities in the Andes. CESA supports production systems, rural marketing, social management of water, natural resource management, local capacity building, etc. They have active participation within the <b>Tungurahua</b> <b>intervention site</b> .		for industry. Address barriers of key chain value at <b>Tungurahua intervention</b> site.	resource management in Paramos Sur- Occidentales in the <b>Tungurahua</b> intervention site.
Corporation for sustainable Forest Management (COMAFORS)	COMAFORS works in several Andean provinces prompting community forestry.	Medium	Technical guidelines to promote agroforestry systems and the implementation of forestry national incentive programs. Train community leaders in the establishment and management tree plantations for industry.	Provide, equipment, personal and other in kind contributions for training community leaders in forestry at intervention sites
		PERU		
		PUBLIC INSTIT	UTIONS	
Ministry of Environment (MINAM)— Division of Evaluation, Valuation, Forest Inventory and Financing/ National Forest Inventory Program	In Peru, the National Forest Inventory is being developed with emphasis in amazon forest. Nonetheless, in the Department of Piura the inventory of the dry forest is currently being conducted. Andean forest so far have not been included in the intervention site.	High	Include Andean forests in national forest inventory, measuring carbon content of above/below ground biomass and forest soils.	Inventory of native Andean forest found in the Department of Piura
Ministry of Environment (MINAM)— Natural Resource Development Program (PRODERN)	PRODERN—with a total of 13 million euros for 6 years of implementation—is financed by the Government of Belgium. It works in several Departments of Peru, including the Huancavelica intervention site. It promotes good practices in degraded pasture lands.	High	Strength institution capacity building, implement participatory rural methodologies and sustainable management of pasture lands.	Possible support in the development of the <b>Huancavelica</b> <b>intervention site</b> , particular in the area of <i>punas of Pilpichaca and</i> <i>Huaytarà.</i>
Ministry of Environment (MINAM)— Division of Biodiversity	The Division of Biodiversity of MINAM is working forward to establish a regional program to protect paramos and increase its represantives within the National	High	Prepare and disseminate guidelines and technologies for the sustainable management of Andean Ecosystems	Will provide personnel, equipment and some funding for the preparation and dissemination of sustainable development

	Protected Area System.			tools
Ministry of Environment (MINAM)— Division of Climate Change, Desertification, Hydraulic Resources and REDD+	The Division of Climate Change, Desertification, Hydraulic Resources and REDD+ of MINAM is leading on-going efforts to implement REDD+ activities and the National Climate Change Strategy in Peru.	Medium	Formulate standardized protocols for monitoring and evaluation of environmental services; allometric equations of carbon stocks (REDD+).	Provide equipment, personal and other in kind contributions for the formulation of standardized protocols to be used at intervention sites
Ministry of Environment (MINAM)— Program for the conservation of Forests and Mitigation of Climate Change	The Conservation of Forests Program has been recently launched by the Peruvian government as a national incentive program to foster biodiversity conservation. No apparent activities have been identified at intervention sites.	Medium	Establish areas of Punas, Paramos and Andean forests into the national incentive program at intervention sites. Share lessons learned from Ecuador's Socio Bosque national incentive program.	At this time, this program has no mandate to promote the conservation of Andean forests
Ministry of Agriculture (MINAG)— Division of Forestry	The Forestry Program is supported by USAID Peru Forest Sector Initiative. (Falta incluir breve descripción de lo que hacen y que sea relevante para el proyecto). No direct activities being developed at intervention sites.	Medium	Revitalize national reforestation plan, creating incentive program	A new forest service is being created. It is expected that this program will support forestation in the Andes.
	SU	UBNATIONAL GO	VERNMENTS	
Regional Government of Piura (GORE- P)	GORE-P has strongly promoted the protection of paramos, disseminating their importance for the region. Incipient conservation agreements are being promoted within low and upper users. As part of the existing Land Use Plan, the regional government is aiming to create a regional protected area system.	High	Strength land use plans and monitoring of regional and local governments. Support the regional government to establish the regional protected areas system within Ayabaca. Promote good management practices in paramo and Andean forests.	Provide personnel, equipment and funding for establishing protected areas and biological corridors and SLM/SFM practices at <b>Piura</b> <b>intervention site</b> .
Regional Government of Huancavelica (GORE-H)	GORE-H is finalizing the design of its Regional Land Use Plans, yet it lacks a monitoring system to assess their impacts. Key issues in the area include support of extensive grazing systems of alpacas and mining.	High	Strength land use plans and monitoring of regional and local governments. Promote good management practices in puna.	Provide personnel, equipment and funding for promoting SLM/SFM practices at <b>Huancavelica</b> intervention site.

	OTHERS				
Nature & Culture International (NCI)	International NGO with active presence within the Piura intervention site. NCI has over fifteen years supporting conservation of nature resources in the Department of Piura. Has been a key partner of CONDESAN in previous activities of research and community development.	High	Promote the conservation of natural resources and sustainable land and forest management practices. Train community technical staff and leaders in the good management practices.	Possible support for the development of the paramo and Andean Forests of Ayabaca- Papaipamba in the Piura intervention site.	
	<u> </u>	ECUADOR &	PERU	<u> </u>	
	LE	ADING EXECUTI	NG PARTNER		
Consortium for the Sustainable Development of the Andean Ecoregion (CONDESAN)	CONDESAN is an ONG with 20 years' experience working regionally with governments and partners at different levels to promote sustainable development in the Andes. Current efforts focus in monitoring and research to support policy and land planning.	High	Provide technical assistant during the project implementation, validate monitoring protocols and define guidelines for SLM/SFM practices. Facilitate dialogue among government agencies, communities and researchers. Develop tools and decision support systems for policy making and land planning.	Assist governments through technical inputs and monitoring systems. Provide personnel, equipment and funding environmental assessments program at intervention sites.	
	REG	GIONAL GOVERNI	MENT PANELS		
General Secretariat of the Andean Community (SGCAN)	SGCAN has recently approved and launched a Regional Environmental Agenda to guide countries in their regional efforts.	Low	Interchange of information on conservation and management of highland ecosystems.	Share information and invitations to participate in seminars and other training events.	
	NATIONAL AND INTER	NATIONAL UNIVI	ERSITIES & RESEARCH CENT	ERS	
Landcare Research	Landcare is an independent research center of the NZ government working since 1992. Its core interests are the provision of research and transfer of technology and knowledge to improve measurement, management and protection of terrestrial ecosystems and biodiversity, GHG emissions, and ecosystem services. It is interested in supporting Andean countries government in	High	Improve measurement, management and protection of terrestrial ecosystems and biodiversity, GHG emissions, and ecosystem services. Share lessons learned from previous experience in establishing NZ national monitoring systems.	Provide technical assistance, methodologies and funding to establish monitoring systems, implement land use plans and fulfill critical baseline knowledge gaps (e.g. modeling soil and vegetation carbon stocks, mapping land management).	

	monitoring activities.			
University of Amsterdam (UvA)	Investigations on carbon stocks and biodiversity in high Andean ecosystems have been undertaken by several researchers, especially in the Carchi intervention site.	High	Strength the monitoring system with emphasis in environmental and carbon fluxes.	A new research project will be developed by UvA and become co-financing for applied research in the project.
Pontifical Catholic University of Ecuador (PUCE)	PUCE-Herbarium has been involved in currently efforts designing field protocols to assess and monitor biodiversity and carbon dynamics in paramo and native Andean forests within different environmental gradients at the Pichincha intervention site.	High	Strength the monitoring system with emphasis in biodiversity and carbon fluxes. Scientifically validate biodiversity and carbon protocols in the field. Train technical staff with protocols and tools developed by the project.	Personnel and other In kind support for research programs.
La Molina National Agrarian University (UNALM)	Research activities at intervention sites.	Medium	Strength the monitoring system with emphasis in forestry and biodiversity. Train technical staff with protocols and tools developed by the project.	Personnel and other In kind support for research programs.
Other national and local universities	Research activities at intervention sites.	Medium	Research in subject related to project goals.	Personnel and other In kind support for research programs.
K	EY INTERNATIONAL DEVELO	DPMENT ORGANIZ	ZATIONS AND COOPERATION	AGENCIES
Swiss Agency for Development and Cooperation (SDC)	Regional activities to protect forests in the Andean countries, with a long history of promoting the protection of Andean forests.	Medium	Prepare and promote of strategic plans and methodologies for the conservation of Andean forests.	A new international project financed by SDC will provide equipment, training, and funds to support conservation efforts at intervention sites.
USAID (Silvacarbon)	Strong capacity building and outreach program in the Andean countries to strength national MRV systems and REDD+ preparation phase. No apparent activities being developed at intervention sites	Low	Monitoring and evaluation of carbon stocks.	Support capacity building for the establishment of national monitoring systems. Provide personnel and equipment needed for monitoring activities developed at the paramos and forests of <i>Ayabaca-</i> <b>Papaipamba</b> at the Piura intervention site.
German technical	GIZ has supported for over a decade natural resource	Low	Monitoring carbon stocks and risk management related	Provide equipment, personnel and some funds

Cooperation	management in both		to adversity of climate	for institutional capacity
(GIZ)	countries. It offers direct		changes	building at intervention
	assistance to national and			sites.
	local governments. It has			
	executed development			
	programs at most of the			
	proposed intervention sites.			
CARE	International NGO supporting rural development and natural resource management through capacity building. CARE has executed development programs at most of the proposed intervention sites	Low	Foster capacity building of regional governments, municipalities and rural community organizations.	Provide equipment, personnel and some funds for capacity building of local institutions.

# 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):

Working at multiple scales will promote the articulation of global and local benefits to boost project impacts and promote replication. The project is focused on the implementation of activities at multiple scales, as a strategy to overcome key coordination and articulation barriers between central and local governments and local communities. Activities that support income diversification of families participating in SFM/SLM activities and link development and land planning at local scales to national programs and initiatives belong to this overarching strategy. In this context the project will provide specific examples and lessons on how to effectively realize the social and environmental benefits associated to decentralized governance of natural resources. Global and local benefits as related to project outcomes are summarized below (Table 4).

## Table 4. Global and local benefits as related to project outcomes

1	Project outcomes	Local benefits	Global benefits.
	Outcome 1.1: An extended knowledge base regarding high Andean ecosystem dynamics and how global environmental changes (GEC) affect biodiversity and carbon stocks and the multiple environmental and social benefits they provide; and Outcome 1.2: Increased access for decision makers at different levels to science-based knowledge and SLM/SFM strategies through decision support tools that enable conservation and sustainable management of high Andean ecosystems.	• Leaders make decisions using new knowledge, science-based tools and validated productive practices, resulting in improved programs for the conservation and sustainable management of high Andean ecosystems	<ul> <li>Enhanced institutional capacity to account for GHG emission reduction and increase in carbon stocks (MRV).</li> <li>INRM tools and methodologies developed and tested</li> </ul>
	<b>Outcome 2.1</b> : Enabling environment in place to integrate multiple benefits in cross-sectorial planning tools at the wider landscape; and <b>Outcome 2.2</b> : Enhanced institutional capacities to apply knowledge and tools that support policies, integrated land use plans and ongoing programs for the conservation and sustainable management of critical high- Andean ecosystems.	<ul> <li>Improved planning, training, collaborative agreements and incentive programs, resulting in more effective conservation and sustainable management programs of high Andean ecosystems.</li> <li>Increased institutional capacities to integrate environmental criteria into land-use planning schemes.</li> </ul>	• Biodiversity conservation and sustainable use of high Andean ecosystems are mentioned in sector policy through specific legislation. Regulations are in place to implement the legislation, and regulations are under implementation.

Project outcomes	Local benefits	Global benefits.
<b>Outcome 3.1</b> : Livelihood strategies and key productive value chains strengthened at interventions sites to address barriers affecting productivity and commercialization; <b>Outcome 3.2</b> : Biodiversity, carbon and social benefits enhanced through SLM/SFM investments and practices on forest and non- forest lands in the high Andes.	<ul> <li>Improved livelihoods of participating farm families through elimination of barriers and strengthening of critical value chains.</li> <li>Improved livelihoods of participating farm families through the implementation of validated SLM/SFM practices.</li> </ul>	<ul> <li>Reduce pressures from competing land-uses to preserve and restore globally important High Andean ecosystems and associated environmental benefits.</li> <li>Biodiversity conservation and enhancement of carbon stocks of 27.000 ha of globally important high Andean ecosystems and 194.325 tons of sequestered CO2 during project lifetime.</li> <li>3-5 % increase of population of ecosystem health indicator species at intervention sites.</li> <li>Increased carbon sequestration (3-5% over baseline) from afforestation, reforestation agroforestry and restoration of degraded lands in the wider landscape.</li> </ul>
<b>Outcome 4.1</b> : National environmental authorities in Ecuador and Peru incorporate science-based knowledge and tools developed by the project into their MRV systems and financial incentive programs; <b>Outcome 4.2</b> : Knowledge, tools and lessons learned disseminated among other local governments and key stakeholders outside the project intervention sites.	<ul> <li>National monitoring programs strengthened by incorporating into their programs new science- base tools and the inclusion of high Andean ecosystems in their work scope.</li> <li>Conservation and sustainable management of critical Andean ecosystems extended outside the project's direct intervention area.</li> </ul>	<ul> <li>Measures to conserve and sustainably use biodiversity in high Andean ecosystems and its multiple benefits incorporated into cross-sectoral planning tools and policy instruments at the wider landscape as well as into relevant productive sector practices (i.e. agriculture, forestry).</li> <li>Information on INRM technologies and good practice guidelines disseminated</li> </ul>

A main approach of the project will be gender mainstreaming. Gender refers to the social roles that men and women play and the power relations between them which usually have a profound effect on the use and management of natural resources. Gender mainstreaming (GM) is becoming a central factor in UNEP policies and programmes, bringing the diverse roles and needs of men and women to the environmental agenda. Accounting for gender equity and equality is an important consideration. Through GM, the project will seek to:

- Identify and address specific gender differentiated needs arising from gender imbalance in policies, decision-making and processes related to the environment.
- Develop coherent policy approaches to gender-specific environmental governance issues.
- Integrate gender analytical tools and methods into capacity building approaches as well as in ecosystem management tools.
- Foster alternative livelihood activities to reduce pressure on ecosystems with focus on disadvantaged groups, particularly women.

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

Cost effectiveness of this project is based on maximizing the impact of current investments and targeting the provision of multiple benefits in these critical ecosystems. In order to achieve that, the project will provide critical technical and political support to key stakeholders at multiple scales (e.g. national incentive programs, regional governments, communities). Unless such support is provided, it is very likely that available funding will not be able to reach local stakeholders or promote good management practices in the high Andes.

While analyzing the project's cost effectiveness, it is important to consider that a key approach of the project is outreach and upscaling lessons learned beyond intervention sites by working closely with national authorities. National efforts, albeit of involving large investments in both countries, lack technical inputs to guide their activities. Furthermore, most on-going national incentives programs have yet not develop strong linkages to regional and local scales. The project will carry activities to address these two critical issues articulating key stakeholders and mobilizing available funding. In that way, the project will prove to be cost-effective, driving

changes not only within the intervention sites but also in Ecuador and Peru with a relatively small investment strategically combined with substantial national incentives.

Additionally, this project bundles together the provision of multiple benefits through a comprehensive understanding of synergies and links between them. The conservation and sustainable management of high Andean ecosystems will contribute to enhance local livelihoods and guaranty the provision of critical ecosystem services (water, soil, wood) in an area of 28.000 hectares. A GEF investment of USD 5 million—catalyzing more than twice of other funding— to protect biodiversity and carbon stocks in high Andean ecosystems should be considered a cost-effective investment. Through the project's leveraging and influence, available funding will simultaneously contribute to biodiversity conservation, climate change mitigation and sustainable forest and land management.

# C. DESCRIBE THE BUDGETED M & E PLAN:

Please refer to the costed Monitoring and Evaluation Workplan in the ProDoc (Appendix 7)

# 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 <u>Operational Focal Point endorsement letter(s)</u> with this form. For SGP, use this <u>OFP endorsement letter</u>).

NAME	POSITION	MINISTRY	<b>DATE</b> ( <i>MM/dd/yyyy</i> )
Marcela Agüiñaga Vallejo	Minister of Environment	Ministry of Environment, Ecuador.	Nov/25/2011
Antonio González Norris	Secretary General	Ministry of Environment, Peru	Nov/29/2011

### **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
Maryam Niamir- Fuller, Director, GEF Coordination Office, UNEP	W. Niem Feller	25 February 2014	Robert Erath Task Manager LAC Biodiversity and Land Degradation UNEP/GEF	+507 305 3171	robert.erath@unep.org

# ANNEX A: PROJECT RESULTS FRAMEWORK

The Project Results Framework is provided in Appendix 4 of the UNEP ProDoc

**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).

All comments have been duly addressed and considered during the PPG, and issues are reflected in the ProDoc and CEO endorsement request. For the responses to reviews refer to Appendix 18 of the ProDoc.

# ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS<sup>5</sup>

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

PPG Grant Approved at PIF: 130,000			
Project Preparation Activities Implemented	GEF/L	DCF/SCCF/NPIF A	mount (\$)
	Budgeted Amount	Amount Spent To date	Amount Committed
1. Establishment of the coordination and			
management framework for the bi-national	20,000	20,000	0
cooperation.			
2. Establish selection criteria and define pilot	15,000	15 000	0
sites and local partners in both countries.	15,000	15,000	0
3. Assess scientific, political and institutional			
gap analyses & strategic priorities regarding the	15,000	15,000	0
project scope in both countries.			
4. Coordinate activities with other global,			
regional and national initiatives relevant for the	5,000	5,000	0
high Andes.			
5. Establish a comparable methodologies and			
preliminary baseline studies to monitor changes	55,000	55,000	0
in SFM, Land Degradation, biodiversity and	55,000	55,000	Ŭ
carbon stocks in the high Andes.			
6. Participate within international negotiations			
and follow-up relevant discussions for high	10,000	10,000	0
Andes biodiversity and carbon stocks.			
7. Feasibility analysis, and ensure project	10.000	10.000	0
coherence with PPG outputs.	10,000	10,000	0
Total	130,000	130,000	0

<sup>&</sup>lt;sup>5</sup> If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, 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 the activities.

GEF5 CEO Endorsement Template-February 2013.doc

# 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)

N/A