



GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

Naoko Ishii
CEO and Chairperson

July 18, 2014

Dear Council Member:

FAO as the Implementing Agency for the project entitled: *Ecuador: Conservation and Sustainable Use of Biodiversity, Forests, Soil and Water to Achieve the Good Living (Buen Vivir / Sumac Kasay) in the Napo Province*, has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with FAO procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by Council in June 2012 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by FAO satisfactorily details how Council's comments and those of the STAP have been addressed. I am, therefore, endorsing the project document.

We have today posted the proposed project document on the GEF website at www.TheGEF.org. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Naoko Ishii
Chief Executive Officer and Chairperson

Attachment: GEFSEC Project Review Document

cc: Country Operational Focal Point, GEF Agencies, STAP, Trustee



REQUEST FOR CEO ENDORSEMENT

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: Conservation and Sustainable Use of Biodiversity, Forests, Soil and Water to Achieve the Good Living (<i>Sumac Kasay</i>) in the Province of Napo			
Country(ies):	Ecuador	GEF Project ID: ¹	4774
GEF Agency(ies):	FAO	GEF Agency Project ID:	615424
Other Executing Partner(s):	Decentralized Autonomous Government of the Province of Napo (NPG) Ministry of the Environment (MAE)	Submission Date:	July 10, 2014
GEF Focal Area (s):	Multi-Focal	Project Duration(Months)	48
Name of Parent Program (if applicable):		Agency Fee (\$):	262,828
	<ul style="list-style-type: none"> ➤ For SFM/REDD+ <input checked="" type="checkbox"/> ➤ For SGP <input type="checkbox"/> 		

A. FOCAL AREA STRATEGY FRAMEWORK²

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Cofinancing (\$)
BD-2	Outcome 2.1: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation.	Output 2.2: Six (6) sub-national land-use plans that incorporate biodiversity and ecosystem services valuation.	GEFTF	1,328,309	6,227,113
LD-1	Outcome 1.3: Sustained flow of services in agro-ecosystems	Output 1.3: Suitable SL/WM interventions to increase vegetative cover in agro-ecosystems	GEFTF	159,844	749,295
LD-3	Outcome 3.1 Enhanced cross-sector enabling environment for integrated landscape management	Output 3.1: One (1) integrated land management plan, developed	GEFTF	53,281	249,763
LD-3	Outcome 3.2: Integrated landscape management practices adopted by local communities	Output 3.2: Three (3) INRM tools and methodologies developed and tested Output 3.4: Information on four (4) INRM technologies and one good practice guidelines disseminated	GEFTF	133,203	624,412
LD-3	Outcome 3.3: Increased investments in integrated landscape management	Output 3.3: Two (2) appropriate actions to diversify the financial resource base	GEFTF	186,485	874,180
SFM/REDD+- 1	Outcome 1.2: Good management practices developed and applied in	Output 1.2: Forest area under sustainable management, categorized by forest type.	GEFTF	431,683	2,023,587

¹ Project ID number will be assigned by GEFSEC.

² Refer to the Focal Area/LDCF/SCCF Results Framework when completing Table A.

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Cofinancing (\$)
	existing forests.				
SFM/REDD+- 1	Outcome 1.3: Good management practices in the wider landscape developed and adopted by relevant economic actors.	Output 1.3: Types and quantity (3) of services generated through SFM.	GEFTF	186,707	875,220
Sub-total				2,479,512	11,623,570
Project Management Costs			GEFTF	148,771	696,934
Total project costs				2,628,283	12,320,504

B. PROJECT FRAMEWORK

Project Objective:

Global Environmental Objective: To promote the conservation and sustainable use of globally important biodiversity, reduce and revert land degradation and deforestation, and improve forest management in the Province of Napo.

Project Development Objective: To increase and improve the supply of goods and services from agricultural, livestock and forestry production in the Province of Napo in a sustainable manner.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Cofinancing (\$)
1. Institutional strengthening to mainstream biodiversity conservation and integrated natural resource management into participatory land-use planning and management, based on an ecosystem approach	TA	<p>1.1: Improved participatory environmental governance in the Province of Napo.</p> <p><i>Environmental thematic axes³ mainstreamed into at least six (6) LUDPs⁴ for conservation and sustainable use of natural resources</i></p> <p><i>Foreseen extent of landscape where the project contributes directly to BD conservation/sustainable use: 47,911 has</i></p> <p><i>PAs within the landscape covered by the project: 15⁵</i></p>	<p>1.1.1: One Participatory inter-institutional strategy for natural resources management designed, implemented and monitored.</p> <p>1.1.2: Six (6) LUDPs with included environmental criteria, implemented and monitored</p> <p>1.1.3: 2 roundtables (protected areas and sustainable livestock) established and functioning.</p> <p>1.1.4: Stakeholders' capacities strengthened for natural resources governance</p> <p>1.1.5: One Information management system of</p>	GEFTF	890,140	5,297,546

³ Axes will comprise sustainable forest management, ecological restoration, sustainable agricultural practices (cocoa in chakra, clean naranjilla, sustainable livestock), promotion of community-based tourism in natural areas, biotrade through bio-initiatives, and improvement of ecosystem services in river basins.

⁴ Land Use Development Plans

⁵ It refers to the following PAs or Protective Forests (PF): Sumaco Napo Galeras, Ecological Reserve of Antisana, Cotopaxi National Park, Llanganates National Park, Cayambe Coca National Park, Forest Heritage Unit 9 – Napo; Forestal Heritage Unit 2 – Napo, La Cascada PF, Rio Tigre PF (High and Medium area); Cerro Sumaco PF, Rio Suno Upstream PF and broader areas, Cumanda PF, Venecia PF, Selva Viva PF, Cuenta de los Rios Colonso PF, Tena PF, Shitic e Inchillaqui PF. See details in the BD Tracking Tool, Indicator BD-2 II.2

		<p>Outcome 1.2: Increased investments for natural resources management.</p> <p><i>Increase in investments for integrated landscape management: 21.5% increase in investments for incentive mechanisms: US\$ 2,676,000 by PY4 (Baseline: US\$476,000 in 2013, expected BAU investment by PY4: US\$ 2,200,000)</i></p> <p><i>Foreseen PES: Biodiversity conservation in forests. 48,845has. USD 43/ha/yr</i></p>	<p>natural resources, developed and managed by MAE and NPG</p> <p>1.2.1: Six (6) incentive mechanisms strengthened and articulated, and operational for biodiversity conservation and sustainable use.</p> <p>1.2.2: One Provincial Sustainable Development Fund established and operational.</p>			
<p>2. Design and promotion of landscape and agro-forestry production systems that include the sustainable management of water, soil, and forests, while improving local population livelihoods in the Province of Napo.</p>	INV	<p>2.1: Production systems incorporate good practices for conservation and management of natural resources in four priority sites of the Province of Napo.</p> <p><i>Spatial coverage of integrated natural resources management practices in the wider landscape: 1,720 ha under sustainable intensification, adapted to the local context (120 ha of naranjilla, 400 ha of cocoa, 1,200 of livestock production)</i></p> <p><i>Land area of production systems with increased vegetation cover (conservation agreements): 1,764 ha of forests conserved by producers of naranjilla (400 ha), cocoa (1,000 ha) and livestock (364 ha)</i></p> <p>2.2: Reduced pressure over the forests of the Sumaco Biosphere Reserve through the</p>	<p>2.1.1: Three (3) technology packages of good practices for cocoa, <i>naranjilla</i> and livestock and conservation agreements signed with small- and medium-scale producers</p> <p>2.1.2: Two (2) cocoa and <i>naranjilla</i> value chains plans updated, implemented and monitored</p>	GEFTF	1,130,780	4,559,024

		<p>implementation of a SFM strategy</p> <p><i>No increase in the deforestation rate after 2014 as direct impact of the project and decrease in 15% in four years project lifetime as indirect impact⁶</i></p> <p><i>Avoided emissions during the 4 years project lifetime due to sustainable forest management in amount of 535,275 t CO_{2eq} and due to forests conserved by producers, inside or around the agricultural systems, in amount of 807,030 t CO_{2eq}⁷</i></p>	<p>2.2.1: A Provincial SFM Strategy designed, agreed, implemented and monitored</p> <p>2.2.2: Twenty-three (23) co-management plans for the La Cascada, Cerro Sumaco and Colonso PFs elaborated, implemented and monitored (40,927 ha).</p> <p>2.2.3: 2,500 ha restored with analogue forestry, reforestation or natural regeneration techniques under conservation agreements and incentives</p> <p>2.2.4: Provincial timber traceability system, designed and piloted in Cerro Sumaco (Wamani and Akoki communities)</p>			
3. Promotion of biotrade and community-based ecotourism as strategies for biodiversity conservation, sustainable management of natural resources, and improvement of livelihoods for local communities	TA	<p>3.1: Biodiversity conserved, natural resources sustainably managed and livelihoods of local communities improved through promotion of community-based ecotourism and biotrade.</p> <p><i>1,000 ha of forests (community-owned or private) conserved through conservation agreements and destined to community tourism or sustainable biotrade practices.</i></p> <p><i>10% increase in the current average income of 200 producers (100 women) working in community tourism and sustainable biotrade.</i></p>	<p>3.1.1: Conservation agreements (500 ha) and good practices in community-based ecotourism implemented.</p> <p>3.1.2: Five (5) biotrade goods⁹ produced under management plans and/or <i>chakra</i> eco-labelling in areas under conservation agreements</p> <p><i>2 priority areas (Archidona and Tena) with 500 ha under conservation agreements</i></p>	GEFTF	333,436	1,577,000

⁶ Baseline: rate of deforestation: 2,735 ha/yr in the Province of Napo for the 2000-2008 period, and estimated in 3,905 ha/yr in 2014

⁷ Baseline: preliminary data estimation with information provided by MAE indicates that the Napo Province's emissions for the 4-years project lifetime could be of 7,681,426 t CO_{2eq} considering 125 t C/ha.

		<i>PAs within the landscape covered by the project: 15⁸</i>				
4. M&E and information dissemination	TA	4.1: Project implementation based on RBM and lessons learned/good practices documented and disseminated <i>Project implemented based on RBM and demonstrating sustainability</i>	4.1.1: Project M&E system established and operational 4.1.2: Midterm and final evaluations 4.1.3: Project best practices and lessons learned published. 4.1.4: Webpage for information sharing and exchange of experiences	GEFTF	125,156	190,000
Subtotal					2,479,512	11,623,570
Project management Cost (PMC) ¹⁰				GEFTF	148,771	696,934
Total project costs					2,628,283	12,320,504

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

Please include letters confirming cofinancing for the project with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount (\$)
Local Government	Government of the Province of Napo	Grant	3,972,660
		In kind	2,015,000
National Government	Ministry of the Environment	Grant	2,005,533
		In kind	930,467
Local Government	Government of the Municipality of Tena	Grant	90,000
		In kind	80,000
Local Government	Government of the Municipality of Quijos	In kind	78,480
Local Government	Government of the Municipality of Archidona	In kind	86,364
		Grant	80,000
Local Government	Government of the Municipality of Arosemena Tola	Grant	35,000
		In kind	30,000
Local Government	Government of the Municipality of El Chaco	Grant	45,000
		In kind	175,000
Local Government	Government of the Parish of Cuyuja	Grant	22,000
		In kind	5,000
National Government	COCASINCLAIR EP	Grant	600,000
		In kind	400,000
Bilateral Aid Agency	German Cooperation Agency (GIZ)	Grant	140,000
		In kind	560,000
Bilateral Aid Agency	USAID	Grant	50,000

⁹ Biotrade goods are native species as follows: i) orchids; ii) palm (*ungurahua (Oenocarpus bataua)*, *morete (Mauritia flexuosa)*, *chonta (Bactris gasipaes)*); iii) guayusa (*Ilex guayusa*); iv) vanilla (*Vainilla sp.*); and v) tikaso (*Plukenetia volubilis*).

⁸ It refers to the following PAs or Protective Forests (PF): Sumaco Napo Galeras, Ecological Reserve of Antisana, Cotopaxi National Park, Llanganates National Park, Cayambe Coca National Park, Forest Heritage Unit 9 – Napo; Forestal Heritage Unit 2 – Napo, La Cascada PF, Rio Tigre PF (High and Medium area); Cerro Sumaco PF, Rio Suno Upstream PF and broader areas, Cumanda PF, Venecia PF, Selva Viva PF, Cuenta de los Rios Colonso PF, Tena PF, Shitic e Inchillaqui PF. See details in the BD Tracking Tool, Indicator BD-2 II.2

¹⁰ PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

CSO	Rainforest Alliance	Grant	500,000
GEF Agency	FAO	Grant	420,000
Total Co-financing			12,320,504

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in \$)		
				Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
FAO	GEF TF	Biodiversity	Ecuador	1,408,645	140,864	1,549,509
FAO	GEF TF	Land Degradation	Ecuador	562,567	56,257	618,824
FAO	GEF TF	Multi-focal Areas	Ecuador	657,071	65,707	722,778
Total Grant Resources				2,628,283	262,828	2,891,111

¹ 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.

² Indicate fees related to this project.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)
International Consultants	0	0	0
National/Local Consultants	1,065,600	2,115,000 ¹¹	3,180,000

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 PIF¹²

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.

The project is still in alignment with national strategies and plans as described in the PIF. The National Good Living Plan 2009-2013 mentioned in the PIF has been extended for the period 2013-2017, which covers the project's lifetime.

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

The project is consistent with the following GEF strategic objectives:

¹¹ The Government of the Province of Napo will provide co-financing in the form of provincial short-term staff, given that the provincial regulations do not envisage consultancy as a possible contractual modality.

¹² 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

- Biodiversity Focal Area – Objective 2 (BD-2): *Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes, Seascapes and Sectors*;
- Land Degradation Focal Area - Objective 1 (LD-1): *Maintain or improve flow of agro-ecosystem services to sustaining the livelihoods of local communities*;
- Land Degradation Focal Area - Objective 3 (LD-3): *Reduce pressures on natural resources from competing land uses in the wider landscape*; and
- Sustainable Forest Management Focal Area / Reduction of emissions from deforestation and forest degradation, foster conservation, sustainable management of forests, and enhancement of forest carbon stocks – Objective 1 (SFM/REDD+-1): *Reduce pressures on forest resources and generate sustainable flows of forest ecosystem services*.

Component 1 will support objective BD-2 through: i) mainstreaming, implementing and monitoring biodiversity conservation principles and integrated natural resources management measures in six Land Use Development Plan (LUDPs) of provincial, municipal and parochial Decentralized Autonomous Governments (DAGs); ii) the design of an Inter-institutional Strategy for conservation, integrated management of landscapes and ecological corridors in the Province of Napo; iii) strengthening of an information system for the Province of Napo that compiles and systematizes information about the biodiversity and natural resources in the region, collected from local, national, and international institutions; iv) supporting PES schemes. Component 1 will also contribute to the objectives LD-3 and SFM/REDD+-1 through: iv) capacity development and implementation of a package of incentives for integrated landscape management at provincial level; v) creation of a Sustainable Development Fund; vi) establishment and start-up of two Thematic Roundtables (Protected Areas and Livestock) and vii) capacity building of the stakeholders in land use under a natural resources governance approach.

Component 2 will support objectives LD-1 and SFM/REDD+-1 by: i) introducing good NRM practices in traditional productive systems managed by small and medium-scale rural producers in the pilot areas of the Province of Napo (1,720 ha) and conservation of 1,764 ha of forests located in farms; ii) implementing SFM in 40,927 ha to reduce the pressure on the Sumaco Biosphere Reserve (SBR) forests; iii) promoting the ecological and/or productive restoration of 2,500 ha of degraded areas with high connectivity potential that are important for biodiversity, climate change resilience, and recovering ecosystem services in the province; iv) designing, implementing and monitoring an agreed strategy for SFM in the province; and v) designing and piloting a traceability system for legal timber in the province.

Component 3 seeks to reduce pressure on natural resources in buffer zones, enhance food security and increase incomes of the local population (see Section 2 of the Project Document for a detailed description of project outputs). It is consistent with objective BD-2 since it will pilot five (5) biotrade enterprises and seven (7) sustainable community-based ecotourism initiatives with the potential of being replicated elsewhere. Biotrade and community-based ecotourism are strategies for sustainable natural resources management and biodiversity conservation, which will also improve the livelihoods of rural communities in the Province of Napo. Rural small-holders will shift from unsustainable practices to sustainable production practices that enhance biodiversity conservation while obtaining economic benefits and improving their livelihoods

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*”; 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:

As in the PIF

A.4. The baseline project and the problem that 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 *Baseline projects and investments for the next 3-5 years addressing the identified GEB threats (main co-financing sources of the project), and b) Remaining barriers to address threats on GEB.*

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 incremental investment of GEF resources will, in Component 1, finance the strengthening of the institutional framework and the capacities of stakeholders in the province through: i) technical assistance by specialists in land use, capacity building, GIS, incentives, value chains, protected areas (PA) and co-management plans; ii) participatory elaboration of the environmental governance strategy; iii) assessments and studies for: a) a gender strategy; b) a participation strategy; c) the ecological zoning as input to update the LUDPs; and d) the identification of synergies between LUDPs and PA management plans; iv) training of government and civil society stakeholders to increase their knowledge and managerial capacities through training workshops in LUDPs, environmental governance, and GIS; meetings of the PA and livestock thematic roundtables, and workshops for dissemination of incentives; and v) procurement of equipment to support the technical assistance and training activities (see detailed descriptions in Sections 2.3 and 2.4 of the FAO-GEF Project Document). Co-financing will be provided by the Napo Provincial Government (NPG), the Ministry of Environment (MAE), the Decentralized Autonomous Governments (DAGs), GIZ, and COCASINCLAIR EP Hydroelectric. For further details on co-financing, please see the FAO GEF Project Document, Section 1.1.1 *c) Incremental reasoning (added value of the GEF financing).*

The incremental resources of the project will, in Component 2, finance the promotion of the sustainable management of water, soils and forests through: i) technical assistance by specialists in agricultural and livestock production, forestry, value chains, timber traceability and promoters for farm planning, conservation agreements and agro-forestry extension; ii) studies and assessments to design the component's gender and participation strategies, studies on livestock and *naranjilla* supply chains, for implementation of conservation agreements, design of a SFM strategy, multi-temporal land use and coverage studies, and a study for identification of areas with restoration potential; iii) technical support for elaboration of 10 co-management plans in La Cascada PF, 9 co-management plans in Cerro Sumaco PF and 3 co-management plans in Colonso PF; iv) training of cocoa, *naranjilla* and livestock producers through workshops on best practices, farm planning, conservation agreements, SFM, ecological restoration and traceability; v) support for implementation of fair and green trade within the framework of value chains; vi) elaboration of information and training materials on best practices and sustainable production; vii) establishment of tree nurseries for promotion of reforestation and restoration; and viii) procurement of equipment to support the promotion of sustainable agricultural and livestock production and forestry. Co-financing will be provided by the NPG, the MAE, municipal DAGs, GIZ, COCASINCLAIR EP Hydroelectric, Rainforest Alliance, and FAO. For further details on co-financing, please see the FAO GEF Project Document, Section 1.1.1 *c) Incremental reasoning (added value of the GEF financing).*

The incremental resources of the project will, in Component 3, finance the support of comprehensive strategies of sustainable community-based ecotourism and biotrade in the NP, through: i) technical assistance by specialists to institutional and civil society stakeholders in community-based tourism and biotrade; ii) studies and assessments to design related gender and participation strategies; iii) elaboration of a sustainable community-based tourism best

practice manual; iv) preparation of management plans for five biotrade products; v) technical assistance to design an eco-label for the province, including certification criteria and field demonstration areas; vi) studies for tourism and biotrade value chains; vii) support for realization of trade fairs for biotrade products; viii) training in tourism best practices, biotrade management plans and eco-labels; ix) preparation of information and training materials; and x) procurement of equipment to support tourism and biotrade activities. Co-financing will be provided by the NPG, the MAE, municipal DAGs, and GIZ. For further details on co-financing, please see the FAO GEF Project Document, Section 1.1.1 *c) Incremental reasoning (added value of the GEF financing)*.

Changes in the results framework compared to the PIF

Regarding certification, after conducting market analysis, during full project preparation, project proponents have concluded that: a) certification under international standards (e.g. FSC) has high costs that are not likely to be covered by the government or private sector partners after project termination; b) GIZ co-financing has been reduced, reducing the likeliness of ensuring certification schemes' longevity and fee payment after project termination; c) certified timber products are not likely to be sold in Ecuador's domestic market, since it lacks differentiated prices that could compensate high certification costs; d) good agricultural and livestock practices are in their early stage in the Napo Province. The opportunity cost of shifting to sustainable options in addition to applying an international certification standard is too high for this context and stage. In light of this, the project will not support the application of international certification schemes but national incentives mechanisms (SocioBosque)¹³, to mainstream biodiversity conservation into production landscapes, incentivize SFM in buffer zones and PAs declared in areas where population already lived before the declaration, and to support the signature of new conservation agreements. Incentives are expected to generate the same GEBs as the FSC certification. For further explanation, please see Section 2.5 of the FAO GEF Project Document.

The SocioBosque incentive is being applied since 2008 in Ecuador. The function of SocioBosque is to assure that biodiversity considerations have been mainstreamed into production landscapes with different land uses. More biodiversity-friendly forest management practices are expected at provincial level in Napo, and GEF funds will support local forest land users in accessing the already available funds under SocioBosque at national level¹⁴.

Some outcomes and outputs have been regrouped and/or reformulated for several reasons: i) better management of implementation and measurement of achievements; ii) as the result of conclusions of analysis and assessments undertaken during the full project preparation; and iii) in response to the STAP's recommendation to reformulate outputs to better reflect products, services or changes to be brought about by the project¹⁵. The adjustments made are described as follows:

Component 1: The four original outcomes under this component have been reformulated into two outcomes for better management of project implementation. Considering that PIF Outcomes 1.1, 1.2 and 1.3 are strongly linked to environmental governance they have been grouped into a single outcome that reflects the expected improvement in the participatory environmental governance of the Province of Napo. Outcome 1.4 remains with a minor change in wording.

For the reasons above, the PIF outputs have been reformulated as follows:

- Outputs 1.1.1, 1.1.3 and 1.2.1 deal with the development of capacities and therefore have been reformulated into a single output that reflects the capacity building of all the relevant stakeholders of the province.
- Output 1.1.2: The output remains but the number of Land Use and Development Plans has been reduced from 8 to 6 taking into account the cofinancing capacity of the local governments (6 local governments have provided cofinancing letters) and the existence of a minimum staff in each government to update the plans.

¹³ SocioBosque is a Government Programme that pays people for conserving forests and is as such a PES incentive mechanism. It is not a certification scheme because it does not include an independent third party, that verifies the compliance with sustainability standards.

¹⁴ For a full description, see Section 1.1.1, 2.3 and 2.4 of the FAO GEF Project Document, and responses to GEFSEC's and STAP's comments in Annex B of this CEO Endorsement request.

¹⁵ See Annex B. STAP comment #1

- Outputs 1.2.2, 1.2.3 and 1.2.4 have been replaced by a single output for the establishment of two roundtables for protected areas and sustainable livestock production. These roundtables currently do not exist in the province and have therefore been prioritized by the provincial government and stakeholders, thus replacing the roundtable for Integrated Watershed Management (Output 1.2.2) and Sumaco Biosphere Reserve Management Committee (Output 1.2.4), both of which already exist.
- Output 1.4.1: The output has been split into two outputs for better management of implementation and measurement of achievements. The first one aims at strengthening the six incentive mechanisms that are implemented by the central government institutions and the provincial government; and the second one aims at the establishment of the sustainable development fund.

The table below summarizes the new numbering of Outcomes and Outputs as a result of the above-mentioned changes in Component 1:

PIF	CEO Endorsement
Outcomes 1.1, 1.2 and 1.3	Outcome 1.1
• Outputs 1.1.1, 1.1.3 and 1.2.1	• Output 1.1.4
• Output 1.1.2	• Output 1.1.2
• Outputs 1.2.2, 1.2.3 and 1.2.4	• Output 1.1.3
• Output 1.2.5	• Output 1.1.1
• Output 1.3.1	• Output 1.1.5
Outcome 1.4	Outcome 1.2
• Output 1.4.1	• Outputs 1.2.1 and 1.2.2

Component 2: The following adjustments have been made in the outcomes:

- Outcome 2.1 remains with a minor change in wording in response to STAP's recommendation.
- Outcomes 2.2 (SFM) and 2.4 (restoration) have been merged into one outcome given that restoration is considered an aspect of a wider SFM strategy that will contribute to reduce the pressures on the Sumaco Biosphere Reserve.
- Outcome 2.3 has been removed. The project design no longer includes forest certification as detailed assessments during the full project preparation concluded that the market for timber products in Ecuador is mainly domestic. Therefore, certification is not incentivized due to the high costs involved and the lack of differentiated prices within the country for certified timber products.

The PIF Outputs have been adjusted as follows:

- Outputs 2.1.1, 2.1.2 and 2.1.3 have been merged into a single output given that they all similarly refer to the adoption of sustainable agricultural practices by producers of cocoa, naranjilla and livestock.
- Output 2.1.4 remains but the number of value chain plans has been reduced to two (cocoa and naranajilla). The value chain plan for milk has been disregarded given that the commercialization of milk faces sanitary issues and their resolution would not be within the scope of this project.
- Output 2.1.5 on community-based ecotourism has been moved to Component 3. This is more appropriate as community-based ecotourism is considered a viable strategy for biodiversity conservation and improvement of livelihoods.
- Output 2.2.2 remains with minor changes. The target has been refined during the full project preparation and is now slightly lower. SFM will be implemented through the development of co-management plans of Protective Forests, which currently do not exist, filling in a gap that will ensure SFM at community level.
- Output 2.2.3 remains and will focus in piloting a provincial timber traceability system to reduce illegal harvesting and commercialization of timber as part of the project's wider SFM strategy.

- Output 2.2.4 has been removed as an output and is now an activity under Output 2.2.2. The project will not establish a carbon sequestration monitoring system as such, but will undertake multi-temporal studies to update the deforestation baseline and carbon estimates in Project Year 1 and will repeat the studies and estimates in Project Year 4 to monitor project achievements in terms of carbon benefits.
- Output 2.3.1 has been removed given that the project no longer includes forest certification as explained above.
- Output 2.4.1 remains with a change in wording, and became output 2.2.3.

The table below summarizes the new numbering of Outcomes and Outputs as a result of the above-mentioned changes in Component 2:

PIF	CEO Endorsement Request
Outcome 2.1	Outcome 2.1
• Outputs 2.1.1, 2.1.2 and 2.1.3	• Output 2.1.1
• Output 2.1.4	• Output 2.1.2
• Output 2.1.5	• Moved to Component 3
Outcomes 2.2 and 2.4	Outcome 2.2
• Output 2.2.1	• Output 2.2.1
• Output 2.2.2	• Output 2.2.2
• Output 2.2.3	• Output 2.2.4
• Output 2.2.4	• Output 2.2.3
Outcome 2.3	Removed
• Output 2.3.1	• Removed
Outcome 2.4	Included in the SFM strategy of Outcome 2.2
• Output 2.4.1	• Output 2.2.3

Component 3: Outcome 3.1 has been reformulated to reflect the inclusion of community-based ecotourism in the Component.

The Outputs have been reformulated to reflect the two main focuses of the component, sustainable community-based tourism and biotrade products:

- Output 3.1.1 on biotrade products remains with a slight change in wording.
- Output 3.1.2 is no longer an output and is now part of the activities under the biotrade output.
- Output 3.1.3 has been removed. The project design no longer includes certification schemes for agricultural/livestock products. As a result of further assessments during the full project preparation, the project will emphasize the promotion of good practices given their low level of adoption in the province (Component 2) but will not promote certification because sufficient funding for certification costs over time cannot be guaranteed. Nevertheless the project will support the Provincial Government in the development and piloting of an eco-label for the so-called *chakra* system, a traditional agro-forestry system widely disseminated in the province. This will be done to generate this biotrade output 3.1.1.
- An output for community-based ecotourism has been added.

The table below summarizes the new numbering of Outcomes and Outputs as a result of the above-mentioned changes in Component 3:

PIF	CEO Endorsement
Outcome 3.1	Outcome 3.1
• Outputs 3.1.1 and 3.1.2	• Output 3.1.2
• Output 3.1.3	• Removed
	• Output 3.1.1

Please refer to Sections 2.2 *Project Objectives*, 2.3 *Expected Project Outcomes* and 2.4 *Project Components and Outputs* of the FAO GEF Project Document for a detailed description. Please refer to Section 2.5 *Global Environmental Benefits* of the Project Document for a full description of GEBs. The Project Results Framework in Annex A includes GEB indicators and targets at outcome level.

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 PIF identified the following risks: 1) Biodiversity conservation and INRM not prioritized at the regional level; 2) Owners' resistance to adopt sustainable production practices; 3) Climate change impact on key ecosystems in landscapes and in agriculture/livestock production (e.g. water availability); and 4) The State prioritizes that public resources, including those from fossil fuel and mineral extraction, are invested in other sectors.

Project design additionally recognizes the following risks: 1) Duplication, lack of complementarity, coordination and exchange of information due to insufficient will and commitment of the main stakeholders (MAE, MAGAP and NPG); 2) Lack of sensitivity to subscribe conservation agreements without providing incentives that are effective and provide direct and immediate benefit to producers; 3) Lack of fulfillment of conservation agreements by providers and users of environmental services; 4) Potential change of local government authorities due to elections could disarticulate the commitments made under the Sustainable Development Fund; 5) Change in MAE and MAGAP policies regarding implementation and/or financing of incentive mechanisms for conservation, ecological restoration and sustainable production (e.g. reduction of resources in the national Budget for the Socio-Bosque Program); 6) Poor producers are not capable of making productive investments.

In order to ensure reducing these new risks, key mitigation measures for each one include: 1) development of an inter-institutional participatory strategy for integrated natural resources management that will foster stakeholder participation and coordination, as well as a clear identification of roles and responsibilities of the institutions participating in project implementation; 2) strengthening and articulating the existing incentive mechanisms that currently have a low level of implementation in the Province to facilitate access by the beneficiaries; 3) monitoring of compliance of conservation agreements; 4) awareness-raising and advocacy with the newly elected authorities to promote their engagement and support to project implementation; 5) reinforcement of linkages between the Provincial institutions and the Central Government institutions in the Province through the inter-institutional strategy (which includes the incentive mechanisms); and 6) promoting access to long-term financing (incentive mechanisms and sustainable development fund) to enable producers to invest in good practices. Please refer to Appendix 4 *Risk Matrix* of the FAO GEF Project Document for a full risk assessment.

A.7. Coordination with other relevant GEF financed initiatives

The project will coordinate actions with the following GEF projects identified during the PPG:

- 1) The GEF Small Grants Programme (SGP), which focuses on communities that live in buffer zones of protected areas. During the Fifth Operational Phase, the SGP implements the FSP "*Our Corridors for Good Living*" (#4375) with the objective of promoting social and economic connectivity. In the Amazon, the SGP is currently working in the identification of project proposals that support the management of sustainable livelihoods of communities.
- 2) The FAO/GEF project "*Promotion of Climate-smart Livestock Management Integrating Reversion of Land Degradation and Reduction of Desertification Risks in Vulnerable Provinces*" (#4775) currently in preparation phase (PPG) aims to reduce soil degradation, increase adaptive capacity to climate change and mitigate GHG emissions by implementing cross-sectorial policies and climate-smart livestock management, with emphasis in the vulnerable provinces. The province of Napo has been selected as one of the seven project provinces.
- 3) The UNDP/GEF project "*Advancing Landscape Approaches in Ecuador's National Protected Area System to Improve Conservation of Globally Endangered Wildlife*" (#4731) executed by MAE. The project addresses a paradigm change in the PAs management, and the adoption of a landscape approach to improve habitats and connectivity. This project promotes the development of programs that reduce the human-wildlife conflicts associated to agriculture. It is especially focused on the real or perceived threat

on livestock represented by carnivore species (bears and jaguars). Conflicts usually take place in buffer zones of protected areas due to colonization and forest conversion. In the NP, the selected areas are Antisana Ecological Reserve and Cayambe-Coca Ecological Reserve. Component 2 under this FAO/GEF proposed project will coordinate actions and information exchange with this UNDP project.

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

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

Active participation of the diverse stakeholders will be promoted through several mechanisms.

Key project participants include the central and provincial governments as well as local communities and local organizations. The Decentralized Autonomous Government (DAG) of the Province of Napo (NPG) will be the Project Executing Partner. The central government institutions include the Ministry of Environment (MAE), Ministry of Agriculture, Livestock, Aquaculture and Fisheries (MAGAP) and Ministry of Tourism (MINTUR) and their respective provincial offices. Local governments that participate in the project are the NPG, the municipal and parochial DAGs. FAO will participate as implementing agency, providing technical backstopping and financial/administrative services for project execution. Other strategic partners include the German Cooperation Agency (GIZ), The Nature Conservancy, Rainforest Alliance, the hydroelectric project COCASINCLAIR EP, and the Andean Amazon Conservation Initiative (ICAA) Support Unit.

The project management structure will ensure the participation of key stakeholders during project planning, implementation and M&E through its decision-making structures:

- The **Project Steering Committee (PSC)** will take decisions on the overall project management and will be in charge of ensuring the project's strategic approach for the operational tasks. The PSC will be chaired by the Prefect of the NPG, and with the participation of the Director of the MAE Napo Provincial Directorate (or his/her delegates) and the FAO Representative (or his/her delegates). The PSC will meet at least twice a year and its responsibilities will include: (i) overall oversight of project progress and achievement of planned results as per the project document; (ii) take decisions in relation to the practical organization, coordination and implementation of the project; (iii) facilitate cooperation between NPG, MAE Napo Provincial Directorate and project participating partners and project support at the local level; (iv) advise the National Project Director (NPD) on other on-going and planned activities facilitating collaboration between the Project and other programmes, projects and initiatives; (v) facilitate that co-financing is provided in a timely and effective manner; and (vi) review and approve the six-monthly Project Progress Reports and the Annual Work Plan and Budget (AWP/B).
- The **Project Management Committee (PMC)** will be responsible for: (i) guiding project implementation as per the AWP/B; (ii) timely achievement of project outcomes and outputs; (iii) effective and efficient use of resources allocated as per the project document; (iv) planning project activities, giving guidance and advice to the NPD; (v) provide technical advice to the Project Steering Committee; (vi) advise the NPD on other on-going and planned activities facilitating collaboration between the Project and other programmes, projects and initiatives. The PMC may also be involved in technical evaluation of project progress and outputs, and eventual development of an agreed adjustment plan in project execution approach, if needed. The PMC will comprise the NPG Planning, Environment and Socioeconomic Development Directorates, the NPD, the Natural Heritage Responsible of the MAE Napo Provincial Directorate, the Forestry Area Responsible of the MAE Napo Provincial Directorate, with the cooperation of FAO and GIZ. The PMC will meet on a bi-monthly basis, as minimum.
- The **Partners Coordination and Support Group (PCG)** will have the objectives of: (i) facilitating coordination among project partners; (ii) supporting the Project Management Committee with technical recommendations and guidance regarding project activities; and (iii) socializing and providing timely information on implementation of co-financed activities. The PCG will be comprised by representatives of the project partners, the NPD and the PTC and will meet on a quarterly basis, as a minimum.

FAO, NPG and MAE will collaborate with the GEF implementing agencies of other GEF-supported programs and projects to identify and facilitate synergies, as well as with other agencies that support projects financed by

other donors. Collaboration will be undertaken through: (i) informal communications; and (ii) exchange of information. In order to guarantee an effective coordination and collaboration between different initiatives, specific coordination responsibilities have been assigned to the Project Management Committee.

The project includes diverse community-based organizations and local communities (see Sub-section 1.1.3 of the Project Document for a full list of communities and organizations), which participate in existing thematic roundtables (forestry, tourism, cocoa, *naranjilla* and the Quijos Valley Corridor roundtables). Project interventions will be agreed and socialized through the existing roundtables as well as the two additional roundtables to be established under the project (protected areas and sustainable livestock), thereby allowing the participation of a wide range of stakeholders linked to these roundtables.

Additionally, participation will be fostered in formal and informal spaces through: i) timely and transparent access to information on project implementation; ii) project messages adapted to the different target audiences; iii) use of existing spaces for dialogue (councils, thematic roundtables) and/or establishment of specific spaces for consultation with the beneficiaries and civil society; iv) timing for training and meetings adapted to producers' timings; v) trainings, meetings and workshops in Spanish, *Kichwa* and *Wao* languages; vi) establishing in meetings and workshops an enabling environment for horizontal dialogue between all the participants; vii) project incentives provided to settlers, *Kichwas*, *Waorani*, men, women and youths, among others; and viii) project activities that promote the self-development of the beneficiaries and the sustainability of project results.

Moreover, the rural population will participate in project implementation through: i) the development and implementation of sustainable alternatives for land use and biotrade value chains; ii) participatory monitoring of economic and environmental factors in production systems (conservation agreements); iii) implementation of demonstration projects; and iv) systematization of experiences. The ethno-cultural specificities of the communities will be taken into account in all project interventions, creating opportunities for income and sustainable livelihoods that are concomitant with their realities and that deliver socio-economic benefits to them, while generating GEBs.

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 (LDCE/SCCF):

The main driver of biodiversity loss and land degradation in the province is poverty. Forest harvesting and agriculture and livestock production are the only income sources in rural areas. Therefore, the long-term solution to the problem consists in making adjustments in the productive sector by mainstreaming principles of economic and environmental sustainability in the productive systems, the development of value chains based on sustainable production, sustainable forest management, and the promotion of biotrade and sustainable community tourism as new sources of revenue, as well as the incorporation of incentives for conservation of biodiversity, and food security.

Through these actions, rural communities will access opportunities for income, thereby reducing rural poverty without harming the natural resources and contributing to attaining global environmental benefits. The project will incorporate 1,720 ha under intensification and INRM, adapted to the local context (additional 120 ha of *naranjilla*, 400 ha of cocoa and 1,200 ha of livestock) and 40,927 ha under sustainable forest management thereby generating incomes from sustainable agricultural production and timber harvesting. The project will also support the sustainable production of 5 native species (orchids, vanilla, palms and *guayusa*) stimulating generation of alternative incomes. Moreover, the project will support 7 community-based ecotourism initiatives, which through the adoption of good practices will increase tourist visits and incomes. The project will support the financial sustainability of environment-friendly production alternatives through the strengthening and articulation of the financial and non-financial incentive mechanisms, which will contribute to up-scaling of good practices to the whole province after project termination. Furthermore the project will also support the development of a *chakra* system eco-label to designate the Province of Napo as a "clean production territory". The eco-label will allow, in the long-term, the adoption of production best practices throughout the whole province, contributing to achieving sustainable production and incomes to greater numbers of rural producers and communities.

Approximately 10,000-12,000 rural families and indigenous communities of the Napo Province will benefit from the project. 70% of the direct beneficiaries are indigenous Kichwa who generate their subsistence incomes through a traditional agricultural system called *chakras*. 80%-90% of the *Kichwa* population is suffering Unmet Basic Needs (UBN). The other 30% of beneficiaries are *mestizos*, whose livelihoods are mainly related to livestock activities. 50-60% of this group is suffering from poverty.

The project mainstreams gender issues throughout its whole cycle. Participation of women and their organizations will contribute to their successful empowerment as social stakeholders. The project will promote timely participation of women beneficiaries in all project activities, such as: i) generation of income opportunities for female heads of households, especially under Component 3 (biotrade and community tourism); ii) a special line within the province's sustainable development fund targeting women; iii) specific technical assistance for women beneficiaries that request one of the current incentives in the province; iv) promotion of participation of women in trainings, meetings and technical assistance under the project (at least 25% of female community leaders and/or producers); v) mainstreaming a cross-cutting gender approach in the LUDPs and the Inter-institutional Strategy for INRM; vi) timely dissemination of lessons learned to female beneficiaries; vii) promotion of participation of women in planning and decision making at provincial, municipal, community and family levels.

Specific field interventions under project components 2 and 3 are expected to benefit rural populations as follows: i) Conservation agreements with forest dependent people: 200 producers (100 women), meaning 200 households, 5 people/household, 1000 people (50% women); ii) poor rural population: a) working in the cacao sector: 400 hectares, 1.5 hectare/family, meaning 267 families; b) in the *naranjilla* sector: 120 hectares, 1.5 hectare/family, meaning 80 families; c) in the livestock sector: 1200 hectares, 12.5 hectare/family, meaning 96 families. Total direct beneficiaries: 643 families, 5 people/family, meaning 3125 people.

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

During full project preparation diverse strategies and methodologies were analysed with a view in their cost/effectiveness and suitability for the provincial context. Three types of key interventions have been identified: i) one institutional; ii) one regarding landscapes and agro-silvopastoral production systems; and iii) one regarding the promotion of biotrade and community ecotourism. The project will build upon existing baseline activities, capacities and infrastructure in the province. In order to reduce soil, water and forest degradation, the following strategies and methodologies have been selected for project implementation:

- i. Capacity development will improve inter-institutional and intersectoral coordination, which in turn will avoid duplication of efforts and reduce project implementation costs.
- ii. Decision-making mechanisms and project activities will be aligned with local development priorities, and other ongoing initiatives. Stakeholder participation is key for these purposes.
- iii. SLM will be promoted to raise awareness on the best land uses in the Amazonian context.
- iv. Training and awareness-raising of individual producers and communities will be supported to achieve a shift in attitude that favours the sustainable management of soils, water and forests, and implementation of appropriate technologies.
- v. Fostering sustainable intensification adapted to the local context (e.g. farm planning, conservation and management of soils, water and forests, use of native species and varieties -cocoa and *naranjilla*-, and pasture management for livestock production).
- vi. Promoting agro-silvopastoral systems, including the combination of trees with pastures and trees with crops within the *chakra* system, and the strengthening of tree nurseries for production of tree seedlings that will be used in reforestation and ecological restoration.
- vii. Promotion of financial and non-financial incentive mechanisms to stimulate the adoption of sustainable production systems that also conserve forest areas in farms and community lands. Incentives will support the long-term financing of activities initiated by the project.
- viii. Fostering a value chain approach that links production to markets. Generating alternative incomes and

livelihoods for project beneficiaries.

- ix. Systematization of experiences and lessons learned will contribute to a cost-effective replication of project results throughout the province, and other Amazonian provinces in South America.

The proposed strategies are cost-efficient: they will allow small-scale producers to maintain their production levels and yields with a low level of use of external technologies, thereby reducing production costs. This, coupled with a strategy of accessing differentiated markets, will let obtain better prices and improve family incomes, hence reducing pressures over pristine forests and biodiversity in the Napo Province (NP).

C. DESCRIBE THE BUDGETED M & E PLAN:

The below is the summary 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
Inception Workshop	NPD, PTC, FAO (PTM supported by LTO, BH, and the FAO GEF Coordination Unit)	Within two months of project start up	USD 3,000
Project Inception Report	NPD, PTC and FAO PTM, cleared by LTO, BH, and the FAO GEF Coordination Unit	Immediately after the workshop	-
Field-based impact monitoring	PTC, institutions and indigenous and small-scale farmers organizations participating in the project	Continually	USD 10,800 (9% of project coordination time, technical workshops for identification of indicators, M&E workshops)
Supervision visits and rating of progress in PPRs and PIRs	NPD, PTC and FAO (PTM, LTO and FAO GEF Coordination Unit)	Annual or as required	FAO visits will be financed through GEF agency fee. Project coordination visits will be financed by the project travel budget
Project Progress Reports (PPR)	NPD, PTC with inputs by NPG, MAE R2 and other participating partners	Six-monthly	USD 4,200 (3,5% of project coordination time)
Project Implementation Review report (PIR)	FAO (LTO and PTM) supported by the NPD and PTC. PIRs cleared and submitted by the FAO GEF Coordination Unit to the GEF Secretariat	Annual	Financed through GEF agency fee
Co-financing Reports	NPD, and PTC with inputs from other co-financiers	Annual	USD 1,200 (1% of project coordination time)
Technical reports	NPD, PTC, and FAO (LTO, PTM)	As appropriate	
Mid-term Evaluation	External Consultants, FAO independent Evaluation Office in consultation with the project team including the GCU and other partners	At mid-point of project implementation	USD 40,000 for independent consultants and associated costs. In addition the agency fee will pay for expenditures of FAO staff time and travel

ANNEX A: PROJECT RESULTS FRAMEWORK

Project outcomes and impacts:

Objective/Impact	Baseline	Outcome Indicators	Assumptions
<p>Global Environmental Objective: To promote conservation and sustainable use of globally important biodiversity, reduce and revert land degradation and deforestation, and improve forest management in the Province of Napo.</p>	<p>Component 1:</p> <p>Outcome 1.1 No provincial policies for integrated natural resources management</p>	<p>Component 1:</p> <p>Outcome 1.1: Environmental thematic axes¹⁷ mainstreamed into at least 6 LUDPs for conservation and sustainable use of natural resources.</p> <p>Indicator <u>BD-2 II.1</u>: Foreseen extent of landscape where project contributes directly to BD conservation/sustainable use of its components: 47,911 has</p>	<p>Component 1:</p> <p>Political will to mainstream biodiversity conservation and integrated natural resources management in strategic instruments and policies.</p> <p>Political will to channel financial resources for INRM and SFM to the Province of Napo.</p>
<p>Project Development Objective:¹⁶ To increase and improve the provision of goods and services from agricultural, livestock and forestry production in a sustainable manner</p>	<p>Component 1.2 Indicator <u>LD-3.iii</u>) Increase in investments for integrated landscape management: US\$476,000 in 2013; expected BAU investment by PY4: US\$ 2,200,000 (including SocioBosque, Forest Management, and Reforestation)</p> <p>Indicator <u>BD-2 II.3</u>: Foreseen PES: Biodiversity conservation in forests. 46,081has. USD 35/ha/yr</p>	<p>Indicator <u>BD-2 II.2</u>: PAs within the landscape covered by the project: 15</p> <p>Component 1.2 Indicator <u>LD-3.iii</u>) Increase in investments for integrated landscape management: Increase in investments for integrated landscape management: +21.5% in investments for incentive mechanisms: US\$ 2,676,000 by PY4</p> <p>Indicator <u>BD-2 II.3</u>: Foreseen PES: Biodiversity conservation in forests. 48,845has. USD 43/ha/yr</p>	
<p>Specific Project Objective: To promote biodiversity conservation, sustainable management of soil, forests, and water, through the strategic investment of public resources, participative environmental governance, incentive mechanisms, community-based tourism, and biotrade in the Napo Province.</p>	<p>Component 2:</p> <p>Outcome 2.1 Indicator <u>LD-3.ii</u>) Spatial coverage of integrated natural resources management practices in the wider landscape: 250 ha of livestock production with sustainable</p>	<p>Component 2:</p> <p>Outcome 2.1 Indicator <u>LD-3.ii</u>) Spatial coverage of integrated natural resources management practices in the wider landscape: 1,720 ha under sustainable intensification, adapted to the local context (additional 120 ha of</p>	<p>Component 2:</p> <p>Producers are willing to learn and engage actively in the adoption of good practices for biodiversity conservation and INRM.</p>

¹⁶ In line with FAO's Strategic Objectives

¹⁷ Axes will comprise sustainable forest management, ecological restoration, sustainable agricultural practices (cocoa in chakra, clean naranjilla, sustainable livestock), promotion of community-based tourism in natural areas, biotrade through bio-initiatives, and improvement of ecosystem services in river basins (see more in Section 2).

Objective/Impact	Baseline	Outcome Indicators	Assumptions
	<p>criteria; 30 ha of clean <i>naranjilla</i>, 1000 of cocoa under good practices</p> <p>Indicator LD-1.iii) Land area of production systems with increased vegetation cover (conservation agreements): 0</p> <p>Outcome 2.2 Rate of deforestation: 2,735 ha/yr in the Province of Napo for the 2000-2008 period, and estimated in 3,905 ha/yr in 2014</p> <p>Preliminary data estimation with information provided by MAE indicates that the Napo Province's emissions for the 4-years project lifetime could be of 7,681,426 t CO_{2eq} considering 125 t C/ha.</p>	<p><i>naranjilla</i>, 400 ha of cocoa, and 1,200 of livestock production)</p> <p>Indicator LD-1.iii) Land area of production systems with increased vegetation cover (conservation agreements): 1,764 ha of forests conserved by producers of <i>naranjilla</i> (400 ha), cocoa (1,000 ha) and livestock (364 ha).</p> <p>Outcome 2.2 No increase in the deforestation rate after 2014 as direct impact of the project and decrease in 15% in four years project lifetime as indirect impact)</p> <p>Avoided emissions during the 4-years project lifetime due to sustainable forest management in amount of 535,275 t CO_{2eq} and due to forests conserved by producers, inside or around the agricultural systems, in amount of 807,030 t CO_{2eq})</p>	<p>Political will to channel financial resources for INRM and SFM to producers for adoption of good practices and conservation.</p>
	<p>Component 3:</p> <p>Outcome 3.1 0</p> <p><i>Current average income baseline to be defined at inception/PY1</i></p>	<p>Component 3:</p> <p>Outcome 3.1 1,000 ha of forests (community-owned or private) conserved through conservation agreements and destined to community-based ecotourism or sustainable biotrade practices</p> <p>10% increase in the current average income of 200 producers (100 women) working in community tourism and sustainable biotrade</p> <p>Indicator BD-2 II.2: PAs within the landscape covered by the project: 15</p>	<p>Component 3:</p> <p>Producers are willing to learn and engage actively in generating alternative livelihoods that contribute to biodiversity conservation.</p> <p>Political will to channel financial resources to the Province of Napo for conservation purposes.</p>
		<p>Component 4:</p> <p>Outcome 4.1 Project implementation based on results-based management</p>	<p>Component 4:</p> <p>Project M&E system designed, including follow-up of activities, mechanisms to verify compliance of outcome and output indicators, and M&E responsibilities, timelines and budgets.</p>

Project outputs and outcomes:

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting		Responsible for Data Collection
			Year 1	Year 2	Year 3	Year 4	Means of verification		
Component 1: Institutional strengthening to mainstream biodiversity conservation and integrated natural resource management into participatory land-use planning and management, based on an ecosystem approach									
Outcome 1.1: Improved participatory environmental governance in the Province of Napo.	Articulated policies between government levels are non-existent. Low capacity of DAGs to regulate natural resources management and agricultural/livestock use <u>Indicator BD-2 II.1:</u> Foreseen extent of landscape where project contributes directly to BD conservation/sustainable use of its components: 0	Environmental thematic axes ¹⁸ mainstreamed into at least 6 LUDPs for conservation and sustainable use of natural resources. <u>Indicator BD-2 II.1:</u> Foreseen extent of landscape where project contributes directly to BD conservation/sustainable use of its components: 47,911 has	Environmental thematic axes ¹⁹ mainstreamed into at least 6 LUDPs <u>Indicator BD-2 II.1: to be determined at inception</u> <u>Indicator BD-2 II.2: to be determined at inception</u>	Environmental thematic axes ²⁰ mainstreamed into at least 6 LUDPs, monitored <u>Indicator BD-2 II.1:</u> Foreseen extent of landscape where project contributes directly to BD conservation/sustainable use of its components: 47,911 has	Policy documents Approval regulations External evaluation reports; PPR; PIR			Project Technical Chief NPG	

¹⁸ Axes will comprise sustainable forest management, ecological restoration, sustainable agricultural practices (cocoa in chakra, clean naranjilla, sustainable livestock), promotion of community-based tourism in natural areas, biotrade through bio-initiatives, and improvement of ecosystem services in river basins (see more in Section 2).

¹⁹ Axes will comprise sustainable forest management, ecological restoration, sustainable agricultural practices (cocoa in chakra, clean naranjilla, sustainable livestock), promotion of community-based tourism in natural areas, biotrade through bio-initiatives, and improvement of ecosystem services in river basins (see more in Section 2).

²⁰ Axes will comprise sustainable forest management, ecological restoration, sustainable agricultural practices (cocoa in chakra, clean naranjilla, sustainable livestock), promotion of community-based tourism in natural areas, biotrade through bio-initiatives, and improvement of ecosystem services in river basins (see more in Section 2).

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsible for Data Collection
	Indicator BD-2 II.2: PAs within the landscape covered by the project: 0	Indicator BD-2 II.2: PAs within the landscape covered by the project: 15				Indicator BD-2 II.2: PAs within the landscape covered by the project: 15		
Output I.1.1: Participatory Institutional Strategy for Natural Resources Management designed, implemented and monitored	There are spaces for dialogue and participation ²¹ . Need to articulate the work of these spaces around natural resources management	Participatory Inter-institutional Strategy for Natural Resources Management, designed, implemented and monitored	Participatory Inter-institutional Strategy for Natural Resources Management, designed	Participatory Inter-institutional Strategy for Natural Resources Management, implemented and monitored	Participatory Inter-institutional Strategy for Natural Resources Management, implemented and monitored	Participatory Inter-institutional Strategy for Natural Resources Management, implemented and monitored	Strategy document Project reports Institutional reports by Project partners (DAGs, MAE, MAGAP, etc.)	Project Technical Chief Chief Technical Advisor NPG
Output I.1.2: LUDPs with environmental criteria, implemented and monitored	24 DAGs have LUDPs without environmental criteria	6 LUDPs with included environmental criteria, implemented and monitored (1 provincial LUDP and 5 municipal and parochial LUDPs)	6 LUDPs with included environmental criteria (1 provincial LUDP and 5 municipal and parochial LUDPs)	6 LUDPs with included environmental criteria, implemented (1 provincial LUDP and 5 municipal and parochial LUDPs)	6 LUDPs with included environmental criteria, implemented and monitored (1 provincial LUDP and 5 municipal and parochial LUDPs)	6 LUDPs with included environmental criteria, implemented and monitored (1 provincial LUDP and 5 municipal and parochial LUDPs)	LUDPs Project reports List of participants for each training event Training materials Training evaluation	Project Technical Chief LU Specialist DAGs

²¹ E.g. thematic roundtables, planning councils, among others.

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting		
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsible for Data Collection	
								forms completed by all participants (gender disaggregated data)	
Output 1.1.3: Roundtables (protected areas and sustainable livestock) established and functioning	Existing thematic roundtables: cocoa, <i>naranjilla</i> , tourism, forestry, Quijos Valley Committee	2 roundtables (protected areas and sustainable livestock) established and functioning	2 roundtables (protected areas and sustainable livestock) established and functioning	2 roundtables (protected areas and sustainable livestock) established and functioning	2 roundtables (protected areas and sustainable livestock) established and functioning	2 roundtables (protected areas and sustainable livestock) established and functioning	Minutes of constitution of roundtables Minutes of meetings Project reports Institutional reports by Project partners (DAGs, MAE, MAGAP, etc.)	Project Technical Chief Value Chain Expert Biology Expert MAE MAGAP NPG	
Output 1.1.4: Stakeholders' capacities strengthened for natural resources governance	At least 50 individuals have been trained with international cooperation support, although in isolated processes	178 government staff and community leaders trained in land use planning based on a natural resources governance approach	100 institutional staffs and community leaders trained in land use planning based on a natural resources governance approach	140 institutional staffs and community leaders trained in land use planning based on a natural resources governance approach	178 institutional staffs and community leaders trained in land use planning based on a natural resources governance approach	Training methodology List of participants for each training event Training materials Training evaluation forms completed by all participants	Project Technical Chief Capacity Development Specialist		

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsible for Data Collection
<p>Output 1.1.5: Information management of natural resources, developed and managed by MAE and NPG</p>	<p>NPG has a GIS Unit insufficiently staffed, outdated equipment and systems for an adequate management of information to support decision-making</p>	<p>1 Information management system for planning and management of natural resources, developed and managed by MAE and NPG</p>	<p>1 Information management system for planning and management of natural resources, developed and managed by MAE and NPG</p>	<p>1 Information management system for planning and management of natural resources, developed and managed by MAE and NPG</p>	<p>1 Information management system for planning and management of natural resources, developed and managed by MAE and NPG</p>	<p>Procurement minutes of hardware and software List of participants for each training event Training materials Training evaluation forms completed by all participants (data disaggregated by gender) GIS Unit reports Project reports</p>	<p>Project Technical Chief GIS Specialist NPG</p>	
<p>Outcome 1.2: Increased investments for natural resources management</p>	<p>Indicator LD-3.iii) Increase in investments for integrated landscape management: US\$476,000 in 2013; expected BAU investment by PY4: US\$ 2,200,000</p>	<p>Indicator LD-3.iii) Increase in investments for integrated landscape management: +21.5% in investments for incentive mechanisms: US\$ 2,676,000 by PY4</p>	<p>20% increase in investments for incentive mechanisms over the baseline: US\$ 535,200</p>	<p>60% increase in investments for incentive mechanisms over the baseline: US\$ 1,605,600</p>	<p>100% increase in investments for incentive mechanisms over the baseline: US\$ 2,676,000</p>	<p>MAE, MAGAP and NPG reports on implementation of incentives Sustainable Development</p>	<p>Project Technical Chief Incentives Specialist MAE</p>	

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsible for Data Collection
	(including SocioBosque, Forest Management, and Reforestation) <u>Indicator BD-2 II.3:</u> Foreseen PES: Biodiversity conservation in forests. 48,845has. USD 43/ha/yr	<u>Indicator BD-2 II.3:</u> Foreseen PES: Biodiversity conservation in forests. 48,845has. USD 43/ha/yr		<u>Indicator BD-2 II.3: to be determined at inception</u>		<u>Indicator BD-2 II.3:</u> Foreseen PES: Biodiversity conservation in forests. 48,845has. USD 43/ha/yr	Fund reports External evaluation reports; PPR; PIR	MAGAP NPG
Output 1.2.1: Incentive mechanisms for biodiversity conservation and sustainable use strengthened, articulated, and operational	Incentives: i) Socio Bosque - conservation (MAE); ii) Socio Bosque - restoration (MAE); iii) Reforestation for commercial purposes (MAGAP); iv) Agro-forestry extension (MAE-MAGAP); v) Productive NPG; and vi) National Concurrent Plan for Reforestation. Limited access in the province due to lack of information and socialization.	6 incentive mechanisms for biodiversity conservation and sustainable use strengthened, articulated, and operational	6 incentive mechanisms strengthened for biodiversity conservation and sustainable use	6 incentive mechanisms strengthened and articulated for biodiversity conservation and sustainable use	6 incentive mechanisms strengthened, articulated, operational for biodiversity conservation and sustainable use of biodiversity	6 incentive mechanisms for biodiversity conservation and sustainable use of biodiversity, operational and monitored	MAE, MAGAP and NPG reports on implementation of incentives	Project Technical Chief Incentives Specialist MAE MAGAP NPG
Output 1.2.2: Provincial Sustainable Development Fund established and operational	Preliminary design of the Fund	1 Provincial Sustainable Development Fund established and operational	Feasibility study and Fund design, carried out	1 Provincial Sustainable Development Fund, established	1 Provincial Sustainable Development Fund operational	1 Provincial Sustainable Development Fund operational and monitored	Fund implementation arrangements Fund implementation reports Project reports	Project Technical Chief NPG Trust Fund Board

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsible for Data Collection

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
Component 2: Design and promotion of landscape and agro-forestry production systems that include the sustainable management of water, soil, and forests, while improving local population livelihoods in the Province of Napo.								
Outcome 2.1: Production systems incorporate good practices for conservation and management of natural resources in four priority sites of the Province of Napo.	Indicator LD-3.ii) Spatial coverage of integrated natural resources management practices in the wider landscape: 250 ha of livestock production with sustainable criteria; 30 ha of clean <i>naranjilla</i> ; and 1000 ha of cocoa production under good practices.	Indicator LD-3.ii) Spatial coverage of integrated natural resources management practices in the wider landscape: 1,720 ha under sustainable intensification, adapted to the local context (additional 120 ha of <i>naranjilla</i> , 400 ha of cocoa, 1,200 of livestock production)	344 ha under sustainable intensification, adapted to the local context (24 ha of <i>naranjilla</i> , 80 ha of cocoa, 240 ha of livestock production)	1032 ha under sustainable intensification, adapted to the local context (72 ha of <i>naranjilla</i> , 240 ha of cocoa, 720 ha livestock production)	1.720 ha under sustainable intensification, adapted to the local context (120 ha of <i>naranjilla</i> , 400 ha of cocoa, 1.200 ha of livestock production)	Institutional reports (MAE, MAGAP, GADPN, cocoa, <i>naranjilla</i> and sustainable livestock roundtables) External evaluation reports; PPR; PIR	Project Technical Chief Agricultural Specialist MAE MAGAP NPG	

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
Output 2.1.1: Technology packages for cocoa, <i>naranjilla</i> and livestock and conservation agreements signed with small- and medium-scale producers	Indicator LD3. ii) Number of INRM tools and methodologies introduced: 0	Indicator LD3. ii) Number of INRM tools and methodologies introduced: 3 technology packages for cocoa, <i>naranjilla</i> and livestock designed, implemented and monitored 593 producers sign conservation agreements: 120 <i>naranjilla</i> producers, 400 cocoa producers, and 73 livestock producers	Diagnosis of good practices and technology packages for <i>naranjilla</i> , cocoa and livestock production elaborated Farm planning implemented in 300 farms	3 technology packages of good practices for cocoa, <i>naranjilla</i> and livestock implemented and monitored 118 producers sign conservation agreements: 24 <i>naranjilla</i> producers, 80 cocoa producers, and 14 livestock producers	3 technology packages of good practices for cocoa, <i>naranjilla</i> and livestock implemented and monitored 356 producers sign conservation agreements: 72 <i>naranjilla</i> producers, 240 cocoa producers, and 44 livestock producers	3 technology packages of good practices for cocoa, <i>naranjilla</i> and livestock implemented and monitored 593 producers sign conservation agreements: 120 <i>naranjilla</i> producers, 400 cocoa producers, and 73 livestock producers	Diagnosis documents of good practices in <i>naranjilla</i> , cocoa and livestock production Conservation agreements Project reports List of participants for each training event Training materials Training evaluation forms completed by all participants (data disaggregated by gender)	Project Technical Chief Agricultural Specialist MAE MAGAP NPG
Output 2.1.2: Cocoa and <i>naranjilla</i> value chain plans, updated, implemented and monitored	Cocoa and <i>naranjilla</i> plans exist but are outdated. FAO and GLZ have value chain methodologies	2 cocoa and <i>naranjilla</i> value chain plans, updated, implemented and monitored	2 cocoa and <i>naranjilla</i> value chain plans, updated	2 cocoa and <i>naranjilla</i> value chain plans, implemented	2 cocoa and <i>naranjilla</i> value chain plans, implemented and monitored	Cocoa value chain plan <i>Naranjilla</i> value chain plan Project reports MAGAP and NPG institutional reports	Project Technical Chief Value Chain Specialist MAGAP NPG	

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
Outcome 2.2: Reduced pressure over the forests of the Sumaco Biosphere Reserve through the implementation of a SFM strategy	Rate of deforestation: 2,735 ha/yr in the Province of Napo for the 2000-2008 period, and estimated in 3,905 ha/yr in 2014	No increase in the deforestation rate after 2014 as direct impact of the project and decrease in 15% in four years project lifetime as indirect impact	Deforestation rate: 3,905 ha/yr	Deforestation rate: 3,905 ha/yr	Deforestation rate: 3,905 ha/yr	Deforestation rate: 3,905 ha/yr	Institutional reports (MAE) Multi-temporal study on land use and coverage External evaluation reports; PPR; PIR	Project Technical Chief Forestry Specialist MAE
Output 2.2.1: A Provincial SFM Strategy developed	Forestry roundtable has a basic strategy	Provincial SFM Strategy designed, agreed, implemented and monitored	Provincial SFM Strategy designed and agreed	Provincial SFM Strategy implemented	Provincial SFM Strategy implemented and monitored	Provincial SFM Strategy implemented and monitored	Strategy document	Project Technical Chief Forestry Specialist MAE NPG
Output 2.2.2: Co-management plans for La Cascada, Cerro Sumaco and Colonso PFs elaborated, implemented and monitored (40,927 ha)	<u>SFM-REDD+</u> Indicator 1.2: Area covered by management plans: Colonso, La Cascada and Cerro Sumaco PFs have global management plans but lack of community co-management plans	<u>SFM-REDD+</u> Indicator 1.2: Area covered by management plans: 23 co-management plans for the La Cascada, Cerro Sumaco and Colonso PFs elaborated, implemented and monitored (10 co-management plans in 27,784 ha of La Cascada PF)	13 co-management plans elaborated (3 co-management plans in 386 ha of Colonso PF and 10 co-management plans in 12,757 ha of La Cascada PF)	10 co-management plans in 27,784 ha of Cerro Sumaco PF elaborated 13 co-management plans implemented and monitored (3 co-management plans in 386 ha of Colonso PF and 10 co-management plans in 12,757	23 co-management plans implemented and monitored (40,927 ha)	23 co-management plans implemented and monitored (40,927 ha)	Co-management plans List of participants for each training event Training materials Training evaluation forms completed by all participants (data disaggregated by gender)	Project Technical Chief Forestry Specialist MAE NPG

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
Output 2.2.3: Restored hectares with analogue forestry, reforestation or natural regeneration techniques under conservation agreements and incentives	SFM-REDD+ Indicator 1.2 Restoration/ rehabilitation of degraded forests: 145 ha reforested in 2012	SFM-REDD+ Indicator 1.2 Restoration/ rehabilitation of degraded forests: 2,500 ha restored with analogue forestry, reforestation or natural regeneration techniques under conservation agreements and incentives	Restoration criteria defined and intervention areas identified	500 ha restored with analogue forestry, reforestation or natural regeneration techniques under conservation agreements and incentives	1500 ha restored with analogue forestry, reforestation or natural regeneration techniques under conservation agreements and incentives	2,500 ha restored with analogue forestry, reforestation or natural regeneration techniques under conservation agreements and incentives	Conservation agreements Reports on implementation of incentives (MAE, MAGAP) List of participants for each training event Training materials Training evaluation forms completed by all participants (data disaggregated by gender)	Project Technical Chief Forestry Specialist MAE NPG
Output 2.2.4: Provincial timber traceability system, designed and piloted in Cerro Sumaco (Wamani and Akoki communities)	0 Timber traceability system	One provincial timber traceability system, designed and piloted in Cerro Sumaco (Wamani and Akoki communities)	1 provincial timber traceability system designed	1 provincial timber traceability system piloted in Cerro Sumaco (Wamani and Akoki communities)	1 provincial timber traceability system piloted in Cerro Sumaco (Wamani and Akoki communities)	1 provincial timber traceability system implemented and monitored in Cerro Sumaco (Wamani and Akoki communities)	Traceability system procedures List of participants for each training event Training materials Training evaluation forms	Project Technical Chief Traceability Specialist MAE NPG

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting		
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection	
								completed by all participants (data disaggregated by gender)	

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
Component 3: Promotion of biotrade and community-based ecotourism as strategies for biodiversity conservation, sustainable management of natural resources, and improvement of livelihoods for local communities								
Outcome 3.1: Biodiversity conserved, natural resources sustainably managed and livelihoods of local communities improved through promotion of community-based ecotourism and biotrade.	0 <i>Average income baseline to be defined at inception/PY1</i>	1,000 ha of forests (community-owned or private) conserved through conservation agreements and destined to community tourism or sustainable biotrade practices 10% increase in the current average income of 200 producers (100 women) working in community tourism and sustainable biotrade Indicator <u>BD-2</u> II.2: PAs within	200 ha of forests (community or private) conserved through conservation agreements 2% increase in the current average income of 50 producers (30 women) <u>Indicator BD-2</u> <u>II.2: to be defined at inception/PY1</u>	600 ha of forests (community or private) conserved through conservation agreements 6% increase in the current average income of 100 producers (70 women)	1,000 ha of forests (community or private) conserved through conservation agreements 10% increase in the current average income of 200 producers (100 women)	Institutional reports (MAE, MAGAP, GADPN) External evaluation reports; PPR; PIR	Project Technical Chief Tourism and Biotrade Specialist MAE NPG	

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting Means of Verification	Responsible for Data Collection
			Year 1	Year 2	Year 3	Year 4		
		the landscape covered by the project: 15						
Output 3.1.1: Conservation agreements and good practices in sustainable community-based ecotourism, implemented	Only 1 initiative has been legalized with MINTUR. Deficiencies in implementation of good practices.	7 sustainable community-based ecotourism initiatives and conservation agreements covering 500 ha implemented	7 sustainable community-based ecotourism initiatives implemented and monitored	7 sustainable community-based ecotourism initiatives implemented and monitored	7 sustainable community-based ecotourism initiatives implemented and monitored	Manual of good practices in community tourism Conservation agreements List of participants for each training event Training materials Training evaluation forms completed by all participants (data disaggregated by gender)	Project Technical Chief Tourism and Biotrade Specialist MAE NPG	
Output 3.1.2: Biotrade goods produced under management plans and/or <i>chakra</i> eco-labelling in areas under conservation	0	5 biotrade products ²² with management plans and/or <i>chakra</i> eco-label produced in 2 priority areas	2 biotrade products with management plans and/or <i>chakra</i> eco-label produced in 2 priority areas	4 biotrade products with management plans and/or <i>chakra</i> eco-label produced in 2 priority areas	5 biotrade products with management plans and/or <i>chakra</i> eco-label produced in 2 priority areas	Management plans <i>Chakra</i> eco-label Conservation	Project Technical Chief Tourism and Biotrade Specialist	

^{22, 23} Biotrade goods are native species as follows: i) orchids; ii) palm; iii) guayusa; iv) vanilla; and v) tikaso. For a detailed description, see sections 1.1 and 2.4 of the FAO GEF Project Document.

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
agreements		(Archidona and Tena) with conservation agreements	management plans and/or <i>chakra</i> eco-label produced in 2 priority areas (Archidona and Tena) with conservation agreements	agreements List of participants for each training event Training materials Training evaluation forms completed by all participants (data disaggregated by gender)	MAE NPG			

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
Component 4: M&E and information dissemination								
Outcome 4.1: Project implementation based on RBM and lessons learned/good practices documented and disseminated		Project implementation based on RBM and demonstrating sustainability	33% progress in achievement of outcomes	64% progress in achievement of outcomes	82% progress in achievement of outcomes	Project outcomes achieved and demonstrating sustainability	PIR PPRs Mid-term and final evaluations	Project Technical Chief NPG FAO
Output 4.1.1: Project M&E system established and operational		M&E plan developed and operational	2 six-monthly reports (1 PPR y 1 PIR)	2 six-monthly reports (1 PPR y 1 PIR)	2 six-monthly reports (1 PPR y 1 PIR)	2 six-monthly reports (1 PPR y 1 PIR)	PPR PIR	Project Technical Chief NPG

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
Output 4.1.2: Midterm and final evaluations		1 mid-term evaluation and 1 final evaluation		Mid-term evaluation report		Final evaluation report	Mid-term and final evaluation reports	Project Technical Chief External evaluator FAO
Output 4.1.3: Project best practices and lessons learned published		At least 3 publications on best practices and lessons learned			1 publication on best practices and lessons learned	3 publications on best practices and lessons learned	Publications PPR; PIR	Project Technical Chief NPG MAE FAO
Output 4.1.4: Webpage for information-sharing and exchange of experiences		Webpage for information sharing and exchange of experiences	Project web page in NPG web site	Web page updated	Web page updated	Web page for information sharing and exchange of experiences	Web page	Project Technical Chief NPG

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).

Responses to GEFSEC comments

Review Criteria	Questions	GEFSEC comments	Responses
Project Consistency	14. Is the project framework sound and sufficiently clear?	<p>March 05, 2012</p> <p>a) Please ensure that STAP guidance on PES is incorporated at time of CEO Endorsement</p>	<p>a) The proposed project is well-aligned with and has followed the criteria detailed by “Payments for Environmental Services and the GEF. A STAP guideline document”.</p> <p>The project proposes two type of PES: 1) government-financed incentives mechanisms (SocioBosque), already in place at national level but poorly implemented in the Napo Province; and 2) the set up of a Sustainable Development (Trust) Fund with a pre-identified Environmental Service (ES) buyer, which is also providing co-financing to the project: the COCOSINCLAIR Hydroelectric EP.</p> <p>In the case of the four government-financed incentive mechanisms²³ for conservation of forests and moorlands, rehabilitation of degraded lands, reforestation for conservation purposes, and reforestation for commercial purposes, the GEF incremental financing will co-finance these PES for multiple services, under the <i>bundling</i> type. The same single user (the State) will buy multiple ES from the same plot (i.e. farmers in the Napo Province that are capable to present their proposals to the SocioBosque MAE²⁴ or the MAGAP²⁵ mechanisms through the Napo Provincial Government). The ES involved are: carbon storage and sequestration in forests, watershed protection by Protective Forests²⁶,</p>

²³ Output 1.2.2 – see Table B of this CEO Endorsement request form. Four of them are considered PES, the additional two are non-financial incentives (Forestry Advisory Services, and Assistance for agricultural and livestock production). For a detailed description of the incentives, see the FAO GEF Project Document, pp. 17-18.

²⁴ For a detailed description of SocioBosque, please see the FAO GEF Project Document, Section 1.1.1 *Rationale*. SocioBosque is managed by the Ministry of Environment (MAE) of Ecuador.

²⁵ For a detailed description of the Reforestation for Commercial Purpose incentive, please see the FAO GEF Project Document, Section 1.1.1 *Rationale*. This incentive is managed by the Ministry of Agriculture and Livestock (MAGAP) of Ecuador.

²⁶ Protective Forests are natural or cultured forests and vegetation that meet one or more of the following requirements: a) Have as key function the conservation of soil wildlife; b) Are located in areas that allow the control of torrential rainfall

			<p>biodiversity conservation, and the protection of landscape beauty (for eco-tourism purposes – see Component 3). Forest/landscape restoration, and activity-reducing conservation are also included.</p> <p>Under Component 1, the project will support the setting up and short-term pilot payment of a Sustainable Development Fund aimed at ensuring the conservation and recovery of relevant ES, the management of micro-basins supplying drinking water and water for hydroelectrical purposes, and the protection of the Quijos river basin, among others²⁷. COCASINCLAIR Hydroelectric EP, the Napo Provincial Government and its strategic partners have been identified as ES users that are considering long-term payments and that will provide co-financing for the initial capitalization of the Trust Fund.</p> <p>GEF capacity-building investments for PES start-up will be realistic, strategic and tailored to this specific case. In the case of SocioBosque, GEF funds will be invested in developing capacities of the NPG staff and the local communities/landholders who will have to submit proposals for getting financing from the SocioBosque incentive. The function of SocioBosque is to assure that biodiversity considerations have been mainstreamed into production landscapes and other land uses. More biodiversity-friendly practices are expected at provincial level, and GEF funds will support forest users in accessing the already available funding at national level (SocioBosque – operating since 2008 in Ecuador).</p> <p>The four threats to PES effectiveness have been addressed: i) to avoid the non-</p>
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events, or the preservation of watersheds, especially in areas of low-level rainfall; c) Occupy eyebrows or mountain areas adjoining water sources, streams or reservoirs; d) Represent windbreaks or barriers to protect the environmental equilibrium; e) Be in hydrological-forestry research areas; f) Be located in strategic areas for national defence, g) Constitute a defence for natural resources and public infrastructure. For a detailed description, please see the FAO GEF Project Document, Section 1.1.1 *Rationale*.

²⁷ For a detailed description, please refer to the FAO GEF Project Document, Section 2.4 *Project Components and outputs*.

			<p>compliance with contractual conditions, SocioBosque and the incentive mechanisms implemented by MAE and MAGAP are based on conservation or land-use agreements. Additional conservation agreements will be signed during project implementation, in order to increase their geographical scope in the province; ii) the poor administrative selection seems not be a high risk in this case, since GIZ and FAO have identified targeted areas with potential to deliver GEBs in the province, one dedicated to livestock production that is putting deforestation pressures, and another one producing cocoa and naranjilla, that is fueling land degradation processes and affecting related ES due to land erosion²⁸; iii) the spatial demand spillovers are addressed by the integrated landscape management approach that underlines the whole project. No additional pressures onto natural resources are expected due to the project intervention; iv) adverse self-selection does not seem to be a risk, since counterfactual analysis (what would have happened with SocioBosque and the other incentives without GEF) is the reality indeed. The Province of Napo has until now only to a very limited extend accessed these funds, even though the mechanism have been available since 2008²⁹.</p> <p>In general terms, given the State's and private sector's interest in spreading and/or setting up these incentives and Trust Fund, the long-term funding of PES seems to be assured in this case. Payments will be made after performance (i.e. effective conservation, effective deforestation avoided) will have been proven³⁰. ES and land uses are well-</p>
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²⁸ For a detailed explanation of the Napo Province's sub-regions addressed by the project, please refer to the FAO GEF Project Document Section 1.1.1 *Rationale*, and Section 2.4 *Project Components and outputs*.

²⁹ For a detailed explanation please refer to the FAO GEF Project Document Section 1.1.1 *Rationale*.

³⁰ SocioBosque is already operating in this way. The project will help increase the scope of this incentive in the Province and the amount paid by hectare considering the opportunity costs of livestock and agricultural farmers. See baseline and target indicators in outcome 1.2, Table B of this CEO Endorsement request.

		<p>d) By CEO Endorsement please include identification of the specific measures to be undertaken which will ensure the longevity of the certification and incentives activities.</p>	<p>defined. Please see Section 1.1.1 and 2.4 of the FAO GEF Project Document for details.</p> <p>Regarding M&E, the project design includes specific indicators to evaluate PES impacts: foreseen PES: biodiversity conservation in forests³¹; foreseen extent of landscape where the project contributes directly to biodiversity conservation/sustainable use³²; hectares of forests (community-owned or private) conserved through conservation agreements³³; reduction of deforestation rate; and tons of avoided CO_{2eq} emissions.</p> <p>d) As extensively described above, the project will support four monetary incentives and two non-monetary incentives (for details, please see the FAO GEF Project Document Section 1.1.1 <i>Rationale</i>). Given the State's and private sector's interest in spreading and/or setting up these incentives and Trust Fund, the longevity of funding for PES seems is likely to be assured.</p> <p>Regarding certification, after conducting market analysis during full project preparation, project proponents have concluded that: a) certification under international standards (e.g. FSC) has high costs that are not likely to be covered by the government or private partners after project termination; b) GIZ co-financing has been reduced, reducing the likeliness of ensuring certification schemes' longevity and fee payment after project termination; c) certified timber products are not likely to be sold in the Ecuador's domestic market, since it lacks differentiated prices that could compensate high certification costs; d) good agricultural and livestock practices are in their early stage in the Napo Province. The opportunity cost of shifting to sustainable</p>
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³¹ See outcome 1.2, Table B of this CEO Endorsement

³² See outcome 1.1, Table B of this CEO Endorsement

³³ See outcome 3.1, Table B of this CEO Endorsement

		<p>e) At CEO Endorsement please add information on how (EX-ACT) is expected to be used as the basis for a monitoring system, and describe the set of measurements which are expected.</p>	<p>options in addition to applying an international certification standard is too high for this context and stage.</p> <p>In light of this, the project will not apply international certification schemes but national incentives mechanisms³⁴, to mainstream biodiversity into production landscapes, incentivize SFM in buffer zones and PAs that were declared in areas where population already lived, and to support the signature of new conservation agreements. Incentives are expected to generate the same GEBs as established in the Section 2.5 of the FAO GEF Project Document.</p> <p>Furthermore, the project will support MAE's efforts to establish a timber traceability system in the Napo Province. Assuring that timber is legally harvested and traded at local and national level is the first step for the implementation of a full certification system in the future. For a detailed description of baseline and project activities on this regard, please see Section 1.1.1 and 2.4 of the FAO GEF Project Document.</p> <p>e) EX-ACT was used to set the preliminary baseline data and project targets at PIF level (2012). In parallel to this full project preparation (late 2012-2014), the MAE (supported by FAO and the Finnish Cooperation) has created country carbon values for different forest covers (instead of using IPCC default values), and measured carbon stocks in the forest sector both at national and provincial levels. National data has been consolidated and published through the Forest National Evaluation and the National Inventory. In November 2013, the</p>
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³⁴ According to FAO and project partners, SocioBosque is considered an incentive mechanism but not a certification scheme because it does not include a Third part, independent, that verifies the compliance with sustainability standards. SocioBosque is a Government Programme that pays people for conserving forests. Given that it is the State who pays to forest land owners and forest communities, it is not a Third that certifies.

			<p>MAE created a Monitoring Unit which will monitor carbon stocks in the forest sector, as well as deforestation rates and vegetation cover in Ecuador. It is expected that similar monitoring units will be established at each province, including Napo.</p> <p>Carbon stocks data at provincial level are being consolidated and are expected to be published in 2014. The project baseline data for carbon stocks in the Province has been provided by the MAE³⁵. More updated provincial data will be made public by MAE later in 2014 and incorporated in the project results framework at inception/PY1. As well, the project baseline data for deforestation rate (2000-2008) has been provided by the MAE. Baseline data for the period 2008-2013 will be made public by MAE later in 2014 and incorporated in the project results framework at inception. Project targets related to avoided CO₂ emissions from deforestation reduction and increase in carbon stocks will be built upon MAE's data at provincial level in PY1³⁶. Further details are described in the FAO GEF Project Document sections 1.1.1, 2.3 and 2.4.</p>
Project Consistency	15. Are the methodology and assumptions for the description of the incremental benefits sound and appropriate?	<p>March 05, 2012</p> <p>At CEO Endorsement details of how the project builds has utilized STAP guidance will be expected.</p> <p>CO2 benefits are estimated in the region of 415,000 tCO2 over the project lifetime, however clearer estimates are expected at time of</p>	<p>Kindly see response to GEFSEC's comment #14 a) above.</p> <p>As detailed in response #14 above, the MAE has established national carbon values (instead of using Tier 1 IPCC default values), through two projects and programmes: i) the preparation of the National Forest Inventory; and ii) the UN REDD Programme (readiness phase), both technically supported by FAO. In order to keep one harmonized methodology and forest carbon measurement within the</p>

³⁵ See outcome 2.2 in the Annex A of this CEO Endorsement request.

³⁶ See outcome 2.2 in the Annex A of this CEO Endorsement request.

		CEO Endorsement.	territory of Ecuador, the MAE has decided not to use other values neither at national nor at provincial level. National forest carbon data was published in November 2013. Provincial forest carbon data is being consolidated at present. Project targets will be based on this harmonized and territory-based data at inception/PY1.
Project Financing	24. Is the funding and co-financing per objective appropriate and adequate to achieve the expected outcomes and outputs?	March 05, 2012 At time of CEO Endorsement please incorporate details of co-finance from those organizations interested in the certification-related activities in Component 2.	As detailed in response to GEFSEC's comment #14 d) above, the project will not apply international certification schemes but national incentives mechanisms. Organizations that will provide co-financing for incentive-related activities in Component 2 include: MAE, MAGAP, the Napo Provincial Government, the municipal DAGs, COCASINCLAIR, Rainforest Alliance, and GIZ. Kindly see more details in the FAO GEF Project Document , Section 1.1 c) <i>Incremental reasoning</i> , and Section 4.3.
Recommendation at PIF stage	31. Items to consider at CEO Endorsement/approval	1. Clear description of PES and incorporation of STAP guidance 2. Co-finance potential from organizations interested in certification-related activities in Component 2. 3. Improved estimates of CO₂ benefits and clear description of carbon monitoring system.	1. Kindly see response to GEFSEC's comment #14 a) above. 2. Kindly see response to GEFSEC's comment #24 above. 3. As described in the response to GEFSEC's comment #14 e), the estimates of the project CO ₂ benefits will be based on the MAE's default values for the Napo Province - to be released in late 2014. This data at provincial level will serve to establish territory-based project targets. In addition, two multi-temporal studies on land use and coverage will be used to monitor project carbon benefits, with the technical assistance of FAO and GIZ. In PY1, a multi-temporal study on land use and coverage (based on MAE's data for the period 2008-2013 ³⁷) will be conducted to

³⁷ This data is not yet available at provincial level, as explained in response #14 above. It will be released by the end of 2014.

		<p>update the deforestation rate baseline³⁸ and to establish the project deforestation reduction targets. As well, this multi-temporal study, based on MAE's carbon data and MAE validated protocol³⁹ will update the carbon/CO2 emissions baseline for the project intervention areas⁴⁰, and will establish the target for project carbon benefits⁴¹ in the LULUCF sector. The multi-temporal study will be repeated in PY4 for the period 2013-2017 to update the deforestation rate data in the project intervention area and to estimate carbon stocks/avoided emissions for this new period. The multi-temporal studies will serve as key inputs for monitoring the project progress in forest conservation and SFM. The studies will also support informed decision-making at provincial level.</p> <p>For further details, kindly see the FAO GEF Project Document, section 2.4, Results Matrix (Appendix 1), and Work Plan (Appendix 2).</p>
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Responses to Council comments:

Council Comments	Responses
<p>Germany: a) The principal project partners are the Environmental Ministry (MAE) and the Provincial Government. Since the Project has a strong focus on sustainable production we would like to emphasize the importance of including the Agricultural Ministry (MAGAP) as the responsible national authority for agriculture.</p>	<p>a) We thank the Council for the useful comments. The Ministry of Agriculture, Livestock, Aquaculture and Fisheries (MAGAP) is a principal project partner. MAGAP will have a key role in project implementation, including the elaboration of inter-institutional participatory strategies for integrated natural resources management and sustainable forest management; the development of technology packages for sustainable production of cocoa, <i>naranja</i> and livestock; the implementation of value chains for cocoa and <i>naranja</i>. MAGAP will also provide with technical assistance and training services to beneficiary producers through proven methodologies (e.g. farmer</p>

³⁸ The current baseline in the Project Results Framework (see Annex A) is related to the period 2000-2008

³⁹ The MAE protocols for assessing carbon stocks and CO2 emissions were validated in 2012-2013 through a wide and participatory national process in Ecuador.

⁴⁰ The current baseline provided by MAE is preliminary and will be adjusted when the provincial carbon data will be released by the end of 2014.

⁴¹ Both carbon stocks and avoided CO2 emissions.

<p>b) The German Government through its technical and financial cooperation supports both the Sumaco Reserve and the Yasuni Biosphere Reserve (2013) in the Amazonian area. The full GEF project should include coordination and agreed activities between both programmes in order to share experiences and lessons learnt.</p>	<p>field schools and extension); and will support the promotion of value chains for agricultural products. In addition, MAGAP will be a key player in the Project Partners Coordination and Support Group⁴².</p> <p>b) GIZ is in fact a project partner and has committed co-financing for project implementation. The GEF project will seek coordination and complementarity with GIZ PROCAMBIO Programme 2014-2016 in issues such as: 1) mainstreaming of environmental issues in local development policies and plans; 2) improvement of the implementation of incentive mechanisms in the province; 3) sustainable forest management and promotion of forest conservation agreements; 4) sustainable community-based tourism; and 5) development of bio-trade products.</p>
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Responses to STAP comments

STAP Comment	Response
<p>1. The project framework captures well the various interventions described in the proposal narrative. However, STAP recommends a careful revision of the outputs, and their indicators. Several of the outputs appear to be activities rather than major changes brought about by the project. So, in some instances, the outputs do not appear to define what product, or service, will result from the proposed intervention. For example, component 2.1 defines the output as "120 livestock farmers have adopted sustainable livestock practices". In STAP's view, what would constitute a product, or a service, would be the natural resource management practices to be adopted by the farmers (as an example). Its indicator would describe what will be measured (# of practices developed and implemented) and not what is to be achieved (120 livestock farmers adopting sustainable livestock practices).</p>	<p>We thank STAP for the useful comments. The project framework has been adjusted taking into account the suggestions made. Please refer to Annex A: Project Results Framework of this CEO Endorsement request.</p>
<p>2. Currently, the project proposal does not appear to recognize or acknowledge the important work already undertaken some as GEF-funded projects; e.g. the GIAHS project of FAO on agro-biodiversity of small-</p>	<p>The project will use the information and experiences of the Globally Important Agricultural Heritage Systems (GIAHS) project. As GIAHS is defined as "remarkable land use systems and landscapes which are rich in</p>

⁴² For a detailed description of the project implementation arrangements, please see Figure 4.1 in the Project Document.

STAP Comment	Response
<p>farm agricultural systems in Ecuador and other countries. The Sumaco Biosphere Reserve, for example, features as a case study in IUCN's 2008 series on Values of Protected Landscapes and Seascapes, Section 1: Protected Landscapes and Agrobiodiversity Values. One aspect brought out in previous studies is the importance of promoting practices that are economically rational to the land user, rather than land uses that are technically efficient. Incentive schemes as mentioned in the proposal have their dangers, including that of unsustainability. Economics or even simple financial accounting needs to be included, along with other lessons from the literature. In the full proposal, these should be fully referenced and the SLM/SFM practices be fully analyzed for their potential to deliver co-benefits for the environment and for local livelihoods.</p>	<p>globally significant biological diversity evolving from the co-adaptation of community with its environment and its needs and aspirations for sustainable development", the GIAHS will serve as basis for the project activities with small-scale farm production of local communities and conservation in the Napo Province, which has a significant biological diversity, including in particular the traditional agro-forestry system (called <i>chakra</i>) used by <i>Kichwa</i> producers and in the Sumaco Biosphere Reserve.</p> <p>Furthermore, the full project document includes and is based on numerous lessons learned from other projects⁴³ implemented in Ecuador and more specifically in the Province of Napo, namely:</p> <ul style="list-style-type: none"> • <i>Programme for Conservation and Sustainable Management of the Natural and Cultural Heritage of the Yasuni Biosphere Reserve</i> implemented by FAO (2008/2011); • <i>Programme for Sustainable Management of Natural Resources</i> (GESOREN) implemented by GIZ (2003 to 2013); • <i>Project Strengthening of Environmental Governance for territorial planning</i> implemented within the framework of the <i>Programme Regional Biodiversity in the Andean-Amazonian Regions</i> (BioCAN); • <i>Regional Programme for Social Management of Andean Forest Ecosystems – Bolivia-Ecuador-Peru (ECOBONA)</i>, implemented by INTERCOOPERATION (2006-2011); • <i>Project QUIJOS Agricultural practices, conservation and local development strategies for adaptation to climate change in the Quijos River sub-basin</i>, executed by INIAP • The MAE's experience in the implementation of incentive mechanisms at national level, as well as The Nature Conservancy (TNC)'s experience worldwide; • Experience of the Kallari Association and the RUNA Foundation in biotrade products; • Sustainable community-based ecotourism lessons identified by Coria and Calfucura in "Ecotourism and the development of indigenous communities: the good, the bad, and the ugly" in <i>Ecological Economics</i> 73 (2012)" and The Nature Conservancy's Parks in Peril Programme (2002-2007). <p>Please refer to Section 1, sub-section 1.1.4 <i>Lessons</i></p>

⁴³ Lessons learned have been drawn from projects that were related to the proposed project's topics: governance, participation and capacity building; sustainable production; community forestry; incentives; biotrade and sustainable community-based eco-tourism.

STAP Comment	Response
	<p><i>learned from past and related work, including evaluations of the Project Document for a full description of the lessons learned that have been included in project design.</i></p> <p>The above-mentioned lessons learned refer to the aspects raised by STAP in the sense of promoting production practices that have been proven in the field, are accepted by the producers, and deliver co-benefits for the environment and livelihoods. For instance, good agricultural practices include: 1) Farm planning; 2) Soil management; 3) Selection and use of native varieties of cocoa and species of <i>naranjilla</i>; 4) Reduction in the use of agro-chemicals and substitution by natural pesticides; 5) Silvo-pastoral systems; 6) Pasture management (improvement of pastures, rotation). Moreover, the project will make use of proven technical assistance and training methodologies and will take into account the ethno-cultural characteristics of the beneficiaries to ensure success in the dissemination of sustainable production practices. It is worth to mention the traditional agro-forestry system used (called <i>chakra</i>) by <i>Kichwa</i> producers, where cash crops such as cocoa and coffee are associated with food crops, natural regeneration of timber trees and medicinal plants. Good practices, especially in the case of cocoa and biotrade products, will be promoted within the framework of the <i>chakra</i> system.</p> <p>These good practices will contribute to the maintenance and conservation of ecosystem services (e.g. nutrient cycles, soil formation, hydrological cycle, water quality) and reduction of the contamination of watercourses; and are expected to improve crop productivity thereby contributing to obtaining better incomes by producers.</p> <p>The Project will support the dissemination of good agricultural practices that are linked to incentives mechanisms, taking into account both the economic and financial viability and sustainability of the SLM/SFM techniques promoted. In this regard, the Project incremental financing will complement the National Incentives Program (MAE)⁴⁴ that allocates resources to a broad incentive system⁴⁵. The project aims at strengthening the access to the incentives system by provincial stakeholders. From an institutional perspective, the Project will help enhance coordination among project stakeholders and an enabling</p>

⁴⁴ Aligned with the National Development Plan for Good Living 2013-2017

⁴⁵ For a detailed description of the incentive system present in the project baseline, please see Section 1 of the Project Document.

STAP Comment	Response
	<p>environment that fosters the incentives in the Napo Province⁴⁶.</p> <p>The Project will also promote capacity development of local organizations, taking into account their different levels of consolidation, strengthening them through information access, training and awareness-raising. Therefore, the organizations accessing incentive mechanisms for SLM/SFM could be capable of maintaining their commitments on the long-term. Signing of forest conservation agreements will be a condition for accessing incentives. The project will support the drafting of agreements and monitoring of their compliance. Moreover, a Provincial Sustainable Development Fund will be established⁴⁷.</p>
<p>3. Furthermore, STAP recommends defining specifically the livestock and agricultural practices and the agroforestry systems to be developed under component 2. Currently, the proposal lacks this information. These practices also need to be specified in the project framework as stated above.</p>	<p>The project will develop technology packages for sustainable production of cocoa, naranjilla and livestock production. The technology packages will comprise the following good practices: 1) Farm planning; 2) Soil management; 3) Selection and use of native varieties of cocoa and species of <i>naranjilla</i>; 4) Reduction in the use of agro-chemicals and substitution by natural pesticides; 5) Silvo-pastoral systems; 6) Pasture management (improvement of pastures, rotation). Please refer to a full description of the implementation of these practices under Output 2.1.1 <i>3 technology packages of good practices for cocoa, naranjilla and livestock production; and conservation agreements signed with small and medium sized producers</i>, section 2.4 <i>Project components and outputs</i> of the FAO GEF Project Document. The Results Framework includes indicators and targets for this output (see Annex A of this CEO Endorsement request: Project Results Framework).</p>
<p>4. STAP welcomes the proposal's explicitness in stating that it will define ex-ante baselines on forest carbon during the proposal development (Component 2 description). In doing so, STAP encourages the project developers to define clearly the methodology that will be used to estimate forest carbon stocks. This is because the proposal is currently unclear whether the Ministry of the Environment's (MEA) methodology will be used in combination with FAO's EX-ACT methodology, or whether only one of these methods will be used.</p>	<p>Please see response to GEFSEC's comments #14 and 15 above.</p>
<p>5. For the design of forest, agriculture and livestock certification schemes (Component 2 and 3), STAP</p>	<p>Component 2 will no longer apply international certification schemes but national incentives</p>

⁴⁶ For a detailed description of the causes of uncoordination and lack of access to incentives, please see Section 1 of the Project Document.

⁴⁷ See more details on the Sustainable Development Fund in page 33 above, and in Section 2 of the Project Document.

STAP Comment	Response
<p>recommends that the project developers consult STAP's advisory document "Environmental Certification and the Global Environmental Facility". The advisory document summarizes the evidence base on the effectiveness of certification programs in generating global and local benefits. The document also identifies four main threats to eco-certification awareness (including coffee and timber products) that STAP recommends for the design of GEF certification projects or GEF project components.</p>	<p>mechanisms. As detailed in the response to GEFSEC's comment #14 d), a certification feasibility study based on a market analysis conducted during full project preparation demonstrated that: a) certification under international standards (e.g. FSC) has high costs that are not likely to be covered by the government or private partners after project termination; b) GIZ co-financing has been reduced, reducing the likeliness of ensuring certification schemes' longevity and fee payment after project termination; c) certified timber products are not likely to be sold in the Ecuador's domestic market, since it lacks differentiated prices that could compensate high certification costs. Price premiums are not high enough to offset the costs of certification; d) good agricultural and livestock practices are in their early stage in the Napo Province. The opportunity cost of shifting to sustainable options in addition to applying an international certification standard is too high for this context and stage.</p> <p>Regarding Component 3, the Napo Provincial Government (NPG) is planning to declare the province as a "clean territory", which means an environmentally-friendly province where PAs, buffer zones, and protective forests are managed in a sustainable manner. To this end, GEF resources will support the NPG in the creation of an eco-label named "chakra", which will recognize the production of agricultural goods and native species produced under this traditional system⁴⁸. This eco-label will aim the domestic market, at least as initial step. For a detailed description, kindly see the FAO GEF Project Document, Section 1.1, 2.3 and 2.4.</p> <p>Component 3 has been designed considering the four threats to eco-certification: i) in order to address the risk of weak certification standards, FAO and GIZ will provide their knowledge, technical assistance and/or co-financing to the NPG when designing the eco-label in PY1; ii) to reduce the risk of noncompliance with certification standards, selected pilot areas for labeling will have signed conservation agreements⁴⁹; iii) mitigation actions to reduce limited participation, both from supply-side or demand-side, as well as adverse</p>

⁴⁸ For a detailed explanation about the "chakra" traditional system, kindly see Section 1.1 of the FAO GEF Project Document
⁴⁹ See output 3.1.2 of in the Annex A of this CEO Endorsement request.

STAP Comment	Response
	self-selection, will be considered by the biotrade specialist when designing the eco-label and awareness-raising strategies in PY1.
<p>6. STAP recommends reviewing the global environmental benefits section. Currently, some of the proposed global environmental benefits are not framed as benefits. For example, the following cannot be considered as benefits but as an activity that may ultimately generate global environmental benefits, i) integrated natural resource management has been introduced in buffer zones; ii) reduced pressures in buffer zones have been achieved; iii) carbon emissions have been reduced by controlling deforestation rates; iv) sustainable water management practices have been introduced; and v) sustainable land management practices have been implemented in degraded lands. Furthermore, because of the multitude of benefits the project intends to generate, it may be useful to illustrate in a table the various benefits, their indicators, and methods for measuring and monitoring these indicators. A table format also will exemplify the global environmental benefits associated with each focal area supporting the proposal. In this regard, the benefits derived from sustainable land management are not as apparent as those obtained from biodiversity conservation and sustainable forest management. Sustainable land management benefits are briefly mentioned only at the end of the incremental reasoning section.</p>	<p>The global environmental benefits have been revised accordingly. Please refer to sub-section 2.5 <i>Global Environmental Benefits</i>, of the FAO GEF Project Document.</p>
<p>7. STAP suggests describing further the proposed sustainable tourism pilot activity, including how the revenues will be distributed equally between the various stakeholders. It also would be valuable to cite references (published or rigorous unpublished documents) supporting the links between tourism, biodiversity conservation and livelihoods. One possible reference synthesizing this literature is as follows Coria, J., Calfucura, E. "Ecotourism and the development of indigenous communities: the good, the bad, and the ugly", <i>Ecological Economics</i> 73 (2012) 47-55. The project developers may wish to refer to this document (and other sources cited in this paper) to strengthen further the scientific rationale and design of the pilot intervention on sustainable tourism.</p>	<p>The Ministry of Tourism (MINTUR) within the framework of its Tourism Plan 2020 fosters sustainable tourism as a means of improving rural population livelihoods. The Napo Province is located along the so-called Water Route of the Amazon Region promoted by the MINTUR, in which several bio-routes have been prioritized (water bio-route, bird bio-route, Amazonian cocoa and chocolate bio-route and cinnamon and <i>guayusa</i> bio-routes). It is worth to mention that there are 21 community tourism initiatives in the province, each of them receiving between 200-400 tourists per year. Within this context, sustainable community eco-tourism has been identified as one of the project interventions to improve the livelihoods of the local population while at the same time conserving the forests and their biodiversity. Hence the project will support existing community tourism initiatives to promote their sustainability as well as their contribution to biodiversity conservation.</p> <p>The project will support 7 sustainable community-based ecotourism initiatives, which have been selected on the</p>

STAP Comment	Response
	<p>basis of their location near protected areas and forest areas, potential contribution to increase biological corridors and functional habitats for conservation, existence of community forests to conserve through conservation agreements and the presence of native ethnic groups.</p> <p>The Project strategy comprises the following key interventions: 1) technical assistance to elaborate a manual of good practices in community ecotourism; 2) training for implementation of good practices and to improve the internal organization and entrepreneurial management of the initiatives; 3) formalization of the initiatives with the Ministry of Tourism and the Ministry of Environment; 4) channeling of incentive mechanisms for investments in infrastructure to improve the quality of services provided to tourists; 5) signing of forest conservation agreements with communities as a condition to be benefited with incentives; and 6) value chain plans, supply chain management studies and strategic partnerships for marketing of community tourism initiatives, seeking niche markets that value nature community tourism. A more detailed description is included under Output 3.1.1 <i>Conservation agreements (500 ha) and good practices in sustainable community tourism implemented</i>, Section 2.4 <i>Project components and outputs</i> of the Project Document.</p> <p>These interventions have been designed taking into account lessons identified by Coria and Calfucura, "Ecotourism and the development of indigenous communities: the good, the bad, and the ugly", <i>Ecological Economics</i> 73 (2012), namely:</p> <ul style="list-style-type: none"> • Indigenous ecotourism does not survive spontaneously without the full involvement of the community and the respect and support of the external agents in the design, implementation and promotion of the ecotourism initiatives. • If the stakeholders have different expectations on the results of ecotourism it is very important to incentivize communication among the stakeholders to align objectives and achieve the conservation and development goals. • In the case of indigenous communities, the lack of managerial capacities and severe infrastructure limitations hinder sustainable ecotourism management. <p>Moreover, additional lessons from The Parks in Peril Programme implemented by The Nature Conservancy in Latin America (<i>Turismo, áreas protegidas y comunidades</i>,</p>

STAP Comment	Response
	<p><i>Estudios de caso y lecciones aprendidas del Programa de Parques en Peligro 2002-2007, TNC, USAID</i>) have been taken into account. The programme identified the existence of partnerships between community, private sector and public institutions as a success factor. On the other hand, a challenge identified was the need for an efficient sale of the tourist products. The proposed solution was to engage in a partnership with a strategic buyer.</p> <p>These lessons have been incorporated in the Project Document. For further details, please see Section 1, subsection 1.1.4 <i>Lessons learned from past and related work, including evaluations.</i></p>
<p>8. The proposal suggests climate change affects the fragile ecosystems of the Sumaco Biosphere Reserve, and that component 1 will address this challenge through adaptive capacity. To strengthen the scientific reasoning of the implicit adaptive capacity measures, STAP suggests indicating what are the climate change projections, or trends, in the region, as well as defining explicitly the adaptation capacity interventions that will be mainstreamed into the ecosystem land-use planning and management measures. For this data, as well as adaptation measures that could be mainstreamed across the various interventions, the project developers may wish to consult the World Bank Climate Change Knowledge Portal-http://sdwebx.worldbank.org/climateportal/index.cfm</p>	<p>The Second National Communication to the UNFCCC concludes that in the short-term multiple areas of the Amazon bordering the Andes will experience both increases and decreases in rainfall, while the Eastern part of the region will experience mostly decreases or very slight increases. In the long-term, rainfall will decrease in the especially the easternmost part. All models agree on the systematic warming of the whole country. The National Plan for Good Living includes specific climate targets to reduce impacts and vulnerability in social, environmental, and economic sectors, with which the GEF project is directly aligned, namely: 1) To increase the territorial areas under conservation or environmental management from 30% to 35% in relation to 2008; 2) To reduce the deforestation rate in 30%; 3) To reduce the ecosystems' high level of vulnerability to climate change to 23% and the level of medium threat level to 69%.</p> <p>Component 1 will address adaptation to climate change by including this issue in public planning. Local governments have developed Land Use and Development Plans (LUDPs) but these do not mainstream environmental issues. Moreover, the province does not have a strategy for integrated natural resources management. The project will support mainstreaming of environmental criteria (including climate change issues) in six LUDPs, as well as implementation and monitoring of implementation. This activity will help develop a mainstreaming methodology that will allow the up-scaling to the remaining local governments. The project will also support the development of a provincial inter-institutional participatory strategy for integrated natural resources management. By reinforcing the environmental governance in the province, the project will help</p>

STAP Comment	Response
	<p>strengthen the capacities to reduce and halt the current trends in degradation of soils, water and forests, which in turn will help climate change adaptation. Component 2 will also address adaptation to climate change. For the design of ecological conservation and restoration tools, an important factor will be their compatibility with climate change. Climate change issues will also be included in the training activities proposed by the project aimed at generating technical capacities of the local governments to implement on the ground activities toward sustainable land and forest management. The adoption of sustainable production systems will contribute to adaptation to climate variability and the expected impacts of climate change. Good practices to be promoted by the project include land use planning, farm planning, soil management, agro-forestry (traditional <i>chakra</i> system), and silvo-pastoral systems, which are recognized adaptation measures.</p>

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS⁵⁰

A. DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY:

N/A

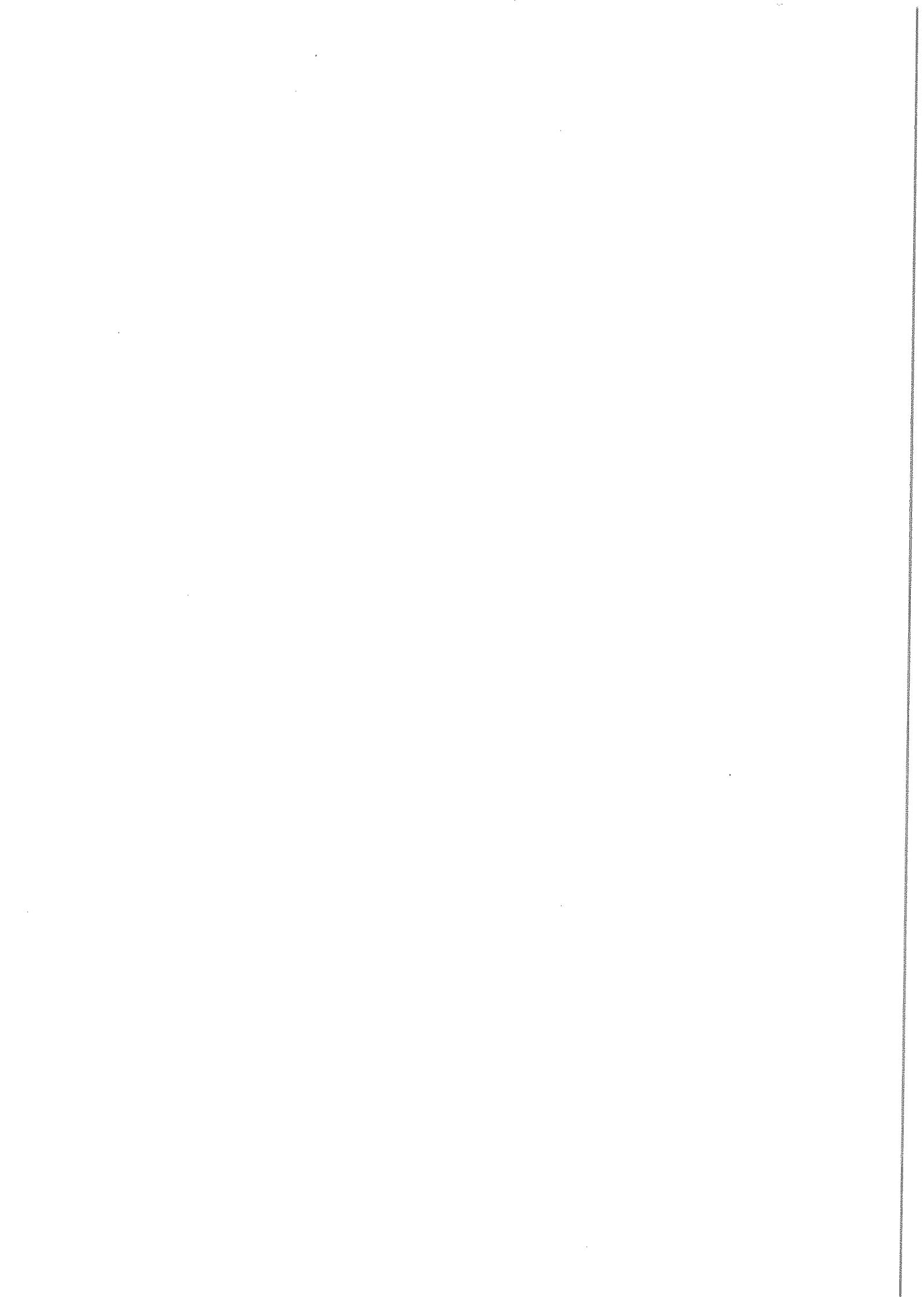
B. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

PPG Grant Approved at PIF:			
<i>Project Preparation Activities Implemented</i>	<i>GEF/LDCF/SCCF/NPIF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
5011 Salaries Professional (Parent)	3087.00		
5012 Salaries General Service (Parent)			
5013 Consultants (Parent)	19000.00	24851.61	
5020 Locally Contracted Labor		1344.00	
5014 Contracts (Parent)	22088.00	15726.40	
5021 Travel (Parent)	3000.00	3633.06	
5023 Training (Parent)	4486.00	3192.35	5595.66
5024 Expendable Procurement	2884.00	181.44	
5028 General Operating Expenses (Parent)		20.48	
Total	54545.00	48949.34	5595.66

⁵⁰ 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.

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

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)





FAO/GLOBAL ENVIRONMENT FACILITY PROJECT DOCUMENT



PROJECT TITLE: CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY, FORESTS, SOIL AND WATER TO ACHIEVE THE GOOD LIVING (*SUMAC KAWSAY*) IN THE PROVINCE OF NAPO

PROJECT SYMBOL: GCP/ECU/082/GFF

RECIPIENT COUNTRY/IES: ECUADOR

RESOURCE PARTNER: GEFTF

FAO PROJECT ID: 615424

GEF/LDCF/SCCF PROJECT ID: 4774

EXECUTING PARTNER(S): DECENTRALIZED AUTONOMOUS GOVERNMENT OF THE PROVINCE OF NAPO (NPG), MINISTRY OF THE ENVIRONMENT (MAE)

EXPECTED EOD (STARTING DATE): JULY 2014

EXPECTED NTE (END DATE): JULY 2018

CONTRIBUTION TO FAO'S STRATEGIC FRAMEWORK

- a. Strategic objective/Organizational Result:** Strategic Objective 2 (SO2): Organizational Result 1 (OO1) and 2 (OO2)
- b. Regional Result/Priority Area:** Climate Change and Environmental Sustainability¹
- c. Country Programming Framework Outcome:** Priority Area 4: Natural Resources Management and Climate Change Mitigation and Adaptation (CPF-4), outcomes 4.1, 4.2 and 4.4²

GEF FOCAL AREA/LDCF/SCCF: BIODIVERSITY, REDUCTION OF LAND DEGRADATION, SUSTAINABLE FOREST MANAGEMENT/SFM-REDD+

GEF/LDCF/SCCF STRATEGIC OBJECTIVES: BD-2, LD-1, LD-3, SFM/REDD+-1

ENVIRONMENTAL IMPACT ASSESSMENT CATEGORY (INSERT √): A B C

FINANCING PLAN: GEF/LDCF/SCCF ALLOCATION:		USD 2,628,283
<u>Co-financing:</u>	NPG	USD 5,987,660
	MAE	USD 2,936,000
	DAG Tena	USD 170,000
	DAG Quijos	USD 78,480
	DAG Archidona	USD 166,364
	DAG Arosemena Tola	USD 65,000
	DAG El Chaco	USD 220,000
	DAG Cuyuja	USD 27,000
	COCASINCLAIR EP	USD 1,000,000
	GIZ	USD 700,000

¹ Based on *Areas of Priority Actions for Latin America and the Caribbean for the Following Biennium (2014–2015)*, taking into account the summary of recommendations of regional technical commissions, 32^{va} FAO Regional Conference for Latin America and the Caribbean. Buenos Aires, Argentina, 2012.

Source: <http://www.fao.org/docrep/meeting/024/md240e.pdf>

² Based on *Marco Nacional de Prioridades para la Asistencia Técnica de la FAO en Ecuador (2013-2017)*.

Source: http://www.cooperacioninternacional.gob.ec/wp-content/uploads/downloads/2013/12/Marco_Nacional_Prioridades_FAO_Ecuador.pdf

http://www.cooperacioninternacional.gob.ec/wp-content/uploads/downloads/2013/12/Marco_Nacional_Prioridades_FAO_Ecuador.pdf

	USAID	USD 50,000
	Rainforest Alliance	USD 500,000
	FAO	USD 420,000
	Subtotal Co-financing:	<u>USD 12,320,504</u>
	Total Budget:	USD14,948,787

EXECUTIVE SUMMARY

Ecuador has a surface area of 256,370 km² and a total population of 14.3 million inhabitants. The country ranks among the 17 most biodiverse countries in the world, hosting around 15% of the endemic species of the planet. The country is politically divided into 24 provinces, one of which, the Province of Napo, constitutes the Project's intervention area. The Province of Napo spans from the Andes Mountains, one of the richest and most diverse biodiversity hotspots worldwide, to the beginning of the Amazon plain, and occupies the upper part of the Napo River system. The province has an extension of 12,504 km², an area that represents 4.87% of the nation's total territory and 10.8% of the Ecuadorian Amazon region. A total of 19 out of the 91 ecosystems reported for Continental Ecuador (MAE 2013) are distributed in the province.

The Province of Napo has a population of 103,697 inhabitants, 56% of which is rural (57,859 inhabitants). The levels of poverty in the province are high; 77.1% of the population is poor, while 42.8% is extremely poor. Agricultural activities and extraction of timber are the only source of income in rural areas and at the same time, they are the key factors that jeopardize the conservation of biodiversity and ecosystem functions.

Unsustainable production practices (agricultural, livestock and forestry) and forest harvesting exert pressure on the natural resources in the buffer zone of the Sumaco Biosphere Reserve and the protected areas of the Province of Napo. It is estimated that 40-60% of the soils of the province are degraded, resulting in a continuous expansion of the agricultural and livestock frontier. An average of 2,932 ha/year is deforested according to most recent records; with 99% of this area converted for agricultural use.

The main driver of biodiversity loss and land degradation in the province is poverty (see figures above). Therefore, the long-term solution to the problem consists in making adjustments in the productive sector by mainstreaming principles of economic and environmental sustainability in the productive systems, the development of value chains based on sustainable production, sustainable forest management, and the promotion of biotrade and sustainable community tourism as new sources of revenue, as well as the incorporation of incentives for conservation of biodiversity, and food sovereignty. Through these actions, rural communities will access opportunities for income, thereby reducing rural poverty without harming the natural resources and contributing to attaining global environmental benefits.

The overall project goal is to address the biodiversity loss and the degradation of soils, forests and water in the Napo province. For this purpose, the project aims at removing three main barriers that currently impede the adequate implementation of strategies for conservation of biodiversity and sustainable management of soils, water and forests: 1) Institutional weakness at local level; 2) Unsustainable agricultural, livestock and forestry production systems that put pressure on the protected areas and biodiversity of the province; and 3) Limited livelihoods of local population that increase pressures on natural resources.

The project strategy to reduce the threats to global environmental benefits is to promote a shift in the current context of insufficient institutional capacities, unsustainable agricultural, livestock and forestry production practices, and limited livelihoods of the local population of the Province of Napo through integrated management of natural resources at provincial, municipal, community and farm levels.

The project's **Global Environmental Objective** is to *promote conservation and sustainable use of globally-important biodiversity, reduce and revert land degradation and deforestation, and improve*

forest management in the Province of Napo. The **Development Objective** is: to increase and improve the provision of goods and services from agricultural, livestock and forestry production in a sustainable manner. The **Specific Project Objective** is to promote biodiversity conservation, sustainable management of soil, forests, and water, through the strategic investment of public resources, participative environmental governance, incentive mechanisms, community-based tourism, and biotrade in the Napo Province.

The project will be implemented through the following components:

1. Institutional strengthening to mainstream biodiversity conservation and integrated natural resource management into participatory land-use planning and management, based on an ecosystem approach.
2. Design and promotion of landscape and agro-forestry production systems that include the sustainable management of water, soil, and forests, while improving local population livelihoods in the Province of Napo.
3. Promotion of biotrade and sustainable community tourism as strategies for biodiversity conservation, sustainable management of natural resources, and improvement of livelihoods for local communities.
4. M&E and information dissemination.

Expected outcomes include the following: i) Environmental thematic axes mainstreamed into at least 6 Land Use Development Plans (LUDPs) for conservation and sustainable use of natural resources. Those axes will comprise sustainable forest management, ecological restoration, sustainable agricultural practices (cocoa in *chakra*, clean *naranjilla*, sustainable livestock), and promotion of community-based tourism in natural areas, biotrade through bio-initiatives, improving ecosystem services in river basins. (Baseline: The province does not have provincial policies for natural resources management); ii) Increase in investments for integrated landscape management: around 21.5% increase in investments for incentive mechanisms: US\$ 2,676,000 by PY4 (Baseline: US\$476,000 in 2013, expected BAU investment by PY4: US\$ 2,200,000); iii) Spatial coverage of integrated natural resources management practices in the wider landscape: 1,720 ha under intensification, adapted to the local context (additional 120 ha of *naranjilla*, 400 ha of cocoa, and 1,200 of livestock production). (Baseline: 250 ha of livestock production with sustainable criteria; 30 ha of clean *naranjilla*, 1000 ha of cocoa production under good practices); iv) Land area of production systems with increased vegetation cover (conservation agreements): 1,764 ha of forests conserved by producers of *naranjilla* (400 ha), cocoa (1,000 ha) and livestock (364 ha). (Baseline: 0); v) Reduction in the rate of deforestation through SFM and conservation agreements (no increase in the deforestation rate after 2014 as direct impact of the project and decrease in 15% in four-years project lifetime as indirect impact) (Baseline: rate of deforestation: 2,735 ha/yr in the Province of Napo for the 2000-2008 period, and estimated in 3,905 ha/yr in 2014); vi) Avoided emissions of CO_{2eq} through protection of forests and reduction of deforestation (avoided emissions during the 4-years project lifetime due to sustainable forest management in amount of 535,275 t CO_{2eq}, and due to forests conserved by producers, inside or around the agricultural systems, in amount of 807,030 t CO_{2eq}) (Baseline: preliminary data estimation with information provided by MAE indicates that the Napo Province's emissions for the 4-years project lifetime could be of 7,681,426 t CO_{2eq} considering 125 t C/ha); vii) 1,000 ha of forests (community or private) conserved through conservation agreements and destined to community tourism or sustainable biotrade practices. (Baseline: 0); viii) 10% increase in the current average income of 200 producers (100 women) working in community-based ecotourism and sustainable biotrade. (Baseline: to be defined at inception/project year 1)

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GLOSSARY OF ACRONYMS

AWP/B	Annual Work Plan and Budget
BH	Budget Holder
CBD	Convention of Biological Diversity
CEO	Chief Executing Officer (GEF)
COOTAD	Territorial Organization, Autonomy and Decentralization Organic Code
DAG	Decentralized Autonomous Government
MDAG	Municipal Decentralized Autonomous Government
PDAG	Provincial Decentralized Autonomous Government
pDAG	Parochial Decentralized Autonomous Government
PEP	Project Executing Partner
FAO	Food and Agriculture Organization of the United Nations
FAS	MAE Forest Administration System
FPMIS	Field Project Management Information System
GEBs	Global Environmental Benefits
GEF	Global Environment Facility
GEFSEC	GEF Secretariat
GIS	Geographical Information System
GIZ	German Cooperation Agency
GoE	Government of Ecuador
ICAA	Initiative for the Conservation of the Andean Amazon
INIAP	National Autonomous Institute for Agricultural Research
INRM	Integrated Natural Resources Management
IUCN	International Union for Conservation of Nature
LTO	Lead Technical Officer
LTU	Lead Technical Unit
LU	Land use planning
LUDP	Land Use and Development Plan
M&E	Monitoring and Evaluation
MAE	Ministry of the Environment
MAGAP	Ministry of Agriculture, Livestock, Aquaculture and Fisheries
MCPEC	Coordinating Ministry for Production, Employment and Competitiveness
MINTUR	Ministry of Tourism
NPG	Provincial Government of Napo
PANE	State Natural Areas Heritage Subsystem
PC	Project Coordination
PIF	Project Identification Form (GEF)
PIR	Project Implementation Review
PF	Protective Forest
PPG	Project Preparation Grant (GEF)
PMC	Project Management Committee
PPR	Project Progress Report
PRODOC	Project Document
PSC	Project Steering Committee
PY	Project Year
RBS	Sumaco Biosphere Reserve
RLC	FAO Regional Office for Latin America and the Caribbean
SFM	Sustainable Forest Management
SLM	Sustainable Land Management
SNAP	National Protected Areas System
STAP	Scientific and Technical Advisory Panel
TCI	Investment Centre Division (FAO)
TNC	The Nature Conservancy
TOR	Terms of Reference
UBM	Unmet Basic Needs

UNCCD	UN Convention to Combat Desertification and Drought
UNFCCC	UN Framework Convention on Climate Change
UN-REDD+	Collaborative Programme for Reduction of Emissions from Deforestation and Degradation of Forests
USD	United States Dollar

SECTION 1 – RELEVANCE (STRATEGIC FIT AND RESULTS ORIENTATION)

1.1 GENERAL CONTEXT

a) *General development context related to the project*

Ecuador has a surface area of 256,370 km² and a total population of 14.3 million inhabitants. The country ranks among the 17 most biodiverse countries in the world, hosting around 15% of the endemic species of the planet (Mittermeier et al., 1999; Myers et al., 2000). The country is politically divided into 24 provinces, one of which, the Province of Napo, constitutes the Project's intervention area. The Province of Napo spans from the Andes Mountains, one of the richest and most diverse biodiversity hotspots worldwide, to the beginning of the Amazon plain, and occupies the upper part of the Napo River system. The province has an extension of 12,504 km², an area that represents 4.87% of the nation's total territory and 10.8% of the Ecuadorian Amazon region. The territory of the province includes low tropical areas, temperate areas and high-Andean moorland areas, in heights ranging from 312 to 5,700 meters above sea level³, which favours a wide diversity of species in all the climate zones. A total of 19 out of the 91 ecosystems reported for Continental Ecuador (MAE 2013) are distributed in the province.

The Province of Napo has a population of 103,697 inhabitants (INEC 2010), 56% of which is rural (57,859 inhabitants). The population is mainly located in the two development poles formed by the cantons Tena/Archidona and Chaco/Baeza, and along the roads and on the banks of rivers (see map in Appendix 7). Most of the population of the province belongs to the *Kichwa* nationality, which together with the *mestizo* population and the *Waorani* nationality are the major ethnic groups. The levels of poverty in the province, measured by Unmet Basic Needs (UBN), are high; 77.1% of the population is poor, while 42.8% is extremely poor. From the point of view of the agrological characterization of the lands of the province, 54.03% of them are forest lands, not suitable for agriculture or livestock; 18.49% corresponds to lands with restrictions for agricultural use, which can be used for livestock production under appropriate land management practices, and finally 27.25% corresponds to lands that are suitable for agriculture⁴.

More than 70% of the territory of the province is under some form of protection. The National System of Protected Areas (SNAP) covers 67.42% of the area with the National Parks Sumaco Napo Galeras, Cayambe Coca, Llanganates, Cotopaxi and the Antisana Ecological Reserve, covering around 550,000 hectares (ha). On the other hand, 151,846 ha have been declared as Protective Forests (PF), where it is possible to carry out limited productive activities in accordance with a management plan; and 155,651 ha have been declared as Forest Heritage areas (both are national categories of forest protection). There are also private and community forests preserved through incentive mechanisms that reach 48,845 ha. More than 6,000 species of vascular plants and 89 species of endemic flora have been reported, 39 of which are endemic to the area and a great part of them are "vulnerable" (according to the International Union for Conservation of Nature – IUCN). In these protected areas

³ Characterization of the Province of Napo. Ecociencia 2008.

⁴ Land Use and Development Plan of the Province of Napo. NPG 2011

82 species of mammals, including 28 bats, 13 rodents and 14 carnivores have been recorded, this last one being a high number in relation to other areas of the country. The province stands out for its great diversity of birds, including endemic and endangered species. To date the existence of 872 species of birds within 64 families has been confirmed. Unfortunately, some of these species are endangered. Moreover 180 species of amphibians and 90 reptiles have been recorded. On the other hand, 65% of the territory of the province is located within the Sumaco Biosphere Reserve (SBR) with 931,930 ha. Surveys carried out in the Valley of Cosanga in the Province of Napo have registered 22 species of mammals, three of which are endemic: *Cryptotis equatoris*, *Thomasomys erro* and *Anoura fistulata*. In another study performed in the foothills of the Sumaco Volcano, 17 species of mammals were recorded, four of which are endemic: *Cryptotis equatoris*, *Thomasomys erro*, *Thomasomys fumeus* and *Anoura fistulata*. In addition, the Antisana moorlands are important habitats for the conservation of resident birds such as the Andean condor (*Vultur gryphus*); some types of ducks (*Anas andium*, *A. spinicauda*, *Oxyura ferruginea*); Andean coot (*Fulica ardesiaca*), Andean gull (*Larus serranus*), Lige (*Vanellus resplendens*), Snipes or Buzzers (*Gallinago Stricklandii nobilis*, *G. jamesoni*); as well as migratory species such as *Calidris bairdii*, *C. alba*, *C. melanotos*, *C. minutilla*, *Tringa melanoleuca*, *T. flavipes*, *Steganopus tricolour* (*Scolopacidae*); *Anas discors* (*Anatidae*) (MAE 2002). In the Antisana Ecological Reserve 42 species of amphibians were registered, which is equivalent to 10.45% of the total number of species registered in Ecuador (MAE 2002).

Productive activities are carried out over an area of 170,000 ha (14% of the provincial territory). The productive activities that can be carried out are essentially defined by the geographical and biophysical characteristics of the province. In this regard, two general regions have been defined: (i) the lowland stretching across the cantons of Tena, Archidona and C. J. Arosemena Tola, and (ii) the highland stretching across the cantons of Quijos and El Chaco. The lowland is generally used for agroforestry and agriculture, while the highland is mainly used for livestock production. The agricultural production system varies depending on the producer's cultural background. The settlers combine subsistence production (yucca, plantain and maize) and income generation. Agriculture and livestock are the main sources of income, with cocoa, *naranjilla* (*Solanum quitoense*) and coffee as the main cash crops. The *Kichwa* producers use the so-called *chakra* system (traditional agroforestry system) in which the main crops (cocoa and coffee) are associated with food crops, natural regeneration of timber trees, and medicinal plants. Livestock production is extensive and is mostly performed in areas with steep slopes. Forests outside the National Protected Areas System (SNAP) are collectively (indigenous *Kichwas* and *Waorani*) and individually (indigenous *Kichwa* and settlers/*mestizos*) owned. The use of these forests is extractive, since it is limited to logging of trees, there is no management of the residual forest (GTZ, 2009) and is followed by conversion for agricultural use. In addition to the extraction of timber, there are many forest species used for food, medicine or fibre. More than 90 species have been identified in the traditional *chakra* system (Ecociencia, 2013). Among the mostly used species are *guayusa* (*Ilex guayusa*), *chonta* (*Bactris gasipaes*), palm (*Aphandra Natalia*), *torquilla* straw (*Carludovica palmata*), lianas and vines, (*pambil* (*Iriartea deltoidea*), *copal* (*Dacryodes peruviana*), cocoa (*Theobroma cacao*) and *achiote* (*Bixa orellana*). Moreover, there are potentially commercial species such as the *ungurahua* (*Oenocarpus bataua*), *sangre de drago* (*Croton lechleri*) and *morete* (*Mauritia flexuosa*).

The diversity of ecosystems in the province makes it attractive for tourism. The province has an interesting network of natural and cultural tourist sites and has a potential for the development of activities such as hiking, rural tourism and bird watching, rafting, kayaking, canopy and rappel, although these are not yet sufficiently developed to be part of national and international tourist packages. The Province of Napo is part of the tourist Water Route - *Yaku Ñamby* – of the Amazon Region, in which several bio-routes have been prioritized: i) the water bio-route in the municipalities of Quijos and Chaco, ii) the bird bio-route in Quijos and Archidona, iii) the Amazonian cocoa and chocolate bio-route in Tena, Arosemena Tola and Archidona, and iv) the cinnamon and *guayusa* bio-routes in Tena. There are 21 community tourism initiatives in the province, each of them receiving between 200-400 tourists per year.

b) Land degradation, threats on biodiversity and forest ecosystems

Forest ecosystems and other ecosystems in the Province of Napo provide a range of services of global and local significance for the livelihoods of the local population, i.e.: (i) biodiversity conservation; (ii) conservation of carbon stocks; (iii) water for human consumption by local populations; (iv) timber and agroforestry systems; (v) non-timber forest products; (iv) food for human consumption from natural and agricultural areas and; (vi) aesthetic and recreational services provided by the water resources and biodiversity for eco-tourism; (vii) water regulation for conservation of electrical energy levels; (viii) prevention of sedimentation for the conservation of the necessary flow levels and the reduction of maintenance costs of hydroelectric projects.

The province is currently at a crossroads with two very different options for the future. On one side the path of preserving the livelihoods of the rural population based on conservation of biodiversity and ecosystem functions,; on the other side, the path of development based on the expansion of the agricultural frontier and primary extraction. Agricultural activities and extraction of timber are the only source of income in rural areas and at the same time, they are the key factors that jeopardize the conservation of biodiversity and ecosystem functions in the province, due to the selective and intensified extraction of timber, deforestation, and non-sustainable production practices.

Selective and intensified extraction of wood

The forestry sector has developed on the basis of an extractive culture linked to processes of occupation of the Amazon, in which the standing forest has not been valued as an ecosystem that produces goods and services. In both collective and individual lands, forests are considered exclusively as land reserves to be distributed to the succeeding generations and as a source of timber, hence the prospect is the conversion of the forest to agricultural use.

The market persistently puts pressure on the forests for timber. The major extraction activities take place in the canton of Tena, according to records of the Ministry of Environment (MAE). The volume of legally produced timber is low mainly due to the high transaction costs related to the procedures involving the legalization of relatively small volumes of wood. The buyers do not pay a substantial difference between wood

with or without a transport permit⁵. At local level, there are no markets that demand wood products with a legal destination. Most of the small landowners outsource their logging activities in order to avoid transaction costs. This implies that the owners of the forests do not manage their properties. It is the sawmills or intermediaries, who do not have a direct connection to the forest ecosystem in terms of living in the land and depending on the forests for livelihoods, that perform this role. Studies have concluded that in the canton of Tena, 98% of the wood that reaches small sawmills (up to 12 m³/month) is illegal, while that percentage reaches 81% in the cases of medium and large establishments (13 to 36 m³/month).

Deforestation

Due to the change in land use for agricultural purposes and selective logging, the deforestation rate in the Province of Napo was 0.21% per year in the 1990-2000 period with an average deforestation of 1,682 ha/year, while for the 2000-2008 period the rate increased to 0.35% per year, or 2,932 ha/year. Analysing the data from both periods, the greater land use change has been recorded in the lowlands, in the cantons of Tena, Archidona, Arosemena Tola and to a lesser extent in El Chaco. During the last analysed period, 99% of the deforestation was due to conversion for agricultural use.

Non-sustainable production practices and land degradation

The main agricultural products in the Province of Napo include cocoa, *naranjilla* and livestock. Their production is associated with deforestation for expansion of the agricultural frontier and land degradation due to non-sustainable production practices.

- *Cocoa*: approximately 6,000 families cultivate cocoa with an average of 1.5 ha, that is to say, a total of 9,500 ha. Even though producers grow cocoa under the *chakra* system, with the increase in production of fine aroma cocoa in recent years, there is a risk of migrating from cultivation in *chakras* to monocultures, motivated by the higher yields obtained under the latter system. This would lead to the expansion of the agricultural frontier at the expense of the forest cover.
- *Naranjilla*: In 2009, the area covered with *naranjilla* in Napo was 1,310 ha with an average yield of 3.6 ton/ha. The sown area corresponded to 26% of the cultivated surface in the country. By 2011, an additional 690 ha were registered, reaching a total of 2,000 ha. The main producing areas include the cantons of Archidona, Quijos and Chaco in the SBR and are distributed in small farms with an average area of 1.5 hectares each⁶. The production system of *naranjilla* in the area of the Sumaco volcano, where most of the production originates, is the so-called traditional system, which generally makes use of land parcels where the primary and secondary forests are cleared or thinned two to four months prior to cultivation. This traditional production system allows the use of the land for 2 to 3 years and after this period new areas of primary forests and protective vegetation are cleared for a new cycle. Soil

⁵ The transport permit is the document that allows the legal transportation throughout the national territory of any forest product and different wood products, from the forest to the destination site or industry.

⁶ MAGAP, 2011. PDOT- GADMA Technical Team

preparation includes the use of herbicides and pesticides, often with poor management, which causes the contamination of soil and water, as well as health problems in communities. The expansion of the cultivation of *naranjilla* is associated with the clearing of land due to: (i) small-scale producers having insufficient access to technological alternatives for *naranjilla* production, making it difficult to improve incomes without increasing the cultivated surface (i.e. deforesting); (ii) poor technology transfer for production, harvest and post-harvest, and lack of sustainable schemes of technology transfer with a value chain approach, and iii) lack of access to soft credits for productive investments.

- *Livestock*: In the last few decades, the Province of Napo has become an important area for livestock production. The most important area for production, especially of milk, is the North of the province in the Quijos and Chaco cantons. On average, the small-scale dairy producers own lands from 10 to 15 hectares in which they have up to 10 head of cattle producing between 4 to 7 litres/day. There are approximately 66,000 ha of pasture in the upper and middle parts of Quijos and Chaco destined to dairy farming, approximately 73% of which are degraded⁷. This is due to the fact that the production systems are based on extensive grazing, where the animals spend a lot of time in large paddocks. This results in the selection of grasses by the cattle and a waste of grass due to trampling. The pasture's productivity deteriorates and decreases in a few years due to the lack of pasture management and the reduction of soil fertility and structure, which leads to the expansion of pastures at the expense of native forests. Renovation of pastures by burning dry grasses during the summer is another practice that adversely affects the vegetation cover and biodiversity in the moorlands. The lack of implementation of best practices is due to: (i) the belief that the low production and growth of native grasses does not justify the subdivision of paddocks; (ii) lack of information, technical assistance, training and financing for implementation of livestock production good practices that are consistent with the conservation of native forests, and iv) the possibility of obtaining better financial returns through livestock production in detriment of forest conservation.

State and perspectives of the Global Environmental Benefits (GEBs)

The economic activity poses risks to the delivery of global environmental benefits in the Province of Napo. Deforestation and non-sustainable agricultural practices, combined with the steep slopes (52% of the province has slopes between 12% and 50%), the type of soil and the heavy rains of the Amazon (3,500 - 4,000 mm/year) lead to soil degradation. In fact, between 40% and 60% of the agricultural soils in the province are considered degraded. Moreover, the conversion of habitats and the contamination caused by the excessive use of agrochemicals affects biodiversity. For instance, farmers hunt the Spectacled Bear (*Tremarctos ornatus*) and the puma (*Puma concolor*) due to the attacks to cattle in pasturelands neighbouring the protected areas. On the other hand, the non-sustainable extraction of timber involves the loss of forest area through the illegal change in land use and the overharvesting of species with commercial value in the market. Through the growing extraction of species of lesser

⁷ Environmental Agenda of the Province of Napo. 2012. (Corti, N., 2010).

value, the forestry production progressively impoverishes until the forests do not generate any value in the short-term through the sale of wood. The result of this process leads to a further increment of the opportunity cost for the forests (especially in the short-term) compared to other land uses and hence finally leads to the change in land use. In addition, the loss of forest cover leads to the reduction of carbon stocks, the reduction in water supply for human consumption, agricultural and industrial production and power generation, and finally the reduction of livelihoods of the local population.

c) Institutional and policy framework

Ecuador is politically and administratively organized in a central government and Decentralized Autonomous Governments (DAGs) at provincial, municipal and parish levels. The main central government institutions related to biodiversity conservation, control of land degradation and sustainable forest management are the Ministry of the Environment (MAE) and the Ministry of Agriculture, Livestock, Aquaculture, and Fisheries (MAGAP).

The **Ministry of the Environment** (MAE) is the Ecuadorian government agency responsible for designing environmental policies and coordinating strategies, projects and programs for protection of ecosystems and sustainable use of natural resources. The MAE issues the regulations to achieve a suitable environmental quality, aiming at a development based on the conservation and proper use of the country's biodiversity and resources. Moreover, it is charged with the administration of the SNAP. The MAE-Napo is the regional branch of the MAE, which aims to contribute to the conservation of the protected areas of Napo, the promotion of sustainable development in the buffer zones and the sustainable management of forests in the territory. It is also responsible for promoting local compliance with environmental policies.

The **Ministry of Agriculture, Livestock, Aquaculture, and Fisheries** (MAGAP) is the institution in charge of regulating, facilitating, monitoring and evaluating the production of agriculture, livestock, aquaculture and fisheries in the country. It promotes rural development, sustainable growth of rural production and productivity, and supports producers' development, in particular family farmers. The MAGAP implements a number of programs, namely: "Competitive Agriculture and Sustainable Rural Development", "National Programme for Rural Inclusive Businesses", "National Programme for Technological Innovation and Participatory Agricultural Productivity", "Sustainable Livestock Programme" and the "Ecuadorian Cocoa Sector Recovery Programme".

The **Ministry of Tourism** (MINTUR) is the government body that leads the tourism activity in Ecuador. It pursues the development of the sector in a sustainable, conscious and competitive manner, through its roles in regulation, planning, management, promotion, distribution and control. MINTUR's strategic areas of work are: i) the promotion of conscious tourism that fosters coexistence, responsibility and respect among the visitors, the host communities and the natural and cultural heritage; (ii) development of the country's tourist offer and increase of quality standards for the services offered at the tourist destinations in accordance to international standards and parameters; and (iii) incentivizing domestic tourism by increasing the Ecuadorians' knowledge of their country, in-country travelling, and enriching themselves through

the natural and cultural experiences that Ecuador offers. MINTUR has developed the Tourism Plan 2020 (PLANDETUR); its vision is to consolidate sustainable tourism as an effective tool for the comprehensive development of the country with social gains, generating employment opportunities and improving the livelihoods of the populations, and promoting conservation. Moreover, the plan seeks to position Ecuador as a destination for quality services, to guarantee the management and development of tourist operations as well as the cultural and natural wealth, in addition to articulating the tourism value chains with connectivity and infrastructure suitable for tourism.

Since the enforcement of the Constitution and the Territorial Organization, Autonomy and Decentralization Organic Code (COOTAD) in 2008, the DAGs also have a higher level of competence in the area of environmental management, production and territorial organization and planning. The Provincial Governments are charged with promotion of environmental, productive, and rural infrastructure management. The Municipal Governments have the responsibility to define urban and rural land use, while the Parochial Governments have responsibilities in the promotion of community-based production practices and biodiversity preservation. The responsibilities regarding reforestation for conservation purposes are concurrently held between the MAE and the Provincial and Parochial Governments. MAE defines the guidelines and monitors the reforestation processes, while DAGs are the executing agencies⁸.

The **National Plan for Good Living (NPGL) 2013-2017** is the national development plan. Its objectives address renewable and non-renewable natural resources use, and improvement of livelihoods. Among them: Objective 7: *To guarantee the rights of nature, and promote territorial and global sustainability*; 8: *To consolidate the social and solidary economic system, in a sustainable manner*; 10: *To promote the transformation of the productive matrix*. Ecuador is aiming to change the energy matrix towards more sustainable and renewable sources of energy. Several renewable energy projects are being promoted in the country, mainly related to hydroelectric power. The largest hydroelectric power station of the country, COCASINCLAIR EP, is currently being built in the Province of Napo and is expected to be operational in early 2016. The NPGL seeks the extension of areas for conservation and environmental management, and the recovery of degraded areas through reforestation and natural regeneration processes. In the framework of the Objective 7, the NPGL proposes the increasing of surface area under restoration to 300,000 ha.

The **National Environmental Policy (PAN)** is the framework for the implementation of environmental policies and seeks to ensure adequate socio-environmental management in Ecuador. It is based on three main pillars: i) institutional management of the environment; ii) consideration of the ecosystems' physical boundaries; and iii) social participation. The PAN seeks to make Ecuador "*a country that preserves and makes appropriate use of its biodiversity so as to maintain and improve the quality of life by promoting sustainable development and social justice, recognizing water, soil and air as strategic natural resources*".

The **Strategic Plan of the SNAP 2007-2016** has several objectives: (i) to consolidate the SNAP; (ii) to contribute to the effective management of the SNAP, strengthening the capacities of the National Environmental Authority and staff responsible for administration and management of the subsystems; (iii) to promote comprehensive

⁸ As defined by the National Competence Council in the framework of the decentralization process.

management through the participation of all stakeholders, such as the DAGs and communities, among others; (iv) to promote the establishment of a favourable regulatory, institutional and financial framework; v) to reach a long-term financial sustainability and to implement financing mechanisms for the subsystems; (vi) to increase information access to support management decision-making; and (vii) to improve the governance of the State Natural Areas Heritage Subsystem (PANE) by means of handling conflicts in land tenure.

The **National Biodiversity Policy and Strategy** promotes a vision of sustainable conservation and use of biodiversity by the year 2020, through several strategic guidelines: (i) consolidate and enhance the sustainability of the productive activities that use native biodiversity; (ii) ensure the existence, integrity and functionality of the components of biological diversity: ecosystems, species and genes; (iii) balance the pressures for the conservation and sustainable use of biodiversity; and (iv) ensure that the benefits of biodiversity conservation and use, traditional knowledge, innovations and practices of local people and communities, are fairly distributed.

The MAE's **National Programme for Sustainable Biotrade** supports the sustainable development and conservation of biodiversity in accordance with the objectives of the Convention on Biological Diversity (CBD) through the promotion of trade and investment that will enhance the use of these resources. The programme focuses on three main areas: i) natural ingredients and finished products in the pharmaceutical and cosmetic industry; (ii) natural ingredients and finished products in the food industry (including aromatic species); and (iii) sustainable tourism.

d) Problems the project will address

The unsustainable practices used in production (agricultural, livestock and forestry) activities and forest harvesting exert pressure on the natural resources in the buffer zone of the Sumaco Biosphere Reserve (SBR) and the protected areas of the Province of Napo. It is estimated that 40-60% of the soils of the province are degraded, resulting in a continuous expansion of the agricultural and livestock frontier. An average of 2,932 ha/year is deforested according to most recent records; with 99% of this area converted for agricultural use. The project will address the problems of biodiversity loss and degradation of soils, forests and water in the province that have been detailed in subsection b) above.

As explained, the main driver of biodiversity loss and land degradation in the province is poverty. Forest harvesting and agriculture and livestock production are the only income sources in rural areas. Therefore, the long-term solution to the problem consists in making adjustments to the productive sector by mainstreaming principles of economic and environmental sustainability in the productive systems, the development of value chains based on sustainable production, sustainable forest management, and the promotion of biotrade and sustainable community tourism as new sources of revenue, as well as the incorporation of incentives for conservation of biodiversity, and food sovereignty. Through these actions, rural communities will access opportunities for income, thereby reducing rural poverty without harming the natural resources and contributing to attaining global environmental benefits.

1.1.1 Rationale

- a) *Baseline projects and investments for the next 3-5 years addressing the identified GEB threats (main co-financing sources of the project)*

The Government of the Republic of Ecuador (GoE), the DAGs and other stakeholders implement diverse initiatives addressing the conservation of biodiversity and sustainable management of soils, forests and water. These initiatives are herewith described as per the project's components.

1. Institutional strengthening

The Decentralized Autonomous Government of the Province of Napo (**NPG**) is currently working on the planning, socialization and validation of an institutional strengthening process. A major part of the province is located within the SBR. The Environmental Leadership School (ELS) is being implemented with the support of GIZ and MAE with the objective of involving the communities in the SBR management and helping them exercise their right to participate in the conservation activities in the reserve. The ELS trains community leaders in the following issues: 1) rights, identity and citizenship; 2) natural resources management; 3) climate change; 4) environmental governance; 5) leadership and community organization; and 6) project formulation and management. The ELS was incorporated into the NPG in 2012. Within this context, a proposal for establishing an NPG Knowledge Management Centre as an entity to provide training and technical assistance has been prepared and approved by the Provincial Chamber, and will be implemented in the near future. The NPG is responsible for forest and environmental governance in the province, as determined by the COOTAD.

The Ministry of the Environment/Regional Branch #2 (**MAE R2**) works in strengthening of the forest and environmental governance in the province in coordination with the NPG. Both institutions coordinate efforts for generating and managing environmental information, environmental inputs and directives for land zoning, and initiatives for conservation and sustainable use of the NP's natural resources. Since 2012, MAE has implemented the *One-stop System for Environmental Information* (SUIA), which provides access to validated, standardized, integrated, consistent, timely and reliable environmental information (statistic, geographic and documentary). This database facilitates the access to key data for informed decision-making.

Since 2008 the GESOREN Programme, financed by the **German Technical Cooperation Agency** (GIZ), has facilitated a process of participatory environmental governance with the NPG, MAE R2, the provincial branches of MAGAP and MINTUR, municipal and parochial DAGs, producer associations, private sector and NGOs. The process has supported the organization of stakeholders in thematic roundtables that meet on a monthly basis, aiming at coordinating efforts, agreeing projects and plans, and carrying out joint actions. The NPG leads the cocoa, tourism, *naranjilla*, and the Quijos Valley Corridor roundtables, while the MAE leads the forestry roundtable.

MAE (with BIOCAN), the NPG, and non-governmental stakeholders with the support of GIZ-GESOREN organized the First Provincial Forum on Natural Resources Governance in August 2013.

Since 2012, **FAO** implements in the Province of Napo the Project TCP/ECU/3401 baby 2: *Institutional strengthening to mainstream the sustainable use of renewable natural resources in the participatory management of the territory*. This project seeks to develop technical instruments to strengthen the NPG's interventions in natural resources management. The project supports the analysis of deficiencies and constraints that block the mainstreaming of soil and biodiversity conservation criteria into land use and development plans (LUDPs). It has also generated an assessment of political and institutional risks that could hinder the strengthening of natural resources governance; a capacities needs assessment to mainstream biodiversity conservation and natural resources management in landscape management; and has supported the design of an incentives system for integrated landscape management.

GIZ is starting the implementation of the ProCamBio Programme 2014-2016 with the following objective: "*indigenous communities and producer organizations implement models for conservation and sustainable use of biodiversity taking into account climate change*". The Napo Province is one of the selected intervention areas. ProCambio is supporting the institutional strengthening through: i) the promotion of participatory biodiversity monitoring systems; ii) supporting the Corridor Promotion Group in developing and implementing a connectivity strategy for landscape management; iii) designing and implementing conservation mechanisms in collaboration with hydroelectric plants; iv) providing technical assistance to the implementation of the National Incentives Programme (which includes SocioBosque⁹, SFM and REDD+ measures); v) M&E of the ecosystem-based adaptation measures; and vi) supporting MAE in mainstreaming conservation agreements into LUDPs. ProCambio is directly related to the three proposed project components.

2. Sustainable management of water, soils and forests, and improvement of the population's livelihoods

In the last five years, several financial and non-financial incentives have been promoted in the Province of Napo to strengthen rural production or natural resources conservation.

- ***Socio Bosque*** is an incentive implemented by the MAE for conservation of forests and moorlands through financial disbursements to rural producers. This incentive was launched in 2008 and until the beginning of 2013 has reported over a million hectares of forests and moorlands conserved at national level, with over US\$14 million invested annually. *SocioBosque* maintains 48,845 ha under conservation agreements in the Province of Napo.
 - ✓ ***Socio Bosque – conservation*** (MAE): Financial incentive for conservation of forests and moorlands through a monetary disbursement with maximum allocations of US\$60 ha/yr for moorlands or US\$35 ha/yr for forests, depending on the area to be conserved.
 - ✓ ***Socio Bosque – restoration*** (MAE): Financial incentive promoting the rehabilitation of degraded areas or areas under natural regeneration with the purpose of recovering ecosystem services. This category includes abandoned cultivated or pasture areas or forest areas that have been subject to logging.

⁹ Socio-bosque Programme is described below.

The amount allocated under this incentive is 70% of the amounts disbursed by *Socio Bosque* – conservation.

- **National Concurrent Plan for Reforestation (MAE):** Financial incentive within the framework of the National Reforestation Plan, which makes funding available to the DAGs through programmes and projects that may be submitted for afforestation and reforestation with conservation purposes within their respective territories.
- **Reforestation for commercial purposes (MAGAP):** Financial incentive within the framework of the National Reforestation Plan that provides financial support to reforestation for productive purposes.
- **Forestry advisory services (MAE):** Non-financial incentive that consists in the provision of technical assistance to small-scale forestry producers by forestry technicians to elaborate forest harvesting plans and programmes.
- **Assistance for agricultural and livestock production (NPG):** Non-financial incentive that supplies inputs for agricultural and livestock production, tourism and biotrade, such as: seeds, grasses, animal health products, equipment and infrastructure for value adding, training and technical assistance for improvement of production.

Moreover, there is a very relevant local case of Payment for Environmental Services for conservation of water sources implemented by the Chaco Municipal DAG where payments are funded through an environmental fee included in the water bill. According to studies carried out in the Andean region, 61% of the urban population is willing to pay for protection of watersheds. The Chaco municipality collects US\$0.68/m³ and has signed compensation agreements of up to US\$60 ha/year through which the population commits to implement protection and restoration activities.

In terms of forest harvesting, the MAE has developed the **Forestry Administration System (FAS)** and since 2010 provides free technical assistance to small-scale landholders through two forestry technicians, consisting in subsidized forest stewardship and forestry extension. The FAS contains information on the forest harvesting plans and constitutes a compulsory registry of forest landowners, identified legal traders, transporters and destinations (collection centres, lumber yards, sawmills). MAE issues local certificates of origin as a first exercise to establish a formal legal timber system in the NP. This local certificate is extended to a landowner under the following criteria: i) the landowner has received MAE's advisory services; ii) the landowner has a forest harvesting license for that land; and iii) the collected timber will be destined to a social/public work.

The Coordination Ministry for Production, Employment and Competitiveness (MCPEC), MAGAP and MINTUR are in the process of constructing and implementing the **Agenda for the Productive Transformation of the Amazon**, which includes several areas. The Agenda seeks to develop proposals of sustainable livestock production and reconversion, and genetic improvement. The Agenda also promotes nature tourism giving key importance to water, forests and the traditional *chakras* roles. The Agenda identified potential high potential for biotrade in the NP and promotes the increase of extension, advisory and financial services to biotrade products through MAGAP, MAE, the Ministry of Social and Economic Inclusion (MIES), and the Institute for the Ecological Development of the Amazonian Region

(ECORAE). The MCPEC has elaborated an agenda for productive transformation specific to Napo, which also identifies the potential of tourism and biotrade in the province.

MAGAP's **National Plan for Sustainable Livestock Production** pursues in 2014-2019 the improvement of livestock productivity and reproductive indices that are environmentally sustainable. This Plan promotes the adoption of practices and strategies that lead to optimized production processes and energy efficiency. In NP, the Plan is implementing activities as: pastures and forages conservation, electrical fences installation, support to dairy networks, and promotion of best farming practices. In addition, MAGAP has launched the Programme for Promotion and Support to the Productive Development of Fine Aroma Cocoa, aimed at establishing forest plantations, technological innovation and participatory dissemination in NP, among other provinces.

The NPG is responsible for productive development and environmental management in the province and implements productive development activities within the framework of its **Production and Environmental Agendas**. The Environmental Agenda has promoted the creation of the Quijos Valley Conservation Corridor; provides technical assistance to DAGs and other organizations willing to implement reforestation and forest restoration programmes; and supports the reduction of greenhouse gas (GHG) emissions and a provincial strategy for climate change adaptation. The Productive Agenda promotes environmental-friendly production practices such as: building collection centres for clean *naranjilla*, providing technical assistance and supply of equipment to sustainable livestock producers; and cultivation of fine aroma cocoa in agroforestry systems under the *chakra* scheme.

The **National Autonomous Institute for Agricultural Research** (INIAP) is responsible for research, development and technology transfer in several products. INIAP has developed the *naranjilla* hybrids *Puyo* and *Palora*, the latter introduced in 2002 and used especially for juice production. In 2009, INIAP launched the new improved variety INIAP-*Quitoense* 2009 of greater resistance and productivity than the afore-mentioned, which is gradually gaining producers' acceptance. The variety has been widely promoted in the *Hollin-Loreto* Corridor in Napo through a clean *naranjilla* technology package that has been compared to the traditional and organic production systems. Given the existence of sanitary problems due to infestations by fungi and nematodes and in response to the interest of producers of El Chaco, research is being carried with wild *naranjilla* (*Lasiocarpa* variety) with positive results. The San Carlos Experimental Station INIAP of Napo contributes to disseminate good production practices including natural resources management and conservation, improvement of productivity and livelihoods. INIAP has worked along three cocoa lines: establishment of an *ex-situ* seed bank of Amazonian cocoa; research of promising clones for productivity improvement; and integrated pest management with emphasis on Monilia Pod-Rot (*Moniliophthora roreri*), Black Pod-Rot (*Phytophthora sp*) and Witches Broom (*Crinipellis pernicioso*). Moreover, INIAP has delivered training to producers on agroforestry systems management.

GIZ within the framework of the **ProCamBio Programme** (2014-2016) will support the following types of interventions: i) implementation of a comprehensive forest and wildlife management strategy in coordination with the SFM incentive system (governance, participatory control system, increase of sustainable management, reduction of illegal logging and deforestation); and ii) promotion of conservation

agreements and sustainable flora and fauna management.

Rainforest Alliance implements the project Initiative for the Conservation of the Andean Amazon (ICAA) in seven communities of the Hatun Sumaku parish in Napo. ICAA promotes planning and use of sustainable practices for natural resources management, improvement of environmental governance through institutional strengthening; and improvement of livelihoods through forest management, sustainable agriculture, community tourism and conservation incentives. The project's Support Unit is executed by the company International Resources Group (IRG), which will carry out studies for ecosystem services valuation in the province.

The UN Collaborative Programme for Reduction of Emissions from Deforestation and Degradation of Forests in Developing Countries (UN REDD, UNJP/ECU/083/UNJ) is implemented in Ecuador with the technical assistance of FAO, UNDP and UNEP since 2012. The UNREDD+ Programme has a national scope and includes interventions in the Province of Napo, such as local capacity development for monitoring of forest resources. The programme's expected outcome is that Ecuador achieves a REDD readiness state for implementation of the REDD+ mechanism at national level with the involvement of the relevant institutions and local stakeholders. The programme pursues the increase in skills and instruments by these stakeholders to enable them to exercise their right to a healthy and secure environment and environmental security. Among the programme's objectives are the conservation of biodiversity, integrated management of natural resources, environmental management and the development of responses for adaptation and mitigation of climate change. More specifically, it promotes the implementation of a plan for reduction of carbon emissions from deforestation and degradation of forests, and the establishment of a system for measurement, reporting and verification of such reductions.

Since 2012 the UN REDD programme has provided support to specific activities included in the National REDD+ Strategy, which are a part of the country's readiness phase. These activities are coordinated with the national efforts and with the German-financed technical and cooperation programmes, which also seek to support the preparation phase for implementation of REDD+. This programme proposes six outputs in Ecuador: (1) national forest monitoring system designed and implemented; (2) consultation process and engagement of the civil society, communities, indigenous peoples and nationalities, Afro-Ecuadorian and Montubio peoples, and sub-village communities in REDD+ at national level; (3) policies and instruments for implementation of REDD+ developed; (4) development of the operational framework necessary for implementation of the REDD+ mechanism; (5) multiple environmental and social benefits secured; and (6) design and implementation of the benefit-sharing system.

The hydroelectric enterprise **COCASINCLAIR EP** works through its Environmental Sub-directorate in the highlands of the cantons of Quijos and Chaco. In the upper Coca River basin, COCASINCLAIR is launching a programme for integrated watershed management with local and institutional stakeholders. In the Quijos and Salado sub-basins, COCASINCLAIR has carried out initial stakeholder analyses and eco-workshops for awareness-raising, information dissemination and training focused on natural resources governance. In El Chaco (Quijos Valley Conservation Corridor), the company is implementing a programme for integrated farm management and establishment of field schools, along with MAGAP-INIAP.

COCASINCLAIR has also contribute to elaborate the La Cascada PF Management Plan (see maps in Appendix 7) and to rehabilitate riverine forests, in collaboration with DAGs.

3. Promotion of biotrade and sustainable community eco-tourism

The **2020 Tourism Plan** of the Ministry of Tourism (MINTUR) fosters tourism in the NP through the Amazonian **Water Route – Yaku Ñamby**, which includes attractions such as: hot springs in Papallacta, Quijos River, petroglyphs of the Cotundo Sacred Valley, Jumandy caves, Misahualli River, Tena River (rafting), Anzu River beach, Llanganates Mountain Range, Sumaco National Park, San Rafael waterfalls, Jatun Yacu River (rafting). Projects to be implemented during the next years include: improvement of the tourist facilities in Tena and the parishes of Misahualli and Talag (trails, sanitary facilities); the Salcedo-Tena route; and the Cocoa Route and its three sites: Cocoa Garden, Cocoa Town and Cocoa Eco-center. MINTUR also provides technical assistance, promotion and training to the community tourism initiatives in the province.a,

According to MINTUR-Napo, there are 21 community-based tourism initiatives in the province. In this context, MAE promotes two community-based tourism initiatives in protected areas (PAs) in the NP: the *Oyacachi* hot springs, and visits to the Sumaco Volcano organized by the *Pacto Sumaco* community. Park rangers give technical support to community-based initiatives located in the buffer zones of PAs (e.g.: communities of *Tambo* (Antisana Ecological Reserve) and *Wamani* (Sumaco Napo Galeras National Park).

The NPG has a key role in promoting productive activities. In light of this, NPG supports community-based tourism initiatives through investments in infrastructure (e.g. cabins, trails), technical assistance, and training in organization and entrepreneurship (e.g: Shinchipura, Tamia Yura and Shiripuno communities have received this support).

Biotrade has been greatly promoted in recent years, mainly by **Kallari Association** and the **RUNA Foundation**. The Kallari Association has 800 member families and produces cocoa. In 2008, the association exported 85 tons of cocoa and currently has begun to commercialize manufactured products such as chocolates, handcrafts and jewellery. RUNA comprises 1,696 producers in 134 communities who produce *guayusa* and is currently exporting leaves for brewing.

The **GIZ ProCamBio Programme** (2014-2016) will provide technical assistance for *chakra* system management and development of innovating products (biotrade); it will also support the implementation of the Sustainable Tourism strategy in the province.

b) Remaining barriers to address threats on GEB

Baseline studies and assessments during this full project document preparation identified three main barriers that currently prevent biodiversity conservation and sustainable soil, water and forest management strategies from being adequately implemented in the Napo province:

1. Institutional weakness at local level; poor inter-institutional coordination between local, provincial and central levels; lack of capacities and training for INRM and incentives access; incomplete BD information

Ecuador has gone through transcendental institutional changes since 2007. A new national Constitution was approved, including the Nature's rights, land use planning and management. Governmental authority has been decentralized, bringing forth new challenges and roles in planning processes at all decision-making levels. This new institutional framework has generated the need of promoting renewed coordination for natural resources governance at national, provincial, municipal and parochial levels. However, coordination has failed sometimes, mainly due to the weak policy articulation between different government agencies often leading to contradictory policies on biodiversity conservation and natural resources management. The weakness this project aims to address is inserted in this context.

A MAE study on environmental governance¹⁰ concluded that the Napo Province has a strong need of developing an inter-institutional structure for environmental planning, which may coordinate different sectors. Lack of capacities and insufficient training of local decision-making¹¹ and technical¹² staff, as well as civil society, are barriers that block the timely mainstreaming of strategies for conservation and sustainable use of natural resources in the participatory land use planning of the Napo Province. The study also identified capacity and technical assistance needs.

The provincial institutions responsible for natural resources management, conservation and land use have no operating coordination mechanisms for decision-making. Even though many parochial, municipal and provincial plans include statements and project ideas to sustainably manage natural resources, protected areas and micro-basins, neither land-use criteria nor integrated natural resources or watershed management approaches are effective part of these initiatives. None of the 24 LUDPs managed by DAGs in the NP include environmental criteria. The main causes are: a) local decision-makers or DAGs staff elaborating the LUDPs have limited knowledge about integrated natural resources management (INRM); b) there is a limited planning capacity in the DAGs; c) inter-institutional coordination between municipalities, province and central government is very weak; and d) in some cases, political will to support inter-institutional processes is reduced.

Some coordination efforts promoted by GESOREN have empowered particular sectors through the thematic roundtables for cocoa, *naranjilla*, forestry and tourism, and the Quijos River Valley Management Committee. However, a coordination mechanism for livestock producers is missing, despite the heavy impact of this activity on local GDP and the natural base. Likewise, protected areas in the NP are lacking dedicated management committees, making the involvement and participation of key stakeholders difficult.

Biodiversity and natural resources information is incomplete and disperse in the NP. At provincial level, thematic maps, inventories and environmental indicators are discontinued. At municipal and parochial levels most information is available at wider scales and is not appropriate to guide local decision-making on landscape management. There is no mechanism to help the province organize and manage such

¹⁰Conducted through the BIOCAN project

¹¹ Provincial, municipal and parochial DAGs and Planning Councils

¹² Provincial branches of MAE and MAGAP in Napo Province

information for decision-making purposes. Although the NPG has a Geographical Information System (GIS) Unit it has neither sufficient trained staff for operation and maintenance nor the updated equipment or systems for an adequate management of the spatial and alphanumeric information. Moreover, there is no ecological zoning identifying the areas with aptitudes for conservation, rehabilitation or sustainable management. These constraints affect the environmental governance by decreasing the capacity of taking effective decisions in regards to environmental management and land use in the province.

MAE, MAGAP and NPG implement several financial and non-financial incentive mechanisms addressing conservation, rehabilitation of degraded areas and production (see previous sub-section). Although these incentives are available in the NP, there is a low degree of implementation due to the lack of dissemination and socialization of information to facilitate access by the potential beneficiaries. The incentives are not implemented in a coordinated manner and do not mainstream INRM nor valuation of ecosystem services considerations. Therefore, the current incentives' potential for delivering global environmental benefits is limited. Furthermore, the DAGs do not have sufficient technical capacity to prepare proposals to access financing within the National Concurrent Plan for Reforestation.

2. Unsustainable agricultural, livestock and forestry production systems put pressure on protected areas in the Napo province

In Napo, more than 50% of soils are Forest Vocation Lands¹³, while 27.25% have agricultural aptitude. The central government, mainly through MAGAP, and the Provincial Government have encouraged different methods and approaches to improving agricultural production in recent years. However, government support has mainly focused on inputs supply to increase production, overlooking sustainability considerations. This approach, coupled with steep slopes¹⁴, has led to a rapid decline in land productivity, and degradation of soils and water. Given that agricultural soils in the NP are very degraded (from 40% and 60% of land), farmers usually clear forest lands to maintain their production levels.

In addition, the expansion of the agricultural and livestock frontier in detriment of forests is not addressed in a systematic manner by LUDPs in the province. Local farmers have low-level awareness of forests benefits and ecosystem services, and of how their economic activities impact on the environment. Deforestation has increased from 1,682 ha/yr (1990-2000) to 2,932 ha/yr (2000-2008).

Sustainable livestock practices are rarely applied in the province, which has 66,000 ha of pastures for livestock, while only 250 ha under sustainable management.

¹³ Forest Vocation Lands (FVL) are those that, due to their physical site features such as soil, topography, and the rainfall they receive, should be kept under forest cover or other sustainable land use if soil or water related negative externalities are to be avoided. FVL classification does not depend on the type of cover the land actually has, nor does it depend on how they attend to the requirements of the agriculture crops or forest production. Therefore, lands with no forest cover or use can still be classified as FVL if their physical features so indicate; while lands covered with forest may not be FVL.

Source: Nascimento, José Rente (2005). Forest Vocation Lands and Forest Policy: When Simpler is Better. RUR-05-03. Washington D.C.: Inter-American Development Bank.

¹⁴ That represent more than 50% of the province's land (52%) with an inclination varying 12%-50%.

Sustainable *naranjilla* production using low levels of agro-chemicals (“clean *naranjilla*”) has started to be promoted. However, only 30 ha of the total 2,000 ha in the province apply this clean approach.

Rural producers lack knowledge and technical assistance for land use planning, hence have low awareness on which areas should have productive uses and which should be set aside for conservation purposes. Due to the afore-mentioned reasons, the use of environment-friendly practices is limited. Technological alternatives for production are being generated and validated, but very few are already available among farmers. There is a lack of sustained technology transfer under value chain approach. Trade is difficult because the links within the supply chains are long especially for *naranjilla* commercialization. Large numbers of stakeholders control the value chain in processing and commercialization. Small-scale producers are usually marginalized from the benefits provided by the prices paid in markets. In addition, access to soft credits is inexistent, and therefore small-scale farmers lack sufficient financial resources to make production investments. These shortfalls cause low-yield and low-income production systems that indirectly lead to use deforestation as a mechanism for increasing production and livelihoods among farmers.

Cocoa represents a special case. In NP, 2,500 ha of the total 9,500 ha cultivated under *chakra* system produce certified cocoa. The *chakra* system implies low-scale production (sometimes in 1 hectare) and multiple crops and animals in the same lands, using a rotation principle. Monoculture is the opposite approach to the *chakra* system. However, in the last years, the intensified cultivation of fine aroma cocoa has led to an increase in cocoa productivity and prices increased in the domestic market. . This new context has generated a risk of migration to cocoa monocultures and expansion of the agricultural frontier.

The NP is lacking a Sustainable Forest Management (SFM) strategic document, even if at national level a Sustainable Forest Development Strategy has been prepared. Discussions on SFM, value chains and reforestation have been promoted within the forestry roundtable. However no common concepts, strategies or approaches to long-term conservation and livelihoods of the forest-dependent peoples have been agreed yet in the NP.

The NP has three Protective Forests (PFs)¹⁵ (Colonso, Cerro Sumaco and La Cascada)¹⁶. The Colonso and La Cascada forests have global Management Plans while the Cerro Sumaco plan is being elaborated. However, the communities that live and carry out production activities within the PFs lack Co-management Plans. Preparation and implementation of these Co-management Plans is limited due to: i) the lack of training of the communities to carry out SFM and sustainable timber and

¹⁵ Protective Forests are natural or cultured forests and vegetation that meet one or more of the following requirements: a) Have as key function the conservation of soil wildlife; b) Are located in areas that allow the control of torrential rainfall events, or the preservation of watersheds, especially in areas of low-level rainfall; c) Occupy eyebrows or mountain areas adjoining water sources, streams or reservoirs; d) Represent windbreaks or barriers to protect the environmental equilibrium; e) Be in hydrological-forestry research areas; f) Be located in strategic areas for national defence, g) Constitute a defence for natural resources and public infrastructure.

Source: FAO, Evaluación de los Recursos Forestales Mundiales 2010. Informe Nacional Ecuador. <http://www.fao.org/docrep/013/al495s/al495s.pdf>

¹⁶ Which account for 106.880 ha in the NP

non-timber goods production; and ii) few coordination between technical assistance and financial incentives that prevents investments to be channelized.

Illegal commercialization of timber is still a huge barrier for SFM in the province. MAE has not still fully implemented a timber traceability system to reduce or eliminate this illegal trade. An initial effort is being carried out under the Forestry Administration System (FAS) where the MAE has issued the first certificate of origin to landowners. The effort is incipient and requires capacity building.

Several institutions are promoting the plantation of trees pursuing different objectives: timber production, protection of river basins and river banks, and restoration of degraded soils for conservation and productive purposes. Although there are several options for reforestation and restoration that range from pure plantations in degraded soils by introducing trees in productive systems (agroforestry), to the promotion and management of natural regeneration, these activities are still incipient. According to MAE records, only 145 ha were reforested in 2012.

Barrier #1 and #2 are directly related. The lack of adequate natural resources governance and the dispersion and not-easy-to-access incentives underline the unsustainable rural practices and externalities over the environment. In the last years, the central government has promoted conservation incentives while the local governments have promoted incentives to production. However, implementation is limited (barrier #1) and the incentives' contribution to production sustainability and SFM and INRM is low (Barrier # 2).

3. Reduced local livelihoods and low capacities affect the conservation and use of globally-important natural resources and biodiversity

Poverty levels are high¹⁷ in the NP and constitute a key barrier to sustainably manage natural resources and conserve biodiversity. Although the NP has potential for diversification of income sources, unsustainable agricultural production and timber harvesting remain the main income sources for rural population in the province. Community-based tourism could be one income-generation alternative. A study about tourism supply and demand (Schubert, 2010) identified that both international and domestic tourists visit the NP due to its nature (rivers, forests), and to meet the communities living in this Amazon area. In the province, most of the tourism initiatives receive between 200 and 400 visitors per year, who spend between US\$ 30-45 per day and stay 2-3 days at the community.

However, there are several constraints for success in the promotion of community-based tourism in natural areas, which also affect biodiversity conservation. The volume of tourists visiting the province for nature tourism is unknown. Community-based tourism initiatives in Napo include neither sustainability principles nor good environmental practices. These initiatives use biodiversity as a tourist attraction without considering conservation importance, increasing the risk of habitats destruction, and producing negative impacts on biodiversity and natural resources. Communities have limited access to financial resources to invest, which limits their growth, expansion, and the improvement of services quality. Hosting facilities and food quality do not meet tourists' requirements and demands. Communities'

¹⁷ 77.1% of the population is poor and 42.8% is extremely poor in the NP

capacities to offer customer services¹⁸ do not meet the needs of operators and tourists. Hence, tourism operators do not promote destinations in the province, and the communities cannot conclude strategic partnerships to sell and promote tourist packages. Community-based associations have organizational matters and internal coordination deficiencies. Most initiatives do not meet the requirement of registration with MINTUR¹⁹, limiting their possibility of receiving public assistance as training, market opening and alliances.

Communities are also lacking formal documentation or conservation agreements that support their commitment to conserve community-managed forests. This fact impacts directly on areas of primary and secondary forest, located in communitarian territories, where tours are conducted. The surface area of forests varies from half a hectare to 12,000 ha, and some of which are situated in high value for conservation, protected areas and buffer zones.

Although the province has potential for generating biodiversity-friendly goods, few of them have been integrated into the market with value added and with the active participation of communities. Studies have identified more than 90 species with diverse uses in the traditional system of *chakras*, several of which have commercial value. Species such as *ungurahua*, *sangre de drago*, *morete*, ornamental orchids, palm, *guayusa*, vanilla (*Vainilla planifolia*) and *tikazo* (*Plukenetia volubilis*) are produced in the *chakra* in combination with other staple and cash crops, and tree species, and generate income (e.g. 1,352 families belonging to association RUNA have obtained average incomes of US\$55-63/family in 2012 selling *guayusa*). RUNA has also obtained revenues of US\$120,000 exporting *guayusa* leaves for brewing. However, these goods cannot access the market in a systematic manner due to several shortfalls: i) Lack of formal procedures for commercialization of products, including the development of management plans for the concerned species, obtaining sanitary permits, export permits, and legal, environmental and health documents in general. These procedures are unknown and/or there are no offices or technicians in the province to give support, making them difficult and expensive for communities, ii) Communities and producers have no knowledge or skills to develop management plans and to work with the value chain approach. Technical assistance for this purpose is very limited; iii) Obtaining and access financing from private or state financial institutions is difficult when it concerns the development of non-typical products. Local initiatives are generally very informal or lack the required legal documents. Financial institutions have credit policies that are restrictive for new businesses, or have high interest rates. Moreover they require warrants or have other requirements that communities or low-scale enterprises cannot generally meet; and iv) Lack of knowledge and training in marketing and market demands. Many initiatives fail due to the lack of market studies or specific commercialization plans.

Excepting cocoa, no biotrade products meet certification schemes in the NP, impeding the access to differentiated prices for sustainable production. The NPG is developing a strategy to designate the province as a “clean production” territory, considering that the *chakra* system is a traditional agroforestry system that delivers environmental benefits. The initiative is in a first stage of defining and researching the principles underpinning the *chakra* approach for production of cocoa. However, dedicated technical assistance and capacity-building is needed to develop an effective eco-label

¹⁸ For example, specialized guides for bird-watching.

¹⁹ Of 21 initiatives in the province, only two are registered with the MINTUR

for the *chakra* system, associated certification scheme, adoption through a provincial regulation, promotion and awareness-raising campaign in the domestic market (targeting green-minded buyers and consumers).

c) Incremental/additional reasoning (added value of the GEF/LDCF/SCCF financing)

To address the above-mentioned barriers and achieve global environmental benefits, the GEF resources will be incrementally invested to the above-mentioned baseline initiatives, as detailed below:

Component 1: Institutional strengthening to mainstream biodiversity conservation and integrated natural resource management into participatory land-use planning and management, based on an ecosystem approach.

In order to overcome barrier #1 (see subsection 1.1.1.b), Component 1 will seek to strengthen the capacities of local governments, government institutions in the province and civil society to implement a comprehensive and articulated policy for integrated natural resources management and land zoning, improving coordination of public policy between the different government levels, and implementing policies on biodiversity conservation and sustainable management of the natural resources (soils, water and forests) in a more effective manner.

In addition, Component 1 will strengthen the incentives mechanisms (see barrier # 1) and their coordination at local level, applying a landscape approach. Conservation agreements will be promoted and access of small-scale producers to incentive funds will be facilitated through capacity development activities.

The NPG will provide co-financing amounting to US\$1,893,533 within the framework of institutional strengthening to mainstream strategies for conservation and sustainable use of natural resources in the participatory planning of the territory. This amount comprises of an in-kind contribution of US\$553,533 in staff, transportation, allowances for travels within the intervention area and equipment as well as a cash contribution of US\$ 1,340,000 for revision and updating of the LUDP, workshops, financing of initiatives for the thematic roundtables to be established by the project, procurement of new equipment to strengthen the GIS, and capitalization of the sustainable development fund.

The MAE will co-finance the sum of US\$2,052,533 to address the strengthening and coordination of conservation incentives (SocioBosque) and to assist local stakeholders to mainstream environmental criteria in their policies and plans. This amount is made up of a cash contribution of US\$1,924,533 in conservation incentives to be disbursed to communities; and an in-kind contribution of US\$128,000 in staff, transportation, facilities for meetings and trainings.

The Municipal DAGs will provide both cash and in-kind contributions to cofinance the mainstreaming of strategies for conservation and sustainable use of natural resources:

- DAG-Tena will cofinance US\$90,000 for updating its LUDP and the strengthening and articulation of incentives (US\$40,000 in cash and US\$50,000 in-kind).

- DAG-Quijos will provide an in-kind contribution of US\$69,480 to update its LUDP.
- DAG-Archidona will cofinance the update of its LUDP in the amount of US\$60,000 (US\$20,000 in cash and US\$40,000 in-kind).
- DAG-Arosemena Tola will contribute with US\$15,000 in-kind to update its LUDP.
- DAG-El Chaco will cofinance US\$100,000 in-kind to update its LUDP and improve the implementation of incentives within its territory..

The DAG of the Cuyuja parish will provide an in-kind contribution of US\$5,000 to cofinance the update of its LUDP and mainstreaming of strategies for conservation and sustainable use of natural resources.

GIZ will co-finance with US\$462,000 (US\$92,400 in cash and US\$369,600 in kind) in activities related to the strengthening of capacities for mainstreaming environmental criteria and climate change adaptation measures in development policies and plans, strengthening of biodiversity monitoring, conservation agreements and incentive mechanisms throughout the three years of ProCamBio (2014-2016).

USAID will cofinance US\$50,000 in cash to carry out a study for ecosystem services assessment and valuation in the Province of Napo, local training workshops, formulation and implementation of an action plan to mainstream ecosystem services in planning. These activities will be complementary to the incentives package for integrated landscape management (see output 1.2.1 in Section 2) to be implemented by this Project.

The COCASINCLAIR EP Hydroelectric will co-finance with US\$500,000 (US\$200,000 in-kind and US\$300,000 in cash) in activities for maintenance of ecosystem functions (water regulation in the Coca River basin), implementation of incentives for conservation, governance of natural resources in the Quijos and Salado Rivers sub-basins, and awareness-raising on the significance of water basins and their integrated management.

GEF incremental financing of US\$890,140 for Component 1 will address the strengthening of the institutional framework and the capacities of stakeholders in the province through: i) technical assistance by specialists in land use, capacity building, GIS, incentives, value chains, protected areas (PA) and co-management plans; ii) participatory elaboration of the environmental governance strategy; iii) assessments and studies for: a) a gender strategy; b) a participation strategy; c) the ecological zoning as input to update the LUDPs; and d) the identification of synergies between LUDPs and PA management plans; iv) training of government and civil society stakeholders to increase their knowledge and managerial capacities through training workshops in LUDPs, environmental governance, and GIS; meetings of the PA and livestock thematic roundtables, and workshops for dissemination of incentives; and v) procurement of equipment to support the technical assistance and training activities (see detailed descriptions in Sections 2.3 and 2.4).

Component 2: Design and promotion of landscape and agro-forestry production systems that include the sustainable management of water, soil, and forests, while improving local population livelihoods in the Province of Napo.

With the objective of removing barrier #2 (see subsection 1.1.1.b) Component 2 will strengthen the environmental sustainability of production activities in the province to reduce soils, water and forests degradation. The project will promote the integrated farm management through land-use planning and zoning, adoption of environmental-friendly production practices, sustainable forest management, ecological restoration and reforestation, and the establishment of conservation agreements to channel government incentives for investment. In this manner the project will seek to halt the expansion of the agricultural and livestock frontier in the buffer zones of the SBR and the Cayambe Coca, Antisana and Sumaco-Napo-Galeras PAs as well as in the Colonso, Sumaco and La Cascada PFs.

The NPG will provide co-financing in the amount of US\$2,275,660 to implement sustainable management of water, soils and forests. This amount comprises a cash contribution of US\$1,632,660 in material inputs for best practices in livestock production, financing of projects that include best practices for cocoa and *naranja* production, equipment and inputs for workshops and extension services, and procurement of legal timber. In addition, NPG will give an in-kind contribution of US\$643,000 as technical staff to support SFM best practices and multi-temporal studies, administrative staff, transportation, allowances, premises, and tree nurseries for production of tree seedlings for reforestation and restoration.

The MAE will provide a contribution of US\$445,000 for SFM and ecological restoration in the province, comprising US\$405,000 in-kind for staff, transportation, facilities for meetings and trainings related to assistance to producers and communities for sustainable production, management of protective forests and legal harvesting of timber, and US\$40,000 in cash to procure materials for reforestation and ecological restoration.

The Municipal DAG of Tena will co-finance with US\$80,000 (US\$50,000 in cash and US\$30,000 in-kind) to promote sustainable water, soils and forests management in the framework of the canton's planning to add 500 ha to the Colonso-Inchillaqui PF. This sum will also contribute to the Tena and Colonso Rivers micro-basins management.

The Municipal DAG of Archidona will provide US\$106,354 (US\$60,000 in cash and US\$46,354 in kind) to cofinance the reforestation and restoration of the canton's river basins as well as for management of *chakras*.

The Municipal DAG of Arosemena Tola will cofinance activities in support and promotion of the value chain of fine aroma cocoa cultivated in agroforestry systems within the *chakra* system, for an amount of US\$50,000 (US\$15,000 in kind and US\$35,000 in cash).

The Municipal DAG of El Chaco will cofinance reforestation and restoration of the Quijos River sub-basin as well as sustainable agricultural and livestock production for an amount of US\$90,000 (US\$45,000 in cash and US\$45,000 in-kind).

The DAG of the Cuyuja parish will cofinance with US\$22,000 in cash to support the promotion and diversification of farms within its territory under a framework of sustainable water, soils and forests management.

Within its ProCamBio programme, GIZ will cofinance activities related to conservation agreements of flora and fauna, and sustainable forest management for an amount of US\$70,000 (US\$14,000 in cash and US\$56,000 in-kind) throughout the three years of the programme.

COCASINCLAIR EP will co-finance with US\$500,000 (US\$200,000 in-kind and US\$300,000 in cash) to implement activities related to the diversification of farms, implementation of farmer field schools along the Quijos Valley Conservation Corridor, restoration of riverine forests in the sub-basins of the Quijos and Salado Rivers, restoration of the vegetative cover of the basin, and recovery of experiences in good local practices and socialization of results.

Rainforest Alliance will provide co-financing for promotion of cocoa, clean *naranjilla*, and sustainable forest management for an amount of US\$500,000 in cash.

FAO will provide US\$420,000 in cash to support updating of the deforestation map by means of analysis and interpretation of the total surface area of continental Ecuador; and assistance to the MAE Napo Provincial Directorate in reforestation projects.

GEF incremental financing of US\$1,130,780 for Component 2 will be used to foster the sustainable management of water, soils and forests through: i) technical assistance by specialists in agricultural and livestock production, forestry, value chains, timber traceability and promoters for farm planning, conservation agreements and agro-forestry extension; ii) studies and assessments to design the component's gender and participation strategies, studies on livestock and *naranjilla* supply chains, for implementation of conservation agreements, design of a SFM strategy, multi-temporal land use and coverage studies, and a study for identification of areas with restoration potential; iii) technical support for elaboration of 10 co-management plans in La Cascada PF, 9 co-management plans in Cerro Sumaco PF and 3 co-management plans in Colonso PF; iv) training of cocoa, *naranjilla* and livestock producers through workshops on best practices, farm planning, conservation agreements, SFM, ecological restoration and traceability; v) support for implementation of fair and green trade within the framework of value chains; vi) elaboration of information and training materials on best practices and sustainable production; vii) establishment of tree nurseries for promotion of reforestation and restoration; and viii) procurement of equipment to support the promotion of sustainable agricultural and livestock production and forestry.

Component 3. Promotion of biotrade and sustainable community-based ecotourism as strategies for biodiversity conservation, sustainable use of natural resources, and improvement of livelihoods for local communities

In order to overcome barrier #3 (see subsection 1.1.1.b) Component 3 will foster sustainable community eco-tourism and biotrade as options for diversification of economic activities and income sources that at the same time serve as strategies for biodiversity conservation and improvement of livelihoods for the small farmers.

The approach of Component 3 aims at promoting the existing but under-developed potential of the province (see barrier #3) to generate alternative livelihoods for rural people living in. In light of this, Component 3 will address two key activities: sustainable community-based ecotourism, and biotrade.

In view of this, the NPG will provide co-financing by US\$1,310,000, which comprises a cash contribution of US\$960,000 to finance tourist facilities, training, elaboration of information material and participation in fairs, as well as disbursements to producer associations for implementation of sustainable management of biotrade products; and an in-kind contribution of US\$350,000 in technical staff, transportation, allowances, premises and participation in provincial and national fairs.

MAE will contribute US\$60,000 to co-finance the sustainable use of biodiversity (biotrade and bio-knowledge) and nature tourism in protected areas and buffer zones. This amount is made up of an in-kind contribution of US\$29,000 in staff, transportation and infrastructure to support community-based ecotourism and biotrade; and a cash contribution of US\$31,000 to promote tourism.

The Municipal DAG of Quijos will provide an in-kind contribution of US\$9,000 to support sustainable community-based ecotourism within its planning framework.

The Municipal DAG of El Chaco will co-finance sustainable community-based ecotourism activities for an amount of US\$30,000 in-kind.

GIZ will provide co-financing through ProCamBio programme for US\$168,000 (US\$33,600 in cash and US\$134,400 in-kind) to support community-based tourism and biotrade as well as conservation agreements linked to these activities.

GEF incremental financing of US\$333,436 will be used in Component 3 to support comprehensive strategies of sustainable community-based ecotourism and biotrade in the NP, through: i) technical assistance by specialists to institutional and civil society stakeholders in community-based tourism and biotrade; ii) studies and assessments to design related gender and participation strategies; iii) elaboration of a sustainable community-based tourism best practice manual; iv) preparation of management plans for five biotrade products; v) technical assistance to design an eco-label for the province, including certification criteria and field demonstration areas; vi) studies for tourism and biotrade value chains; vii) support for realization of trade fairs for biotrade products; viii) training in tourism best practices, biotrade management plans and eco-labels; ix) preparation of information and training materials; and x) procurement of equipment to support tourism and biotrade activities.

Component 4: M&E and information dissemination

Further to the three technical components a fourth component has been prepared for project monitoring, evaluation, and systematizing and dissemination of lessons learned that might be useful for future SLM, INRM and BD initiatives in the country and in other countries. Accordingly, Component 4 will support project M&E, and will address the creation and/or improvement of institutional M&E capacities of executing partners.

The NPG will provide US\$160,000, of which US\$40,000 in cash to finance the publication of best practices, and US\$120,000 in-kind in staff to support project monitoring, maintenance and updated of the project's website.

MAE will contribute US\$30,000 comprising US\$10,000 in cash to co-finance information materials, and US\$20,000 in-kind through staff time and transportation.

Incremental GEF financing of US\$125,156 will support through Component 4: M&E of project progress and achievement of targets, monitoring of risk mitigation

measures and identification of new measures to address unforeseen risks, progress reports, mid-term and final evaluations, systematization of lessons learned, and preparation of information materials. Once systematized, lessons learned (successes and failures) will be disseminated throughout the country and might be useful for projects to be implemented in the Amazon region.

1.1.2 FAO's comparative advantages

FAO is the UN System Agency that has comparative advantages in projects related to SLM, SFM and integrated management of natural resources.

In Ecuador, FAO is a key player in policies and legal regulations for the forest sector, providing relevant technical assistance in the elaboration of policies, training activities, conservation of biodiversity, and strengthening management and conservation of natural resources in the communities. FAO implements several forestry projects aimed at promoting sustainable forest management, such as “*Sustainable Forest Management facing Climate Change*”²⁰ with MAE, which has been implemented since 2010. In the forest sector, FAO has focused its efforts on reducing forest degradation and conserving biodiversity in the Andes and the Amazon regions. FAO has also supported two DAGs placed downstream of the Napo river (Sucumbíos and Orellana provinces) in designing their sustainable rural land-use plans. In 2008-2012, FAO has implemented a component of the UN Joint Programme “*Conservation and Sustainable Management of the Natural Heritage in the Yasuni Biosphere Reserve*” (UNJP/ECU/075/SPA) in the buffer zone of the Yasuní Biosphere Reserve. The UNJP supported collaborative watershed management and the generation of cross-cutting ecosystem information with other FAO projects (e.g. satellite data and methodologies for forest inventory and monitoring parcels). Lessons learned through the Yasuní programme that are relevant to the GEF project are included in Subsection 1.1.4.

Regarding investments FAO has a long track record in investment projects. Through the Investment Centre Division (TCI) and its more than 40 investment officers FAO is supporting the development, implementation and supervision of investment projects in agriculture and forestry. The FAO-GEF Coordination Unit is based in TCI to ensure the integration of this expertise in the design and supervision of GEF projects, which include technical assistance as well as investments. The mission of TCI is to provide developing countries with technical assistance to identify and formulate investment strategies and operations for external financing, including environmental and natural resources management projects. The FAO-GEF Unit specialists in technical assistance and investment project design and implementation provided guidance for the development of this project and will have a key role in support of project implementation.

1.1.3 Participants and other stakeholders

Key project participants include central and provincial governments as well as local communities and local organizations. The NPG will be the Project Executing Partner.

²⁰ *Manejo Forestal Sostenible ante el Cambio Climático*, original title in Spanish.

The central government institutions include MAE, MAGAP and MINTUR and their respective provincial offices. Local governments that participate in the project are the NPG, the municipal and parochial DAGs.

The project includes diverse community-based organizations and local communities, which are listed below. They are categorized as per their involvement in project activities. Some communities will participate in more than one activity:

Cocoa production:

- Producer associations: Amwae, Miskikakau, Tsatsayaku, Winak, Inti and Amanecer Campesino

Naranjilla production:

- Communities: Chaluayacu, Wamaní, Pucuno Chico, Pacto Sumaco, Volcán Sumaco, Wawa Sumaco, Hatun Sumaku, Pachakutik, and Papancu

Sustainable livestock production:

- Producer associations in the localities of Gonzalo Díaz, Cuyuja, Borja and Sardinias.

Community-based eco-tourism:

- Communities: Oyacachi, Cosanga –Guacamayos – Narupa, Pacto Sumaco, Sinchi Pura, Waysa Yacu, Santa Rita and Gareno

SFM:

- Forest User Groups of the communities of Akoki and Rucullacta
- Communities in Cerro Sumaco PF: Mondayacu, Pucuno chico, Rio Guacamayo Jatun Sumaku, Wawa Sumaco, Wamani, Cristo del Consuelo, Volcán Sumaco, Maria Antonieta de Lleucan, Akoki
- Communities in La Cascada PF: Sucursal del Cielo, Divina Providencia, El Eden, Mirador del Alto Coca, San Francisco II, Camaleg, Machacuyacu, Fago, Luz y Vida, El Triunfo
- Communities in Colonso PF: Shitig, Alto Tena, Libertad

Project interventions will be agreed and socialized through the existing roundtables in the NP (forestry, tourism, cocoa, *naranjilla* and the Quijos Valley Corridor), thereby allowing the participation of a wide range of stakeholders linked to these roundtables.

FAO will participate as implementing agency, providing technical backstopping and financial/administrative services for project execution (see Section 4). Other strategic partners include GIZ, The Nature Conservancy, Rainforest Alliance, COCASINCLAIR EP, and the Andean Amazon Conservation Initiative (ICAA) Support Unit.

1.1.4 Lessons learned from past and related work, including evaluations

The proposed project includes a series of lessons learned in the areas of participation, environmental governance, capacity building, sustainable production, community forestry, incentives, biotrade and sustainable community tourism, namely:

Governance, participation and capacity development

The *Programme for Conservation and Sustainable Management of the Natural and Cultural Heritage of the Yasuni Biosphere Reserve* (UNJP/ECE/075/SPA) implemented by FAO in the period 2008/2011 identified the following lessons learned:

- In order to positively influence environmental issues through conservation strategies and sustainable development, it is necessary to work with participatory extension models that allow capturing the main needs of the settler and indigenous communities and conduct a joint work with these communities and the local authorities during the planning, implementation, monitoring and evaluation phases.
- Social management by community organizations is important for action effectiveness, and for input and resource adequate use - when provided by agencies working in natural and cultural heritage conservation.

The *Programme for Sustainable Management of Natural Resources* (GESOREN) implemented by GIZ in several stages during the period from 2003 to 2013, identified the following lessons learned in regards to participation and capacity building:

- The thematic roundtables should be used as spaces for agreement and management as they have proven to be an adequate space for coordination between public and private institutions, productive sector and civil society.
- Multi-stakeholder processes and natural resources management platforms are based on the stakeholders' confidence in these spaces and efforts put into them. In most cases, the stakeholders put a high level of effort in the early stages of work. This energy gradually decreases if the stakeholders do not see specific results of their discussions and agreements. It is therefore necessary that these platforms show quick results to key problems in order to generate a correspondence between what the space offers and what the stakeholders want. In the long run other results will be noted, such as facilitating the discussion of complex environmental problems, and the formulation and management of joint projects. The discussion space should generate enough internal confidence so that different local interests are disclosed in a balanced manner.
- For an effective governance of natural resources and multi-stakeholder processes the following principles should be taken into account: responsibility, representation, legitimization of rights, transparency, sustainability, inclusion, participation, and complementarity
- Multi-stakeholders dialogue platforms and processes need to have a shared horizontal leadership, creating an atmosphere of inclusion and trust. Dialogue platforms and multi-stakeholders spaces should not turn into executing institutions, but remain as informal places for dialogue and consensus. The role of cooperation agencies (international and national) is to facilitate and moderate these processes of horizontal and transparent participation.
- Awareness-raising and political advocacy are key for ensuring decision-makers' support.

- Capacity development of community leaders and the continuous assistance to producer organizations and communities facilitate the participation of beneficiaries in local governance processes for natural resources management.

The project *Strengthening of Environmental Governance for territorial planning* was implemented within the framework of the programme *Regional Biodiversity in the Andean-Amazonian Regions* (BioCAN). Its objective was the setting of a working platform that identify and systematize proposals for environmental territorial planning in Napo. The project finalized in August 2013 and provided the following lessons:

- An information-sharing mechanism needs to be developed for enhancing coordination between GADs and central government on land-use planning. Information deficiencies in the LUDPs indicates the lack of a NP environmental information system
- Existing LUDPs were elaborated without environmental criteria. Environmental guidelines have then been prepared but will only be used for the updating process in 2014.

Sustainable agricultural and livestock production

Lessons learned from several initiatives are taken into account, namely the *Programme for Conservation and Sustainable Management of the Natural and Cultural Heritage of the Yasuni Biosphere Reserve* (UNJP/ECE/075/SPA) implemented by FAO, the *Regional Programme for Social Management of Andean Forest Ecosystems – Bolivia-Ecuador-Peru (ECOBONA)*, implemented by INTERCOOPERATION in 2006-2011; the GIZ GESOREN Programme, the Project *QUIJOS Agricultural practices, conservation and local development strategies for adaptation to climate change in the Quijos River sub-basin*, executed by INIAP, and finally the INIAP Fruticulture Programme. These include:

- Diversified production systems (e.g. agroforestry or ancestral methods such as the *chakra*), have many advantages: soil regeneration by supplying nutrients and organic matter, erosion prevention, and food supply.
- Differentiated production with native seeds, cultural practices and chemical-free production, and meat production with strict food safety standards, constitute success factors.
- Women's participation is high in production initiatives for improving household incomes. However, women training and education is limited. It is necessary to work with a social and gender approach involving a process of continuous practical training.
- Rather than individual farmers, large to small-scale rural organizations/associations are more likely to receive technical assistance from government agencies, NGOs and international organizations when promoting the protection/conservation of Amazonian ecosystems. Training is usually focused on the production and marketing of environmental-friendly goods.
- Strong organization and leadership, and the credibility of organizations' board members are success factors. These concepts are built upon permanent information-sharing and agreed actions.

- Extension and technical services better reach stakeholders along the supply chain when a coordinated inter-institutional work between DAGs and central government (MAGAP, INIAP, Ministry of Production -MIPRO) does exist.
- Training and technical assistance are essential for adoption of good agricultural practices²¹. Production systems and methods that are adapted to the cultural, environmental and economic local conditions should be promoted.
- The development and strengthening of local production systems contribute to the sustainability of agricultural and livestock production through the incorporation of species suitable for human and animal consumption, diversification of production, and agroforestry practices.

Community forestry

- Community forestry should be supported by collective actions as: the identification of seed trees and periodic harvesting of seeds, multiplication of tree seedlings, collection of germplasm and conservation and sustainable use of community forest areas.
- The promotion of sustainable forest management involves the strengthening of timber systems and transportation controls²².
- The existence of a political organization of producers is not enough. A commercial organization is required or the organization should have business skills, so that producers can have direct access to the market for forest products.
- It is advisable to reduce the heavy reliance of producers on intermediaries - who may facilitate market access but offer unfavourable trading conditions to communities and small-scale producers.
- Some companies have programs that integrate small-scale farmers. Partnerships with these companies have in many cases helped reduce operating, administrative and legal costs related to forest harvesting. They create an important commercial advantage, tend to avoid intermediaries, and improve producers' incomes.

Incentives

MAE experience in the implementation of incentive mechanisms at national level, as well as TNC experience worldwide, provides the following lessons learned:

- The *Socio Bosque* programme is the strongest financial incentive mechanism implemented by MAE and also the most successful in terms of forest conservation. Incentive programs should have the highest level of political support and a proper engagement of forest producers and forest landowners to be successful.

²¹ Such as: for dairy farming: genetic improvement, semi-stabled handling, animal health, soil and pasture management; for *naranjilla*: introduction of varieties resistant to soil problems and diseases, reduction of the use of green label agro-chemicals.

²² Timber coming from sustainable forest management complies with legal regulations for forest harvesting, which involves higher production costs. Illegal timber does not comply with sustainable practices and regulations, hence incurring in lower costs and generating unfair competition.

- Forest management coordination between different levels of government is essential for the formulation and implementation of comprehensive policies and strategies for conservation and sustainable use of natural resources.
- Interventions that incorporate local realities and livelihoods of indigenous or settler communities are more likely to be successful. The promotion of traditional production systems based on improved traditional practices, such as the *chakra*, provides multiple ecosystem services including biodiversity conservation and carbon sequestration, in addition to the direct economic benefits associated with production.
- Design and operation of financial mechanisms for sustainable forest management and conservation of natural resources has enabled in-country coordination between different public and private institutions. The success of these mechanisms should be consolidated over time on the basis of assessments and adjustments. In addition to the resources to be channelled through the mechanism itself, the availability of sufficient resources is essential to conduct the necessary initial studies and supporting an M&E system.

Biotrade

The Kallari Association and the RUNA Foundation are pioneers in implementing projects that foster biotrade among the beneficiaries of the National Programme for Sustainable Biotrade²³. Some lessons learned related to this Project are detailed as follows:

- Consolidation of organized groups, members' participation along the value chain, and equal benefit-sharing are key elements for biotrade promotion at community level.
- Technical assistance should focus primarily on improving production, generating a basic business plan, promoting business organization, designing products, finding and opening markets.
- Family is a production unit. Maintenance of traditional lifestyles and combination of several species in the same production system have proven successful. Thus, the *chakra* production system can be combined with traditional subsistence systems such as *Kichwas*.
- Biotrade approaches and technology transfer aimed at family production units should be linked to national Academia research.

Sustainable community-based ecotourism

²³ In 2001, Ecuador launched the National Sustainable BioTrade Programme - Ecuador, PNBSE (*Programa Biocomercio Sostenible, Ecuador*) as an initiative of MAE and UNCTAD. The programme coordination is implemented by the Export and Investment Promotion Corporation (CORPEI) in strategic alliance with the environmental NGO EcoCiencia. The Programme's mission is to "facilitate sustainable development and biodiversity conservation in line with the objectives of the CBD, through the promotion of trade and investment activities which boost the use of Ecuadorian resources". Source: <http://www.biotrade.org/nationalECU4.asp>

The project extracts several factors of success and failures identified by Coria and Calfucura in *Ecotourism and the development of indigenous communities: the good, the bad, and the ugly*, in *Ecological Economics* 73 (2012)²⁴:

- To be successful, indigenous-based ecotourism needs full community involvement and the respect and support of external agents in the design, implementation, and promotion of these initiatives.
- If stakeholders have different expectations about the ecotourism initiative results, communication among them has to be promoted to align objectives, and achieve conservation and development goals.
- In the case of indigenous communities, the lack of managerial capacities and severe infrastructure limitations hinder sustainable ecotourism management.

The Parks in Peril Programme²⁵ implemented by TNC in Latin America (2002-2007) identified the existence of partnerships between communities, private sector and public institutions as a success factor. On the other hand, a challenge identified was the need for an efficient sale of ecotourism products and services. The proposed solution was to engage ecotourism initiatives in a partnership with strategic buyers.

1.1.5 Links to national development goals, strategies, plans, policy and legislation, GEF/LDCF/SCCF and FAO's Strategic Objectives

a) Alignment with national development goals and policies

The project is consistent with the Political Constitution of Ecuador, which grants rights to nature²⁶, promotes the Good Living or *Sumak Kawsay*, and recognizes Ecuador as a plurinational state that recognizes the rights of Afro-Ecuadorian and Montubio peoples and nationalities. It also establishes the responsibilities of the central government and the DAGs regarding environmental management and natural resources.

The project is aligned with the National Plan for Good Living (PNBV) 2013-2017 which considers *sustainability* as one of the basic dimensions for planning, monitoring and evaluation of the process to achieve Good Living. The PNBV 2013-2017 identifies "*sustainability, conservation, knowledge of the natural heritage and promotion of community tourism*" as key strategies to achieve a deep and definitive shift of the development model. More specifically, the project is aligned with the following objectives of the PNBV 2013-2017: i) Objective 7: Guarantee the rights of nature, and promote regional and global environmental sustainability; ii) Objective 8: Strengthening the social and solidary economic system in a sustainable manner; and iii) Objective 10: To promote the transformation of the productive matrix.

Moreover, the Project is consistent with: i) MAE's *SocioBosque* Programme²⁷ and Environmental Policy; ii) The National Strategy for Sustainable Development and its actions toward sustainable forest management, sustainable agricultural and livestock

²⁴ *Ecotourism and the development of indigenous communities: the good, the bad, and the ugly*. Coria y Calfucura, *Ecological Economics* 73 (2012)

²⁵ Turismo, áreas protegidas y comunidades, Estudios de caso y lecciones aprendidas del Programa de Parques en Peligro 2002-2007, TNC, USAID.

²⁶ That is, nature is regarded as a subject with rights.

²⁷ Incentives programme for conservation of forests based on the national forest governance model. See detailed description in subsection 1.1.c.

practices and biotrade; iii) the Strategy for Participation in Sustainable Forest Management and the National REDD+ Strategy being designed by the MAE with the support FAO and GIZ; and iv) the Policy and Strategic Plan 2007-2016 of the National Protected Area System of Ecuador, the Biodiversity Policy and Strategy, the Ecuador National Tourism Plan (PLANDETUR) and the National Biotrade Programme.

At local level, the project is consistent with: i) the LUDP of the Province of Napo, including its Productive Agenda and Environmental Agenda; ii) the Management Plan of the SBR, and iii) the management plans of the PAs in the intervention area.

Finally, the project is consistent with: i) the Seville Strategy and the Statutory Framework of the World Network of Biosphere Reserves and ii) the Madrid Action Plan for Biosphere Reserves (2008).

b) Alignment with NAPA, NAPs, NBSAP, NIPs, NAMA

The project is consistent with the Fourth National Report to the Convention for Biological Diversity (CBD), submitted by the GoE in January 2010, including the following prioritized issues: i) strengthening of the National System of Protected Areas and protection of endangered species as a strategy focused on biological biodiversity conservation; ii) sustainable agriculture and restoration of degraded lands, focusing on food security and sovereignty; and iii) biotrade, conceived as an opportunity for development and economic growth, and especially ecotourism.

The project is coherent with the Fourth Reporting and Review Cycle - 2010 Report for Ecuador, under the Performance Review and Assessment of Implementation (PRAIS), UN Convention to Combat Desertification and Drought (UNCCD) (2010-2011), in particular with the measures proposed to overcome rural poverty: i) empower men and women of all ages, households and communities to achieve a greater control over their lives and on the use and management of natural resources; ii) promote and/or strengthen gender equality to empower women and free their energy and creativity, which is greatly underused; and iii) accelerate growth for the benefit of the developing and in transition poor whose economies grow slowly, are stagnant or decreasing.

c) Alignment with GEF focal area strategies

The project is consistent with the following GEF strategic objectives:

- Biodiversity Focal Area – Objective 2 (BD-2): *Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes, Seascapes and Sectors;*
- Land Degradation Focal Area - Objective 1(LD-1): *Maintain or improve flow of agro-ecosystem services to sustaining the livelihoods of local communities;*
- Land Degradation Focal Area - Objective 3 (LD-3): *Reduce pressures on natural resources from competing land uses in the wider landscape; and*
- Sustainable Forest Management Focal Area / Reduction of emissions from deforestation and forest degradation, foster conservation, sustainable management of forests, and enhancement of forest carbon stocks – Objective

1 (SFM/REDD+-1): *Reduce pressures on forest resources and generate sustainable flows of forest ecosystem services.*

Component 1 will support objective BD-2 through: i) mainstreaming, implementing and monitoring biodiversity conservation principles and integrated natural resources management measures in six LUDPs of provincial, municipal and parochial DAGs; ii) the design of an Inter-institutional Strategy for conservation, integrated management of landscapes and ecological corridors in the Province of Napo; iii) strengthening of an information system for the Province of Napo that compiles and systematizes information about the biodiversity and natural resources in the region, collected from local, national, and international institutions. Component 1 will also contribute to the objectives LD-3 and SFM/REDD+-1 through: iv) capacity development and implementation of a package of incentives for integrated landscape management at provincial level; v) creation of a Sustainable Development Fund; vi) establishment and start-up of two Thematic Roundtables (Protected Areas and Livestock) and vii) capacity building of the stakeholders in land use under a natural resources governance approach.

Component 2 will support the objectives LD-1 and SFM/REDD+-1 by: i) introducing good NRM practices in traditional productive systems managed by small and medium-scale rural producers in the pilot areas of the Province of Napo (1,720 ha) and conservation of 1,764 ha of forests located in farms; ii) implementing SFM in 40,927 ha to reduce the pressure on the SBR forests; iii) promoting the ecological and/or productive restoration of 2,500 ha of degraded areas with high connectivity potential that are important for biodiversity, climate change resilience, and recovering ecosystem services in the province; iv) designing, implementing and monitoring an agreed strategy for SFM in the province; and v) designing and piloting a traceability system for legal timber in the province.

Component 3 is consistent with the objective BD-2 since it will implement five (5) pilot biotrade experiences and seven (7) sustainable community-based tourism initiatives, selected under replicability criteria. Biotrade and community-based tourism are strategies for sustainable natural resources management and biodiversity conservation, which will also improve the livelihoods of rural communities in the Province of Napo. Rural small-holders will shift from unsustainable practices to sustainable production practices that enhance biodiversity conservation while obtaining economic benefits and improving their livelihoods. In sum, the project will support the implementation of biotrade and community tourism initiatives as economically sustainable options to depleting production activities. The component's approach seeks to reduce pressures on natural resources in buffer zones, enhance food security, increase household and overall incomes (see Section 2 for a detailed description of project outputs).

d) Alignment with FAO Strategic Framework and Objectives

The project is in line with FAO's Strategic Results Framework (2014-2019) and particularly with FAO's Strategic Objective 2 (SO2): *Increase production in agriculture, fisheries and forestry in an economic, social and environmentally sustainable manner*, Outcome 1 (OO1): *Producers and natural resource managers adopt practices that increase and improve the provision of goods and services in agricultural sector production systems in a sustainable manner*; and Outcome 2

(OO2): *Stakeholders in member countries strengthen governance – the policies, laws, management frameworks and institutions that are needed to support producers and resource managers in the transition to sustainable agricultural sector production systems.*

Moreover, the project is coherent with FAO’s Regional Priorities for Latin America and the Caribbean²⁸ and is aligned with the priority area *Climate change and environmental sustainability*: “[provide assistance to governments for] strengthening national programmes for the sustainable management of natural resources, agroclimatic risk reduction, mitigation of emissions and adaptation of the agriculture sector to climate change, in the new context of low-carbon development”²⁹.

Finally, the Project is in line with the FAO Country Priority Framework in Ecuador (2013-2017)³⁰, priority area 4: *To contribute to the consolidation of the environmental public policy through conservation, valuation and sustainable management of biodiversity and natural resources as a strategic resource of the State, as well as ensuring ecosystem services and the development of strategies for adaptation and mitigation of climate change and ensuring food sovereignty*; Outcome 4.1: *Increased areas for conservation and protection within the national territory*; Outcome 4.2: *Strengthened legal and institutional mechanisms for promotion of sustainable forest management, conservation, and protection to counteract processes that affect the natural heritage*; and Outcome 4.4: *Strengthened national comprehensive system for management, control and punishment of illegal and legal trade of forest resources and biodiversity.*

²⁸ See *Areas of Priority Actions for Latin America and the Caribbean for the Following Biennium (2014–2015)*, taking into account the summary of recommendations of regional technical commissions, 32nd FAO Regional Conference for Latin America and the Caribbean. Buenos Aires, Argentina, 2012.

Fuente: <http://www.fao.org/docrep/meeting/024/md240e.pdf>

²⁹ Ibidem

³⁰ See *Marco Nacional de Prioridades para la Asistencia Técnica de la FAO en Ecuador (2013-2017)*. Source: http://www.cooperacioninternacional.gob.ec/wp-content/uploads/downloads/2013/12/Marco_Nacional_Prioridades_FAO_Ecuador.pdf

SECTION 2 – PROJECT FRAMEWORK AND EXPECTED RESULTS

2.1 PROJECT STRATEGY

The project's strategy is to promote a shift in the current context of insufficient institutional capacities, unsustainable agricultural, livestock and forestry production practices, and limited livelihoods of the local population of the NP, through the integrated management of natural resources at provincial, municipal, parochial, community and farm levels. This strategy aims at addressing the threats to global environmental benefits that are described in Section 1.

The proposed project is well-aligned with and has followed the criteria detailed by "Payments for Environmental Services and the GEF. A STAP guideline document".

The project proposes two type of PES: 1) government-financed incentives mechanisms (SocioBosque), already in place at national level but poorly implemented in the Napo Province; and 2) the set up of a Sustainable Development (Trust) Fund with a pre-identified Environmental Service (ES) buyer, which is also providing co-financing to the project: the COCOSINCLAIR Hydroelectric EP.

In the case of the four government-financed incentive mechanisms³¹ for conservation of forests and moorlands, rehabilitation of degraded lands, reforestation for conservation purposes, and reforestation for commercial purposes, the GEF incremental financing will co-finance these PES for multiple services, under the *bundling* type. The same single user (the State) will buy multiple ES from the same plot (i.e. farmers in the Napo Province that are capable to present their proposals to the SocioBosque MAE³² or the MAGAP³³ mechanisms through the Napo Provincial Government). The ES involved are: carbon storage and sequestration in forests, watershed protection by Protective Forests³⁴, biodiversity conservation, and the protection of landscape beauty (for eco-tourism purposes – see Component 3). Forest/landscape restoration, and activity-reducing conservation are also included.

GEF capacity-building investments for PES start-up will be realistic, strategic and tailored to this specific case. In the case of SocioBosque, GEF funds will be invested in developing capacities of the NPG staff and the local communities/landholders who will have to submit proposals for getting financing from the SocioBosque incentive. The function of SocioBosque is to assure that biodiversity considerations have been

³¹ Output 1.2.2 – see Appendix 2. Four of them are considered PES, the additional two are non-financial incentives (Forestry Advisory Services, and Assistance for agricultural and livestock production). For a detailed description of the incentives, see pp. 17-18.

³² For a detailed description of SocioBosque, please see the Section 1.1.1 *Rationale*. SocioBosque is managed by the Ministry of Environment (MAE) of Ecuador.

³³ For a detailed description of the Reforestation for Commercial Purpose incentive, please see the Section 1.1.1 *Rationale*. This incentive is managed by the Ministry of Agriculture and Livestock (MAGAP) of Ecuador.

³⁴ Protective Forests are natural or cultured forests and vegetation that meet one or more of the following requirements: a) Have as key function the conservation of soil wildlife; b) Are located in areas that allow the control of torrential rainfall events, or the preservation of watersheds, especially in areas of low-level rainfall; c) Occupy eyebrows or mountain areas adjoining water sources, streams or reservoirs; d) Represent windbreaks or barriers to protect the environmental equilibrium; e) Be in hydrological-forestry research areas; f) Be located in strategic areas for national defence, g) Constitute a defence for natural resources and public infrastructure. For a detailed description, please see the Section 1.1.1 *Rationale*.

mainstreamed into production landscapes and other land uses. More biodiversity-friendly practices are expected at provincial level, and GEF funds will support forest users in accessing the already available funding at national level (SocioBosque – operating since 2008 in Ecuador).

Institutional strengthening will increase and improve the capacities of institutional public and private stakeholders to mainstream conservation and sustainable use of renewable natural resources in the participatory landscape planning and management. The Project will apply an ecosystem-based and integrated landscape management approach. Component 1 will enhance the articulation of initiatives among stakeholders, creating a comprehensive impact where isolated activities currently take place.

At landscape level, the Project will apply a watershed and conservation corridors approach. Project intervention areas have been selected in a mosaic of landscapes. Sustainable conservation, management and use of resources will be implemented there to contribute to maintain connectivity between corridors and conserve natural resources. The Project will complement the ongoing activities by the central government (MAE, MAGAP, MINTUR) and the NPG³⁵ through adjustments in the production sector by: i) mainstreaming principles of economic and environmental sustainability in the agricultural, livestock and forestry production systems; ii) promoting sustainable community-based ecotourism and biotrade as new income sources; and iii) incorporating incentives that combine sustainable investments, conservation of biodiversity and food security.

The intervention areas (mosaics, see above) are located in the buffer zones of the protected areas of the province. The vision is to establish biological corridors by implementing conservation activities in community and private properties (see map in Appendix 7). Sustainable livestock production practices will be fostered in the highlands of the province, while in the lowlands the project will seek to strengthen the cocoa sustainable production corridor, and the commercialization of biodiversity products. Best production practices of clean *naranjilla* will be promoted in the area between the two sectors of the Sumaco Napo Galeras National Park. Sustainable community-based ecotourism will be promoted in these same areas. These actions are expected to provide rural communities with opportunities for income generation, hence reducing their poverty and at the same time conserving and recovering the ecosystem services of local, national and global significance. The proposed solutions for the province are potentially replicable in other Amazonian provinces and the Andean-Amazonian pre-montane areas of Ecuador. The project strategy aims at developing and consolidating a sustainable landscape management strategy based on the strengthening of capacities of the small-scale farmers, DAGs and other stakeholders (services, markets) seeking the economic, environmental and socio-cultural sustainability to achieve a balanced development.

Stakeholder participation will be a key driver of the project's intervention strategy, and will be fostered in formal and informal spaces through: i) timely and transparent access to information on project implementation; ii) project messages adapted to the different target audiences; iii) use of existing spaces for dialogue (councils, thematic roundtables) and/or establishment of specific spaces for consultation with the beneficiaries and civil society; iv) timing for training and meetings adapted to producers' timings; v) trainings, meetings and workshops in Spanish, *Kichwa* and

³⁵ See detailed descriptions in Section 1

Wao languages; vi) establishing in meetings and workshops an enabling environment for horizontal dialogue between all the participants; vii) project incentives provided to settlers, *Kichwas*, *Waorani*, men, women and youths, among others; and viii) project activities that promote the self-development of the beneficiaries and the sustainability of project results.

Moreover, the rural population will participate in project implementation through: i) the development and implementation of sustainable alternatives for land use and biotrade value chains; ii) participatory monitoring of economic and environmental factors in production systems (conservation agreements); iii) implementation of demonstration projects; and iv) systematization of experiences. The ethno-cultural specificities of the communities will be taken into account in all project interventions, creating opportunities for income and sustainable livelihoods that are concomitant with their realities and that deliver socio-economic benefits to them, while generating GEBs.

The project mainstreams gender issues throughout its entire cycle, based on the premise that besides ensuring participation of women (and their organizations) in the spaces generated by the project, it will contribute to their effective empowerment as social actors. The project recognizes the ethno-cultural characteristics of the concerned groups (settlers and *Kichwa* and *Waorani* indigenous peoples), the role of the family in production and income generation, the socio-economic differences between men and women, and the differences between the environment-related knowledge in each case. The project will prioritize the empowerment of women through: 1) generating opportunities for households led by women, especially under Component 3 through biotrade and community tourism; 2) a special line for women within Sustainable Development Fund of the province; 3) special technical assistance to female beneficiaries that request any of the existing incentive mechanisms in the province; 4) fostering participation of women in trainings, meetings and technical assistance (minimum of 25% participation by community female leaders and/or producers); 5) mainstreaming of a gender approach in the LUDPs and the inter-institutional strategy for natural resources management; 6) timely communication of lessons learned to women beneficiaries; and 7) fostering participation of women in planning and decision-making at provincial, municipal, community and family levels.

2.2 PROJECT OBJECTIVES

Global Environmental Objective: To promote conservation and sustainable use of globally-important biodiversity, reduce and revert land degradation and deforestation, and improve forest management in the Province of Napo.

Development Objective³⁶: To increase and improve the provision of goods and services from agricultural, livestock and forestry production in a sustainable manner in the Province of Napo.

Specific Project Objective: To promote biodiversity conservation, sustainable management of soil, forests, and water, through the strategic investment of public resources, participative environmental governance, incentive mechanisms, community-based ecotourism, and biotrade in the Napo Province.

³⁶ In line with FAO strategic objectives

2.3 EXPECTED PROJECT OUTCOMES

Outcome 1.1: Improved participatory environmental governance in the Province of Napo. The targeted project value for this outcome is:

- Environmental thematic axes mainstreamed into at least 6 LUDPs for conservation and sustainable use of natural resources. Axes will comprise sustainable forest management, ecological restoration, sustainable agricultural practices (cocoa in chakra, clean naranjilla, sustainable livestock), promotion of community-based tourism in natural areas, biotrade through bio-initiatives, and improvement of ecosystem services in river basins. (Baseline: The province does not have provincial policies for natural resources management).

Outcome 1.2: Increased investments for natural resources management. Outcome 1.2 will be monitored through the LD-PMAT tracking tool. Targeted Project value is:

- Indicator LD-3.iii Increase in investments for integrated landscape management: around 21.5% increase in investments for incentive mechanisms: US\$ 2,676,000 by PY4.
20% increase in investments for incentive mechanisms over the baseline: US\$ 571.200 (PY2);
60% increase in investments for incentive mechanisms over the baseline: US\$ 761.600 (PY3);
100% increase in investments for incentive mechanisms over the baseline: US\$ 952.000 (PY4).
(Baseline: US\$476,000 in 2013, expected BAU investment by PY4: US\$ 2,200,000)

Outcome 2.1: Production systems incorporate good practices for conservation and management of natural resources in four priority sites of the Province of Napo. Outcome 2.1 will be monitored through the LD-PMAT tracking tools. Targeted project values are:

- Indicator LD-3.ii Spatial coverage of integrated natural resources management practices in the wider landscape: 1,720 ha under sustainable intensification, adapted to the local context (additional 120 ha of *naranjilla*, 400 ha of cocoa, and 1,200 of livestock production). (Baseline: 250 ha of livestock production with sustainable criteria; 30 ha of clean *naranjilla*; 1000 has of cocoa production under good practices).
- Indicator LD-1.iii Land area of production systems with increased vegetation cover (conservation agreements): 1,764 ha of forests conserved by producers of *naranjilla* (400 ha), cocoa (1,000 ha) and livestock (364 ha). (Baseline: 0)

Outcome 2.2: Reduced pressure over the forests of the Sumaco Biosphere Reserve (SBR) through the implementation of a Sustainable Forest Management (SFM) strategy. Outcome 2.2 will be monitored through the SFM-REDD+ tracking tool. Targeted project values are:

- Percentage of reduction in the rate of deforestation through SFM and conservation agreements (no increase in the deforestation rate after 2014 as direct impact of the project and decrease in 15% in four-years project lifetime as indirect impact) (Baseline: rate of deforestation: 2,735 ha/yr in the Province of Napo for the 2000-2008 period, and estimated in 3,905 ha/yr in 2014).

- Tons of avoided emissions of CO_{2eq} through protection of forests and reduction of deforestation (avoided emissions during the 4-years project lifetime due to sustainable forest management in amount of 535,275 t CO_{2eq}, and due to forests conserved by producers, inside or around the agricultural systems, in amount of 807,030 t CO_{2eq}) (Baseline: preliminary data estimation with information provided by MAE indicates that the Napo Province's emissions for the 4-years project lifetime could be of 7,681,426 t CO_{2eq} considering 125 t C/ha).

The percentage of reduction of deforestation rate is a suitable indicator to put the province in line with the REDD strategy that is being developed at national level. In addition, deforestation reduction will lead to GHG emission reductions.

Outcome 3.1: Improved conservation and sustainable use of biodiversity and livelihoods through the promotion of community-based ecotourism and biotrade. Outcome 3.1 will be monitored through the BD tracking tool. Targeted project values are:

- 1,000 ha of forests (community-owned or private) conserved through conservation agreements and destined to community tourism or sustainable biotrade practices.
(Baseline: 0)
- 10% increase in the current average income of 200 producers (100 women) working in community tourism and sustainable biotrade.
(Baseline: *to be defined at inception/project year 1*)

Outcome 4.1: Project implementation based on results-based management and application of lessons learned and good practices in future interventions, facilitated. Outputs corresponding to Outcome 4.1 are detailed in Section 2.4 below.

2.4 PROJECT COMPONENTS AND OUTPUTS

Project overview

To achieve the objectives and expected outcomes indicated above, the project has been structured into four components with their respective outputs as described below:

Component 1: Institutional strengthening to mainstream biodiversity conservation and integrated natural resource management into participatory land-use planning and management, based on an ecosystem approach.

The objective of Component 1 is to strengthen institutional capacities of key stakeholders in the Province of Napo for mainstreaming conservation and sustainable use of renewable natural resources in participatory land-use planning and management. The overall Component 1 objective is to improve environmental governance in the NP. The project will provide technical assistance to increase the knowledge base and the management capacity for sustainable development through: i) training of DAGs (provincial, municipal and parochial), central government dependencies in the province (MAE, MAGAP and MINTUR), civil society organizations and community leaders; ii) promotion of participatory spaces for dialogue, discussion, consensus and advocacy leading to an effective environmental governance in the province and avoiding duplicity of efforts; iii) improvement of decision making mechanisms; and iv) strengthening of investments that target conservation, recovery, management and sustainable production. Component 1 comprises the following outputs and activities:

Output 1.1.1: Participatory Inter-institutional Strategy for Natural Resources Management, designed, implemented and monitored

Activities:

This Strategy will constitute an umbrella that will bring together the individual interests and initiatives of different stakeholders, joining inter-institutional efforts, and enhancing policy complementarity. The objective of the strategy is to mainstream integrated landscape and watershed management into the institutional plans of all relevant stakeholders in the province. During Project Year One (PY1), targeted diagnosis will be elaborated for defining the inter-institutional Strategy. The diagnosis will assess the Province Participation Council, its current functions and members; will identify additional key stakeholders to establish the Inter-institutional Committee with representation criteria (including the existing thematic roundtables - cocoa, *naranjilla*, forestry, tourism, Quijos River Valley Committee - and the protected areas and sustainable livestock roundtables to be established under Output 1.1.3); and will design the participatory process to be followed to build-up the Strategy. In addition, the diagnosis will generate a proposal of inter-institutional strategy, including participation and gender approaches. Once the diagnosis will be completed, the proposed Strategy will be revised and validated through participatory workshops (30 workshops). Decision-making mechanism, the Committee's management arrangements, and the training methodologies will be defined in this second phase. From PY2 to PY4 the Strategy will be implemented and monitored to obtain feedback from stakeholders and extract lessons learned that might contribute to improve its design and functioning. The Strategy will constitute the framework for stakeholder participation, will facilitate the coordination among different government levels active in the NP, will enhance decision-making, and will provide a basis for organizing and potentially increasing investments in the field.

Output 1.1.2: 6 LUDPs with included environmental criteria, implemented and monitored

Activities

During PY1 the project will support the updating of one provincial LUDP and five municipal and parochial LUDPs (that will be geographically defined in PY1³⁷). Environmental criteria will be mainstreamed into these six LUDPs as pilot experiences aimed at developing a mainstreaming methodology and extracting lessons to allow replication in LUDPs of other DAGs in the NP. This activity will be based on MAE guidelines for environmental criteria in LUDPs. Selection criteria of the LUDPs to be updated include: 1) capacity of providing co-financing to the process; ii) existence of a minimum technical team to carry out the foreseen activities; iii) strength of the relations between the municipal and provincial governments; and iv) presence of infrastructure projects in the territory that have environmental impacts. In PY1, an ecological zoning will be carried out to contribute to the LUDPs update. 42 workshops will be held to support capacity development of DAGs management and technical staffs and key stakeholders and to present and validate the six updated

³⁷ Elections for Decentralized Autonomous Government authorities were held in February 2014, and the institutional scenario is currently being re-organized. This Project is expected to start implementation by the end of 2014, when after-election period will be completed and political composition of DAGs will have been confirmed for the next four years.

LUDPs. From PY2 to PY4, the respective DAGs will implement the updated LUDPs and compliance with the agreed environmental criteria will be monitored.

Output 1.1.3: Two roundtables (protected areas and sustainable livestock), established and functioning

Activities

In PY1 the project will support the creation of the protected areas (PA) and sustainable livestock roundtables, facilitate the coordination of these key thematic areas, and complement the existing dialogue spaces, such as the cocoa, forestry, *naranjilla*, tourism and Quijos Valley Corridor roundtables. Key stakeholders living in or around PAs as well as livestock producers will be identified and meetings will be convened to launch the two roundtables. Once the roundtables are established, rules and procedures for functioning and decision-making will be defined. During project implementation, both roundtables will meet at least 6 times per year with the purpose of reaching consensus on common objectives, planning, coordinating actions among members, and monitoring initiatives within their respective fields. The establishment and operation of the PA roundtable will, in addition, facilitate coordination between the LUDPs and PA management plans. Moreover, both roundtables will provide inputs to support planning and implementation of project activities for elaboration of co-management plans (Output 2.2.1) and good practices for livestock production (Output 2.1.1).

Output 1.1.4: Stakeholders' capacities strengthened for natural resources governance

Activities

During PY1 the project will develop a training methodology, including training modules, materials and procedures for evaluation and feedback, and will implement the training. During project implementation 86 training workshops will be held benefiting 178 government staff members (minimum of 30% women). Trainings will help develop staff's skills on land-use planning, and will contribute to implementing a natural resources governance strategy (see output 1.1.1) in the province. Beneficiaries comprise representatives of the following institutions and community-based organizations:

- Provincial Planning Council: 20
- DAGs staff: 40
- Provincial Council, Municipal Councils, Parochial Boards: 52
- MAE: 4
- Ministries: 7
- Forestry roundtable: 7 (1 from *Akoki* association, 1 from *Rucullacta* association, 1 from sawmills, 4 from forest organizations)
- Cocoa roundtable: 6 (associations named: *Tsatsayaku*, *Wiñak*, *Kallaki*, *Amwae*, *Miskikakau*, *Sol Oriente*)
- Tourism roundtable: 7 (associations named: *Oyacachi*, *Cosanga* – *Guacamayos* – *Narupa*, *Pacto Sumaco*, *Sinchi Pura*, *Waysa Yacu*, *Santa Rita* and *Gareno*)
- *Naranjilla* roundtable: 9 (associations named: *Chaluayacu*, *Wamaní*, *Pucuno Chico*, *Pacto Sumaco*, *Volcán Sumaco*, *Wawa Sumaco*, *Hatun Sumaku*, *Pachakutik*, and *Papanacu*)

- Livestock: 17 (16 producer associations, 1 youth association)
- SocioBosque beneficiaries: 5 representatives of communities
- Associations/guilds: 4

Training will include: i) land use planning (territorial planning, design and management of LUDPs, participatory processes, inter-culturality and gender); ii) participatory mechanisms; iii) Geographical Information Systems (GIS) as a decision-making tool; iv) environmental impact assessment; v) environmental regulations and design of ordinances; vi) conflict management; vii) landscape and watershed management; viii) Project design; ix) biodiversity and conservation; x) monitoring of biological corridors; xi) incentives for conservation.

Output 1.1.5: Information management system of natural resources, developed and managed by MAE and NPG

Activities

In PY1, the GIS Unit placed at the NPG will be strengthened through equipment supply (hardware and software), support from a GIS specialist, and training of the provincial government staff. Standardized protocols that define roles and responsibilities for managing this information system will be agreed with the NPG and MAE. In PY1 and PY2 the NPG/GIS Unit and MAE will collect and update the existing natural resources information in the NP. Sources will include, MAE/GIS Unit, NPG/GIS Unit, other government institutions, BioCAN project, and Gran Sumaco project among others. In PY1 and PY2, the IT system that will back the information system will be designed, and tools for internal information management will be developed. Between PY2 and PY4 a spatial database on production and conservation projects will be developed to support the provincial land use and environmental planning. An M&E system will be included. The GIS Unit/NPG will be operated by at least 4 trained technicians, who will act as trainers of other public and private institutions in the NP.

Output 1.2.1: 6 incentive mechanisms strengthened, articulated, and operational for biodiversity conservation and sustainable use

Activities

The project will provide technical assistance to strengthen the following financial and non-financial incentive mechanisms: i) Socio Bosque - conservation (MAE); ii) Socio Bosque -restoration (MAE); iii) Reforestation for commercial purposes (MAGAP); iv) Agro-forestry extension (MAE-MAGAP); v) Productive NPG; and vi) National Concurrent Plan for Reforestation. During PY1 the intervention areas of these incentive mechanisms will be geographically assessed and tailor-made guidelines will be issued to facilitate the cooperation among the NPG, MAE, MAGAP, municipalities and parishes. Socio-economic variables will be incorporated. Guidelines will be based on the production activities to be implemented under Components 2 and 3. Moreover, an assessment of the potential complementarity with aspects currently extern to the incentives will be carried out, including: a) strengthening of Socio Bosque investment plans with community partners, and impact assessment along with private partners; b) mainstreaming of environmental criteria in production of cocoa, *naranjilla* and livestock; c) conditions for supply chains; and d) market access. In PY2 and PY3, incentives information will be socialized through 120 workshops seeking to stimulate the interest and access of project beneficiaries (Components 2 and 3), and to strengthen their capacities. Furthermore, technical

assistance will be provided to the NPG to facilitate access to funding by the National Concurrent Plan. Implementation of the incentive mechanisms will be monitored through a monitoring system based on the long-term conservation agreements which constitute the legal basis. Special incentives targeting female producers will be introduced.

Output 1.2.2: Provincial Sustainable Development Fund, established and operational

The project will support the setting up and short-term pilot payment of a Sustainable Development Fund aimed at ensuring the conservation and recovery of relevant ES, the management of micro-basins supplying drinking water and water for hydroelectrical purposes, and the protection of the Quijos river basin, among others³⁸. COCASINCLAIR Hydroelectric EP, the Napo Provincial Government and its strategic partners have been identified as ES users that are considering long-term payments and that will provide co-financing for the initial capitalization of the Trust Fund.

GEF resources will be used for the Provincial Sustainable Development Fund development. The initial fund capitalization will be financed by the Napo Provincial Government and other partners.

Activities

During the full project preparation, a pre-feasibility analysis was carried out to establish a provincial Sustainable Development Fund. It considered current successful experiences in Ecuador. The Fund is conceived as a mechanism for managing financial resources under a trust fund modality. The Fund will finance activities that are of the common interest of different public or private institutions, with the following objectives: i) to ensure the conservation and/or recovery of relevant ecosystem services while maintaining the livelihoods of the local population of Napo or the country in general; and ii) to foster the socio-economic and cultural development of the rural population of the province through the promotion and strengthening of traditional and sustainable productive practices. The Fund will finance activities related to: i) management of micro-basins that supply drinking water; ii) protection of the Quijos River basin; and iii) recovery and maintenance of ecosystem services.

During PY1, the project will carry out feasibility studies and establish the Fund. Studies will comprise: i) baseline assessment of ecosystem services in order to prioritize critical zones for intervention (based on the ecosystem services valuation study by the ICAA Support Unit/International Resources Group – IRG and the study for characterization of ecosystem services in the Quijos Valley by GIZ); ii) assessment of fees and financing mechanisms to define payment schemes for protection of micro-basins that supply drinking water to the population; and iii) institutional assessment to define the detailed design of the Fund (legal basis, trustees, structure and functions of the trustees and the board).

Following the study, the Fund and Trust Fund for managing the resources will be established with the different public and private institutions that will be part of the Fund. The Fund will be initially capitalized with US\$400,000 to be allocated by the NPG and/or its strategic partners. During PY2 the Fund Technical Secretariat will be

³⁸ For a detailed description, please refer to the FAO GEF Project Document, Section 2.4 *Project Components and outputs*.

established, the priorities for investment of resources will be defined and resources will be leveraged. During PY3 and PY4 the Fund will be operational and will fund specific activities in accordance with the priorities identified by the Trust Fund Board.

Component 2: Design and promotion of landscape and agro-forestry production systems that include the sustainable management of water, soil, and forests, while improving local population livelihoods in the Province of Napo.

Component 2 has the objective of fostering the sustainable management of water, soils and forests. To this end the project will work with a two-fold approach:

1) Sustainable Land Management (SLM): the project will provide technical assistance to 593 small- and medium-size producers to disseminate good practices in their production systems, thereby reaching a total of 1,720 ha under INRM and sustainable intensification, and 1,764 ha of forests conserved through conservation agreements. The project intervention areas are located in the buffer zones of the province's protected areas. Component 2 aims at establishing biological corridors through the implementation of conservation instruments in community-owned and private lands (see map in Appendix 7). Good practices for livestock production will be promoted in the highlands of the province. In the lowlands the sustainable cocoa corridor will be strengthened through agro-forestry systems and *chakras*. In the area between the two core areas of the Sumaco Napo Galeras National Park the project will foster good practices for production of environment-friendly *naranjilla*. In all cases, the adoption of good practices will be linked to the incentive mechanisms strengthened under Output 1.2.1 through signing of forest conservation agreements in the producers' land properties.

2) Promoting Sustainable Forest Management (SFM) to create an enabling environment that underlines a diverse "forestry culture". Component 2 will work with landowners to promote a vision shift from seeing forestry as an occasional activity solely oriented to logging and land use change, to recognizing the value of forests as ecosystem services providers on which their livelihoods depend. This shift shall lead to increasing SFM in the province. In this manner the landowners will cease to be *agents of degradation* and be the *agents of conservation* of locally- and globally-important goods and services, such as water supply, biodiversity conservation and carbon maintenance/sequestration. The project will provide technical assistance for the SFM of 43,427 ha of forests, through the elaboration and implementation of three PFs co-management plans and ecological restoration. Component 2 will contribute to reduce the deforestation rate and avoid carbon leakages.

These approaches seek to promote sustainable agriculture, livestock and forestry production to improve local population's incomes and livelihoods, while reducing the expansion of the agricultural frontier and conserving forests through incentive mechanisms and conservation agreements. The project will generate experiences and lessons learned that would serve the MAE and MAGAP to upscale the results in their respective incentive programmes at national level.

Output 2.1.1: Three technology packages of good practices for cocoa, *naranjilla* and livestock production, and conservation agreements signed with small- and medium-scale producers

Activities:

In PY1, currently used technology packages for production of cocoa, *naranjilla* and livestock will be assessed and improved by incorporating environmental-friendly

practices. A process for farm planning with producers will also organize with participatory approach. In PY2 and PY3, 84 workshops will be held to deliver training on land planning in farms and community territories, and on conservation agreements. Additional 108 workshops will help disseminate targeted good practices for each production system (36 workshops on *naranjilla*, 48 workshops for cocoa, and 24 workshops for livestock).

The NPG and MAGAP will provide technical assistance to producers for good practices implementation. The methodology of farmer field schools³⁹ will be used with cocoa and *naranjilla* producers. It consists in a monthly training in which two or three communities meet in a demonstration parcel owned by one of the producers and work together applying the good practices. In each meeting, the group chooses the theme for the following meeting.

Livestock producers will receive technical assistance and training through MAGAP's extension methodology, which consists of: i) periodic visits to producers by the extension officers assigned to the parishes, and ii) organization of field days for observation of on-farm good practices. Technical assistance will include traditional knowledge, replication of successful methodologies⁴⁰, and the employment of the *Kichwa* language.

In PY2 materials and inputs will be supplied to support the implementation of good practices (e.g. machetes, shovels, forage choppers, electric fences, tree seedlings for silvo-pastoral systems, inputs for production of natural pesticides, native cocoa seedlings). The implementation of good practices will be linked to the signature of forest conservation agreements by the landowners, which will be prepared and negotiated in PY1. The signature of these agreements will facilitate the flow of financial and non-financial incentive resources to local producers.

Table 2.1 below summarizes the relevant aspects for the delivery of Output 2.1.1.

Table 2.1
Characterization of implementation of good production practices
(Output 2.1.1, Component 2)

	Cocoa	Naranjilla	Livestock
Selected good practices	1) Farm planning 2) Soil management 3) On-farm selection of native varieties of cocoa (benefit: resistance to Monilia)	1) Farm planning 2) Soil management 3) Use of native species 4) Reduction in the use of agro-chemicals and substitution by natural pesticides	1) Farm planning 2) Silvo-pastoral system 3) Pasture management (improvement of pastures, rotation) 4) Soil management
Number of producers to be trained	300-400	120	73
Communities / organizations	6 organizations: Amwae, Miskikakau,	9 communities: Chaluyacu, Wamaní,	Producer associations of Gonzalo Diaz,

³⁹ This capacity development methodology has been tested by MAGAP and FAO in other projects, both in Ecuador and in Latin America.

⁴⁰ It mainly refers to the environmental- and cultural-friendly production practices of fine aroma cocoa that are applied in the Amazon provinces, as well as the clean *naranjilla* production model already in place in NP.

	Cocoa	Naranjilla	Livestock
	Tsatsayaku, Winak, Inti, Amanecer Campesino	Pucuno Chico, Pacto Sumaco, Volcán Sumaco, Wawa Sumaco, Hatun Sumaku, Pachakutik, y Papanacu	Cuyuja, Borja and Sardinas
Selection criteria	Gender, inter-culturality, distribution along the cocoa tourist route	All <i>naranjilla</i> producing communities located in the corridor between the two core areas of the Sumaco Napo Galeras National Park	Location in corridors between PAs
Target area for sustainable intensification, adapted to the local context	400 ha	120 ha	1.200 ha
Target forest area to be conserved through conservation agreements	1,000 ha	400 ha	364 ha
Incentive mechanisms to be channelled through conservation agreements	1) Agro-forestry extension (MAE) 2) NPG - production 3) Extension for sustainable production (MAGAP and NPG)	1) Agro-forestry extension (MAE) 2) NPG - production 3) Extension for sustainable production (MAGAP and NPG)	1) Agro-forestry extension (MAE) 2) NPG - production 3) Extension for sustainable production (MAGAP and NPG)

Output 2.1.2: Two value chain plans for cocoa and *naranjilla*, updated, implemented and monitored

The value chain plans aim at facilitating the access of sustainably produced cocoa and *naranjilla* to the domestic market in Ecuador, generating increased incomes and enhanced livelihoods for family farmers and small-scale rural producers - who live in areas of high-biodiversity importance. Value chain plans will help reduce anthropic pressures in the buffer zones and on the PAs of the Napo Province.

Activities

In PY1, the cocoa and *naranjilla* value chains plans for the NP will be updated through: i) a thorough market analysis and a proposed revised plan, to be prepared by a Value Chain Specialist (see TORs in Appendix 6); and ii) 8 workshops for consultation and updating of the plans.

From PY2 onward the afore-mentioned plans will be implemented and monitored, seeking niche markets that give value to sustainable production. This output is closely related with output 3.1.2, which will support the NPG in developing an eco-label for the *chakra* system. The eco-label aims at adding value to environmental-friendly goods produced in the province.

Output 2.2.1: A Provincial SFM Strategy designed, agreed, implemented, and monitored

Activities

In PY1, 15 participatory workshops for construction and validation of the Provincial SFM Strategy will be carried out. The strategy will comprise key SFM contents such as: i) SFM stakeholders in the province and their respective roles; ii) participatory mechanisms for management and implementation of the strategy; iii) inter-institutional partnerships; iv) training and technical assistance for local groups in organizational and participatory issues; v) mainstreaming of forestry planning in the LUDPs, articulated with MAE guidelines; vi) diagnosis and analysis of gender issues regarding forest resources use, access to, and value chains; vii) research needs to generate relevant forest information to support the economic and productive development of the province, and rural population livelihoods; and viii) good practices and lessons learned about forest management, and how to develop a value chain of legal forest products. The strategy will be socialized through a participatory workshop and will be published to promote its dissemination. From PY2 to PY4, the SFM Strategy will be implemented and monitored. Its progress will be recorded, and results and lessons learned will be systematized (see more about project M&E system in Component 4).

Output 2.2.2: 23 co-management plans for La Cascada, Cerro Sumaco and Colonso PFs elaborated, implemented and monitored (40,927 ha)

Activities

In PY1 a multi-temporal study on land use and coverage at province level on a 1:50000 scale will be carried out for the 2008-2013 period using protocols validated by the MAE. This study will serve as the project baseline. On the basis of this study and MAE available information on biomass parcels, the project will estimate the carbon stocks/avoided emissions in the intervention area. The multi-temporal study will be repeated in PY4 covering the period 2013-2017 to update the deforestation rate in the province and estimate the carbon stocks/avoided emissions for the new period. The study will likewise serve as an input to monitor project progress in conserving the forests of the province.

The project will support the implementation of the Provincial SFM Strategy elaborated under output 2.2.1 between PY1 and PY4 in the Colonso, Cerro Sumaco and La Cascada PFs, which are high value forests in terms of water and electricity supply. The Colonso PF supplies water to Tena and Archidona, the Cerro Sumaco PF supplies water to the Hatun Sumaku parish, while the La Cascada PF contains the Coca Codo Sinclair hydro-electric dam, which provides electricity nationwide. The Forest Law states that national PFs require a Global Management Plan, which elaboration is the MAE's responsibility. Communities located inside PFs should have a Co-management Plan, which is defined as a plan per association or community that identifies the following zones: 1) permanent protection zones; 2) native forest management zones; and 3) zones for other uses. For the last category, permitted activities are identified, which could include: integrated farms, tourism, crops, among others,. The Colonso and La Cascada PFs have Global Management Plans, while the Global Management Plan for Cerro Sumaco PF is currently being elaborated. Project support will be directed to elaboration of the community Co-management Plans in the three PFs.

In PY1, 23 Co-management Plans will be elaborated in the three PFs, along with local communities. Targeted technical assistance and training on SFM will be delivered. To facilitate the design of each co-management plan, four workshops per plan will be held, including topics as socialization, diagnosis, zoning, and of a work plan for production activities. In total, 92 community workshops will be organized. Additionally, 6 validation meetings will be held with relevant institutions (2 per PF). Between PY2 and PY4 the project will support the implementation and monitoring of the 23 Co-management Plans as well as the establishment of tree nurseries and production of tree seedlings. MAE and COCASINCLAIR EP will support the plans implementation by providing investment.

Table 2.2 summarizes the main data related to implementation of the Co-management Plans:

Table 2.2
Implementation of Co-management
Plans of Protective Forests: Description

	Cerro Sumaco PF	La Cascada PF	Colonso PF
Number of co-management plans to be developed by the Project	10	10	3
Involved communities	Mundayacu Pucuno chico Rio Guacamayo Jatun Sumaku Wawa Sumaco Wamani Cristo del Consuelo Volcán Sumaco Maria Antonieta de Lleucan Akoki	Sucursal del Cielo Divina Providencia El Eden Mirador del Alto Coca, San Francisco II Camaleg Machacuyacu Fago Luz y Vida El Triunfo	Libertad Shitig Alto Tena
Target area covered by the co-management plans	27.784 ha	12.758 ha	385 ha

Output 2.2.3: 2,500 ha restored with analogue forestry, reforestation or natural regeneration techniques under conservation agreements and incentives

Activities

Priority areas for restoration will be identified in PY1. From PY2 onward the project will provide training in ecological restoration to producers and communities interested in implementing restoration in their lands (private or community-owned). Conservation agreements will be negotiated and signed in order to channel incentives for restoration purposes. 90 training events and field days with producers and communities will be held for stimulating this interest. The project will finance the start-up costs of restoration, which comprise the supply of inputs and establishment of tree nurseries to produce seedlings; costs that will be subsequently assumed by the incentive mechanisms. Incentive mechanisms applicable to this output are: 1)

Reforestation for production (MAGAP); 2) Reforestation for conservation (MAE); 3) Socio Bosque – restoration; and 4) National Concurrent Plan (MAE-DAGs). Through the project, MAE, NPG and MAGAP will provide technical assistance for implementation of restoration activities, which may consist in: i) passive reforestation (natural regeneration); ii) active reforestation (planting of tree species); and/or iii) analogue forestry (combination of natural regeneration and enrichment with species that are favourable to the fauna).

Output 2.2.4: Provincial timber traceability system, designed and piloted in Cerro Sumaco (Wamani and Akoki communities)

The Forestry Administration System (FAS) of MAE is responsible for the implementation and compliance of all timber traceability system in place (or to be in place) in the provinces of Ecuador. In Napo, supported by the project, MAE will pilot a traceability system, according to MAE's mandate. The system's sustainability is assured since MAE will be responsible for both implementation and addressing non-compliance. MAE will provide co-financing to output 2.2.4, along with the NPG.

Activities

This output is aimed at promoting an effective sustainable forest management throughout the whole timber supply chain. Given that the Province has had incipient experiences, the project will catalyze funds to pilot a traceability system that, if successful, will then be up-scaled with NPG and other government sources financing.

In PY1 the project will provide technical assistance for designing a provincial timber traceability system. This design will be based on the MAE Forestry Administration System (FAS), which is a tool that serves for identifying timber origin and destination. 12 participatory workshops will support the design, training on, and implementation of the system. The system design will incorporate the whole value chain, including: i) comprehensive farm management plans and forest harvesting plans (Output 2.2.2); ii) primary transformation (tree cutting and sawing: logs, boards or planks); iii) verification at source level of the quantity of forest products extracted during harvesting; iv) transport of timber toward Tena; v) storage (generally in private lumber yards in Tena); vi) secondary transformation in sawmills; vii) final transport out of the province; viii) external private lumber yards in Ambato and Quito; and ix) commercialization.

The traceability system will be piloted during PY2 and PY3 with the communities of Akoki and Wamani. The project will support the elaboration of Comprehensive Farm Management Plans and Forestry Harvesting Plans⁴¹ in the afore-mentioned communities as an input to design and piloting of the traceability system. Commercial agreements for both communities to ensure timber legal sale will be sought. Training and technical assistance will be provided to small-scale producers in issues related to the supply chain of forest products and organization. Market studies will be carried

⁴¹ The Comprehensive Farm Management Plan is the land use planning instrument at farm level, which justifies and regulates land use and sustainable management and use of natural resources in a certain area. The Forest Harvesting Plan defines harvesting and use of timber. Plans include: forest inventory, tabulation of inventory data and legal documents of the landowner (property register, certificate of being registered in MAE, certificate of previous obligations – previous experience in adequate management – MAE fees paid). This information is uploaded to the FAS and the type of product identified: boards, planks and/or logs.

out to identify demand/chains with certification potential. Strategic partnerships will be promoted with companies that have Corporate Social Responsibility standards and are willing to sell environmental-friendly goods (if possible under voluntary forest certification schemes). Moreover the project will provide training and technical assistance to forest industries in the province to formalize businesses and optimize transformation processes; it will also support the development of promotional activities such as events, fairs, shows and forums. In PY4, the system implementation will be monitored and lessons will be extracted for up-scaling. After project termination, the sustainability of the provincial traceability system will be ensured through NPG financing.

Component 3: Promotion of biotrade and community-based ecotourism as strategies for biodiversity conservation, sustainable management of natural resources, and improvement of livelihoods for local communities

Component 3 aims at providing alternatives for improving local communities' livelihoods while contributing to biodiversity conservation. The project will provide technical assistance to promote sustainable community-based tourism and biotrade as strategies for biodiversity conservation, sustainable management of natural resources, and improvement of rural communities' livelihoods in the NP. Component 3 will be implemented in the buffer zones and transition zones of the RBS and in high value areas for connectivity in the NP. The Component strategies are expected to generate: i) 10% increase in the current average income of 200 producers (100 women); and ii) 1,000 ha of conserved forests in community-owned and/or private lands. Improved livelihoods will reduce the risk of encroachment over the surrounding protected areas, contributing to maintain habitats where threatened species⁴² live or circulate.

Output 3.1.1: Conservation agreements (500 ha), and good practices in sustainable community-based ecotourism, implemented

Activities

7 sustainable community-based ecotourism initiatives in the communities of Oyacachi, Cosanga –Guacamayos – Narupa, Pacto Sumaco, Sinchi Pura, Waysa Yacu, Santa Rita and Gareno will be supported since PY1. These communities have been selected based on the following criteria: i) their location near protected areas and forest areas; ii) their potential contribution to increase biological corridors and functional habitats for conservation; iii) the existence of community-owned forests that could be conserved through conservation agreements; and iv) the presence and willingness to participate of native ethnic groups.

In PY1 the project will provide technical assistance to elaborate a manual of good practices in sustainable community-based ecotourism. 21 training events will be held to support the dissemination and implementation of these good management practices. Training will also address the internal organization and entrepreneurial management of the initiatives. The NPG, MINTUR and MAE will support the legalization of the selected initiatives⁴³, as well as the development of infrastructure to improve the quality of services provided to tourists. They will also facilitate the establishment of strategic partnerships for developing tourism packages. A community-base

⁴² Such as the Spectacled Bear, Andean Tapir (*Tapirus pinchaque*), Amazonian Tapir (*Tapirus terrestris*), and the White-tailed Deer (*Odocoileus virginianus*).

⁴³ Through MINTUR and MAE formal mechanisms. See Section 1 for a detailed description.

ecotourism supply chain study. On this basis, value chain plans for ecotourism in natural areas will be refined and updated. 14 workshops will be held to validate them. From PY2 to PY4 the plans will be implemented and monitored, pursuing niche markets willing to value community-based nature tourism.

From PY2 onward the project will supply materials and inputs to support the implementation of good practices in sustainable tourism (e.g. septic tanks, rainwater harvesting systems, waste management, bathroom facilities). Good tourism practices implementation will be linked to the endorsement of forest conservation agreements in producer or community lands. In early PY1, conservation agreements will be elaborated and negotiated aiming to conserve 500 ha in private and/or community lands. Once the agreements will be endorsed, incentives funds⁴⁴ will flow to producers from PY1 to PY4.

Output 3.1.2: 5 biotrade products with management plans and/or *chakra* eco-label produced in 2 priority areas (Archidona and Tena) with conservation agreements (500 ha)

Activities

The project will support the production of 5 biotrade goods (listed in Table 2.3) grown under the traditional *chakra* system or in the context of sustainable management plans in the cantons of Tena and Archidona.

**Table 2.3
Species and biotrade products**

Species	Product	Area
Orchid	Flowers	Tena and Archidona
Palm	Fibres	Tena
<i>Guayusa</i>	Beverage	Archidona
Vanilla	Vanilla	Tena
<i>Tikaso</i>	Oil	Archidona and Tena

In PY1, the communities and associations will be identified. Technical assistance will be provided to them on: i) development of management plans for 5 bioproducts at *chakra* level; and ii) MAE’s approval procedures of plans to obtain authorization for bioproducts commercialization. By the end of PY1, 20 training workshops will be held to create capacities on management plans elaboration, and certification process, to generate an eco-label for the *chakra* system.

In PY2, materials and inputs will be supplied to support the implementation of good biotrade practices (e.g. machetes, shovels, choppers, seedlings, community nurseries, post-harvest materials). Good biotrade practices implementation will be linked to the endorsement of forest conservation agreements in producer or community lands. In early PY1, conservation agreements will be elaborated and negotiated. Once the agreements will be endorsed, incentives funds will flow to producers, from PY1 to PY4..

⁴⁴ The following MAE incentives will be channelized: Socio Bosque conservation, and National Concurrent Plan for Reforestation.

The NPG has the initiative of declaring the province as a “ clean production territory”. In this framework, technical assistance will be provided to the NPG (MAE and MAGAP), to design a *chakra* eco-label that will be applicable to the production of those 5 biotrade goods, ecotourism, cocoa and *naranjilla*. The eco-label will be designed in PY3. This will include certification criteria development, pilot areas definition, and a regulation proposal, to obtain the provincial recognition of the label.

In PY2 and PY3, the value chains plans for the 5 bioproducts will be developed through: i) a thorough market analysis and 5 proposed plans, to be prepared by a Value Chain Specialist (see TORs in Appendix 6); and ii) 10 workshops to validate and revise the plans. From PY3 onward the afore-mentioned plans will be implemented and monitored, seeking niche markets that give value to bioproducts. This output is directly related to outputs 2.1.2 and 3.1.1 (see above).

Component 4: M&E and information dissemination

The objective of Component 4 is to monitor and evaluate the project progress and achievement of indicator targets, risk mitigation measures, identify new measures to address unforeseen risks, generate progress reports, mid-term and final evaluations, systematize lessons learned, and prepare information materials. Once systematized, lessons learned (successes and failures) will be disseminated throughout the country and might be useful for projects to be implemented in the Amazon region. The outcomes of Component 4 comprise the following outputs and activities:

Output 4.1.1: Project M&E system operational, providing constant information on project progress in achieving outcomes and outputs

Activities:

Between PY1 and PY4, the Project Technical Chief will prepare six-monthly Project Progress Reports (PPRs). The PPRs include the project results framework with project outputs and outcomes indicators, baseline and six-monthly target indicators, the monitoring of the risk matrix, and identifies potential risks and mitigation measures to reduce those unexpected risks. At the end of each year, the Project Technical Chief will provide appropriate inputs to the Lead Technical Officer (LTO). The LTO-FAO will be responsible for preparing the yearly Project Implementation Review (PIR). The PIR includes the project results framework with project outputs and outcomes indicators, baseline and yearly target indicators, the monitoring of the risk matrix, and will identify potential risks and mitigation measures to reduce those unexpected risks.

Output 4.1.2: Mid-term and final evaluations

Activities:

After 24 months of project implementation, a mid-term project evaluation will be conducted by an external consultant, who will work in consultation with the project team including the FAO Independent Evaluation Office (OED), the FAO-GEF Coordination Unit, the LTO, and other partners. Three months before the end of project implementation (month 45) a final project evaluation will be conducted by an international external consultant under the supervision of FAO OED, in consultation with the project team including the FAO-GEF Coordination Unit, the LTO, and other partners.

Output 4.1.3: Project best practices and lessons learned published

Activities:

In PY3, a publication will be issued on project best practices and lessons learned. In PY4, 2 additional publications will be issued on project best practices and lessons learned including success stories and failures. The specific themes to be treated in these publications will be defined during the course of project implementation. All publications will be uploaded to the project website, and will be distributed through (limited) printed copies to local partners and government staff

Output 4.1.4: Webpage for information-sharing and exchange of experiences

Activities

The project will have its own webpage in the NPG website with the objective of sharing permanent and updated information on project progress with various stakeholders and partners, as well as with the public in general.

2.5 GLOBAL ENVIRONMENTAL BENEFITS

The involved government institutions and their local staff (NPG, MAE, MAGAP), state-owned companies (COCACODO Sinclair), civil society (producer associations and communities, see Table 1 and 2), and small and medium-scale rural farmers (linked to livestock, naranjilla, and cocoa) will be supported to develop their capacities on SLM, INRM, SFM, and BD conservation and good use; and along with the international cooperation agencies (FAO, GIZ) will help deliver GEBs as detailed below. Targeted protected forests and buffer zones in the NP are areas of global importance, as described in Section 1.

The project will incorporate 47,911 ha under sustainable land management with maintained or increased forest cover. This includes: 1) 1,720 ha under intensification and INRM, adapted to the local context (additional 120 ha of *naranjilla*, 400 ha of cocoa and 1,200 ha of livestock); 2) 1,764 ha of forests conserved by *naranjilla*, cocoa and livestock producers through conservation agreements; 3) 40,927 ha under sustainable forest management in the Colonso, Cerro Sumaco and La Cascada PFs through co-management plans; 4) 2,500 ha restored with analogue forestry, reforestation or natural regeneration techniques through conservation agreements and incentive mechanisms; 5) sustainable production of 5 native species (orchids, vanilla, palms and *guayusa*) and conservation of 500 ha of forests through conservation agreements; 6) 500 ha of forests conserved in community-owned or private properties within the framework of sustainable community tourism initiatives; 7) improvement of the conservation status of native fauna through conservation of forests in the corridors between protected areas; 8) reduction of the pressures on forest ecosystems by production sectors through reduction of the deforestation rate⁴⁵; 9) CO_{2eq} avoided emissions through the protection of forests and reduction of deforestation⁴⁶.

⁴⁵ Percentage to be defined at inception/PY1. (Preliminary target: no increase in the deforestation rate after 2014 as direct impact of the project and decrease in 15% in four years project lifetime as indirect impact) (Baseline: rate of deforestation: 2,735 ha/yr in the Province of Napo for the 2000-2008 period, and estimated in 3,905 ha/yr in 2014).

⁴⁶ The target of avoided CO_{2eq} emissions through protection of forests and reduction of deforestation will be defined at inception/PY1 (Preliminary target: avoided emissions during the 4 years project lifetime due to sustainable forest management in amount of 535,275 t CO_{2eq}, and due to forests conserved by producers, inside or around the agricultural systems in amount of 807,030 t CO_{2eq})

Moreover, other GEBs to be accrued by the project will include: i) the mainstreaming of globally-important BD conservation and sustainable use into the Napo public policies (e.g. LUDPs); ii) the increase of connectivity among PAs and Biosphere reserves with a landscape approach; iii) the reduction of degradation of forests; iv) the increase of stakeholders’ awareness on how to manage globally-important BD, through capacity development of stakeholders, participation, inter-institutional and intersectoral coordination, setting the basis for sustainability after project termination ; v) the development of a *chakra* system eco-label to designate the Province as a “clean production territory”. The eco-label will allow, in the long-term, the adoption of production best practices throughout the whole province; vi) the financial sustainability of environmental-friendly production alternatives through the strengthening and articulation of the financial and non-financial incentive mechanisms – expected to be up-scaled in the whole province after project termination.

The project will contribute to include the INRM approach in the buffer zones of the globally significant SBR and the Napo River basin, which is a tributary of the trans-border Amazon basin.

Table 2.4 summarizes the main global benefits to be accrued by the project.

Table 2.4
Summary of global environmental benefits to be delivered by the Project⁴⁷

Global environmental benefits
<p><i>Biodiversity and ecosystem functions</i></p> <ul style="list-style-type: none"> • Increase in connectivity and habitats for biodiversity • Increase in forest cover and diversity of tree species • Reduction of pressures over native forests due to expansion of the agricultural and livestock frontier, and selective logging • Conservation of species of global importance, e.g. Spectacled Bear, Puma, Andean Tapir, Amazon Tapir, others • Conservation of species of economic importance, e.g. vanilla orchid, native orchids, <i>tikaso</i>, <i>guayusa</i>, palms <p><i>Carbon benefits</i></p> <ul style="list-style-type: none"> • Avoided CO_{2eq} emissions

Carbon benefits

Reduced Carbon Emissions and Increased Carbon Stocks

National and local institutions, local communities, NGOs and small-scale farmers will help deliver carbon benefits through the implementation of project activities. Therefore, the Project will have direct and indirect impacts on carbon stocks and will

(Baseline: preliminary data estimation with information provided by MAE indicates that the Napo emissions for the 4 years project lifetime could be of 7,681,426 t CO_{2eq} considering 125 t C/ha).

⁴⁷ Please find specific quantitative and qualitative indicators in the Project Results Framework, Appendix 1.

reduce CO₂ emissions. The following estimation has been calculated by using a defensive methodology – see below. Project targets will be further refined in PY1.

Baseline information

This information is estimated considering a deforestation baseline in the Province of Napo, in amounts of 1,682 ha/year (1990-2000) and 2,735 ha/year (2000 - 2008), and an equivalent of 125 t/ha or 457.50 t CO_{2eq}/ha. The data have been estimated by the Ministry of Environment (MAE) in the framework of the FAO Project *Sustainable Forest Management in a Changing Climate Programme*,⁴⁸ and the *UN REDD Programme Ecuador* (UNJP/ECU/083/UNJ)⁴⁹.

In order to generate a map of historical deforestation, the MAE developed a methodology which sets procedures for generating coverage and land use maps for the reference years 1990, 2000 and 2008. Satellite images of LANDSAT and ASTER sensors have been used with the lower cloud cover as possible. After the pre-processing it was determined that the information area at national level without clouds was 84% in 1990, 88% in 2000, and, 74% in 2008.

Different time periods have been assessed through the MAE methodology. The comparison between these periods has identified spatial conversions from forest to other coverage and land uses for two periods: 1990-2000, and 2000-2008. The MAE methodology also includes procedures of documentation, verification and validation that allow the user to evaluate the quality of generated information and reported data. By applying the MAE methodology, the annual rate of change of forest cover in continental Ecuador was estimated in - 0.68% for the period 1990-2000 and in - 0.63% for the period 2000-2008. This corresponds to an annual deforestation average of 74,300 ha/year and 61,800 ha/year for both periods, respectively.

A summary about the estimation of the deforestation rate in Ecuador could be consulted at: <http://sociobosque.ambiente.gob.ec/files/Folleto%20mapa-parte1.pdf>

Based on this information, the deforestation BAU scenario in the Napo Province has been estimated as follows:

⁴⁸ The agreement on the *Sustainable Forest Management in a Changing Climate Programme* was signed between the Government of Finland and FAO in March 2009 at FAO headquarters, Rome. The programme has aimed at strengthening the FAO resources and capacity in methodological and tool development at FAO headquarters and five pilot countries (Ecuador, Peru, Tanzania, Viet Nam and Zambia). Special emphasis was in providing tools and methods for multi-purpose forest inventories and for REDD+ monitoring and climate change adaptation, supporting the collection of quality forest resources data on which to base policy decisions in forestry and establishing closer links between NFMA and NFPs. The programme has collaborated with UN REDD (see below) with bilaterally funded NFMA/NFI projects, international organizations and NGOs. See: <http://www.fao.org/forestry/fma/76453/en/>

⁴⁹ [UN-REDD](http://www.un-redd.org/AboutUNREDDProgramme/NationalProgrammes/Ecuador/tabid/7073/Default.aspx) (United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation). The UN REDD programme has received FAO's technical support in Ecuador. See <http://www.un-redd.org/AboutUNREDDProgramme/NationalProgrammes/Ecuador/tabid/7073/Default.aspx>.

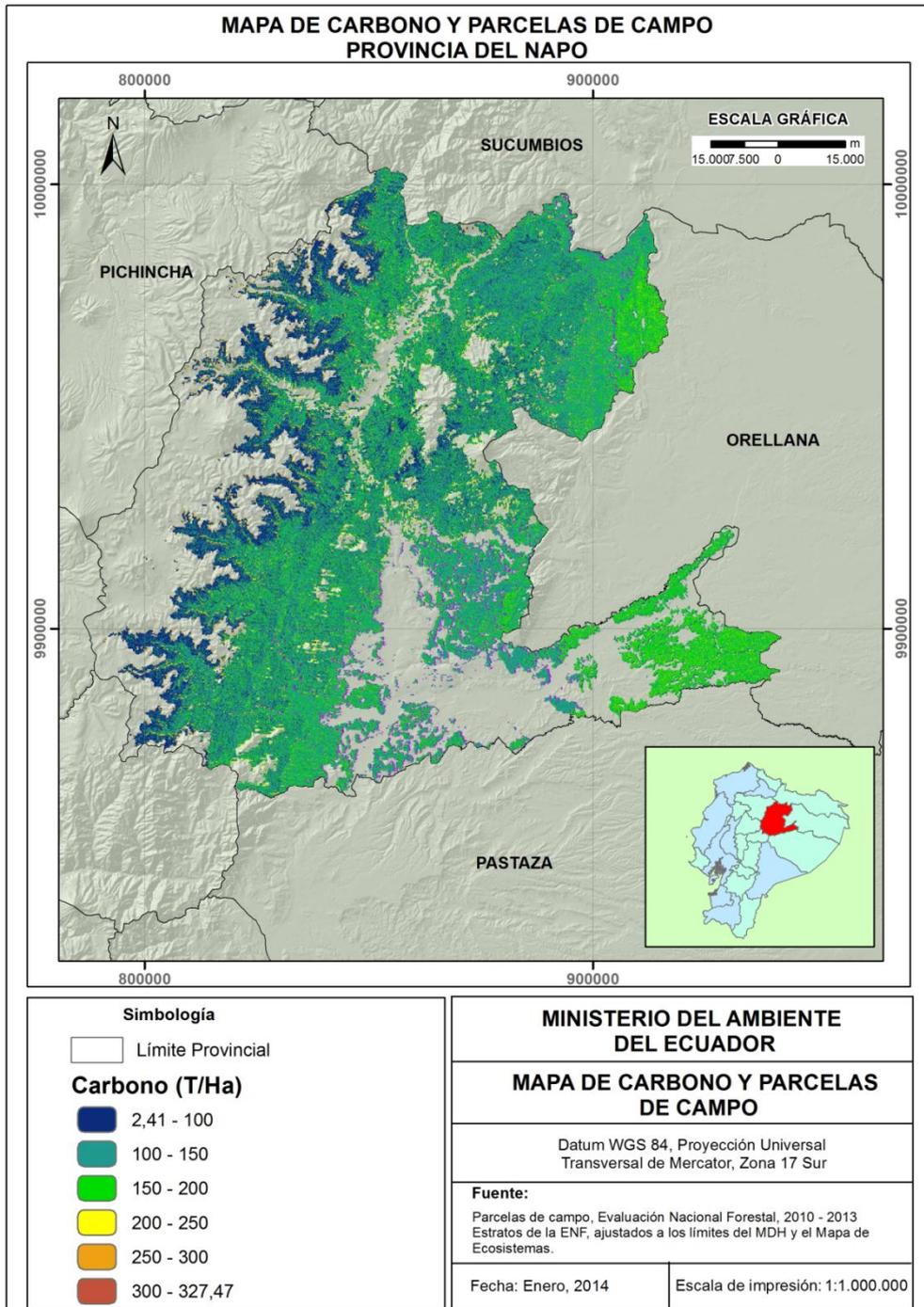
Table 2.5
Deforestation scenario (business-as-usual)
 (estimation for the project implementation period: 2014 – 2018)

	1995 (1990 – 2000)	2004 (2000- 2008)	2010	2011	2012	2013	2014	2015	2016	2017	2018
Deforestation (ha/year)	1,682	2,735	3,437	3,554	3,671	3,788	3,905	4,022	4,139	4,256	4,373

Note: using a lineal progression with two control points (1995 and 2004). The yearly variation was estimated in - 117 ha/year. Formula: $\Delta = (Deforestation\ 1995 - Deforestation\ 2004) / 9\ years$

The forest carbon has been also estimated by using the carbon maps provided by the MAE. For the Napo Province it has been used a conservative value of 125 t C/ha, as indicated in the following map.

**Map 1:
Carbon map and field areas.
Province of Napo, Ecuador**



Date: January, 2014. Scale: 1:1.000.000
Source: National Forestry Assessment 2010-2013

Based on this information, the baseline carbon and carbon dioxide emissions are presented in the Table 2.6 below.

Table 2.6: Carbon emissions and Carbon dioxide emission (business-as-usual)

	1995 (1990 – 2000)	2004 (2000-2008)	2010	2011	2012	2013	2014	2015	2016	2017	2018
Deforestation (ha/year)	1,682	2,735	3,437	3,554	3,671	3,788	3,905	4,022	4,139	4,256	4,373
Carbon emission (t C/year)	210,250	341,875	429,625	444,250	458,875	473,500	488,125	502,750	517,375	532,000	546,625
Carbon dioxide emission (t CO ₂ eq/year)	769,515	1,251,263	1,572,428	1,625,955	1,679,483	1,733,010	1,786,538	1,840,065	1,893,593	1,947,120	2,000,648

Note: Using 125 t C/ha and a conversion factor of 3.66 for estimating CO₂eq.

The MAE methodology for estimating deforestation and forest carbon could be consulted at:

<http://www.ambiente.gob.ec/wp-content/uploads/downloads/2012/10/Metodologia-para-el-desarrollo-del-estudio-piloto-de-la-ENF.pdf>. This methodology has been developed by Ecuador to participate in REDD+ in the future.

The project will help reduce the pressures over the forests of the Sumaco Biosphere Reserve by implementing a Sustainable Forest Management Strategy, that includes:

- Reduction in the rate of deforestation through i) the sustainable forest management (target to be defined at inception - year 1), ii) forest conservation (1,000 ha of forests – community-owned or private), and iii) the conservation agreements (1,720 ha under sustainable intensification, adapted to local context).
- Enhanced forest carbon sequestration through i) the production systems with increased vegetation cover (1,764 ha of forest conserved by producers), and ii) recovering the forest cover of 2,500 ha.

In the alternative project scenario, business-as-usual CO₂ emissions will be reduced due to project interventions. Calculations are as follows:

Direct impacts

Avoided Emissions from Deforestation

Through the *Outcome 2.1: Production systems incorporate good practices for conservation and management of natural resources in four priority sites of the Province of Napo*: This action will promote 1,764 ha of forests conserved by producers, inside or around the agricultural systems, using conservation agreements as a basis for a formal commitment for avoiding deforestation and forest degradation. It is expected to promote a reduction of the emissions in amount of **807,030 t CO₂eq** (1,764 ha x 125 t C/ha x 3.66).

Through the *Outcome 2.2: Reduced pressure over the forests of the Sumaco Biosphere Reserve through the implementation of a SFM strategy*: Although the reduction in the rate of the deforestation through SFM and conservation agreements will be defined during PY1, some estimations could be made using a scenario approach. In this sense it is expected that during the implementation period of the project the deforestation rate will remain at least without increase, that corresponds to

an avoided deforestation in 1,170 ha (considering the estimated deforestation rate in PY4). This scenario causes an estimated avoided emission of about **535,274 t CO_{2eq}**, as indicated in the table 2.7 below.

Table 2.7: Avoided carbon emissions and Carbon dioxide emission (scenario with SFM)

	1995 (1990 – 2000)	2004 (2000-2008)	2010	2011	2012	2013	2014	2015	2016	2017	2018
Business as usual											
Deforestation (ha/year)	1,682	2,735	3,437	3,554	3,671	3,788	3,905	4,022	4,139	4,256	4,373
Carbon emission (t C/year)	210,250	341,875	429,625	444,250	458,875	473,500	488,125	502,750	517,375	532,000	546,625
Carbon dioxide emission (t CO _{2eq} /year)	769,515	1,251,263	1,572,428	1,625,955	1,679,483	1,733,010	1,786,538	1,840,065	1,893,593	1,947,120	2,000,648
With SFM											
Deforestation (ha/year)	1,682	2,735	3,437	3,554	3,671	3,788	3,905	3,905	3,905	3,905	3,905
Carbon emission (t C/year)	210,250	341,875	429,625	444,250	458,875	473,500	488,125	488,125	488,125	488,125	488,125
Carbon dioxide emission (t CO _{2eq} /year)	769,515	1,251,263	1,572,428	1,625,955	1,679,483	1,733,010	1,786,538	1,786,538	1,786,538	1,786,538	1,786,538
Avoided emissions											
Avoided carbon dioxide emissions (t CO _{2eq} /year)								53,527	107,055	160,582	214,110
TOTAL:								535,274			

Through the *Outcome 3.1: Biodiversity conserved, natural resources sustainably managed and livelihoods of local communities improved through promotion of community-based ecotourism and biotrade*: It is expected that 1,000 ha of forests (community-owned or private) will be conserved through conservation agreements and they will be destined to community tourism or sustainable biotrade practices, without deforestation or forest degradation in those areas, and therefore it will result in avoided emissions in amount of **457,500 t CO_{2eq}** (1,000 ha x 125 t/ha x 3.66).

Total avoided emissions due to the project interventions in reducing deforestation and forest degradation are therefore: **535,274 + 457,500 + 807,030 = 1,799,804 t CO_{2eq}** (project implementation period).

Enhanced Forest Carbon Sequestration

Through the *Outcome 2.1: Production systems incorporate good practices for conservation and management of natural resources in four priority sites of the Province of Napo*: The project will promote the integration of natural resources management practices in the wider landscape for establishing agroforestry systems in which the producer will appreciate more the forest related with their production systems (1,200 ha agroforestry systems with livestock and 520 ha agroforestry systems with cocoa and naranjilla). This restoration will re-establish in PY1 a forest cover of 25% in agroforestry systems with livestock, and 40% with cocoa and naranjilla. Taking a conservative value of enhanced forest sequestration of 2 t C/ha/year, it is estimated a sequestration of **20,144 t CO_{2eq}** [(1,200 ha x 25% x 4 years + 520 ha x 40% x 4 years) x 2 t C/ha/year x 3.66]

Through *Output 2.2.3: Restoration of degraded land/forest*: It is expected that 2,500 ha will be restored as a result of project implementation during four years. This restoration will be also yearly executed in phases: 15 % in PY1 (375 ha), 30% in PY2 (750 ha), 40% in PY3 (1,000 has) and 15% in PY4 (375 has). Taking a conservative value of enhanced forest sequestration of 2 t C/ha/year, it is estimated additional sequestration of **57,835 t CO_{2eq}** [(273 ha x 4 years + 750 ha x 3 years + 1,000 ha x 2 years + 375 ha) x 2 t C/ha/year x 3.66]

Total enhanced sequestration due to the project interventions to increase carbon stock is therefore: **20,144 CO_{2eq} + 57,835 CO_{2eq} = 77,979 t CO_{2eq}**.

Over the 4-year lifetime of the project, this will lead to avoided emissions of **1,799,804 t CO_{2eq}** and additional sequestration of **77,979 t CO_{2eq}** (see Table 2.8 below).

Table 2.8: Direct avoided emissions and sequestration (4 years project implementation)

	1995 (1990 – 2000)	2004 (2000-2008)	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Business as usual (baseline)												
Carbon dioxide emission (t CO _{2eq} /year)	769,515	1,251,263	1,572,428	1,625,955	1,679,483	1,733,010	1,786,538	1,840,065	1,893,593	1,947,120	2,000,648	
Emissions									7,681,426			
Avoided carbon dioxide emissions (t CO_{2eq})												
SFM									535,274			
1,000 ha of forests (community-owned or private) will be conserved									457,500			
1,764 ha of forests conserved by producers, inside or around the agricultural systems									807,030			
									Total:			
									1,799,804			
Enhanced forest carbon sequestration (t CO_{2eq})												
1,200 ha agroforestry systems with livestock and 520 ha with cocoa and naranjilla									20,144			
2,500 ha restored as a result of the implementation of the project during the four years									57,835			
									Total:			
									77,979			

Indirect Impacts

In addition to the direct impacts, the project is expected to generate some indirect positive impacts through : i) the enlargement of the sustainable forest management in 40,927 hectares (included in co-management plans to be prepared and implemented), and ii) the enlargement of agroforestry system areas, as result of the demonstrative effect of project activities.

The major indirect impact would be the reduction of the deforestation rate. The GADPN is aimed at establishing a committed goal for the whole province, and would be able to use the experience gained through this project in other areas under its jurisdiction. During the 4-years project, it is expected that the Province will reduce at least 15% of the deforestation rate. This indirect impact is estimated in an amount of avoided emission of **607,103 t CO_{2eq}** as presented in the table 2.9 below:

**Table 2.9:
Direct and indirect avoided emissions and sequestration (4-years project
implementation).**

	1995 (1990 – 2000)	2004 (2000-2008)	2010	2011	2012	2013	2014	2015	2016	2017	2018
Business as usual											
Deforestation (ha/year)	1,682	2,735	3,437	3,554	3,671	3,788	3,905	4,022	4,139	4,256	4,373
Carbon emission (t C/year)	210,250	341,875	429,625	444,250	458,875	473,500	488,125	502,750	517,375	532,000	546,625
Carbon dioxide emission (t CO ₂ eq/year)	769,515	1,251,263	1,572,428	1,625,955	1,679,483	1,733,010	1,786,538	1,840,065	1,893,593	1,947,120	2,000,648
With SFM (direct impact)											
Deforestation (ha/year)	1,682	2,735	3,437	3,554	3,671	3,788	3,905	3,905	3,905	3,905	3,905
Carbon emission (t C/year)	210,250	341,875	429,625	444,250	458,875	473,500	488,125	488,125	488,125	488,125	488,125
Carbon dioxide emission (t CO ₂ eq/year)	769,515	1,251,263	1,572,428	1,625,955	1,679,483	1,733,010	1,786,538	1,786,538	1,786,538	1,786,538	1,786,538
Direct avoided carbon dioxide emissions (t CO ₂ eq/year)								53,527	107,055	160,582	214,110
TOTAL:								535,274			
With SFM (indirect impact)											
Deforestation (ha/year)	1,682	2,735	3,437	3,554	3,671	3,788	3,905	-3% 3,788	-6% 3,671	-10% 3,515	-15% 3,319
Carbon emission (t C/year)	210,250	341,875	429,625	444,250	458,875	473,500	488,125	473,500	458,875	439,375	414,875
Carbon dioxide emission (t CO ₂ eq/year)	769,515	1,251,263	1,572,428	1,625,955	1,679,483	1,733,010	1,786,538	1,733,010	1,679,483	1,608,113	1,518,443
Indirect avoided carbon dioxide emissions (t CO ₂ eq/year)								53,528	107,055	178,425	268,095
TOTAL:								607,103			

2.6 COST EFFECTIVENESS

During full project preparation diverse strategies and methodologies were analysed with a view in their cost/effectiveness and suitability for the provincial context. Three types of key interventions have been identified: i) one institutional; ii) one regarding landscapes and agro-silvo-pastoral production systems; and iii) one regarding the promotion of biotrade and sustainable community tourism⁵⁰. The project will build upon existing baseline activities, capacities and infrastructure in the province. In order to reduce soil, water and forest degradation, the following strategies and methodologies have been selected for project implementation:

- i. Capacity development will improve inter-institutional and inter-sectoral coordination, which in turn will avoid duplication of efforts and reduce project implementation costs.

⁵⁰ See further description in Subsection 2.1, 2.2 and 2.3 above.

- ii. Decision-making mechanisms and project activities will be aligned with local development priorities, and other ongoing initiatives. Stakeholder participation is key for these purposes.
- iii. SLM will be promoted to raise awareness on the best land uses in the Amazonian context.
- iv. Training and awareness-raising of individual producers and communities will be supported to achieve a shift in attitude that favours of sustainable management of soils, water and forests, and implementation of appropriate technologies.
- v. Fostering sustainable and cultural-friendly intensification (e.g. farm planning, conservation and management of soils, water and forests, use of native species and varieties -cocoa and *naranjilla*-, and pasture management for livestock production).
- vi. Promoting agro-silvo-pastoral systems, including the combination of trees with pastures and trees with crops within the *chakra* system, and the strengthening tree nurseries for production of tree seedlings that will be used in reforestation and ecological restoration.
- vii. Promotion of financial and non-financial incentive mechanisms to stimulate the adoption of sustainable production systems that also conserve forest areas in farms and community lands. Incentives will support the long-term financing of activities initiated by the project.
- viii. Fostering a value chain approach that links production to markets. Generating alternative incomes and livelihoods for project beneficiaries.
- ix. Systematization of experiences and lessons learned will contribute to a cost-effective replication of project results throughout the province, and other Amazonian provinces in South America.

The proposed strategies are cost-efficient: they will allow small-scale producers to maintain their production levels and yields with a low level of use of external technologies, thereby reducing production costs. This, coupled with a strategy of accessing differentiated markets, will let obtain better prices and improve family incomes, hence reducing pressures over pristine forests and biodiversity in the NP.

2.7 INNOVATIVENESS

Project innovativeness lays on creating an environmental governance at provincial level, where before only fragmented and productivity-minded approaches have been spread. The project will strengthen the institutionality of multiple public and private stakeholders including the sustainable management of natural resources, agriculture, livestock production and forestry, participatory policies, inter-institutional and intersectoral mechanisms, development of capacities, and financial modalities.

The project will also promote rural-based biotrade initiatives and eco-tourism that bring together development and environment as a comprehensive approach, under FAO and GIZ technical assistance. In this way, the sustainable use of globally-significant natural resources will also support vulnerable people's livelihoods and incomes in the Province, increasing their food security at local level. Alternative economic activities are key to protect world forest heritage in the Amazonian region.

The project has also included since its inception the participation of *Kichwa* and *Waorani* indigenous peoples, incorporating their ethnic and cultural characteristics, as

well as those of settlers who have lived in the province for the last three decades. The socio-economic differences between men and women, and the differentiation of environment-related knowledge in each case are also considered in this project document and will be monitored during project implementation.

SECTION 3 – FEASIBILITY (FUNDAMENTAL DIMENSIONS FOR HIGH QUALITY DELIVERY)

3.1 ENVIRONMENTAL IMPACT ASSESSMENT

Following FAO's *Environmental Impact Assessment (EIA): Guidelines for FAO Field Projects*⁵¹, the proposed Project is classified under category B⁵². The corresponding Environmental and Social Review Form⁵³ is attached in Appendix 8.

3.2 RISK MANAGEMENT

Project risks have been identified and analysed during the full project preparation and mitigation measures have been incorporated into the project design (see Risk Matrix in Appendix 4). With the support from and under the supervision of FAO, the Project Management Committee (PMC) will be responsible for the day-to-day management of these risks and the effective implementation of mitigation measures. The project's M&E system will serve to monitor project outcomes and outputs indicators, project risks and mitigation measures. The PMC will also be responsible for monitoring the effectiveness of mitigation measures and adjusting mitigation strategies as needed, and identify and manage any eventual new risks not foreseen during project development, in dialogue with other project partners.

The six-monthly Project Progress Report (see section 4.5.3) is the main tool for project risk monitoring and management. The reports include a section on systematic follow-up of risks and mitigation actions identified in previous reporting periods. The PPRs also include a section for identification of eventual new risks or risks that still need attention, their rating and mitigation actions, as well as the responsible for monitoring those actions and the expected timeline. FAO will monitor the project risk management closely and follow up if needed by providing support for the adjustment

⁵¹ See <http://www.fao.org/docrep/016/i2802e/i2802e.pdf>

⁵² Category B projects should not entail significant (or potentially irreversible) negative environmental (and associated social) impacts, but may still have adverse effects which can be mitigated with suitable preventive actions. An indicative list of projects that would normally be assigned to Category B includes: i) Agro-industry projects of small and medium scale; ii) Water impoundment, irrigation and drainage schemes of small scale; iii) Small and medium-scale agricultural and animal husbandry production schemes which involve the use of "exogenous" technology and/or inputs (i.e. cultivation or animal husbandry techniques, agricultural or post-harvest machinery, disease and pest control, seeds, fertilizer, and tools that are not commonly used/traded in the project area); iv) Watershed management or rehabilitation, river basin management planning, international water management, and agreements for medium-size projects; v) Range and pasture management and livestock management, including waste control and livestock health aspects; vi) Small and medium-size aquaculture, including small and medium-scale industrial and artisanal fisheries; vii) Limited bioenergy projects; viii) Climate change adaptation projects; ix) Small and medium-size plantations for bioenergy or pulp or other agricultural use; x) Reforestation/afforestation; xi) Forest industry development including industrial and community uses; xii) Introduction of genetically modified organisms; xiii) Small and medium-size road construction, maintenance and rehabilitation; xiv) Significant changes in plant and animal gene pool; xv) Land use changes affecting biodiversity; xvi) Projects that may have potentially minor adverse impacts on physical cultural resources

⁵³ Ranking under Category B is to be certified by the FAO Lead Technical Officer (LTO) who can proceed to final design and implementation phases. The FAO LTO should carefully fill-in the FAO Environmental and Social Review Form – attached in Appendix 8.

and implementation of risk mitigation strategies. Reporting on risk monitoring and rating will also be part of the annual Project Implementation Review (PIR) prepared by FAO and submitted to the GEF Secretariat (see section 4.5.3).

3.2.1 Risks and mitigation measures

The table in Appendix 4 summarises the risks identified and analysed during the full project preparation, its probability of occurrence and proposed mitigation measures.

3.2.2 Fiduciary risk analysis and mitigation measures (only for NEX projects)

N/A

SECTION 4 – IMPLEMENTATION AND MANAGEMENT ARRANGEMENTS

4.1 INSTITUTIONAL ARRANGEMENTS

The main institutions involved in the project are: the Decentralized Autonomous Government of the Province of Napo (NPG); the Ministry of Environment (MAE)-Regional Office 2; the German Cooperation Agency (GIZ); the Ministry of Agriculture, Livestock, Aquaculture and Fisheries (MAGAP); the municipal governments of El Chaco, Tena, Archidona, Quijos, and Arosemena Tola; the Decentralized Autonomous Government (DAGs) of the Parish of Cuyuja; the Coca Codo Sinclair hydroelectric project; the NGO Rainforest Alliance, and the Support Unit of the Andean Amazonian Initiative – ICAA.

As requested by the NPG⁵⁴, the Food and Agriculture Organization of the United Nations (FAO) will be the GEF Implementing Agency, and Project Executing Agency (see description in Section 4.2)

The NPG will be the lead project executing partner and the MAE will be the main co-executing partner. Both project executing partners will be responsible for ensuring coordination of the four project components, as well as coordination and collaboration with the DAGs, local community organizations and other partners.

In accordance with articles 252 and 263 of the Political Constitution of Ecuador, the NPG has exclusive responsibilities in: i) planning of provincial development and formulation of land use and development plans (LUDPs); ii) environmental management; iii) promotion of agricultural and production activities at provincial level; iv) managing international cooperation of provincial issues. One NPG's role is to formulate initiatives that support the sustainable, inclusive and participatory development of the province related to production, mobility, environmental management and public services, guarantying the Good Living.

MAE is the leading institution in charge of advocating for a healthy environment, and respect for the rights of nature or *pacha mama*. It aims for environmentally balanced development, respectful of cultural diversity, that conserves biodiversity and the natural regeneration capacity of the ecosystems; and ensures the needs fulfilment of present and future generations. Its mission is to effectively and efficiently lead the promotion of environmental management, guaranteeing a harmonious relationship between the economic, social and environmental dimensions that ensures the sustainable management of strategic natural resources.

FAO, NPG and MAE will collaborate with the GEF implementing agencies of other GEF-supported programs and projects to identify and facilitate synergies, as well as with other agencies that support projects financed by other donors. Collaboration will be undertaken through: (i) informal communications; and (ii) exchange of information. In order to guarantee an effective coordination and collaboration between different initiatives, specific coordination responsibilities have been assigned to the Project Management Committee (see below) and included in the terms of

⁵⁴ The NPG, through letter 004-SG-GPN has requested FAO to be the administrator of the project's resources.

reference of the Technical Chief, which results shall be explicitly reflected in the Project Progress Reports (PPRs).

The project will coordinate actions with the following GEF projects, among others:

- 1) The GEF Small Grants Programme (SGP), which focuses on communities that live in buffer zones of protected areas. During the Fifth Operational Phase, the SGP implements the FSP “*Our Corridors for Good Living*” (#4375) with the objective of promoting social and economic connectivity. In the Amazon, the SGP is currently working in the identification of project proposals that support the management of sustainable livelihoods of communities.
- 2) The FAO/GEF project “*Promotion of Climate-smart Livestock Management Integrating Reversion of Land Degradation and Reduction of Desertification Risks in Vulnerable Provinces*” (#4775) currently in preparation phase (PPG), which objective is to reduce soil degradation, increase adaptive capacity to climate change, and mitigate GHG emissions by implementing cross-sectorial policies and climate-smart livestock management, with emphasis in the vulnerable provinces. The province of Napo has been selected as one of the seven project provinces.
- 3) The UNDP/GEF project “*Advancing Landscape Approaches in Ecuador's National Protected Area System to Improve Conservation of Globally Endangered Wildlife*” (#4731) executed by MAE. The project addresses a paradigm change in the PAs management, and the adoption of a landscape approach to improve habitats and connectivity. This project promotes the development of programs that reduce the human-wildlife conflicts associated to agriculture. It is especially focused on the real or perceived threat on livestock represented by carnivore species (bears and jaguars). Conflicts usually take place in buffer zones of protected areas due to colonization and forest conversion. In the NP, the selected areas are Antisana Ecological Reserve and Cayambe-Coca Ecological Reserve. Component 2 under this FAO/GEF proposed project will coordinate actions and information exchange with this UNDP project.

4.2 IMPLEMENTATION ARRANGEMENTS

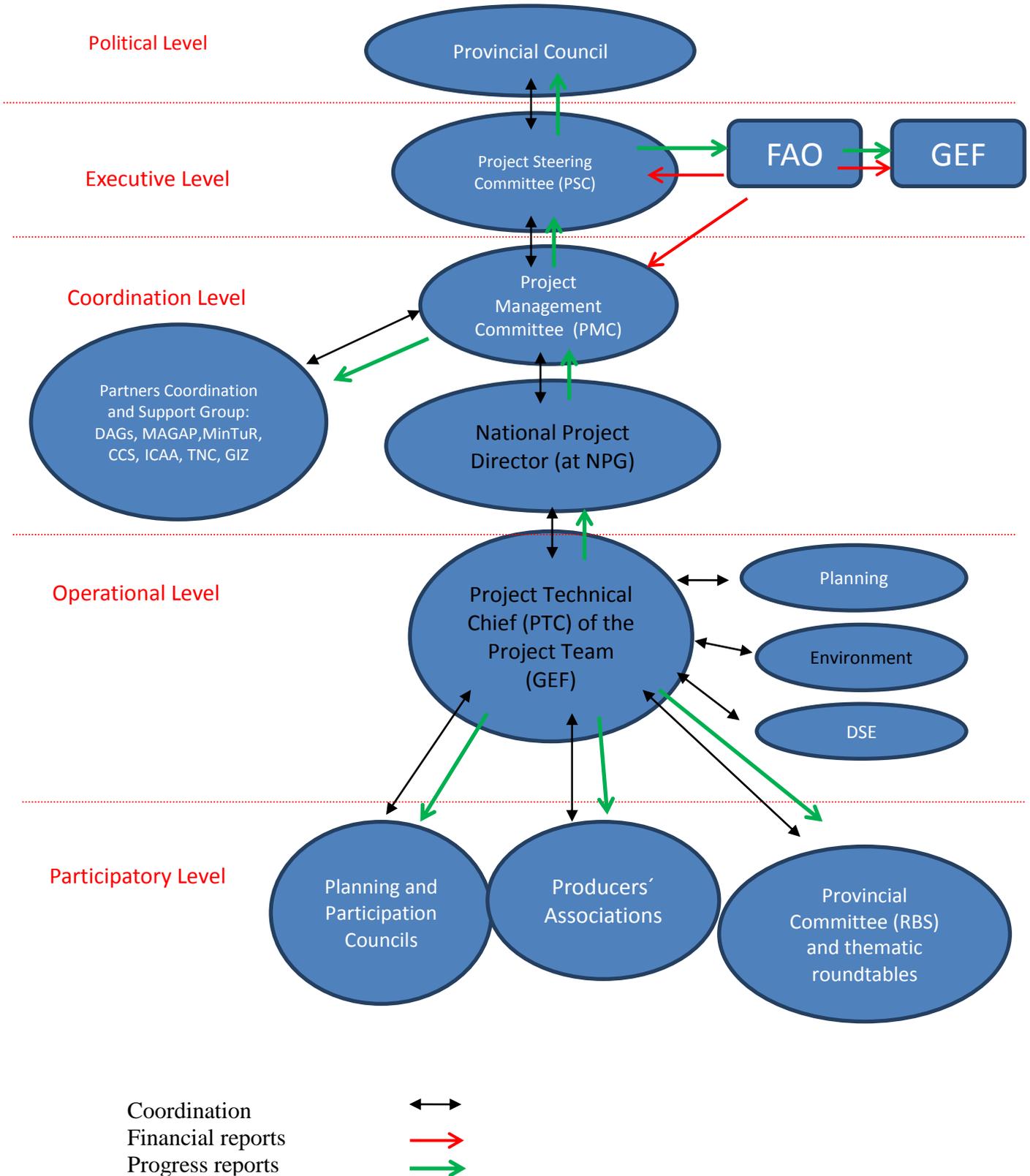
FAO will be the GEF Agency responsible for supervision and provision of technical guidance during project implementation. In addition, FAO will act as financial and operational Executing Agency, and will be responsible for the financial and operational execution of the project in addition to being the GEF implementing agency. FAO will delivery procurement and contracting services to the project using FAO rules and procedures, as well as financial services to manage GEF resources.

The project will be technically executed by the NPG, in collaboration with MAE–Regional Office 2. A **Project Steering Committee (PSC)** will be set up to provide oversight of and coordinate the planning of project implementation, and will comprise the NPG, MAE and FAO.

More specifically, the project will be executed through the **Project Management Committee (PMC)** made up of the Environment, Planning and Socioeconomic Development Directorates and the National Project Director of the NPG. The PMC will be responsible for decision-making, providing guidance and supervising the

Project Team headed by the Project Technical Chief (PTC). The Project Team in charge of project execution will be stationed in the NPG offices in Tena.

Figure 4.1: Institutional Arrangements for Project Implementation



4.2.1 Roles and responsibilities of the project executing partners

The roles and responsibilities of the main institutions involved in project implementation are the following:

The **Ministry of Environment (MAE)** Headquarters is the GEF operational focal point in Ecuador and responsible for coordinating the programming of GEF resources and supervising the GEF project portfolio in Ecuador, in collaboration with the GEF implementing agencies and project executing partners. The specific responsibility of the MAE in this project will be monitoring the annual Project Implementation Reviews (PIR) and will be invited to the mid-term and final evaluations of the project. The MAE's Napo Provincial Directorate will be the co-executing partner, will support project operations and will ensure the timely delivery of inputs and products, especially in relation to the forestry subcomponent, protected areas thematic roundtable and biodiversity information system, in collaboration with the other co-executing partners, making sure the inputs and products are delivered in a timely manner. Within the framework of the Management Committee, it will participate in the meetings of the Project Steering Committee, Local Committees and will collaborate with the NPG in preparation of the AWP/B, PPR and inputs for the PIR.

The **Decentralized Autonomous Government of the Province of Napo (NPG)** will be the **project executing partner**, and will thus be responsible for: (i) technical implementation of project activities; (ii) day-to-day monitoring of project progress and achievement of results; and (iii) financial planning and procurement of goods, minor works and services, which will be undertaken by the FAO Representation in Ecuador as per the request of the NPG. The Prefect of the NPG or the person designated by him will chair the Project Steering Committee and the annual meetings for project planning and review. Technical execution of the project will be the responsibility of the Planning, Environment and Socioeconomic Development Directorates. The Directors will act as representatives of the NPG in the Project Management Committee and will be in charge of the technical supervision of the project and reviewing the financial reports. The NPG, in coordination with the MAE's Napo Provincial Directorate will supervise preparation and submission to the FAO Representation in Ecuador of the six-monthly Project Progress Reports (PPRs), detailed Annual Work Plan and Budget (AWP/B) and all the documents necessary to prepare the PIRs (see section 4.5.3 below).

To undertake these activities, the NPG will designate a **National Project Director (NPD)**. The NPD will be an NPG staff and will have the responsibility of supervising and guiding the Project Technical Chief (see below) on the NPG's policies and priorities. He/she will also be responsible for coordinating the activities with all the NPG bodies related to the different project components, as well as with the project partners. He/she will be responsible for requesting FAO the timely disbursement of GEF resources that will allow the execution of project activities, in strict accordance with the Project Results-Based Budget and the approved AWP/B for the current project year.

A GEF-financed **Project Team (PT)** will be established within the NPG. The main responsibility of the PT, following the directives and decisions of the Project Steering Committee and the Project Management Committee (see Figure 4.2 below) and under the supervision of the NPD, is to ensure coordination and execution of the project through the rigorous and effective implementation of the AWP/B.

Under the supervision of the NPD, the PT will be headed by the **Project Technical Chief (PTC)** (financed by GEF funds) who will be in charge of project daily management and technical supervision including: i) coordinate and closely supervise the implementation of project activities; ii) day-to-day project management; iii) coordination with related initiatives; iv) ensuring collaboration between the participating national, provincial and local institutions and organizations; v) implement and manage the project M&E plan and its communication program; vi) prepare the Project Progress Reports (PPRs), containing information on the activities carried out and the progress in the achievement of outcomes and outputs; vii) organize annual project workshops and meetings to monitor project progress and will prepare the Annual Work Plans and Budgets (AWP/B); viii) submit PPRs together with the AWP/B to the Project Management Committee (PMC) for approval and presentation to the Project Steering Committee (PSC) and FAO; ix) act as secretary to the PMC, PSC, and Steering Committees and the Partners' Coordination and Support Group; x) supporting the preparation of PIRs, mid-term and final evaluations.

Moreover, following FAO rules and regulations and in accordance with the Project Document and the AWP/Bs, the PTC will assist the NPD in the identification of targeted expenditures and disbursements that should be requested to FAO for timely project execution.

The PTC will supervise the work of, provide technical backstopping, and assess the reports and outputs produced by project national consultants (financed by GEF funds).

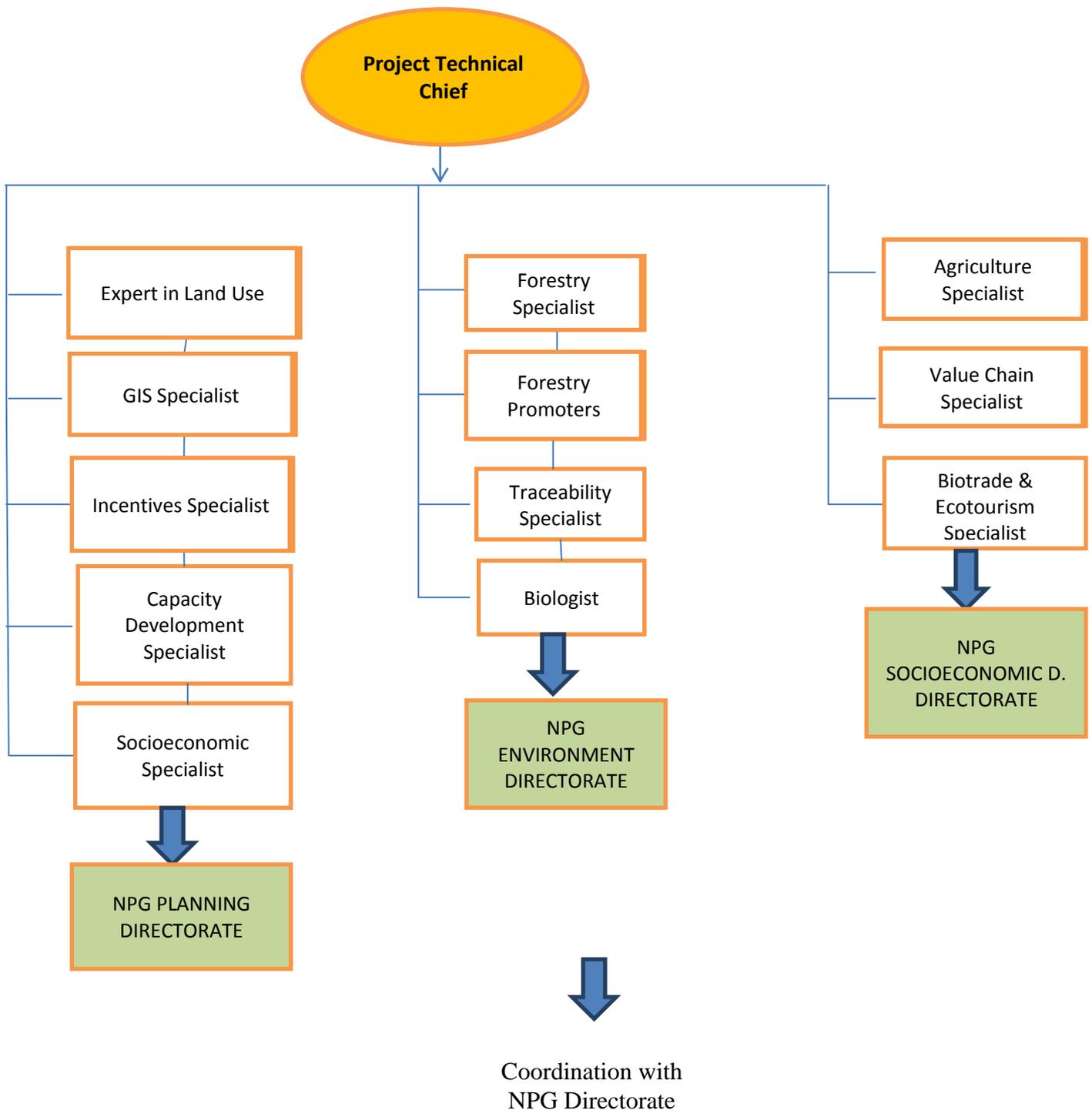
The **National Budget and Operations Officer (part-time)** will be responsible for the day-to-day financial management and operation of the project including raising contracts and procure other needed inputs in accordance with the approved budget and annual work plans. The Budget and Operations Officer will work in close consultation with the NPD, PTC, Budget Holder (BH, see below), Lead Technical Officer (LTO, see below) and project executing partners, particularly with the FAO Representation in Ecuador (FAOEC), and will take the operational responsibility for timely delivery of needed inputs to produce project outputs⁵⁵.

Figure 4.2 illustrates the Project Team composition.

⁵⁵ Detailed TORs in Appendix 6

Figure 4.2: Project Team composition

(financed with GEF funds)



Co-financed government staff

The NPG through the operational Directorates for Socioeconomic Development and Environment and the advisory body, which is the Planning Directorate, will be the main project executing partner. For project implementation, NPG staff will be assigned and will devote part of its work time to achieve project outputs and outcomes, as follows:

- The Socioeconomic Development Directorate will provide in-kind co-financing through the staff time of two technicians for livestock, two for cocoa, two for *naranjilla*, three for ecotourism, and two for biotrade. These technicians will coordinate their related tasks with the PT.
- The Planning Directorate will provide in-kind co-financing through the staff time of three technicians assigned to the provincial LUDP, two GIS specialists for development of the biodiversity and natural resources information system, and two technicians for the provincial GIS Unit. These technicians will coordinate their related tasks with the PT.
- The Environment and Water Resources Directorate will provide in-kind co-financing through the staff time of two forestry technicians for assistance in harvesting plans, design and implementation of farm management plans, and conservation agreements; and two technicians for forest restoration, active, passive and productive reforestation for restoration of degraded areas. These technicians will coordinate their related tasks with the PT.
- National Project Director (NPD) of the NPG, who will provide with strategic supervision to the PTC and the PT.

4.2.2 Roles and responsibilities of the GEF agency

FAO will be the GEF Agency of the Project as well as the financial and operational executing agency. As the financial and operational executing agency FAO will provide procurement and contracting services and financial management services of GEF resources. As the GEF Agency FAO will supervise and provide technical guidance for the overall implementation process. Administration of the GEF grants will be in compliance with the rules and procedures of FAO, and in accordance with the agreement between FAO and the GEF Trustee. As the GEF agency for the project, FAO will:

- Administrate funds from GEF in accordance with the rules and procedures of FAO;
- Oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers and the rules and procedures of FAO;
- Provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned;
- Carry out at least one supervision mission per year;
- Report to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, on project progress and provide financial reports to the GEF Trustee.

Based on a request from the NPG⁵⁶, FAO will also be the financial and operational executer of the GEF resources including financial management, procurement of goods and contracting of services following FAO rules and procedures. As the financial executer, FAO will provide six-monthly financial reports including a statement of project expenditures to the NPG, Project Steering Committee (PSC) and the Project Management Committee (PMC). In accordance with the present project document, progress in the financial execution of the project, and the Annual Work Plan and Budget approved by the PSC, FAO will prepare budget revisions to maintain the budget current in the financial management system of FAO. The budget revisions will be provided to NPG, PMC, and the PSC to facilitate project planning and execution. FAO will, in collaboration with NPG and the PMC, participate in the planning and execution of contracting and procurement processes.

The FAO Representative in Ecuador will be **the Budget Holder (BH)** and responsible for the management of the GEF resources. As a first step in project start-up, the FAO Representation in Ecuador will establish an interdisciplinary Project Task Force (PTF) within FAO to guide the implementation of the project. In consultation with the LTO (see below) the FAO Representative will be responsible for timely operational, administrative and financial management of the GEF project resources, including in particular: (1) contracting and procurement processes based on the request from NPG/PMC and in accordance with the approved Annual Work Plan and Budget; (2) process the payments corresponding to delivery of goods, services and technical products based on the prior clearance of the same by NPG and PMC as applicable in each case; (3) provide six-monthly financial reports including a statement of project expenditures to NPG/PMC and the PSC; and (4) at least one time per year or more frequent if required, prepare Budget Revisions for submission to TCI/GEF Coordination Unit for approval. The FAO Representation in Ecuador will work in close consultation with NPG, MAE, the FAO LTU (see below), the LTO, and the FAO GEF Coordination Unit for the management of GEF resources.

The FAO Representative will in consultation with the LTU, LTO and the FAO-GEF Coordination Unit give no-objection to AWP/B submitted by the Project Management Committee as well as to the Project Progress reports which should be approved by the LTO before they are submitted to the FAO-GEF Coordination Unit for final approval and upload in FPMIS.

The **FAO GEF Project Task Manager (PTM)** will, under the direct supervision of the FAO Representative in Ecuador, support the FAO Representative in the supervision of project management and progress, procurement and contracting processes, and in the provision of technical guidance to the project, in close consultation with the LTU and the interdisciplinary Project Task Force. The PTM will be paid from GEF fee resources and will have the following main tasks:

- Review and provide comments to the project progress reports prepared by the PTC, and submit them to the BH and the LTU for inputs and subsequently to the FAO-GEF Coordination Unit in the Investment Center Division (TCI) for their final approval and uploading to the FPMIS.

⁵⁶ Letter 004-SG-GPN

- Participate in the annual project progress review and planning workshops; review and provide comments to the AWP/B and recommend its approval to the FAO Representative, in consultation with the LTU and the FAO-GEF Coordination Unit.
- Review the contracting and procurement documentation for those contracts and procurements to be financed by GEF resources, and recommend their approval to the FAO Representative, in consultation with the LTU and the FAO-GEF Coordination Unit.
- Review the co-financing reports submitted annually (June) by the project executing partners.
- Review the six-monthly financial reports prepared by the Administrative Assistant FAO Representative in Ecuador, previous to their submittal to the PTC for preparation of the PPR.
- Undertake periodic supervision missions; support the results-based project management, and facilitate the provision of technical guidance by FAO;
- Support the LTU in preparing the annual PIR report;
- When requested by the FAO Representative, participate in the Project Steering Committee;
- Participate in the project personnel selection committees to interview and give advice on candidate selection for key positions to be financed by GEF resources. The committees composition will be designated by the Project Management Committee; and
- Prepare draft terms of reference for the mid-term and final evaluations in consultation with the FAO Evaluation Office, the LTU and the FAO-GEF Coordination Unit, and project executing partners; support the organization of the evaluations; contribute to the development of an eventual agreed adjustment plan in project execution approach and supervise its implementation.

The **FAO Lead Technical Unit (LTU)** will be the Forestry Department. The LTU will designate a Lead Technical Officer (LTO) for the project, with experience in sustainable forest management and integrated landscape management.

Under the general technical oversight of the LTU, the **Lead Technical Officer (LTO)** will provide technical guidance to the project team to ensure delivery of quality technical outputs. The LTO will coordinate the provision of appropriate technical backstopping from all the concerned FAO units represented in the Project Task Force responding to requests from the NPG and the Project Management Committee. The Project Task Force is thus composed of technical officers from the participating FAO units and of operational officers and is chaired by the BH. The LTO, supported by the LTU when needed, will be responsible for:

- Review and give no-objection to TORs for consultancies and contracts to be performed under the project, and to CVs and technical proposals short-listed

by the Project Management Committee for key project positions, goods, minor works, and services to be financed by GEF resources;

- Supported by the FAO Representation in Ecuador, in particular by the PTM, review and clear final technical products delivered by consultants and contract holders financed by GEF resources before the final payment can be processed;
- Assist with review and provision of technical comments to draft technical products/reports on request from the Project Management Committee during project execution;
- Review and approve project progress reports submitted by the PTC, in coordination with the BH;
- Support the FAO Representative in reviewing, revising and giving no-objection to AWP/B submitted by the PTC for approval by the Project Steering Committee;
- Prepare the annual Project Implementation Review report, supported by the PTM with inputs from the PTC and the PT, which will be presented to the BH and the FAO-GEF Coordination Unit for approval, finalization and submittal to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio. The LTO must ensure that the PTC and the PT has provided information on co-financing provided during the course of the year for inclusion in the PIR;
- Undertake field annual (or as needed) supervision missions;
- Review the TORs for the mid-term evaluation, participate in the evaluation mission including the mid-term workshop with all key project stakeholders, development of an eventual agreed adjustment plan in project execution approach, and supervise its implementation supported by the PTM (FAOEC).
- Review the TORs for the final evaluation; participate in the mission including the final workshop with all key project stakeholders, development and follow-up to recommendations on how to insure sustainability of project outputs and results after the end of the project.

The **FAO-GEF Coordination Unit** will review and approve Project Progress Reports, project reviews, financial reports, and budget revisions based on the AWP/B. This FAO GEF Coordination Unit will review and clear the annual PIR and undertake supervision missions if considered necessary. The PIRs will be included in the FAO GEF Annual Monitoring Review submitted to GEF by the FAO GEF Coordination Unit. The FAO GEF Coordination Unit will also participate in the mid-term and final evaluations and the development of corrective actions in the project implementation strategy in the case needed to mitigate eventual risks affecting the timely and effective implementation of the project. The FAO GEF Coordination Unit will in collaboration with the FAO Finance Division request transfer of project funds from the GEF Trustee based on six-monthly projections of funds needed.

The **FAO Finance Division** will provide annual Financial Reports to the GEF Trustee and, in collaboration with the FAO-GEF Coordination Unit, request project funds on a six-monthly basis to the GEF Trustee.

4.2.3 Project decision-making mechanisms

The **Project Steering Committee (PSC)** will take decisions on the overall project management and will be in charge of ensuring the project strategic approach for the operational tasks. The PSC will be chaired by the Prefect of the NPG, and with the participation of the Director of the MAE Napo Provincial Directorate (or his/her delegates) and the FAO Representative (or his/her delegates). The PSC will meet at least twice a year and its responsibilities will include: (i) overall oversight of project progress and achievement of planned results as per the project document; (ii) take decisions in relation to the practical organization, coordination and implementation of the project; (iii) facilitate cooperation between NPG, MAE Napo Provincial Directorate and project participating partners and project support at the local level; (iv) advise the NPD on other on-going and planned activities facilitating collaboration between the Project and other programmes, projects and initiatives; (v) facilitate that co-financing is provided in a timely and effective manner; and (vi) review and approve the six-monthly Project Progress Reports and the AWP/B.

The **Project Management Committee (PMC)** will be responsible for: (i) guiding project implementation as per the AWP/B; (ii) timely achievement of project outcomes and outputs; (iii) effective and efficient use of resources allocated as per the project document; (iv) planning project activities, giving guidance and advice to the NPD; (v) providing technical advice to the Project Steering Committee; (vi) advising the NPD on other on-going and planned activities facilitating collaboration between the Project and other programmes, projects and initiatives. The PMC may also be involved in technical evaluation of project progress and outputs, and eventual development of an agreed adjustment plan in project execution approach, if needed. The PMC will comprise the NPG Planning, Environment and Socioeconomic Development Directorates, the NPD, the Natural Heritage Responsible of the MAE Napo Provincial Directorate, the Forestry Area Responsible of the MAE Napo Provincial Directorate, with the cooperation of FAO and GIZ. The PMC will meet on a bi-monthly basis, as minimum.

The **Partners Coordination and Support Group (PCG)** will have the objectives of: (i) facilitating coordination among project partners; (ii) supporting the Project Management Committee with technical recommendations and guidance regarding project activities; and (iii) socializing and providing timely information on implementation of co-financed activities. The PCG will be comprised by representatives of the project partners, the NPD and the PTC. The NPD will act as secretary of the Group. The PCG will meet on a quarterly basis, as minimum.

4.3 FINANCIAL PLANNING AND MANAGEMENT

The total cost of the project is USD 14,940,787, of which USD 2,628,283 will be financed by the GEF grant and USD 12,312,504 will be cofinanced by the NPG, MAE, municipal DAGs of Chaco, Archidona, Tena, Quijos and Arosemena Tola, the parochial DAG of Cuyuja, the Coca Codo Sinclair hydroelectric project, GIZ, FAO, USAID through the ICAA Monitoring Unit and the NGO Rainforest Alliance.

Table 4.2 includes the cost by component, output and co-financier and Table 4.3 includes the sources and types of confirmed co-financing. FAO as GEF implementing

agency will be responsible for the execution of the GEF resources and FAO co-financing.

4.3.1 Financial plan (by component, outputs and co-financier)

Table 4.2. Project costs by component, outputs and co-financier

Component/output	GADPN	MAE	FAO	DAG Tena	DAG Quijos	DAG Archidona	DAG Arosemena Tola	DAG El Chaco	GADP Cuyuja	GIZ	USAID	Rainforest Alliance	Coca Codo Sinclair	Total co-financing	% Co-financing	GEF	% GEF	Total
Componente 1:	1,893,533	2,052,533	0	90,000	69,480	60,000	15,000	100,000	5,000	462,000	50,000	0	500,000	5,297,546	86%	890,140	14%	6,187,686
Output 1.1.1	10,000	5,000								168,000			50,000	233,000	80%	59,570	20%	292,570
Output 1.1.2	230,000	2,000		20,000	69,480	60,000	15,000	20,000	5,000					421,480	74%	150,370	26%	571,850
Output 1.1.3	87,000	120,000											150,000	357,000	83%	72,040	17%	429,040
Output 1.1.4	641,533	54,000								84,000			150,000	929,533	90%	104,420	10%	1,033,953
Output 1.1.5	480,000	20,000								84,000				584,000	81%	140,960	19%	724,960
Output 1.2.1	5,000	1,851,533		70,000						126,000	50,000		150,000	2,252,533	94%	136,820	6%	2,389,353
Output 1.2.2	440,000							80,000						520,000	70%	225,960	30%	745,960
Component 2	2,275,660	445,000	420,000	80,000	0	106,364	50,000	90,000	22,000	70,000	0	500,000	500,000	4,559,024	80%	1,130,780	20%	5,689,804
Output 2.1.1	1,750,660	12,500		80,000		20,000	50,000	30,000	22,000			150,000	300,000	2,415,160	85%	424,180	15%	2,839,340
Output 2.1.2												50,000		50,000	55%	41,490	45%	91,490
Output 2.2.1	10,000	2,500								42,000				54,500	52%	49,470	48%	103,970
Output 2.2.2	210,000	225,000	420,000			86,364				28,000		150,000		1,119,364	78%	310,120	22%	1,429,484
Output 2.2.3	52,000	165,000						60,000				100,000	200,000	577,000	81%	135,600	19%	712,600
Output 2.2.4	253,000	40,000										50,000		343,000	67%	169,920	33%	512,920
Component 3	1,310,000	60,000	0	0	9,000	0	0	30,000	0	168,000	0	0	0	1,577,000	83%	333,436	17%	1,910,436
Output 3.1.1	560,000	10,000			9,000			30,000		42,000				651,000	82%	147,490	18%	798,490
Output 3.1.2	750,000	50,000								126,000				926,000	83%	185,946	17%	1,111,946
Component 4	160,000	30,000	0	0	0	0	0	0	0	0	0	0	0	190,000	60%	125,156	40%	315,156
Output 4.1.1	10,000	5,000												15,000	37%	26,016	63%	41,016
Output 4.1.2	10,000	5,000												15,000	15%	85,270	85%	100,270
Output 4.1.3	120,000	20,000												140,000	91%	13,270	9%	153,270
Output 4.1.4	20,000													20,000	97%	600	3%	20,600
Project Management	348,467	348,467												696,934	82%	148,771	18%	845,705
Total Project	5,987,660	2,936,000	420,000	170,000	78,480	166,364	65,000	220,000	27,000	700,000	50,000	500,000	1,000,000	12,320,504	82%	2,628,283	18%	14,948,787

Table 4.3. Confirmed sources of co-financing

Sources of Co-financing	Name of Co-financier (source)	Type of Co-financing	Co-financing Amount (\$)
Local Government	Decentralized Autonomous Government (DAG) of Napo	Grant	3.972.660
		In kind	2.015.000
National Government	Ministry of Environment	Grant	2.005.533
		In kind	930.467
Local Government	Municipal DAG of Tena	Grant	90.000
		In kind	80.000
Local Government	Municipal DAG of Quijos	In kind	78.480
Local Government	Municipal DAG of Archidona	Grant	80.000
		In kind	86.364
Local Government	Municipal DAG of Arosemena Tola	Grant	35.000
		In kind	30.000
Local Government	Municipal DAG El Chaco	Grant	45.000
		In kind	175.000
Local Government	Parochial DAG of Cuyuja	Grant	22.000
		In kind	5.000
National Government	COCASINCLAIR EP	Grant	600.000
		In kind	400.000
Bilateral Aid Agency	German Cooperation Agency (GIZ)	Grant	140.000
		In kind	560.000
Bilateral Aid Agency	USAID	Grant	50.000
CSO	Rainforest Alliance	Grant	500.000
GEF Agency	FAO	Grant	420.000
			12.320.504

4.3.2 GEF inputs

The requested GEF grant will be allocated mainly in support of institutional and stakeholder capacity building in the province (government, municipal and parochial institutions) to implement a comprehensive and articulated policy for Integrated Natural Resources Management and Land Use Planning; including the participatory formulation of an environmental governance strategy, mainstreaming of environmental criteria in the LUDPs, training of government and civil society stakeholders to increase their knowledge and management capacity for integrated natural resources management; promotion of spaces for dialogue and consensus; improvement and articulation of incentive mechanisms for conservation and sustainable production. Moreover, GEF resources will be allocated to promotion of sustainable management of water, soils and forests, including technical assistance and training for sustainable intensification of cocoa, *naranjilla* and livestock production, adapted to the local context, and sustainable forest management; and to promote alternatives for improving livelihoods of the local communities while at the same time contributing to biodiversity conservation (sustainable community tourism and biotrade).

4.3.3 Government inputs

The NPG will provide cash and in-kind contributions. In-kind contributions are mainly related to personnel, transportation, allowances for official travel within the project intervention areas, premises, equipment, studies, and tree nurseries for production of seedlings for reforestation and restoration. Cash contributions will be destined to the review and update of the LUDPs; workshops; investments in initiatives by the thematic roundtables to be established under the project; procurement of new equipment to strengthen the GIS; capitalization of the sustainable development fund; supply of equipment and inputs to producers for adoption of good practices by cocoa and *naranjilla* producers; equipment and

inputs for workshops and extension activities; procurement of legal timber; financing of tourist facilities; elaboration of promotional material and participation in fairs; financial disbursements to associations for implementation of sustainable management of biotrade products.

MAE in-kind contributions comprises personnel, transportation, infrastructure for meetings and trainings, training materials; equipment and thematic maps of the province; and tree nurseries. These inputs will support training of DAG personnel, producers and communities; validation of environmental issues in LUDPs; promotion of spaces for dialogue and consensus; co-management of protected areas; support to community tourism; sustainable forest management in protective forests; support to communities for legal harvesting of timber, reforestation and restoration of degraded areas, as well as management of biotrade products. Cash contributions will be destined to support strengthening of provincial stakeholder capacities; co-management of protected areas; incentive mechanisms under conservation agreements; restoration of degraded areas through active and passive reforestation; and trainings in tourism and biotrade.

Municipal and parochial DAGs will provide cash and in-kind contributions. These inputs will be mainly destined to review and update of LUDPs. Additionally, inputs will be destined to promoting good practices, value chains, sustainable forest management, conservation of ecosystem services, forest restoration and community tourism.

4.3.4 FAO inputs

FAO will provide technical assistance, support, training and supervision of the implementation of the activities financed with GEF resources. The GEF project will be complementary to and will be cofinanced by the “*UN REDD Programme – Outcome 1 National Forest Monitoring System*” UNJP/Ecuador/083/UNJ, which supports the preparation of the country’s land use map through the analysis of forest cover by means of RAPIDEYE images. This contribution will be complementary to Outcome 2.2 *Pressure over the forests of the Sumaco Biosphere Reserve reduced through implementation of a Sustainable Forest Management (SFM) strategy*, through updating of the deforestation map by means of analysis and interpretation of the total surface area of continental Ecuador; and assistance to the MAE Napo Provincial Directorate in reforestation projects.

4.3.5 Other co-financiers inputs

GIZ inputs will be destined to provide technical assistance for institutional strengthening aiming at improving and promoting environmental governance of natural resources, fostering sustainable production, conservation of ecosystem services, ecotourism and biotrade.

USAID, through the IRG will provide inputs to undertake a study for characterization and valuation of prioritized ecosystem services in the province of Napo, local training workshops and elaboration of an action plan to mainstream ecosystem services in planning.

Rainforest Alliance will provide inputs to support the promotion of good practices in production of cocoa and *naranjilla*; elaboration, implementation and monitoring of plans for development of cocoa and *naranjilla* value chains; forest restoration; design and implementation of a timber traceability system for SFM; and promotion of conservation agreements in the Hatun Sumaku parish in the area of the Cerro Sumaco PF.

COCA SINCLAIR EP hydroelectric enterprise will provide inputs to prepare the participatory inter-institutional strategy; strengthening of the incentive mechanisms; support to awareness raising processes; promotion of productive diversification in farms and recovery of local practices, as well as restoration of the vegetation cover.

4.3.6 Financial management of and reporting on GEF resources

Financial management and reporting in relation to the GEF resources will be carried out in accordance with FAO's rules and procedures, and in accordance with the agreement between FAO and the GEF Trustee. On the basis of the activities foreseen in the budget and the project, FAO will undertake all operations for disbursements, procurement and contracting for the total amount of GEF resources, as per the request of the NPD.

Financial Records. FAO shall maintain a separate account in United States dollars for the Project's GEF resources showing all income and expenditures. Expenditures incurred in a currency other than United States dollars shall be converted into United States dollars at the United Nations operational rate of exchange on the date of the transaction. FAO shall administer the Project in accordance with its regulations, rules and directives.

Financial Reports. The BH shall prepare six-monthly project expenditure accounts and final accounts for the project, showing amount budgeted for the year, amount expended since the beginning of the year, and separately, the un-liquidated obligations as follows:

1. Details of project expenditures on a component-by-component and output-by-output basis, reported in line with project budget codes as set out in the Project document, as at 30 June and 31 December each year.
2. Final accounts on completion of the Project on a component-by-component and output-by-output basis, reported in line with project budget codes as set out in the Project document.
3. A final statement of account in line with FAO Oracle Project budget codes, reflecting actual final expenditures under the Project, when all obligations have been liquidated.

Financial Statements. Within 30 working days of the end of each semester, i.e. on or before 31 July and 31 January, the FAO Representation in Ecuador shall submit six-monthly statements of expenditure of GEF resources to the Project Management Committee and Project Steering Committee, which will be included in the PPRs. The purpose of the financial statement is to list the expenditures incurred on the project on a six monthly basis compared to the budget, so as to monitor project progress and to reconcile outstanding advances during the six-month period. The financial statement shall contain information that will serve as the basis for a periodic revision of the budget.

The BH will submit the above financial reports for review and monitoring by the LTO and the FAO GEF Coordination Unit. Financial reports for submission to the donor (GEF) will be prepared in accordance with the provisions in the GEF Financial Procedures Agreement and submitted by the FAO Finance Division.

Responsibility for cost overruns. The BH shall utilize the GEF project funds in strict compliance with the project document. The BH shall be authorized to make variations not exceeding 20 per cent on any total output budget line or any cost category line of the project budget provided that the total allocated for the specific budgeted project component is not exceeded and the reallocation of funds does not impact the achievement of any project output as per the project Results Framework (Appendix 1). Any variations exceeding 20 per cent on

any total output budget line or any cost category line, which may be necessary for the proper and successful implementation of the project, shall be subject to prior consultations with the LTO and the FAO-GEF Coordination Unit. In such a case, a revision to the FAO-GEF budget in FPMIS should be prepared by the BH and approved by the LTO and the FAO-GEF Coordination Unit. Cost overruns shall be the sole responsibility of the BH.

Audit

The Project shall be subject to the internal and external auditing procedures provided for in FAO financial regulations, rules and directives and in keeping with the Financial Procedures Agreement between the GEF Trustee and FAO.

The audit regime at FAO consists of an external audit provided by the Auditor-General (or persons exercising an equivalent function) of a member nation appointed by the Governing Bodies of the Organization and reporting directly to them, and an internal audit function headed by the FAO Inspector-General who reports directly to the Director-General. This function operates as an integral part of the Organization under policies established by senior management, and furthermore has a reporting line to the governing bodies. Both functions are required under the Basic Texts of FAO which establish a framework for the terms of reference of each. Internal audits of imprest accounts, records, bank reconciliation and asset verification take place at FAO field and liaison offices on a cyclical basis.

4.4 PROCUREMENT

As per the request of the NPD and managed by the PTC, FAO will procure the equipment and services foreseen in the budget (Appendix 3) and the AWP/B, in accordance with FAO rules and procedures.

Careful procurement planning is necessary for securing goods, services and works in a timely manner, on a “Best Value for Money” basis, and in accordance with the Rules and Regulations of FAO. It requires analysis of needs and constraints, including forecast of the reasonable timeframe required to execute the procurement process. Procurement and delivery of inputs in technical cooperation projects follow FAO’s rules and regulations for the procurement of supplies, equipment and services (i.e. Manual Sections 502 and 507). *Manual Section 502*: “Procurement of Goods, Works and Services” establishes the principles and procedures that apply to procurement of all goods, works and services on behalf of the Organization, in all offices and in all locations, with the exception of the procurement actions described in Appendix A – Procurement Not Governed by Manual Section 502. *Manual Section 507* establishes the principles and rules that govern the use of Letters of Agreement (LoA) by FAO for the timely acquisition of services from eligible entities in a transparent and impartial manner, taking into consideration economy and efficiency to achieve an optimum combination of expected whole life costs and benefits (“Best Value for Money”).

As per the guidance in FAO’s Project Cycle Guide, the BH will draw up an annual procurement plan for major items which will be the basis of requests for procurement actions during implementation. The plan will include a description of the goods, works, or services to be procured, estimated budget and source of funding, schedule of procurement activities and proposed method of procurement. In situations where exact information is not yet available, the procurement plan should at least contain reasonable projections that will be corrected as information becomes available.

Before commencing procurement, the PTC will update the project's Procurement Plan (Appendix 5) for approval by the Project Management Committee. This plan will be reviewed during the inception workshop and will be approved by the FAO Representative in Ecuador. The PTC will update the Plan every six months, request the approval of the NPD and submit the plan to the FAO Representative in Ecuador for approval.

4.5 MONITORING AND REPORTING

Monitoring and evaluation of progress in achieving project results and objectives will be done based on the targets and indicators established in the Project Results Framework (Appendix 1 and described in section 2.3 and 2.4). The project Monitoring and Evaluation Plan has been budgeted at USD 99,200 (see Table 4.4). Monitoring and evaluation activities will follow FAO and GEF monitoring and evaluation policies and guidelines. The monitoring and evaluation system will also facilitate learning and replication of project results and lessons in relation to integrated management of natural resources.

Regarding M&E of PES, the project design includes specific indicators to evaluate PES impacts, and foreseen PES: biodiversity conservation in forests⁵⁷; foreseen extent of landscape where the project contributes directly to biodiversity conservation/sustainable use⁵⁸; hectares of forests (community-owned or private) conserved through conservation agreements⁵⁹; reduction of deforestation rate; and tons of avoided CO₂eq emissions.

4.5.1 Oversight and monitoring responsibilities

The monitoring and evaluation roles and responsibilities specifically described in the Monitoring and Evaluation Plan (see below) will be undertaken through: (i) day-to-day monitoring and project progress supervision missions (PTC and NPD); (ii) technical monitoring of indicators to measure the introduction of technologies for integrated natural resources management and project areas and the surface covered by conservation agreements and management plans (NPD in coordination with local organizations and other project stakeholders); (iii) specific monitoring plans for implementation of good practices (component 2); (iv) mid-term and final evaluations (independent consultants and FAO Evaluation Office); and (v) monitoring and supervision missions (FAO).

At the initiation of project implementation, the NPD and the PT will set up a project progress monitoring system. Participatory mechanisms and methodologies for systematic data collection and recording will be developed to support outcome and output indicator monitoring and evaluation. During the inception workshop (see section 4.5.3 below), M&E related tasks to be addressed will include: (i) presentation and clarification (if needed) of the Project Results Framework with all project stakeholders; (ii) review of the M&E indicators and their baseline; (iii) drafting the required clauses to include in consultants' contracts to ensure they complete their M&E reporting functions (if relevant); and (iv) clarification of the respective M&E tasks among the Project different stakeholders. One of the main outputs of the workshop will be a detailed monitoring plan agreed to by all stakeholders based on the monitoring and evaluation plan summary presented in section 4.5.4 below.

The day-to-day monitoring of the Project implementation will be the responsibility of the NPD and the PTC and will be driven by the preparation and implementation of an AWP/B

⁵⁷ See outcome 1.2, Appendix 1.

⁵⁸ See outcome 1.1, Appendix 1.

⁵⁹ See outcome 3.1, Appendix 1.

followed up through six-monthly PPRs. The preparation of the AWP/B and six-monthly PPRs will represent the product of a unified planning process between main project stakeholders. As tools for results-based-management (RBM), the AWP/B will identify the actions proposed for the coming project year and provide the necessary details on output targets to be achieved, and the PPRs will report on the monitoring of the implementation of actions and the achievement of output targets. Specific inputs to the AWP/B and the PPRs will be prepared based on participatory planning and progress review with all stakeholders and coordinated through the NPD and facilitated through project planning and progress review workshops. These contributions will be consolidated by the PTC in the AWP/B draft and the PPRs.

An annual project progress review and planning meeting should be held with the participation of the Project Management Committee to finalize the AWP/B and the PPRs. Once finalized, the AWP/B and the PPRs will be submitted to the Project Steering Committee for approval (AWP/B) and revision (PPR) and to FAO for approval. The AWP/B will be developed in a manner consistent with the Project Results Framework to ensure adequate fulfillment and monitoring of project outputs and outcomes.

Following the approval of the Project, the PY1 AWP/B will be adjusted (either reduced or expanded in time) to synchronize it with the annual reporting calendar. In subsequent years, the AWP/Bs will follow an annual preparation and reporting cycle as specified in section 4.5.3 below.

4.5.2 Indicators and information sources

To monitor project outputs and outcomes including contributions to global environmental benefits, specific indicators have been established in the Project Results Framework (see Appendix 1). The Project Results Framework indicators and means of verification will be applied to monitor both project performance and impact. Following FAO monitoring procedures and progress reporting formats, data collected will be sufficiently detailed that can track specific outputs and outcomes, and flag project risks early on. Output target indicators will be monitored on a six-monthly basis, and outcome target indicators will be monitored on an annual basis, if possible, or as part of the mid-term and final evaluations.

The project output and outcome indicators have been designed to monitor biophysical and socio-economic impacts and progress in building and consolidating capacities for conservation and sustainable use of biodiversity, integrated management of natural resources and sustainable forest management, at both at the political-legal level as well as at the productive level, among small farmer communities that conserve and use the natural resources for their food security, maintenance of ecosystems and cultures, and generation of economic benefits.

Capacity building processes indicators will monitor:

Outcome 1.1: number of provincial policies mainstreaming conservation and sustainable use of natural resources

Outcome 1.2: percentage of increase in investments for incentives over the baseline; level of capitalization of the sustainable development fund.

On-the-ground impact indicators will monitor:

Outcome 2.1: areas under sustainable and culturally friendly intensification of cocoa, naranjilla and livestock production;

Outcome 2.2: Percentage of reduction in the deforestation rate through SFM and conservation agreements; tons of avoided emissions of CO_{2eq} through forest conservation and reduction of deforestation.

Outcome 3.1: area of forests conserved in private or community-owned lands where sustainable community-based ecotourism and biotrade are undertaken; percentage of increase in the incomes of producers that undertake sustainable community-based ecotourism and biotrade.

The main information sources to support the M&E plan include: i) NPG, MAE, MAGAP, MINTUR, DAGs and other project partners monitoring systems; ii) participatory workshops with stakeholders and beneficiaries to review project progress; iii) on-the-ground monitoring of good practices, sustainable forest management, community tourism and biotrade; iv) progress reports prepared by the PTC with inputs from the NPG, MAE, MAGAP, MINTUR and DAGs, project specialists and other stakeholders; v) consultants' reports; vi) training reports; viii) mid-term review and final evaluation; viii) financial reports and budget revisions; ix) Project Implementation Reviews prepared by the FAO LTO supported by the FAO Representation in Ecuador; and x) FAO supervision mission reports.

4.5.3 Reporting schedule

Specific reports that will be prepared under the monitoring and evaluation program are: (i) Project inception report; (ii) Annual Work Plan and Budget (AWP/B); (iii) Project Progress Reports (PPRs); (iv) Annual Project Implementation Review (PIR); (v) Technical reports; (vi) Co-financing reports; and (vii) Terminal Report. In addition, assessment of the GEF BD, SFM and LD Tracking Tools (TTs) against the baseline (completed during project preparation) will be required at mid-term and final project evaluation.

Project Inception Report. After FAO approval of the project an inception workshop will be held. Immediately after the workshop, the PTC will prepare a project inception report in consultation with the PTM in the FAO Representation in Ecuador and other project partners. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. It will also include a detailed first year AWP/B, a detailed project monitoring plan based on the monitoring and evaluation plan summary presented in section 4.5.4 below. The draft inception report will be circulated to FAO, the Project Steering Committee and the Project Management Committee for review and comments before its finalization, no later than three months after project start-up. The report will be cleared by the FAO BH, LTU and the FAO GEF Coordination Unit, and uploaded in FPMIS.

Annual Work Plan and Budget (AWP/B). The PTC, under the supervision of the NPD, will submit to the Project Steering Committee a draft AWP/B no later than 10 January of each year. The AWP/B should include detailed activities to be implemented by project outputs and divided into monthly timeframes and targets and milestone dates for output indicators to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year. The FAO PTM will circulate the draft AWP/B to the FAO interdisciplinary Project Task Force and will consolidate and submit the FAO comments to the PTC, who will incorporate the comments of the Management Committee. The final AWP/B will be sent to the Project Steering Committee for approval and to the FAO for final no-objection and upload in FPMIS by the FAO PTM.

Project Progress Reports (PPR). The PTC, under the supervision of the NPD will prepare six-monthly PPRs and submit them to the Project Management Committee and the FAO Representation in Ecuador no later than July 31 (covering the period January through June) and 31 January (covering the period July through December). The first semester six months report should be accompanied by the updated AWP/B, if needed, for review and no-objection by FAO. The PPR are used to identify constraints, problems or bottlenecks that impede timely implementation and take appropriate remedial action. PPRs will be prepared based on the systematic monitoring of output and outcome indicators identified in the project's Results Framework (Appendix 1). Each semester, the FAO PTM will review the PPR, collect and consolidate eventual comments by the FAO (BH, LTO, FAO-GEF Coordination Unit) and provide these comments to the PTC. When comments have been duly incorporated the BH and the LTO will give final approval and submit the final PPR to the FAO-GEF Coordination Unit for final clearance and upload in FPMIS.

Annual Project Implementation Review (PIR). The LTO supported by the FAO GO and with inputs from the PTC, will prepare an annual Project Implementation Review covering the period July (the previous year) through June (current year) to be submitted to the BH and the FAO-GEF Coordination Unit for review and approval no later than 31 July. The FAO-GEF Coordination Unit will upload the final report on FPMIS and submit it to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio. The FAO-GEF Coordination Unit will provide the updated format when the first PIR is due.

Technical Reports. Technical reports will be prepared as part of project outputs and to document and share project outcomes and lessons learned. The drafts of any technical reports must be submitted by the PTC to the Project Management Committee and the FAO Representation in Ecuador who will share it with the LTO for review and clearance and to the FAO-GEF Coordination Unit for information and eventual comments, prior to finalization and publication. Copies of the technical reports will be distributed to the Project Steering Committee and other project partners as appropriate. The final reports will be posted on the FAO FPMIS by the FAO PTM.

Co-financing Reports. The PTC will be responsible for collecting the required information and reporting on in-kind and cash co-financing provided by all the project cofinanciers and eventual other new partners not foreseen in the Project Document. Every year, the PTC will submit the report to the FAO Representation in Ecuador before 31 July covering the period July (the previous year) through June (current year).

GEF Tracking Tools. Following the GEF policies and procedures, the tracking tools for the BD, SFM/REDD+ and LD focal areas will be submitted to the GEF Secretariat at three moments: (i) with the project document at CEO endorsement; (ii) at the project's mid-term evaluation; and (iii) with the project's terminal evaluation.

Terminal Report. Within two months before the end date of the project, the PTC will submit to the Project Management Committee and the FAO Representation in Ecuador a draft Terminal Report. The main purpose of the final report is to give guidance to authorities (ministerial or senior government level) on the policy decisions required for the follow-up of the Project, and to provide the donor with information on how the funds were utilized. The terminal report is accordingly a concise account of the main **products, results, conclusions and recommendations** of the Project, without unnecessary background, narrative or technical details. The target readership consists of persons who are not necessarily technical specialists but who need to understand the policy implications of technical findings and needs for ensuring sustainability of project results. Work is assessed, lessons learned are summarized,

and recommendations are expressed in terms of their application to the integrated landscape management in the Province of Napo in the context of the development priorities at national and provincial levels, as well as in practical execution terms. This report will specifically include the findings of the final evaluation as described in section 4.6 below. A final project review meeting should be held to discuss the draft terminal report with the Project Steering Committee before it is finalized by the PTC and approved by the BH, LTO and the FAO-GEF Coordination Unit.

4.5.4 Monitoring and evaluation plan summary

Table 4.4 below provides a summary of the main monitoring and evaluation reports, responsible parties and timeframe:

Table 4.4. Summary of the main monitoring and evaluation activities

Type of M&E Activity	Responsible Parties	Time-frame	Budget
Inception Workshop	NPD, PTC, FAO (PTM supported by LTO, BH, and the FAO GEF Coordination Unit)	Within two months of project start up	USD 3,000
Project Inception Report	NPD, PTC and FAO PTM, cleared by LTO, BH, and the FAO GEF Coordination Unit	Immediately after the workshop	-
Field-based impact monitoring	PTC, institutions and indigenous and small-scale farmers organizations participating in the project	Continually	USD10,800 (9% of project coordination time, technical workshops for identification of indicators, M&E workshops)
Supervision visits and rating of progress in PPRs and PIRs	NPD, PTC and FAO (PTM, LTO and FAO GEF Coordination Unit)	Annual or as required	FAO visits will be financed through GEF agency fee. Project coordination visits will be financed by the project travel budget
Project Progress Reports (PPR)	NPD, PTC with inputs by NPG, MAE R2 and other participating partners	Six-monthly	USD4,200 (3,5% of project coordination time)
Project Implementation Review report (PIR)	FAO (LTO and PTM) supported by the NPD and PTC. PIRs cleared and submitted by the FAO GEF Coordination Unit to the GEF Secretariat	Annual	Financed through GEF agency fee
Co-financing Reports	NPD, and PTC with inputs from other co-financiers	Annual	USD1,200 (1% of project coordination time)
Technical reports	NPD, PTC, and FAO (LTO, PTM)	As appropriate	

Type of M&E Activity	Responsible Parties	Time-frame	Budget
Mid-term Evaluation	External Consultants, FAO Office for Evaluation in consultation with the project team including the GCU and other partners	At mid-point of project implementation	USD 40,000 for two independent consultants and associated costs. In addition the agency fee will pay for expenditures of FAO staff time and travel
Final evaluation	External Consultants, FAO independent Evaluation Office in consultation with the project team including the FAO GEF Coordination Unit, and other partners	At the end of project implementation	USD 40,000 for two external, independent consultants and associated costs. In addition the agency fee will pay for expenditures of FAO staff time and travel
Terminal Report	NPD, and PTC, LTO, TSCR report Unit	At least two months before the end date of the GCP Agreement	As completed by the NPD and PTC
Total Budget			USD99,200

4.6 PROVISION FOR EVALUATIONS

An independent Mid-Term Evaluation (MTE) will be undertaken at the end of the first 24 months of project implementation to review progress and effectiveness of implementation in terms of achieving project objective, outcomes and outputs. Findings and recommendations of this review will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project's term if necessary. FAO (the Office of Evaluation) will arrange for the MTE in consultation with project management. The evaluation will, *inter alia*:

- a) Review the effectiveness, efficiency and timeliness of project implementation;
- b) Analyse effectiveness of partnership arrangements;
- c) Identify issues requiring decisions and remedial actions;
- d) Propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and
- e) Describe the technical achievements and lessons learned derived from project design, implementation and management.

An independent Final Evaluation (FE) will be carried out three months prior to the terminal review meeting. The FE will aim to identify the project impacts, sustainability of project results and the degree of achievement of long-term results. The FE will also have the purpose of indicating future actions needed to expand on the existing Project in subsequent phases, mainstream and up-scale its products and practices, and disseminate information to management authorities and institutions with responsibilities in food security, conservation

and sustainable use of natural resources, small farmer agricultural production and ecosystem conservation to assure continuity of the processes initiated by the Project. Critical elements that both the MTR and FE will pay special attention to are the outcome indicators.

4.7 COMMUNICATION AND VISIBILITY

In Component 1, capacity development activities will be visible to authorities and decision-makers (central government institutions, provincial institutions, planning councils, and parochial councils). Civil society stakeholders will have an active role in project implementation. The project's participation and gender strategies will contribute to improve communication among stakeholders. Workshops will serve to support training, awareness-raising and information-sharing. Information and training materials will include key messages on environmental governance, integrated landscape management, inter-institutional coordination and collaboration, land use planning and participation.

In Component 2, methodologies and good practices of natural resources management will be disseminated through farmer field schools, and agricultural and forestry extension. Information-sharing activities will also include field days and extension officers visits. Communication will be supported through the use of the *Kichwa* language. Training material contents will be adapted to local context and cultural features. Project's visibility will be supported through the supply of materials and inputs to beneficiaries and the participatory formulation of the SFM strategy.

In Component 3, key project messages will be disseminated to promote alternative production activities to sustainably use and conserve biodiversity. As in Component 2, the use of the native language and tailored-made training materials will contribute to adequate communication. The supply of infrastructure, materials and inputs to promote community-based eco-tourism and biotrade will contribute to the project's visibility.

Component 4 will systematize project lessons learned, through at least three publications. In addition, the project webpage will be designed and made available at the NPG website, where information on project progress and results will be periodically uploaded for information-sharing and exchange of experiences.

Furthermore, the project will generate technical reports, mid-term and final evaluation reports, and a Terminal Report, which will facilitate the dissemination of project results.

SECTION 5 – SUSTAINABILITY OF RESULTS

The Project has been designed to remove the identified barriers and create an enabling environment to protect the biodiversity and ecosystem functions in the Province of Napo from the threats linked to the expansion of deforestation and degradation of forests, and land degradation in the province.

The project results are expected to be sustainable since the project is aligned to national priorities and the activities address issues of national, provincial and community ownership. (see sub-section 1.1.5).

In addition, the four threats to PES effectiveness have been addressed: i) to avoid the non-compliance with contractual conditions, SocioBosque and the incentive mechanisms implemented by MAE and MAGAP are based on conservation or land-use agreements. Additional conservation agreements will be signed during project implementation, in order to increase their geographical scope in the province; ii) the poor administrative selection seems not be a high risk in this case, since GIZ and FAO have identified targeted areas with potential to deliver GEBs in the province, one dedicated to livestock production that is putting deforestation pressures, and another one producing cocoa and naranjilla, that is fueling land degradation processes and affecting related ES due to land erosion⁶⁰; iii) the spatial demand spillovers are addressed by the integrated landscape management approach that underlines the whole project. No additional pressures onto natural resources are expected due to the project intervention; iv) adverse self-selection does not seem to be a risk, since counterfactual analysis (what would have happened with SocioBosque and the other incentives without GEF) is the reality indeed. The Province of Napo has until now only to a very limited extent accessed these funds, even though the mechanism have been available since 2008⁶¹.

In general terms, given the State's and private sector's interest in spreading and/or setting up these incentives and Trust Fund, the long-term funding of PES seems to be assured in this case. Payments will be made after performance (i.e. effective conservation, effective deforestation avoided) will have been proven⁶². ES and land uses are well-defined. Please see Section 1.1.1 and 2.4 for details.

By the end of PY4, it is expected that the involved DAGs and communities will continue project activities with the support of NPG, MAE, and MAGAP. The NPG and DAGs will be strengthened for playing an active role in the project exit strategy (in PY4 and after project completion). The three dimensions of project sustainability (social, economic, and environmental) are detailed below.

5.1 SOCIAL SUSTAINABILITY

The social sustainability of project results will be achieved through a participatory, inter-institutional, and integrated landscaped approach. Best production practices will be disseminated through MAGAP extension and FAO farmer-to-farmer methodologies which

⁶⁰ For a detailed explanation of the Napo Province's sub-regions addressed by the project, please refer to the Section 1.1.1 *Rationale*, and Section 2.4 *Project Components and outputs*.

⁶¹ For a detailed explanation please refer to the Section 1.1.1 *Rationale*.

⁶² SocioBosque is already operating in this way. The project will help increase the scope of this incentive in the Province and the amount paid by hectare considering the opportunity costs of livestock and agricultural farmers. See baseline and target indicators in outcome 1.2, Appendix 1.

have been tested in the territory (see sub-section 1.1.4). Project implementation will include defining factors that ensure social sustainability⁶³:

- **Capacity development** (see sub-section 5.4).
- **Gender equality and gender mainstreaming** at institutional and community levels. The project will promote timely participation of women beneficiaries through: i) the generation of income opportunities for female-led households, especially under Component 3 (biotrade and community eco-tourism); ii) a special line within the province's sustainable development fund targeting women; iii) specific technical assistance for women beneficiaries that request one of the current incentives in the province; iv) promotion of participation of women in project trainings, meetings and technical assistance (at least 25% of female of community leaders and/or producers); v) mainstreaming a cross-cutting gender approach in the LUDPs and the Inter-institutional Strategy for INRM; vi) timely dissemination of lessons learned to female beneficiaries; vii) promotion of women participation in planning and decision-making at provincial, local, community and family levels.
Data will be disaggregated by gender to monitor differentiated project impacts, and women producers will be particularly involved and represented in all project activities.
- **Participation** through multi-stakeholders workshops, thematic roundtables, and validation processes that will be applied to policy updates, alternative livelihoods strategies, and incentive mechanisms. Local communities will be fully involved in production, biotrade, and eco-tourism activities. Component 1 will work along with the civil society, and especially community-based organizations. Project activities will empower stakeholders that represent indigenous peoples and smallholders of the NP. The rural population will participate in Components 2 and 3 through: i) development and implementation of sustainable land use options and value chains; ii) implementation of conservation agreements; iii) implementation of demonstration activities (best practices); and iv) systematization of experiences.
- **Food security** promoted through incentives for soil and water conservation practices and INRM activities carried out by small-scale farmers in livestock, *naranjilla*, and cocoa production systems. Project activities seek to increase sustainable food production, mainly in Component 2.
- **Diversified livelihoods** through enhanced agricultural systems, reforestation of degraded areas, investments in conservation agreements, biotrade, and eco-tourism. The ethno-cultural characteristics of the communities will be considered, developing income opportunities and sustainable livelihoods appropriate to the socio-cultural characteristics of local communities.
- **Ownership** by local institutions, producer associations, and local communities of all project processes (see sub-section 5.4).

The project incorporates the ethno-cultural features of involved groups (smallholders, *Kichwas*, and *Waorani* indigenous peoples), the family's role in production and income generation, the socio-economic differences between men and women, and the knowledge differences regarding the use of natural resources.

⁶³ Based on FAO, *Environmental Impact Assessment - Guidelines for FAO Field Projects*, "Annex 3: Basic Policy Requirement for field projects": <http://www.fao.org/docrep/016/i2802e/i2802e.pdf>

5.2 ENVIRONMENTAL SUSTAINABILITY

The environmental sustainability of project results will be achieved through the application of an integrated landscape approach to the Napo Province. Different interventions will target different areas, including areas for sustainable production, areas for restoration and areas with natural vegetation for maintenance of ecosystem services.

Project activities will directly or indirectly contribute to environmental sustainability by:

- **Institutional strengthening of government agencies dealing with environmental issues in the NP:** developing an Inter-institutional participatory strategy for INRM; mainstreaming the environmental criteria in the LUDPs (see description in Section 2)
- **Capacity development** of stakeholders who manage natural resources (see sub-section 5.4)
- **Improving financial sustainability of environmental-friendly initiatives:** promoting monetary and non-monetary incentive mechanisms to finance sustainable production; and promoting forest conservation agreements jointly with incentive mechanisms (see description in Section 2).
- **Disseminating sustainable natural resources management practices:** support the NPG in developing the *chakra* system eco-label, and declaring the NP as a “clean production territory” (see description in Section 2).

5.3 FINANCIAL AND ECONOMIC SUSTAINABILITY

Financial and economic sustainability of project supported activities will be achieved to the extent that these activities are financially and economically viable for the parties involved, including small-scale farmers and their families, organized communities, producer organizations, and institutional partners in the central and local governments, particularly the NPG and MAE.

The project will promote inter-institutional coordination and agreements to increase the resources channelled through the monetary and non-monetary incentive mechanisms towards the Province of Napo. SLM and SFM investments will be increased by catalyzing and facilitating the access of producers and communities to national and provincial funding sources. The Provincial Sustainable Development Fund will be financed by the NPG. The project will only support its initial stages (design, launching, and capacity development) as a de-risking action to unblock funding that is already available. The financial sustainability of the project is likely secured through the public investments in conservation, restoration and sustainable production. In addition, the exploration of niche markets for biotrade, *chackra* system, and eco-tourism goods and services are expected to leverage funding from the private sector and the final consumers in the domestic market.

The activities promoted by the project will contribute to the financial and economic sustainability of the rural beneficiaries by improving their livelihoods. Best agricultural practices will enhance the productivity of cacao, naranjilla and livestock areas. Community-based eco-tourism initiatives will be supported in offering better quality services, which may boost the number of visitors to the province. The project will foster the sustainable use of biodiversity products, creating a new income-generating alternative. It will channel more financial resources towards the province. In light of all this, positive economic impacts on the local family and community economies are foreseen.

In addition, drinking water supply to urban population in the province (i.e. in Tena, El Chaco, Baeza and Archidona) will increase, due to better regulation water cycles in the province

watersheds. Two hydro-electrical projected centres that rely on water provision from NP (Coca Sinclair and Quijos⁶⁴), will receive a positive impact related to the increase in water regulation and sediment retention ecosystem services.

5.4 SUSTAINABILITY OF CAPACITIES DEVELOPED

The project will address the three dimensions of capacity development (CD) identified in *FAO's Approach to Sustainability*⁶⁵: i) individuals (small-scale farmers, households, female-led households); ii) institutions (provincial and local governments, regional branches of MAE and MAGAP, roundtables, associations); and iii) the policy enabling environment (new environmental governance strategy; enhanced institutional capacities through trainings on SFM, SLM and INRM; updated policy instruments). The interaction between community members and local CSOs, and between CSOs and DAGs will be also addressed.

CD activities will be focused on strengthening the managerial and technical skills of the national and local institutions, producer associations, civil society and local communities.

At institutional level, the project will strengthen the provincial, municipal and parochial governments, the ministries (MAE and MAGAP) in the province, and CSOs to facilitate multi-stakeholder coordination. CD will maximize the institutionality of multiple public and private stakeholders in the design of policies and strategies on sustainable management of natural resources, agriculture, livestock production and forestry. Training and raising awareness among stakeholders will improve the environmental governance in the province (enabling environment).

At field level, the promotion of best practices will be based on methodologies already used in the province (e.g. farmer field schools, extension, farmer-to-farmer), local knowledge, and collective community work (called *mingas*). Training methods and modules will take into account local ethno-cultural knowledge to ensure the mainstreaming of cultural issues in the proposals for plans and strategies, sustainable best practices, and forest conservation and management. Ethno-cultural knowledge will be combined with current technologies to be promoted by the project. Training events (e.g. courses, workshops, tours, field days) will be timely programmed to ensure the participation of beneficiaries, especially women. Whenever possible, the *Kichwa* language will be used during the events in order to revitalize local culture. In sum, stakeholders' ownership of best practices and SLM/SFM concepts will contribute to the sustainability of the acquired capacities. Systematized lessons learned will also contribute to CD sustainability.

5.5 APPROPRIATENESS OF TECHNOLOGY INTRODUCED

The project's technical feasibility is based on the NPG's, the MAGAP's and the INIAP's⁶⁶ technical capacity for research and technology transfer without compromising ecosystems and their regeneration cycles. MAGAP and INIAP have worked in the generation and transfer of clean technologies for production of *naranjilla*. The NPG holds agreements with the municipalities of Quijos and El Chaco to promote technology transfer for improved livestock production. Moreover, the local institutions have technologies for sustainable production of

⁶⁴ The two State ongoing construction projects in NP.

⁶⁵<http://www.fao.org/capacitydevelopment/the-three-dimensions-of-the-fao-capacity-development-framework/en/20>

⁶⁶ The three institutions are present and active in the Napo Province

livestock and *naranjilla* in Amazonian ecosystems, which have been developed by national entities and the international cooperation and are currently undergoing a validation process within the province's territory.

The project will promote tested, cost-effective and environmental-friendly production practices adapted to the context of the Napo province. These technologies and practices include agroforestry and silvopastoral systems, reforestation and ecological restoration with native species, soil conservation and management, reduced use of chemicals, use of native species and varieties (*naranjilla* and cacao) and pasture management. Furthermore, the project will make use of training and technical assistance methodologies currently used by FAO and MAGAP/INIAP, which are known and accepted by both technicians and producers. The project will also promote the traditional productive systems based on traditional practices such as the *chakra*.

5.6 REPLICABILITY AND SCALING UP

The potential for replication of the project is high given its complementarity with national and provincial policies and programs. The development of the inter-institutional participatory INRM strategy and the SFM strategy will allow the up-take of integrated natural resources management at the provincial level. In addition, the generation of guidelines for mainstreaming environmental issues in the LUDPs of the DAGs will allow replicating the experience to all the LUDPs in the province.

Strengthening and coordination of incentive mechanisms and the implementation of the Sustainable Development Fund will allow channelling of monetary and non-monetary resources for investment in SLM and SFM throughout the province. Systematization of experiences and lessons learned will serve to promote the replication of project results to the rest of the province as well as to other Ecuadorian provinces in the Amazon region.

At regional level, the suite of project best practices and appropriate technologies could be used in other Amazon countries. The FAO Representation in Ecuador will share information on project lessons learned with the Regional Office for Latin America and the Caribbean (FAO RLC) to disseminate it to other countries with similar ecosystems and problems.

APPENDICES

APPENDIX 1: RESULTS MATRIX

Project outcomes and impacts:

Objective/Impact	Baseline	Outcome Indicators	Assumptions
<p>Global Environmental Objective: To promote conservation and sustainable use of globally-important biodiversity, reduce and revert land degradation and deforestation, and improve forest management in the Province of Napo.</p> <p>Project Development Objective:⁶⁷ To increase and improve the provision of goods and services from agricultural, livestock and forestry production in a sustainable manner</p> <p>Specific Project Objective: To promote biodiversity conservation, sustainable management of soil, forests, and water, through the strategic investment of public resources, participative environmental governance, incentive mechanisms, community-based tourism, and biotrade in the Napo Province.</p>	<p>Component 1:</p> <p>Outcome 1.1 No provincial policies for integrated natural resources management</p> <p>Outcome 1.2 <u>Indicator LD-3.iii</u>) Increase in investments for integrated landscape management: US\$476,000 in 2013; expected BAU investment by PY4: US\$ 2,200,000 (including SocioBosque, Forest Management, and Reforestation)</p> <p><u>Indicator BD-2 II.3:</u> Foreseen PES: Biodiversity conservation in forests. 46,081has. USD 35/ha/yr</p>	<p>Component 1:</p> <p>Outcome 1.1: Environmental thematic axes⁶⁸ mainstreamed into at least 6 LUDPs for conservation and sustainable use of natural resources.</p> <p><u>Indicator BD-2 II.1:</u> Foreseen extent of landscape where project contributes directly to BD conservation/sustainable use of its components: 47,911 has</p> <p><u>Indicator BD-2 II.2:</u> PAs within the landscape covered by the project: 15</p> <p>Outcome 1.2 <u>Indicator LD-3.iii</u>) Increase in investments for integrated landscape management: Increase in investments for integrated landscape management: +21.5% in investments for incentive mechanisms: US\$ 2,676,000 by PY4</p> <p><u>Indicator BD-2 II.3:</u> Foreseen PES: Biodiversity conservation in forests. 48,845has. USD 43/ha/yr</p>	<p>Component 1:</p> <p>Political will to mainstream biodiversity conservation and integrated natural resources management in strategic instruments and policies.</p> <p>Political will to channel financial resources for INRM and SFM to the Province of Napo.</p>
	Component 2:	Component 2:	Component 2:

⁶⁷ In line with FAO SOs

⁶⁸ Axes will comprise sustainable forest management, ecological restoration, sustainable agricultural practices (cocoa in chakra, clean naranjilla, sustainable livestock), promotion of community-based tourism in natural areas, biotrade through bio-initiatives, and improvement of ecosystem services in river basins (see more in Section 2).

Objective/Impact	Baseline	Outcome Indicators	Assumptions
	<p><u>Outcome 2.1</u> Indicator LD-3.ii) Spatial coverage of integrated natural resources management practices in the wider landscape: 250 ha of livestock production with sustainable criteria; 30 ha of clean <i>naranjilla</i>, 1000 of cocoa under good practices</p> <p>Indicator LD-1.iii) Land area of production systems with increased vegetation cover (conservation agreements): 0</p> <p><u>Outcome 2.2</u> Rate of deforestation: 2,735 ha/yr in the Province of Napo for the 2000-2008 period, and estimated in 3,905 ha/yr in 2014</p> <p>Preliminary data estimation with information provided by MAE indicates that the Napo Province's emissions for the 4-years project lifetime could be of 7,681,426 t CO_{2eq} considering 125 t C/ha.</p>	<p><u>Outcome 2.1</u> Indicator LD-3.ii) Spatial coverage of integrated natural resources management practices in the wider landscape: 1,720 ha under sustainable intensification, adapted to the local context (additional 120 ha of <i>naranjilla</i>, 400 ha of cocoa, and 1,200 of livestock production)</p> <p>Indicator LD-1.iii) Land area of production systems with increased vegetation cover (conservation agreements): 1,764 ha of forests conserved by producers of <i>naranjilla</i> (400 ha), cocoa (1,000 ha) and livestock (364 ha).</p> <p><u>Outcome 2.2</u> No increase in the deforestation rate after 2014 as direct impact of the project and decrease in 15% in four years project lifetime as indirect impact.</p> <p>Avoided emissions during the 4-years project lifetime due to sustainable forest management in amount of 535,275 t CO_{2eq}, and due to forests conserved by producers, inside or around the agricultural systems, in amount of 807,030 t CO_{2eq}</p>	<p>Producers are willing to learn and engage actively in the adoption of good practices for biodiversity conservation and INRM.</p> <p>Political will to channel financial resources for INRM and SFM to producers for adoption of good practices and conservation.</p>
	<p><u>Component 3:</u></p> <p><u>Outcome 3.1</u> 0</p> <p><i>Current average income baseline to be defined at inception/PY1</i></p>	<p><u>Component 3:</u></p> <p><u>Outcome 3.1</u> 1,000 ha of forests (community-owned or private) conserved through conservation agreements and destined to community-based ecotourism or sustainable biotrade practices</p> <p>10% increase in the current average income of 200 producers (100 women) working in community tourism and sustainable biotrade</p>	<p><u>Component 3:</u></p> <p>Producers are willing to learn and engage actively in generating alternative livelihoods that contribute to biodiversity conservation.</p> <p>Political will to channel financial resources to the Province of Napo for conservation purposes.</p>

Objective/Impact	Baseline	Outcome Indicators	Assumptions
		<u>Indicator BD-2 II.2:</u> PAs within the landscape covered by the project: 15	
		<u>Component 4:</u> <u>Outcome 4.1</u> Project implementation based on results-based management	<u>Component 4:</u> Project M&E system designed, including follow-up of activities, mechanisms to verify compliance of outcome and output indicators, and M&E responsibilities, timelines and budgets.

Project outputs and outcomes:

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsible for Data Collection
Component 1: Institutional strengthening to mainstream biodiversity conservation and integrated natural resource management into participatory land-use planning and management, based on an ecosystem approach								
<u>Outcome 1.1:</u> Improved participatory environmental governance in the Province of Napo.	Articulated policies between government levels are non-existent. Low capacity of DAGs to regulate natural	Environmental thematic axes ⁶⁹ mainstreamed into at least 6 LUDPs for conservation and sustainable		Environmental thematic axes ⁷⁰ mainstreamed into at least 6 LUDPs <u>Indicator BD-2 II.1:</u>		Environmental thematic axes ⁷¹ mainstreamed into at least 6 LUDPs, monitored	Policy documents Approval regulations External	Project Technical Chief NPG

⁶⁹ Axes will comprise sustainable forest management, ecological restoration, sustainable agricultural practices (cocoa in chakra, clean naranjilla, sustainable livestock), promotion of community-based tourism in natural areas, biotrade through bio-initiatives, and improvement of ecosystem services in river basins (see more in Section 2).

⁷⁰ Axes will comprise sustainable forest management, ecological restoration, sustainable agricultural practices (cocoa in chakra, clean naranjilla, sustainable livestock), promotion of community-based tourism in natural areas, biotrade through bio-initiatives, and improvement of ecosystem services in river basins (see more in Section 2).

⁷¹ Axes will comprise sustainable forest management, ecological restoration, sustainable agricultural practices (cocoa in chakra, clean naranjilla, sustainable livestock), promotion of community-based tourism in natural areas, biotrade through bio-initiatives, and improvement of ecosystem services in river basins (see more in Section 2).

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsible for Data Collection
	resources management and agricultural/ livestock use <u>Indicator BD-2 II.1:</u> Foreseen extent of landscape where project contributes directly to BD conservation/sustainable use of its components: 0 <u>Indicator BD-2 II.2:</u> PAs within the landscape covered by the project: 0	use of natural resources. <u>Indicator BD-2 II.1:</u> Foreseen extent of landscape where project contributes directly to BD conservation/sustainable use of its components: 47,911 has <u>Indicator BD-2 II.2:</u> PAs within the landscape covered by the project: 15		<i>to be determined at inception</i> <u>Indicator BD-2 II.2:</u> <i>to be determined at inception</i>		<u>Indicator BD-2 II.1:</u> Foreseen extent of landscape where project contributes directly to BD conservation/sustainable use of its components: 47,911 has <u>Indicator BD-2 II.2:</u> PAs within the landscape covered by the project: 15	evaluation reports; PPR; PIR	
Output 1.1.1: Participatory Inter-institutional Strategy for Natural Resources Management designed, implemented and monitored	There are spaces for dialogue and participation ⁷² . Need to articulate the work of these spaces around natural resources management	Participatory Inter-institutional Strategy for Natural Resources Management, designed, implemented and monitored	Participatory Inter-institutional Strategy for Natural Resources Management, designed	Participatory Inter-institutional Strategy for Natural Resources Management, implemented and monitored	Participatory Inter-institutional Strategy for Natural Resources Management, implemented and monitored	Participatory Inter-institutional Strategy for Natural Resources Management, implemented and monitored	Strategy document Project reports Institutional reports by Project partners (DAGs, MAE, MAGAP, etc.)	Project Technical Chief Chief Technical Advisor NPG

⁷² E.g. thematic roundtables, planning councils, among others.

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsible for Data Collection
Output 1.1.2: LUDPs with included environmental criteria, implemented and monitored	24 DAGs have LUDPs without environmental criteria	6 LUDPs with included environmental criteria, implemented and monitored (1 provincial LUDP and 5 municipal and parochial LUDPs)	6 LUDPs with included environmental criteria (1 provincial LUDP and 5 municipal and parochial LUDPs)	6 LUDPs with included environmental criteria, implemented (1 provincial LUDP and 5 municipal and parochial LUDPs)	6 LUDPs with included environmental criteria, implemented and monitored (1 provincial LUDP and 5 municipal and parochial LUDPs)	6 LUDPs with included environmental criteria, implemented and monitored (1 provincial LUDP and 5 municipal and parochial LUDPs)	LUDPs Project reports List of participants for each training event Training materials Training evaluation forms completed by all participants (gender disaggregated data)	Project Technical Chief LU Specialist DAGs
Output 1.1.3: Roundtables (protected areas and sustainable livestock) established and functioning	Existing thematic roundtables: cocoa, <i>naranjilla</i> , tourism, forestry, Quijos Valley Committee	2 roundtables (protected areas and sustainable livestock) established and functioning	2 roundtables (protected areas and sustainable livestock) established	2 roundtables (protected areas and sustainable livestock) established and functioning	2 roundtables (protected areas and sustainable livestock) established and functioning	2 roundtables (protected areas and sustainable livestock) established and functioning	Minutes of constitution of roundtables Minutes of meetings Project reports Institutional reports by Project partners (DAGs, MAE, MAGAP, etc.)	Project Technical Chief Value Chain Expert Biology Expert MAE MAGAP NPG

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsible for Data Collection
Output 1.1.4: Stakeholders' capacities strengthened for natural resources governance	At least 50 individuals have been trained with international cooperation support, although in isolated processes	178 government staff and community leaders trained in land use planning based on a natural resources governance approach	Training methodology designed. 70 institutional staffs and community leaders trained in land use planning based on a natural resources governance approach	100 institutional staffs and community leaders trained in land use planning based on a natural resources governance approach	140 institutional staffs and community leaders trained in land use planning based on a natural resources governance approach	178 institutional staffs and community leaders trained in land use planning based on a natural resources governance approach	Training methodology List of participants for each training event Training materials Training evaluation forms completed by all participants (data disaggregated by gender)	Project Technical Chief Capacity Development Specialist
Output 1.1.5: Information management of natural resources, developed and managed by MAE and NPG	NPG has a GIS Unit insufficiently staffed, outdated equipment and systems for an adequate management of information to support decision-making	1 Information management system for planning and management of natural resources, developed and managed by MAE and NPG	1 Information management system for planning and management of natural resources, developed and managed by MAE and NPG	1 Information management system for planning and management of natural resources, developed and managed by MAE and NPG	1 Information management system for planning and management of natural resources, developed and managed by MAE and NPG	1 Information management system for planning and management of natural resources, developed and managed by MAE and NPG	Procurement minutes of hardware and software List of participants for each training event Training materials Training evaluation forms completed by all participants (data	Project Technical Chief GIS Specialist NPG

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsible for Data Collection
							disaggregated by gender) GIS Unit reports Project reports	
Outcome 1.2: Increased investments for natural resources management	<u>Indicator LD-3.iii)</u> Increase in investments for integrated landscape management: US\$476,000 in 2013; expected BAU investment by PY4: US\$ 2,200,000 (including SocioBosque, Forest Management, and Reforestation) <u>Indicator BD-2 II.3:</u> Foreseen PES: Biodiversity conservation in forests. 46,081has. USD 35/ha/yr	<u>Indicator LD-3.iii)</u> Increase in investments for integrated landscape management: +21.5% in investments for incentive mechanisms: US\$ 2,676,000 by PY4 <u>Indicator BD-2 II.3:</u> Foreseen PES: Biodiversity conservation in forests. 48,845has. USD 43/ha/yr		20% increase in investments for incentive mechanisms over the baseline: US\$ 535,200 <u>Indicator BD-2 II.3:</u> <i>to be determined at inception</i>	60% increase in investments for incentive mechanisms over the baseline: US\$ 1,605,600	100% increase in investments for incentive mechanisms over the baseline: US\$ 2,676,000 <u>Indicator BD-2 II.3:</u> Foreseen PES: Biodiversity conservation in forests. 48,845has. USD 43/ha/yr	MAE, MAGAP and NPG reports on implementation of incentives Sustainable Development Fund reports External evaluation reports; PPR; PIR	Project Technical Chief Incentives Specialist MAE MAGAP NPG
Output 1.2.1: Incentive mechanisms for biodiversity conservation and sustainable use strengthened,	Incentives: i) Socio Bosque - conservation (MAE); ii) Socio Bosque - restoration (MAE); iii) Reforestation for commercial purposes (MAGAP); iv) Agro-	6 incentive mechanisms for biodiversity conservation and sustainable use strengthened, articulated, and	6 incentive mechanisms strengthened for biodiversity conservation and sustainable use	6 incentive mechanisms strengthened and articulated for biodiversity conservation and sustainable use	6 incentive mechanisms strengthened, articulated, operational for biodiversity conservation and sustainable use of	6 incentive mechanisms for biodiversity conservation and sustainable use of biodiversity, operational and	MAE, MAGAP and NPG reports on implementation of incentives Project reports	Project Technical Chief Incentives Specialist MAE

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsible for Data Collection
articulated, and operational	forestry extension (MAE-MAGAP); v) Productive NPG; and vi) National Concurrent Plan for Reforestation. Limited access in the province due to lack of information and socialization.	operational			biodiversity	monitored		MAGAP NPG
Output 1.2.2: Provincial Sustainable Development Fund established and operational	Preliminary design of the Fund	1 Provincial Sustainable Development Fund established and operational	Feasibility study and Fund design, carried out	1 Provincial Sustainable Development Fund, established	1 Provincial Sustainable Development Fund operational	1 Provincial Sustainable Development Fund, operational and monitored	Fund implementation arrangements Fund implementation reports Project reports	Project Technical Chief NPG Trust Fund Board

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
Component 2: Design and promotion of landscape and agro-forestry production systems that include the sustainable management of water, soil, and forests, while improving local population livelihoods in the Province of Napo.								
Outcome 2.1: Production systems incorporate good practices for conservation and management of	<u>Indicator LD-3.ii)</u> Spatial coverage of integrated natural resources management practices in the wider landscape: 250 ha of	<u>Indicator LD-3.ii)</u> Spatial coverage of integrated natural resources management practices in the wider landscape:		344 ha under sustainable intensification, adapted to the local context (24 ha of <i>naranjilla</i> , 80 ha of cocoa, 240	1032 ha under sustainable intensification, adapted to the local context (72 ha of	1.720 ha under sustainable intensification, adapted to the local context (120 ha of <i>naranjilla</i> , 400 ha	Institutional reports (MAE, MAGAP, GADPN, cocoa, <i>naranjilla</i> and sustainable livestock	Project Technical Chief Agricultural Specialist MAE

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
medium-scale producers		monitored 593 producers sign conservation agreements: 120 <i>naranjilla</i> producers, 400 cocoa producers, and 73 livestock producers	farms	conservation agreements: 24 <i>naranjilla</i> producers, 80 cocoa producers, and 14 livestock producers	sign conservation agreements: 72 <i>naranjilla</i> producers, 240 cocoa producers, and 44 livestock producers	sign conservation agreements: 120 <i>naranjilla</i> producers, 400 cocoa producers, and 73 livestock producers	List of participants for each training event Training materials Training evaluation forms completed by all participants (data disaggregated by gender)	
Output 2.1.2: Cocoa and <i>naranjilla</i> value chain plans, updated, implemented and monitored	Cocoa and <i>naranjilla</i> plans exist but are outdated. FAO and GIZ have value chain methodologies	2 cocoa and <i>naranjilla</i> value chain plans, updated, implemented and monitored	2 cocoa and <i>naranjilla</i> value chain plans, updated	2 cocoa and <i>naranjilla</i> value chain plans, implemented	2 cocoa and <i>naranjilla</i> value chain plans, implemented and monitored	2 cocoa and <i>naranjilla</i> value chain plans, implemented and monitored	Cocoa value chain plan Naranjilla value chain plan Project reports MAGAP and NPG institutional reports	Project Technical Chief Value Chain Specialist MAGAP NPG
Outcome 2.2: Reduced pressure over the forests of the Sumaco Biosphere Reserve through the implementation of a SFM strategy	Rate of deforestation: 2,735 ha/yr in the Province of Napo for the 2000-2008 period, and estimated in 3,905 ha/yr in 2014)	No increase in the deforestation rate after 2014 as direct impact of the project and decrease in 15% in four years project lifetime as indirect impact	Deforestation rate: 3,905 ha/yr	Deforestation rate: 3,905 ha/yr	Deforestation rate: 3,905 ha/yr	Deforestation rate: 3,905 ha/yr	Institutional reports (MAE) Multi-temporal study on land use and coverage External evaluation reports;	Project Technical Chief Forestry Specialist MAE

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
							PPR; PIR	
Output 2.2.1: A Provincial SFM Strategy developed	Forestry roundtable has a basic strategy	Provincial SFM Strategy designed, agreed, implemented and monitored	Provincial SFM Strategy designed and agreed	Provincial SFM Strategy implemented	Provincial SFM Strategy implemented and monitored	Provincial SFM Strategy implemented and monitored	Strategy document	Project Technical Chief Forestry Specialist MAE NPG
Output 2.2.2: Co-management plans for La Cascada, Cerro Sumaco and Colonso PFs elaborated, implemented and monitored (40,927 ha)	<u>SFM-REDD+ Indicator 1.2:</u> Area covered by management plans: Colonso, La Cascada and Cerro Sumaco PFs have global management plans but lack of community co-management plans	<u>SFM-REDD+ Indicator 1.2:</u> Area covered by management plans: 23 co-management plans for the La Cascada, Cerro Sumaco and Colonso PFs elaborated, implemented and monitored (10 co-management plans in 27.784 ha of Cerro Sumaco PF; 10 co-management plans in 12.757 ha of La Cascada PF and 3 co-management plans in 386 ha of Colonso PF)	13 co-management plans elaborated (3 co-management plans in 386 ha of Colonso PF and 10 co-management plans in 12.757 ha of La Cascada PF)	10 co-management plans in 27.784 ha of Cerro Sumaco PF elaborated 13 co-management plans implemented and monitored (3 co-management plans in 386 ha of Colonso PF and 10 co-management plans in 12.757 ha of La Cascada PF)	23 co-management plans implemented and monitored (40,927 ha)	23 co-management plans implemented and monitored (40,927 ha)	Co-management plans List of participants for each training event Training materials Training evaluation forms completed by all participants (data disaggregated by gender)	Project Technical Chief Forestry Specialist MAE NPG

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
<p>Output 2.2.3: Restored hectares with analogue forestry, reforestation or natural regeneration techniques under conservation agreements and incentives</p>	<p><u>SFM-REDD+ Indicator 1.2</u> Restoration/ rehabilitation of degraded forests: 145 ha reforested in 2012</p>	<p><u>SFM-REDD+ Indicator 1.2</u> Restoration/ rehabilitation of degraded forests: 2,500 ha restored with analogue forestry, reforestation or natural regeneration techniques under conservation agreements and incentives</p>	Restoration criteria defined and intervention areas identified	500 ha restored with analogue forestry, reforestation or natural regeneration techniques under conservation agreements and incentives	1500 ha restored with analogue forestry, reforestation or natural regeneration techniques under conservation agreements and incentives	2.500 ha restored with analogue forestry, reforestation or natural regeneration techniques under conservation agreements and incentives	<p>Conservation agreements</p> <p>Reports on implementation of incentives (MAE, MAGAP)</p> <p>List of participants for each training event</p> <p>Training materials</p> <p>Training evaluation forms completed by all participants (data disaggregated by gender)</p>	<p>Project Technical Chief</p> <p>Forestry Specialist</p> <p>MAE</p> <p>NPG</p>
<p>Output 2.2.4: Provincial timber traceability system, designed and piloted in Cerro Sumaco (Wamani and Akoki communities)</p>	0 Timber traceability system	One provincial timber traceability system, designed and piloted in Cerro Sumaco (Wamani and Akoki communities)	1 provincial timber traceability system designed	1 provincial timber traceability system piloted in Cerro Sumaco (Wamani and Akoki communities)	1 provincial timber traceability system piloted and monitored in Cerro Sumaco (Wamani and Akoki communities)	1 provincial timber traceability system implemented and monitored in Cerro Sumaco (Wamani and Akoki communities)	<p>Traceability system procedures</p> <p>List of participants for each training event</p> <p>Training materials</p> <p>Training evaluation forms completed by all participants (data disaggregated by</p>	<p>Project Technical Chief</p> <p>Traceability Specialist</p> <p>MAE</p> <p>NPG</p>

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
							gender)	

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
Component 3: Promotion of biotrade and community-based ecotourism as strategies for biodiversity conservation, sustainable management of natural resources, and improvement of livelihoods for local communities								
Outcome 3.1: Biodiversity conserved, natural resources sustainably managed and livelihoods of local communities improved through promotion of community-based ecotourism and biotrade.	0 <i>Average income baseline to be defined at inception/PY1</i>	1,000 ha of forests (community-owned or private) conserved through conservation agreements and destined to community tourism or sustainable biotrade practices 10% increase in the current average income of 200 producers (100 women) working in community tourism and sustainable biotrade <u>Indicator BD-2 II.2:</u> PAs within the		200 ha of forests (community or private) conserved through conservation agreements 2% increase in the current average income of 50 producers (30 women) <u>Indicator BD-2 II.2:</u> <i>to be defined at inception/PY1</i>	600 ha of forests (community or private) conserved through conservation agreements 6% increase in the current average income of 100 producers (70 women)	1,000 ha of forests (community or private) conserved through conservation agreements 10% increase in the current average income of 200 producers (100 women)	Institutional reports (MAE, MAGAP, GADPN) External evaluation reports; PPR; PIR	Project Technical Chief Tourism and Biotrade Specialist MAE NPG

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
		landscape covered by the project: 15						
<p>Output 3.1.1:</p> <p>Conservation agreements and good practices in sustainable community-based ecotourism, implemented</p>	<p>Only 1 initiative has been legalized with MINTUR. Deficiencies in implementation of good practices.</p>	<p>7 sustainable community-based ecotourism initiatives and conservation agreements covering 500 ha implemented</p>	<p>7 sustainable community-based ecotourism initiatives implemented</p>	<p>7 sustainable community-based ecotourism initiatives implemented and monitored</p>	<p>7 sustainable community-based ecotourism initiatives implemented and monitored</p>	<p>7 sustainable community-based ecotourism initiatives implemented and monitored</p> <p>Conservation agreements covering 500 ha implemented</p>	<p>Manual of good practices in community tourism</p> <p>Conservation agreements</p> <p>List of participants for each training event</p> <p>Training materials</p> <p>Training evaluation forms completed by all participants (data disaggregated by gender)</p>	<p>Project Technical Chief</p> <p>Tourism and Biotrade Specialist</p> <p>MAE</p> <p>NPG</p>
<p>Output 3.1.2:</p> <p>Biotrade goods produced under management plans and/or <i>chakra</i> eco-labelling in areas</p>	<p>0</p>	<p>5 biotrade products with management plans and/or <i>chakra</i> eco-label produced in 2 priority areas (Archidona and Tena) with conservation agreements</p>	<p>“Chakra” eco-label and certification criteria, designed</p> <p>1 biotrade product with management plans and/or <i>chakra</i> eco-label produced</p>	<p>2 biotrade products with management plans and/or <i>chakra</i> eco-label produced in 2 priority areas (Archidona and Tena) with conservation</p>	<p>4 biotrade products with management plans and/or <i>chakra</i> eco-label produced in 2 priority areas (Archidona and Tena) with</p>	<p>5 biotrade products with management plans and/or <i>chakra</i> eco-label produced in 2 priority areas (Archidona and</p>	<p>Management plans</p> <p><i>Chakra</i> eco-label</p> <p>Conservation agreements</p>	<p>Project Technical Chief</p> <p>Tourism and Biotrade Specialist</p> <p>MAE</p>

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
under conservation agreements			in 2 priority areas (Archidona and Tena) with conservation agreements	agreements	conservation agreements	Tena) with conservation agreements	List of participants for each training event Training materials Training evaluation forms completed by all participants (data disaggregated by gender)	NPG

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
Component 4: M&E and information dissemination								
Outcome 4.1: Project implementation based on RBM and lessons learned/good practices documented and disseminated		Project implementation based on RBM and demonstrating sustainability	33% progress in achievement of outcomes	64% progress in achievement of outcomes	82% progress in achievement of outcomes	Project outcomes achieved and demonstrating sustainability	PIR PPRs Mid-term and final evaluations	Project Technical Chief NPG FAO

Outcomes and Outputs	Baseline	Target	Milestones towards achieving output and outcome targets				Data Collection and Reporting	
			Year 1	Year 2	Year 3	Year 4	Means of Verification	Responsible for Data Collection
Output 4.1.1: Project M&E system established and operational		M&E plan developed and operational	2 six-monthly reports (1 PPR y 1 PIR)	2 six-monthly reports (1 PPR y 1 PIR)	2 six-monthly reports (1 PPR y 1 PIR)	2 six-monthly reports (1 PPR y 1 PIR)	PPR PIR	Project Technical Chief NPG FAO
Output 4.1.2: Midterm and final evaluations		1 mid-term evaluation and 1 final evaluation		Mid-term evaluation report		Final evaluation report	Mid-term and final evaluation reports	Project Technical Chief External evaluator FAO
Output 4.1.3: Project best practices and lessons learned published		At least 3 publications on best practices and lessons learned			1 publication on best practices and lessons learned	3 publications on best practices and lessons learned	Publications PPR; PIR	Project Technical Chief NPG MAE FAO
Output 4.1.4: Webpage for information-sharing and exchange of experiences		Webpage for information sharing and exchange of experiences	Project web page in NPG web site	Web page updated	Web page updated	Web page for information sharing and exchange of experiences	Web page	Project Technical Chief NPG

APPENDIX 2: WORK PLAN (RESULTS BASED)

Output	Activities	Responsible Institution	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
Component 1: Institutional strengthening to mainstream biodiversity conservation and integrated natural resource management (INRM) into participatory land-use planning and management, based on an ecosystem approach																		
Output 1.1.1 Inter-Institutional Participatory Strategy for Natural Resources Management, designed, implemented and monitored	Assessments (participation, gender, stakeholders, others)	Project Technical Chief National Project Director NPG MAE																
	30 workshops for design and dissemination of the strategy	Project Technical Chief National Project Director NPG MAE																
	Implementation of the Strategy	Project Technical Chief National Project Director NPG MAE																
	Monitoring of implementation	Project Technical Chief National Project Director NPG MAE																
Output 1.1.2 6 LUDPs with included environmental criteria, implemented and monitored	Ecological zoning as input to update LUDPs	Land Use (LU) Specialist Project Technical Chief National Project Director NPG MAE																
	Updating of LUDPS	LU Specialist Project Technical Chief National Project Director																

Output	Activities	Responsible Institution	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
		DAGs MAE																
	42 workshops for training and presentation of LUDPs	LU Specialist Project Technical Chief National Project Director DAGs MAE																
	Implementation of LUDPs	LU Specialist Project Technical Chief National Project Director DAGs																
	Monitoring of implementation	LU Specialist Project Technical Chief National Project Director DAGs																
Output 1.1.3 2 Thematic roundtables (Protected Areas and Sustainable Livestock Production), established and functioning	Identification of stakeholders for each roundtable	Capacity Development (CD) Specialist Project Technical Chief National Project Director NPG MAE MAGAP																
	Identification of synergies between LUDPs and PA management plans	CD Specialist Project Technical Chief National Project Director NPG MAE MAGAP																
	Establishment of the PA and Livestock roundtables	Capacity Development Specialist (CD) Project Technical Chief National Project Director NPG MAE MAGAP																

Output	Activities	Responsible Institution	Year 1				Year 2				Year 3				Year 4			
			Q1	Q 2	Q 3	Q 4	Q 1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Monthly meetings of the roundtables (48 meetings of the PA roundtables and 48 meetings of the livestock roundtable)	Capacity Development Specialist (CD) Project Technical Chief National Project Director NPG MAE MAGAP																
Output 1.1.4 Stakeholders' capacities strengthened for natural resource governance	Elaboration of the training methodology	CD Specialist Project Technical Chief National Project Director NPG MAE																
	Elaboration of training materials	CD Specialist Project Technical Chief National Project Director NPG MAE																
	192 training workshops in environmental governance	CD Specialist Project Technical Chief National Project Director NPG MAE																
Output 1.1.5 Information management system for natural resources, developed and managed by MAE and NPG	Procurement of equipment of GIS Unit	GIS Specialist Project Technical Chief National Project Director NPG																
	Implementation of the GIS Unit (updating of information, creation of a data base)	GIS Specialist Project Technical Chief National Project Director NPG																
Output 1.2.1 6 incentives strengthened and articulated, and operational for BD conservation and sustainable use	Geographical assessment of intervention sites of incentive mechanisms / complementarities	Incentives Specialist Project Technical Chief National Project Director NPG MAE																

Output	Activities	Responsible Institution	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
		MAGAP																
	Proposal of guidelines for inter-institutional articulation to channel incentive mechanisms	Incentives Specialist Project Technical Chief National Project Director NPG MAE MAGAP																
	120 workshops for socialization of incentive mechanisms	Incentives Specialist Project Technical Chief National Project Director NPG MAE MAGAP																
	Technical assistance to the NPG to access resources of the National Concurrent Plan for Reforestation	Incentives Specialist Project Technical Chief National Project Director NPG MAE																
Output 1.2.2 One Provincial Sustainable Development Fund, established and operational	Feasibility study for the Fund establishment	Project Technical Chief National Project Director NPG																
	Fund Establishment, capitalization and start-up	Project Technical Chief National Project Director NPG																
	Starting Fund operations	Project Technical Chief National Project Director NPG Trust Fund Manager																
Component 2: Design and promotion of landscape and agro-forestry production systems that include the sustainable management of water, soil, and forests, while improving local population livelihoods in the Province of Napo																		
Output 2.1.1 7 Good productive practices adopted and conservation agreements signed by small- and medium-scale producers	Assessments and improvement of technological packages for cocoa, naranjilla and livestock	Agricultural Specialist Project Technical Chief National Project Director NPG MAGAP																

Output	Activities	Responsible Institution	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
	82 technical assistance and training workshops in farm and community planning, and conservation agreements	Agricultural Specialist Project Technical Chief National Project Director NPG MAE MAGAP																
	108 training workshops in good practices	Agricultural Specialist Project Technical Chief National Project Director NPG MAGAP																
	Supply of materials for sustainable production in farms and <i>chakras</i>	Agricultural Specialist Project Technical Chief National Project Director NPG MAGAP																
	Implementation of good practices and conservation agreements	Agricultural Specialist Project Technical Chief National Project Director NPG MAE MAGAP																
Output 2.1.2 2 value chain plans for cocoa and naranjilla updated, implemented and monitored	Updating of value chain plans and studies for business models for naranjilla and livestock	Value Chain Specialist Project Technical Chief National Project Director NPG MAGAP																
	Implementation of value chain plans for cocoa and naranjilla	Value Chain Specialist Project Technical Chief National Project Director NPG MAGAP																
	Monitoring of cocoa and naranjilla value chain plans	Value Chain Specialist Project Technical Chief National Project Director																

Output	Activities	Responsible Institution	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
		NPG MAGAP																
Output 2.2.1 A Provincial SFM strategy designed, implemented and monitored	Design of the SFM strategy	Forestry Specialist Project Technical Chief National Project Director NPG MAE																
	15 workshops for design, validation and socialization of the strategy	Forestry Specialist Project Technical Chief National Project Director NPG MAE																
	Implementation of the strategy	Forestry Specialist Project Technical Chief National Project Director NPG MAE																
	Monitoring of implementation	Forest Specialist Project Technical Chief National Project Director NPG MAE																
Output 2.2.2 23 co-management plans, elaborated, implemented, and monitored (40,927 ha under SFM)	Multi-temporal land use and cover study	Forestry Specialist Biology Specialist Project Technical Chief National Project Director NPG MAE																
	Elaboration of 10 co-management plans for Cerro Sumaco PF	Forestry Specialist Biology Specialist Project Technical Chief National Project Director NPG MAE																
	Elaboration of 10 co-	Forestry Specialist																

Output	Activities	Responsible Institution	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
	management plans for La Cascada PF	Biology Specialist Project Technical Chief National Project Director NPG MAE																
	Elaboration of 3 co-management plans for Colonso PF	Forestry Specialist Biology Specialist Project Technical Chief National Project Director NPG MAE																
	92 workshops for elaboration of co-management plans and 6 meetings for validation with institutions	Forestry Specialist Biology Specialist Project Technical Chief National Project Director NPG MAE																
	Implementation and monitoring of co-management plans	Forestry Specialist Biology Specialist Project Technical Chief National Project Director NPG MAE																
Output 2.2.3 2.500 ha restored with analogue forestry, reforestation or natural regeneration techniques and under conservation agreements and incentives	Identification of priority areas for restoration	Forestry Specialist Biology Specialist Project Technical Chief National Project Director NPG MAE																
	90 training workshops in ecological restoration	Forestry Specialist Biology Specialist Project Technical Chief National Project Director NPG MAE																

Output	Activities	Responsible Institution	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
	Supply of materials for ecological restoration	Forestry Specialist Biology Specialist Project Technical Chief National Project Director NPG MAE																
	Implementation of restoration activities (active reforestation, passive reforestation, analogue forestry) and conservation agreements	Forestry Specialist Biology Specialist Project Technical Chief National Project Director NPG MAE																
Output 2.2.4: Provincial timber traceability system, designed and piloted in Cerro Sumaco PF (Wamani and Akoki communities)	Design of the timber traceability system	Traceability Specialist Project Technical Chief National Project Director NPG MAE																
	Elaboration of comprehensive management plans and forest harvesting plans for Akoki and Wamani	Traceability Specialist Project Technical Chief National Project Director NPG MAE																
	12 training workshops in timber traceability	Traceability Specialist Project Technical Chief National Project Director NPG MAE																
	Piloting of the traceability system	Traceability Specialist Project Technical Chief National Project Director NPG MAE																
	Monitoring of implementation of the traceability system	Traceability Specialist Project Technical Chief National Project Director																

Output	Activities	Responsible Institution	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
		NPG MAE																
Component 3. Promotion of biotrade and sustainable community tourism as strategies for biodiversity conservation, sustainable use of natural resources, and improvement of livelihoods for local communities																		
Output 3.1.1 Conservation agreements (500 ha) and sustainable community-based ecotourism good practices implemented	Elaboration of a good practice manual for sustainable community tourism	Tourism & Biotrade Specialist Project Technical Chief National Project Director NPG MAE MINTUR																
	Support to legalization of tourist initiatives with MAE and MINTUR	Tourism & Biotrade Specialist Project Technical Chief National Project Director NPG MAE MINTUR																
	Updating of sustainable community-based ecotourism value chain plans, and studies for business models	Tourism & Biotrade Specialist Project Technical Chief National Project Director NPG MAE MINTUR																
	21 training workshops in sustainable community-based ecotourism good practices	Tourism & Biotrade Specialist Project Technical Chief National Project Director NPG MAE MINTUR																
	Supply of materials for implementation of good	Tourism & Biotrade Specialist																

Output	Activities	Responsible Institution	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
	practices	Project Technical Chief National Project Director NPG MAE MINTUR																
	Implementation and monitoring of good practices and conservation agreements	Tourism & Biotrade Specialist Project Technical Chief National Project Director NPG MAE MINTUR																
Output 3.1.2 5 biotrade products with management plans and/or <i>chakra</i> eco-label produced in 2 priority areas (Archidona and Tena) with conservation agreements (500 ha)	Elaboration of management plans for 5 biotrade products and legalization with MAE	Tourism & Biotrade Specialist Project Technical Chief National Project Director NPG MAE																
	Elaboration of value chain plans for 5 biotrade products, and studies for business models	Tourism & Biotrade Specialist Project Technical Chief National Project Director NPG MAE																
	20 biotrade training workshops	Tourism & Biotrade Specialist Project Technical Chief National Project Director NPG MAE																
	Supply of materials for implementation of management plans	Tourism & Biotrade Specialist Project Technical Chief National Project Director NPG																

Output	Activities	Responsible Institution	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
		MAE																
	Implementation of management plans and conservation agreements	Tourism & Biotope Specialist Project Technical Chief National Project Director NPG MAE																
	Design of the <i>chakra</i> eco-label	Project Technical Chief National Project Director NPG																
Component 4: Project progress monitoring and evaluation and information dissemination																		
Output 4.1.1 Project M&E system operational, providing constant information on project progress in achieving outputs and outcomes	Inception workshop	Project Technical Chief National Project Director NPG MAE																
	Preparation and validation of AWP/B	Project Technical Chief National Project Director																
	Preparation and validation of M&E plan	Project Technical Chief National Project Director																
	Periodic monitoring and preparation of progress reports (PPR)	Project Technical Chief National Project Director																
	Preparation of annual reports (PIR)	LTU Project Technical Chief National Project Director																
Output 4.1.2 Midterm and final evaluations	Midterm evaluation	External Consultant FAO National Project Director Project Technical Chief																
	Final evaluation	External Consultant FAO Project Technical Chief National Project Director																
Output 4.1.3	Identification of best practices	Project Technical Chief																

Output	Activities	Responsible Institution	Year 1				Year 2				Year 3				Year 4			
			Q1	Q 2	Q 3	Q 4	Q 1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Project best practices and lessons learned published	and lessons learned	National Project Director FAO																
	Preparation of technical reports on good practices and lessons learned	Project Technical Chief National Project Director FAO																
Output 4.1.4 Project website for information - sharing and exchange of experiences	Website design and update	Project Technical Chief National Project Director																
Project Management	Contracting of project management staff	FAO Ecuador																
	Project Steering Committee (PSC) meetings	PSC Chairperson Project Technical Chief National Project Director																

APPENDIX 3: RESULTS BUDGET

For space reasons, please find the GEF detailed outputs-based budget here:



GEF Napo final budget

Oracle code and description	Unit	No. of units	Unit cost	BUDGET in USD				PM	Total GEF	Expenditures by year			
				Component 1:	Component 2:	Component 3:	Component 4:			Year 1	Year 2	Year 3	Year 4
				Total	Total	Total	Total						
5300 Salaries professionals													
Administrative and Operations Officer	month	48	3.099,39	0	0	0	0	148.771	148.771	37.193	37.193	37.193	37.193
5300 Sub-total salaries professionals				0	0	0	0	148.771	148.771	37.193	37.193	37.193	37.193
National consultants													
Project Technical Chief	month	48	2.500,00	84.600	14.400	4.800	16.200		120.000	30.000	30.000	30.000	30.000
LU Specialist	month	24	2.000,00	48.000	0	0	0		48.000	24.000	24.000		
Capacity Development Specialist	month	36	2.000,00	72.000	0	0	0		72.000	24.000	24.000	24.000	
GIS Specialist	month	42	2.000,00	84.000	0	0	0		84.000	21.000	21.000	21.000	21.000
Incentives Specialist	month	42	2.000,00	84.000	0	0	0		84.000	21.000	21.000	21.000	21.000
Socioeconomic Specialist	month	24	2.000,00	22.400	19.200	6.400	0		48.000	24.000			24.000

Oracle code and description	Unit	No. of units	Unit cost	Component 1:	Component 2:	Component 3:	Component 4:	PM	GEF	Year 1	Year 2	Year 3	Year 4
				Total	Total	Total	Total						
Agricultural Specialist	month	42	2.000,00	16.800	67.200	0	0		84.000	21.000	21.000	21.000	21.000
Chain Value Specialist	month	42	2.000,00	16.800	25.200	42.000	0		84.000	21.000	21.000	21.000	21.000
Forestry Specialist	month	42	2.000,00	0	84.000	0	0		84.000	21.000	21.000	21.000	21.000
Biology Specialist	month	42	2.000,00	16.800	67.200	0	0		84.000	21.000	21.000	21.000	21.000
Timber Traceability Specialist	month	36	2.000,00	0	72.000	0	0		72.000	18.000	18.000	18.000	18.000
Forestry Promoters (4)	month	42	2.800,00	0	117.600	0	0		117.600	29.400	29.400	29.400	29.400
Biotrade and Tourism Specialist	month	42	2.000,00	0	0	84.000	0		84.000	21.000	21.000	21.000	21.000
5570 Sub-total consultants				445.400	466.800	137.200	16.200	0	1.065.600	296.400	272.400	248.400	248.400
5650 Contracts													
Ecological zoning as input for LUDPs	contract	1	40.000	40.000	0	0	0		40.000	40.000			
BD information system informatics architecture	contract	1	40.000	40.000	0	0	0		40.000	30.000	10.000		
Sustainable development fund	contract	1	193.800	193.800	0	0	0		193.800	67.000	66.800	40.000	20.000
Design of conservation agreements (legal consultancy)	contract	1	10.000	0	10.000	0	0		10.000		10.000		
Multitemporal studies of land use and coverage, including potential areas for restoration	contract	1	50.000	0	50.000	0	0		50.000	50.000			
10 comanagement plans in La Cascada	contract	10	5.000	0	50.000	0	0		50.000	50.000			
10 comanagement plans in Cerro Sumaco	contract	10	5.000	0	50.000	0	0		50.000		50.000		
3 comanagement plans in Colonso	contract	3	5.000	0	15.000	0	0		15.000	15.000			
Sustainable tourism good practices manual	contract	1	15.000	0	0	15.000	0		15.000	15.000			
Management plans for 5 biotrade products	contract	5	11.673	0	0	58.366	0		58.366	29.183	29.183		
Design of monitoring system	contract	1	2.500	0	0	0	2.500		2.500	2.500			
Mid-term evaluation	contract	1	40.000	0	0	0	40.000		40.000		40.000		
Final evaluation	contract	1	40.000	0	0	0	40.000		40.000				40.000
Editing and design of final documents	contract	2	4.000	0	0	0	8.000		8.000				8.000
5650 Sub-total Contracts				273.800	175.000	73.366	90.500	0	612.666	298.683	205.983	40.000	68.000

Oracle code and description	Unit	No. of units	Unit cost	BUDGET in USD				PM	Total GEF	Expenditures by year			
				Component 1:	Component 2:	Component 3:	Component 4:			Year 1	Year 2	Year 3	Year 4
				Total	Total	Total	Total						
5900 Travel													
Local Travel	day	614	40	54.800	85.540	10.080	6.000		156.420	39.105	39.105	39.105	39.105
Regional Travel	day	55	90	5.400	11.940	900	6.000		24.240	6.060	6.060	6.060	6.060
5900 Sub-total travel				60.200	97.480	10.980	12.000	0	180.660	45.165	45.165	45.165	45.165
5023 Training and workshops													
Socialization, construction and validation of the strategy (30 workshops, 2 days/workshop)	workshop days	60	200	12.000	0	0	0		12.000	3.000	3.000	3.000	3.000
Training and presentation LUDPs (42 workshops)	workshop days	42	200	8.400	0	0	0		8.400	2.100	2.100	2.100	2.100
PA and livestock roundtables meetings (6 meetings/year x 2 roundtables= total 48 meetings)	workshop days	48	200	9.600	0	0	0		9.600	2.400	2.400	2.400	2.400
Environmental governance training workshops	workshop days	198	200	39.600	0	0	0		39.600	9.900	9.900	9.900	9.900
GIS training workshops	workshop days	25	200	5.000	0	0	0		5.000	1.250	1.250	1.250	1.250
Meetings for socialization of incentives in project areas	workshop days	120	200	24.000	0	0	0		24.000	6.000	6.000	6.000	6.000
Training workshops and TA in farm/community land use planning and conservation agreements	workshop days	84	200	0	16.800	0	0		16.800	4.200	4.200	4.200	4.200

Oracle code and description	Unit	No. of units	Unit cost	BUDGET in USD				PM	Total GEF	Expenditures by year			
				Component 1:	Component 2:	Component 3:	Component 4:			Year 1	Year 2	Year 3	Year 4
				Total	Total	Total	Total						
Good agricultural practices training workshops Cocoa: 2 subjects, 2 workshops/subject, 12 groups, 2 days/workshops : TOTAL 48 workshops in 96 days Livestock: 3 subjects, 2 workshops/subject, 2 days/workshop, 4 groups: TOTAL 24 workshops in 48 days Naranjilla: 3 subjects, 2 workshops/subject, 2 days/workshop, 6 groups= TOTAL 36 workshops in 72 days	workshop days	216	200	0	43.200	0	0		43.200	10.800	10.800	10.800	10.800
Fairs for project value chain products	fair	4	2.000	0	2.000	6.000	0		8.000	2.000	2.000	2.000	2.000
Workshops for socialization, construction and validation of the SFM strategy :5 work groups (3 community, 1 highland, 1 lowland). Per group: 1 socialization/diagnosis workshop, 1 proposal workshop and 1 validation workshop + 1 provincial level workshop ((3 x 15)+1)	workshop days	16	200	0	3.200	0	0		3.200	800	800	800	800
SFM training: TOTAL 92 workshops in 92 days. Socialization and validation of work with institutions pero Protective Forest 2 workshops, 3*2 _ 6	workshop days	98	200	1.200	21.800	0	0		23.000	5.750	5.750	5.750	5.750
Ecological restoration training: assume work in 30 restoration points; 3 trainings/site (socialization, reforestation techniques, field work) TOTAL 90 workshops. Additionally 10 workshops with DAGs	workshop days	100	200	0	20.000	0	0		20.000	5.000	5.000	5.000	5.000
Traceability training in 2 pilot communities, 4 trainings/community (diagnosis, proposals, implementation, evaluation) TOTAL 8 days. At	workshop days	12	200	0	2.400	0	0		2.400	600	600	600	600
Training workshops in tourism good practices 7 communities, 3 workshops (good practices, organization, entrepreneurship), 10 days/community and 14 value	workshop days	84	200	0	0	16.800	0		16.800	4.200	4.200	4.200	4.200

Oracle code and description	Unit	No. of units	Unit cost	BUDGET in USD				PM	Total GEF	Expenditures by year			
				Component 1:	Component 2:	Component 3:	Component 4:			Year 1	Year 2	Year 3	Year 4
				Total	Total	Total	Total						
Biotrade training workshops management plans and eco-label (5 biotrade products, 4 subjects -management plan, good practices, production practices, entrepreneurship-, 14 days/product and 10 value chain products	workshop days	80	200	0	0	16.000	0		16.000	4.000	4.000	4.000	4.000
Inception workshop	event	1	3.000	0	0	0	3.000		3.000	3.000	0	0	0
5023 Sub-total training				99.800	109.400	38.800	3.000	0	251.000	65.000	62.000	62.000	62.000
6000 Expendable procurement													
Office materials	global		12.000	2.800	2.000	800	1.200		6.800	1.700	1.700	1.700	1.700
Biotrade and tourism materials	global	2	32.000	0	0	64.000	0		64.000	17.500	32.000	14.500	
Stands for fairs and workshops	global	3	2.000	0	0	6.000	0		6.000	1.500	1.500	1.500	1.500
Materials for good practices in chakras and livestock production	global	1	190.000	0	190.000	0	0		190.000	50.000	114.000	26.000	
Tree nursery	global	1	60.000	0	60.000	0	0		60.000		60.000		
Training materials box	global	6	500	2.000	1.000	500	0		3.500	3.500			
Dissemination/systematization materials	global		1.196	0	0	0	1.196		1.196				1.196
6000 Sub-total expendable procurement				4.800	253.000	71.300	2.396	0	331.496	74.200	209.200	43.700	4.396
6100 Non-expendable procurement													
Computers	equipment	14	1.000	4.000	5.000	1.000	0		10.000	10.000			
Printers	equipment	4	250	250	250	250	250		1.000	1.000			
GPS L1-L2	equipment	6	7.000	0	21.000	0	0		21.000	21.000			
Camcorder	equipment	1	1.500	0	1.500	0	0		1.500	1.500			
Office modulars	modular	15	300	1.050	750	300	450		2.550	2.550			
Projector	equipment	3	1.000	700	500	200	300		1.700	1.700			
Photographic cameras	equipment	3	200	140	100	40	60		340	340			
6100 Sub-total non-expendable procurement				6.140	29.100	1.790	1.060	0	38.090	38.090	0	0	0
6300 GOE budget													
Miscellaneous including contingencies				0	0	0	0		0				
6300 Sub-total GOE budget				0	0	0	0	0	0	0	0	0	0
TOTAL				890.140	1.130.780	333.436	125.156	148.771	2.628.283	854.731	831.941	476.458	465.154

SUBTOTAL Comp 1	890.140,00	34%
SUBTOTAL Comp 2	1.130.780,00	43%
SUBTOTAL Comp 3	333.436,26	13%
SUBTOTAL Comp 4	125.156,00	5%
SUBTOTAL Project Management	148.770,74	6%
TOTAL GEF	2.628.283,00	100%

APPENDIX 4: RISK MATRIX

Risk statement	Impact	Likelihood ⁷³	Mitigation measures
<p>Political Risk: Lack of political interest in biodiversity conservation and integrated management of natural resources at regional level</p>	Provincial policies and strategies without mainstreaming environmental criteria will continue promoting interventions that deteriorate the environment.	L	The project will support the elaboration of an inter-institutional participation strategy for INRM and a sustainable forest management strategy for the province. These strategies will be agreed upon through stakeholder participation and promotion of inter-sectoral (public-private, private-private) cooperation, and will involve the different working areas of the local government (e.g. environment, agriculture, forestry, among others) as well as other relevant institutional stakeholders and civil society. By strengthening participation and consultation the risk that political interests may hinder project implementation will be reduced.
<p>Political risk: The State prioritizes the investment of public resources (even those coming from the extraction of non-renewable natural resources) in sectors other than those covered by the Project.</p>	The low level of investment of resources for sustainable production, conservation of biodiversity and ecosystem functions through incentive mechanisms will continue, thereby favouring investments that deteriorate the environment.	L	Through this project, a local strategy will be defined in order to make sure that DAGs and other organizations working in the province have sufficient capacities and information to prioritize activities in this field of action. To mitigate the risk of disinvestment, the project will closely work with MAE, the Ministry of Economic and Social Inclusion (MIES) and MAGAP. According to the COOTAD, it is the competence of local governments to work in natural resources management.
<p>Institutional risk: Duplication, lack of complementarity, coordination and exchange of information due to insufficient will and</p>	Implementation of un-coordinated low impact interventions, superposition of activities.	L	During full project preparation, the participation of the relevant institutions in the activities to be implemented by the Project as well as their corresponding co-financing contributions have been identified. Moreover, the Project will support the formulation of an Inter-institutional Strategy (see output 1.1.1), which will contribute to reduce duplication of efforts and lack of coordination in natural resources management in the Province. Given that the strategy will be prepared

⁷³ Estimate of likelihood: High, Moderately High, Moderately Low, or Low, as per the FAO Project Cycle Guidelines. .

Risk statement	Impact	Likelihood ⁷³	Mitigation measures
commitment of the main stakeholders (MAE, MAGAP and NPG)			in a participatory manner it will help reduce the potential lack of commitment and political will of the main stakeholders. Furthermore, the Project will foster multi-stakeholder spaces for dialogue and consensus, such as the Thematic Roundtables, which will contribute to exchange of information and a participatory construction of governance between the public and private stakeholders in the Province
<p>Institutional risk</p> <p>Lack of sensitivity to subscribe conservation agreements without providing incentives that are effective and provide direct and immediate benefit to producers.</p> <p>Lack of fulfilment of conservation agreements by providers and users of environmental services.</p>	Reduction in forest cover by landowners and communities	ML	The Project will support the strengthening and coordination of the existing financial and non-financial incentive mechanisms that currently have a low level of implementation in the Province. To this purpose, it will support the dissemination of information on these mechanisms and will provide technical assistance to facilitate access to them. The Project will also support the existing organizations taking into account their different levels of consolidation. The Project will identify practical incentive packages (e.g. training; technical assistance for certification of certain products; supply of cacao, <i>naranjilla</i> and tree seedlings; and support to academic and cultural events). It will also promote environmental awareness of the beneficiaries on the ecosystem goods and services provided by forests. Compliance of the conservation agreements will be monitored.
<p>Institutional risk:</p> <p>Change of local government authorities due to elections could disarticulate the commitments made under the Sustainable Development Fund</p>	Decrease in involvement of authorities in Project implementation and ownership.	ML	Strong political advocacy with the new local authorities to ensure the commitments assumed in 2013/14 for the start-up of the Sustainable Development Fund are maintained. The Project has been prioritized by the Provincial Chamber in three extraordinary sessions.
<p>Institutional risk:</p> <p>Change in MAE and MAGAP policies regarding implementation and/or financing of incentive mechanisms for conservation, ecological restoration and sustainable production (e.g. reduction of resources in the National Budget for the Socio-Bosque Program)</p>	Implementation of incentive mechanisms in the province remains low	L	The Inter-Institutional Strategy will reinforce the permanent linkages between the Provincial institutions and the Central Government institutions in the Province, thereby ensuring sustainability in the management of natural resources (of which the incentive mechanisms are an essential part). The MAE has established the National Incentives Program, which will group the <i>SocioBosque</i> , <i>SocioParamo</i> and <i>SocioManglar</i> programs and is aligned with the 2013-2017 Good Living National Plan. No changes are foreseen in financing of incentives in the next four years.

Risk statement	Impact	Likelihood ⁷³	Mitigation measures
<p>Socioeconomic risk: Poor producers are not capable of making productive investments</p>	<p>Producers do not improve their livelihoods through sustainable production</p>	<p>MH</p>	<p>The Project will promote several strategies to enable producers to access monetary and non-monetary (e.g. technical assistance and inputs) resources to make the required investments; these include technologies based on materials found in the area; agreements with local financial entities; financial and non-financial incentive mechanisms; and coordination of existing programs..</p>
<p>Socioeconomic risk: Resistance of landholders to adopt best practices for sustainable production and forest management, community-based ecotourism and sustainable BD use</p>	<p>Further expansion of the agricultural and livestock frontier, deforestation and degradation of forests, and loss of ecosystem services</p>	<p>MH</p>	<p>The project will implement demonstrative pilot projects, will include communities in the planning process, will take cultural and social aspects into account in the design of actions, and will deliver training and information-sharing. Training and technical assistance on the significance of sound environmental practices in production activities will be key part of the project strategy. The project will take into account the local knowledge, use of the <i>Kichwa</i> language, proven field methodologies (e.g. field school, extensionism), and will work with community leaders, to ensure the involvement of producers. The project will also promote an adequate coordination between best practices for conservation and management of forests, and incentive mechanisms. The SFM Strategy will include the most favourable mechanisms to promote adoption of forest management. Activities such as the development of the traceability system for timber will improve SFM. Moreover, mainstreaming of environmental variables in the LUDPs will contribute to enshrine forests as a key element in the landscape for generating ecosystem services that are strategic for the social and economic development of the Province. Furthermore, promotion of value chains and market access would tend to improve the incomes of producers, thereby adding an additional factor to stimulate the involvement of producers and adoption of environmentally sustainable production systems. Likewise, the project will support the NPG in its current initiative to develop an ecological label for the <i>chakra</i> system. This would also contribute to foster the interest of buyers of sustainable products that could pay better prices for these types of products.</p>
<p>Environmental risk: Climate change impact on key ecosystems in landscapes and in agriculture/livestock production (e.g. water availability)</p>	<p>Reduction in quantity and quality of water. Loss of production due to extreme weather events. Probability of food insecurity.</p>	<p>L</p>	<p>The project's first component will address adaptation to climate change by including this issue in public planning. For the design of ecological conservation and restoration tools, an important factor will be their compatibility with climate change. This aspect will also be included in the training activities proposed by the project aimed at generating technical capacities at the DAGs. The adoption of sustainable production systems will contribute to adaptation to climate variability and the expected impacts of climate change.</p>

APPENDIX 5: PROCUREMENT PLAN

Referencia	Descripción del elemento	Unidad	Cantidad estimada	Coste estimado	Precio unitario	Método de requerimiento ⁷⁴	Método de compra ⁷⁵	Comprador ⁷⁶	Fecha prevista de lanzamiento de la licitación	Fecha prevista del contrato	Fecha prevista de entrega	Destino final y términos de la entrega	Estado ⁷⁷	Otras limitaciones o consideraciones

⁷⁴ Petición de presupuesto, petición de propuestas, invitación a ofertar.

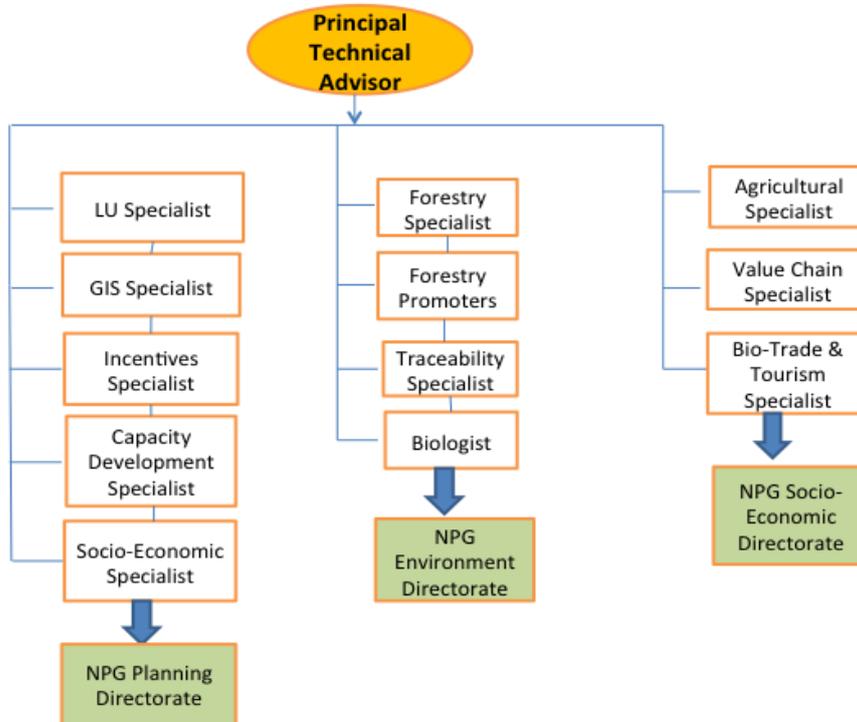
⁷⁵ Compra directa, reutilización de resultados de licitaciones, marco de Naciones Unidas, etc.

⁷⁶ CSAP, Fuera de la sede, Misión de compras.

⁷⁷ Esta columna se actualizará en las fases de implementación y seguimiento.

APPENDIX 6: TERMS OF REFERENCE (TORS)

Organization Chart – Technical Team



N.1: Draft Terms of Reference: PROJECT TECHNICAL CHIEF

Under the overall supervision of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the FAO Representative in Ecuador/Budget Holder and the technical guidance of the Senior Forestry Officer in his capacity as Lead Technical Officer (LTO), the Project Technical Chief will support the NPG acting as the head of the team of Project specialists and as Secretary to the Steering Committee (SC). He/she will be responsible overall planning, daily management, technical supervision and coordination of all project activities, carrying out the following tasks:

- Participate in the inception workshop, annual project progress review and planning workshops with local stakeholders and Project Executing Partners to prepare the Annual Work Plan and Budget (AWP/B).
- Provide comments and advise the FAO Representative on giving no-objection to AWP/B in consultation with the LTU and the FAO-GEF Coordination Unit.
- Provide technical supervision and guidance to the Project Executing Partners in implementing project activities.
- Conduct regular field supervision visits and provide on-site guidance to technical staff from Project Executing Partners;
- Day-to-day coordination and communication with the Project Executing Partners staff.
- Monitor project risks according to the risk matrix (see Appendix 4) and ensure that mitigation measures are being applied or alternative mitigation measures are in place.
- Ensure that the integrated natural resources management approaches are followed during project implementation;
- Prepare six-monthly Project Progress Reports (PPRs) in coordination with the Project specialists.
- Support the LTU in preparation of the annual Project Implementation Review (PIR);
- Support the NPG in reporting in-kind and cash co-financing provided by co-financers and eventual other partners not foreseen in the Project Document;
- In consultation with the NPG, the FAO Evaluation Office, the LTU and the FAO-GEF Coordination Unit, support the organization of the mid-term and final evaluations;
- Coordinate and conduct M&E related activities including: i) conducting regularly field M&E visits to project sites; ii) monthly monitoring progress in achieving all project outputs and outcome indicators; iii) providing technical and operational guidance to the staff of participating institutions; and iv) proposing eventual shifts in project implementation strategies if the project is not performing as planned;
- Coordinate the review and approval of the Terms of Reference and technical specifications for the corresponding contracts;
- Coordinate the work of the other specialists hired for project implementation;
- Coordinate with the NPG Project Focal Point in regards to the organization and functioning of the institutional teams that will implement the project and requirements from the main authorities and departments of the provincial government and other partners in the territory;
- Draft Terms of Reference for the development of the Environmental Governance Strategy and the Sustainable Development Fund and supervise their development;
- Design and implement, with the collaboration of the corresponding specialists and work teams, activities to promote biotrade principles and biotrade criteria

Minimal Requirements:

- University degree in Environmental Management, Public Management, Economy, Agronomy, or related fields;

- At least 10 years of professional experience in integrated management of natural resources and/or management of international cooperation projects;
- Knowledge and experience in results based management, budget design, and execution, preparation of technical and financial reports, and M&E;
- Proven capacity to work with technical and managerial staff of governmental and non-governmental institutions;
- Proven capacity as team leader and team builder in developing countries;
- Excellent oral and written communication skills;
- Experience with GEF Projects is desirable;
- Preferably has working experience in the Province of Napo.

Duration: 48 months

Location: Tena, Province of Napo with regular field visits to project intervention areas, and Quito.

Languages: Spanish

N.2: Draft Terms of Reference: LAND USE PLANNING SPECIALIST

Under the overall coordination of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the direct supervision of the Project Technical Chief, the Land Use Planning Specialist will support the NPG with technical assistance, supervision and monitoring and evaluation to achieve Outputs 1.1.2 and 1.1.4. He/she will coordinate with the project team of specialists and with the FAO Representation in Ecuador (FAOEC) in carrying out the following tasks:

- Prepare the annual work plan and budget for the activities that fall under his/her responsibility and contribute to preparation of the project's Annual Work Plan and Budget (AWP/B);
- Prepare periodic reports of the activities developed and contribute to the preparation of the Project Progress Report (PPR);
- Support periodic Monitoring and Evaluation of the project, collecting information related to progress in achieving outcome and output indicators, means of verification and identifying lessons learned;
- Draft Terms of Reference for the study on ecological zoning that will serve as input for updating the Land Use and Development Plans (LUDP) of the selected DAGs and supervise the development of the study;
- Prepare information and training materials for awareness raising and training of the managerial and technical staff of the DAGs and key stakeholders to develop their capacities for mainstreaming environmental criteria in the LUDPs in accordance with the MAE's guidelines;
- Support the organization and implementation of training workshops;
- Provide technical support to the DAGs in updating their LUDPs and mainstreaming environmental criteria;
- Support monitoring of the implementation of the LUDPs by the DAGs;
- Provide technical inputs on the risks that may arise during project implementation and propose the mitigation measures that may be needed to reduce their impacts.

Minimal Requirements:

- University degree in Geography specializing in Land Use Planning, or other related fields.
- At least 5 years of professional experience in the field of land use planning and management.
- Knowledge and experience in land use planning and preparation of land use and development plans in Ecuador.
- Proven capacity to conduct fieldwork and ability to work in teams and establish working relationships central and local government institutions and civil society organizations.
- Experience in training processes to Decentralized Autonomous Governments.
- Preferable to have working experience in the Province of Napo.
- Excellent oral and written communication skills.

Duration: 24 months

Location: Tena, Province of Napo with regular field visits to project intervention areas.

Languages: Spanish

N.3: Draft Terms of Reference: CAPACITY DEVELOPMENT SPECIALIST

Under the overall coordination of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the direct supervision of the Project Technical Chief and in line with good development effectiveness⁷⁸ and capacity development practice⁷⁹, the Capacity Development Specialist will enhance the capacities of the NPG through providing support, technical assistance and on-the-job training in addition to supervision, monitoring and evaluation to achieve Output 1.1.4. He/she will coordinate with the project team of specialists and with the FAO Representation in Ecuador (FAOEC) in carrying out the following tasks

:

- Prepare the annual work plan and budget for the activities that fall under his/her responsibility and contribute to preparation of the project's Annual Work Plan and Budget (AWP/B);
- Prepare periodic reports of the activities developed and contribute to the preparation of the Project Progress Report (PPR) including capturing good practices and lessons learned;
- Support and facilitate periodic and participatory (i.e. stakeholder involved) Monitoring and Evaluation of the project, collecting information related to progress in achieving outcome and output indicators, means of verification and identifying lessons learned;
- Draft Terms of Reference for the diagnosis study (including a capacity needs assessment) for the inter-institutional participatory strategy for integrated management of natural resources of the Province of Napo and supervise the development of the study;
- Supervise the process and provide on-the-job training to counterparts for participatory design of the inter-institutional strategy through a inclusive capacity needs assessment, socialization, design and validation workshops;
- Facilitate the enhancement of stakeholder capacities through providing support and technical assistance during the implementation stage of the strategy, supporting monitoring and evaluation to obtain feedback from the stakeholders and extract lessons learned that might contribute to improve the design;
- Conduct a learning needs assessment and on that basis propose the training methodology to develop the individual capacities of the province's stakeholders to apply land use planning based on a natural resources governance approach, including training modules, materials and procedures for evaluation and feedback;
- Support the organization, implementation and follow-up of training workshops for provincial stakeholders, preparing training programmes and information and training materials;
- Facilitate the initiation and sustaining of networks, alliances and multi-stakeholder partnerships to sustainably strengthen programme implementation;
- Facilitate knowledge sharing sessions, and learning processes among project staff and national counter-parts and document good practices.

Minimal Requirements:

- University degree in Andragogy, Pedagogy, Public Management or other related fields.
- At least 5 years of professional experience in the field of institutional strengthening and capacity development.
- Extensive experience in facilitating capacity enhancement of national counter-parts to manage (i.e. plan, implement, monitor and evaluate) projects and programmes efficiently and effectively.

⁷⁸ See <http://www.aideffectiveness.org/>

⁷⁹ See <http://www.fao.org/capacitydevelopment/en/>

- Knowledge and experience in comprehensive institutional strengthening including conducting a capacity needs assessment, developing strategies to promote capacity development in broad institutional contexts throughout the territory and track results.
- Proven capacity to conduct fieldwork and ability to work in teams and establish working relationships with central and local government institutions and civil society organizations.
- Experience in effective learning and training processes to Decentralized Autonomous Governments.
- Preferably with working experience in the Province of Napo.
- Excellent oral and written communication skills.

Selection criteria (Optional):

- Extent of experience in facilitating the strengthening of national capacities to formulate and implement policies and to lead policy and legislative reforms.
- Extent of familiarity with FAO's renewed approach and strategy on capacity development for more sustainable results [This can be assessed as documents are available publicly) <http://www.fao.org/capacitydevelopment/en/>]
- Extent of familiarity with FAO's approach and strategy on Knowledge Sharing and Knowledge Capitalization [This can be assessed as documents are available publicly) <http://www.fao.org/knowledge/km-gender/en/>]

Duration: 36 months

Location: Tena, Province of Napo with regular field visits to project intervention areas.

Languages: Spanish

N.4: Draft Terms of Reference: GEOGRAPHICAL INFORMATION SYSTEM (GIS) SPECIALIST

Under the overall coordination of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the direct supervision of the Project Technical Chief, the Geographical Information System Specialist will support the NPG with technical assistance, supervision and monitoring and evaluation to achieve Output 1.1.5. He/she will coordinate with the project team of specialists and with the FAO Representation in Ecuador (FAOEC) in carrying out the following tasks:

- Prepare the annual work plan and budget for the activities that fall under his/her responsibility and contribute to preparation of the project's Annual Work Plan and Budget (AWP/B);
- Prepare periodic reports of the activities developed and contribute to the preparation of the Project Progress Report (PPR);
- Support periodic Monitoring and Evaluation of the project, collecting information related to progress in achieving outcome and output indicators, means of verification and identifying lessons learned;
- Draft Terms of Reference for the design and architecture of the GIS and supervise its development;
- Identify the needs for updating equipment (hardware and software) to strengthen the GIS Unit. Draft technical specifications for procurement of equipment (hardware and software). Supervise the adequate supply, installation and functioning of the equipment;
- Prepare training materials and train the NPG staff in GIS;
- Support the NPG in training of MAE and other relevant stakeholders of the province in GIS following the training-of-trainers methodology;
- Provide technical assistance to the NPG to design and create a spatial data base on the ongoing production and conservation projects in the province and a monitoring structure to support territorial and environmental planning. Support the uploading and updating of data and production of reports;
- Draft Terms of Reference for the multi-temporal studies on land use and coverage (1:50000) for the periods 2008-2013 and 2013-2017 with protocols validated by the MAE to generate the project baseline, estimate carbon stocks and avoided CO_{2eq} emissions in the project intervention area and update the deforestation rate in the province. Supervise the development of the studies.

Minimal Requirements:

- University degree in Geography or other field related to management of information systems in land use planning.
- At least 5 years of professional experience in the use of Geographical Information Systems, design and operation of natural resources related data bases.
- Proven capacity to conduct fieldwork and ability to work in teams and establish working relationships central and local government institutions and civil society organizations.
- Experience in training processes to Decentralized Autonomous Governments.
- Preferably have working experience in the Province of Napo.
- Excellent oral and written communication skills.

Duration: 42 months

Location: Tena, Province of Napo with regular field visits to project intervention areas.

Languages: Spanish

N.5: Draft Terms of Reference: INCENTIVE MECHANISMS SPECIALIST

Under the overall coordination of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the direct supervision of the Project Technical Chief, the Incentives Mechanisms Specialist will support the NPG with technical assistance, supervision and monitoring and evaluation to achieve Outcome 1.2. He/she will coordinate with the project team of specialists and with the FAO Representation in Ecuador (FAOEC) in carrying out the following tasks:

- Prepare the annual work plan and budget for the activities that fall under his/her responsibility and contribute to preparation of the project's Annual Work Plan and Budget (AWP/B);
- Prepare periodic reports of the activities developed and contribute to the preparation of the Project Progress Report (PPR);
- Support periodic Monitoring and Evaluation of the project, collecting information related to progress in achieving outcome and output indicators, means of verification and identifying lessons learned;
- Provide technical assistance for the preparation of a geographical assessment of the sites where the incentives are being applied in the province. On the basis of the spatial analysis and integrating social and economic variables, propose guidelines for articulation of NPG, MAE, MAGAP, municipalities and parishes and channelling of incentives in accordance with the activities foreseen under Components 2 and 3;
- Carry out an assessment of the potential complementarity of issues currently not taken into account by the incentives and support implementation of project activities, including: a) strengthening of Socio Bosque investment plans with community partners and analysis of the impact with private partners; b) mainstreaming of the environmental variable in production of coca, naranjilla and livestock; c) supply chain management; d) market access;
- Support the organization and implementation of workshops for validation of the incentive mechanisms to promote access by the beneficiaries of Components 2 and 3;
- Support monitoring of implementation of the incentive mechanisms under Components 2 and 3.
- Support the NPG in preparing a proposal to access financial resources of the National Concurrent Plan for Reforestation (MAE) to be applied in the province;
- Follow-up on the procedures for negotiating and signing of conservation agreements with producers and communities within the framework of the activities under Components 2 and 3;
- Draft Terms of Reference for the study to support the NPG in the implementation of conservation agreements and supervise its development.

Minimal Requirements:

- University degree in Environmental Economy, Environmental Management, or other related fields.
- At least 5 years of professional experience in the design, implementation and monitoring of incentive mechanisms.
- Proven capacity to conduct fieldwork and ability to work in teams and establish working relationships central and local government institutions and civil society organizations.
- Experience in delivering training to Decentralized Autonomous Governments.
- Preferably have working experience in the Province of Napo.
- Excellent oral and written communication skills.

Duration: 42 months

Location: Tena, Province of Napo with regular field visits to project intervention areas.

Languages: Spanish

N.6: Draft Terms of Reference: SOCIO-ECONOMIC SPECIALIST

Under the overall coordination of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the direct supervision of the Project Technical Chief, the Socioeconomic Specialist will support the NPG with technical assistance, supervision and monitoring and evaluation to implement cross-cutting issues (participation, gender equity, interculturality). He/she will coordinate with the project team of specialists and with the FAO Representation in Ecuador (FAOEC) in carrying out the following tasks:

- Prepare the annual work plan and budget for the activities that fall under his/her responsibility and contribute to preparation of the project's Annual Work Plan and Budget (AWP/B).
- Prepare periodic reports of the activities developed and contribute to the preparation of the Project Progress Report (PPR).
- Support periodic Monitoring and Evaluation of the project, collecting information related to progress in achieving outcome and output indicators, means of verification and identifying lessons learned.
- Ensure mainstreaming of cross-cutting approaches: gender equity, interculturality, participation and profitability of productive systems.
- Elaborate the project's gender equity and stakeholder participation strategies, supervise and evaluate their application.
- Elaborate an assessment of the socio-economic impact at mid-term and end of project and its relation with the national, regional and local development plans, providing feedback to project technicians and partners on the results of the assessment.
- Elaborate a socio-economic and anthropological assessment of project implementation with native groups (Kichwas and Waorani) and their perception of change.
- Implement with the Project Technical Chief activities to promote biotrade principles and criteria.

Minimal Requirements:

- University degree in Sociology, Anthropology, Socio-economy, or other related fields.
- At least 5 years of professional experience in socio-economic and environmental evaluation of territorial development projects.
- Proven capacity to conduct fieldwork and ability to work in teams and establish working relationships central and local government institutions and civil society organizations.
- Experience in training processes to Decentralized Autonomous Governments.
- Preferably with working experience in the Province of Napo.
- Excellent oral and written communication skills.

Duration: 24 months

Location: Tena, Province of Napo with regular field visits to project intervention areas.

Languages: Spanish

N.7: Draft Terms of Reference: AGRICULTURAL SPECIALIST

Under the overall coordination of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the direct supervision of the Project Technical Chief, the Agricultural Specialist will support the NPG with technical assistance, supervision and monitoring and evaluation to achieve Outcome 2.1 (technology packages for good practices in cocoa, naranjilla and livestock production). He/she will coordinate with the project team of specialists and with the FAO Representation in Ecuador (FAOEC) in carrying out the following tasks:

- Prepare the annual work plan and budget for the activities that fall under his/her responsibility and contribute to preparation of the project's Annual Work Plan and Budget (AWP/B);
- Prepare periodic reports of the activities developed and contribute to the preparation of the Project Progress Report (PPR);
- Support periodic Monitoring and Evaluation of the project, collecting information related to progress in achieving outcome and output indicators, means of verification and identifying lessons learned;
- Provide technical support to the NPG, MAGAP and INIAP to improve the technology packages for production of cocoa, naranjilla and livestock, incorporating environment-friendly practices (farm planning, soil management, native species and varieties, reduction in the use of agro-chemicals, silvo-pastoral systems and pasture management);
- Provide technical support for implementation of a participatory farm planning process with project producers;
- Provide technical support for preparation of training materials and contents for farm planning and good practices, taking into account cross-cutting issues such as traditional knowledge, replication of ongoing successful methodologies, gender equity and the use of the Kichwa language;
- Provide technical support for identification and supply of materials and inputs for implementation of cocoa, naranjilla and livestock good practices by producers;
- Support the Value Chain Specialist in the establishment of the sustainable livestock roundtable;
- Complete the GEF Land Degradation tracking tool at mid-term and end of project.

Minimal Requirements:

- University degree in Agronomy, or other related fields.
- At least 5 years of professional experience in rural development and design and implementation of technology packages for good agricultural practices.
- Proven capacity to conduct fieldwork and ability to work in teams and establish working relationships central and local government institutions and civil society organizations.
- Experience in delivering training to Decentralized Autonomous Governments.
- Preferably have working experience in the Province of Napo.
- Excellent oral and written communication skills.

Duration: 42 months

Location: Tena, Province of Napo with regular field visits to project intervention areas.

Languages: Spanish

N.8: Draft Terms of Reference: VALUE CHAIN SPECIALIST

Under the overall coordination of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the direct supervision of the Project Technical Chief, the Value Chain Specialist will support the NPG with technical assistance, supervision and monitoring and evaluation to achieve Outcomes 2.1 (cocoa and naranjilla value chains) and 3.1 (biotrade and tourism). He/she will coordinate with the project team of specialists and with the FAO Representation in Ecuador (FAOEC) in carrying out the following tasks:

- Prepare the annual work plan and budget for the activities that fall under his/her responsibility and contribute to preparation of the project's Annual Work Plan and Budget (AWP/B);
- Prepare periodic reports of the activities developed and contribute to the preparation of the Project Progress Report (PPR);
- Support periodic Monitoring and Evaluation of the project, collect information related to progress in achieving outcome and output indicators, means of verification and identifying lessons learned.
- Support the establishment of a sustainable livestock roundtable and measures for supply chain management in the dairy sector;
- Draft Terms of Reference and follow-up on the study on value chains for cocoa and naranjilla;
- Provide technical support to implementation of studies for supply chain management in community tourism;
- Provide technical support to the NPG for organization of participatory workshops for consultation and updating of the value chain plan for community tourism in natural areas. Prepare training materials and contents;
- Provide technical support for implementation and monitoring of value chain plans for community tourism and biotrade products, supporting the search for niche markets that value nature community tourism and sustainable production;
- Draft Terms of Reference for the design of the "chakra" eco-label and supervise the development of the study;
- Implement activities (with the Project Technical Chief) to promote biotrade principles and criteria.

Minimal Requirements:

- University degree in Economy, Agronomy, or other related fields.
- At least 5 years of professional experience in design and implementation of value chains. Working experience with cocoa, naranjilla, livestock, biotrade and/or community tourism is desirable.
- Proven capacity to conduct fieldwork and ability to work in teams and establish working relationships central and local government institutions and civil society organizations.
- Experience in delivering training to Decentralized Autonomous Governments.
- Preferably have working experience in the Province of Napo.
- Excellent oral and written communication skills.

Duration: 42 months

Location: Tena, Province of Napo with regular field visits to project intervention areas.

Languages: Spanish

N.9: Draft Terms of Reference: FORESTRY SPECIALIST

Under the overall coordination of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the direct supervision of the Project Technical Chief, the Forestry Specialist will support the NPG with technical assistance, supervision and monitoring and evaluation to achieve Outcome 2.2 (forestry strategy, co-management plans for protective forests and ecological restoration for sustainable forest management). He/she will coordinate with the project team of specialists and with the FAO Representation in Ecuador (FAOEC) in carrying out the following tasks:

- Prepare the annual work plan and budget for the activities that fall under his/her responsibility and contribute to preparation of the project's Annual Work Plan and Budget (AWP/B);
- Prepare periodic reports of the activities developed and contribute to the preparation of the Project Progress Report (PPR);
- Support periodic Monitoring and Evaluation of the project, collecting information related to progress in achieving outcome and output indicators, means of verification and identifying lessons learned;
- Draft Terms of Reference for the sustainable forest management strategy and provide follow-up to this Strategy;
- Provide technical support the NPG and MAE for organization and implementation of participatory workshops for design, validation and socialization of a Provincial Strategy for sustainable forest management;
- Provide technical support to the NPG and MAE for implementation and monitoring of the strategy, following progress and extracting results and lessons learned;
- Draft Terms of Reference for the study on the potential for forest restoration and follow-up on the development of the study;
- Provide technical assistance to the NPG in preparing a proposal to access financial resources of the National Concurrent Plan for Reforestation (MAE) to be applied in the province, as well as for preparation of the respective reforestation plans. Support the organization and implementation of training workshops in ecological restoration. Prepare training materials and contents;
- Provide technical support to the DAGs, communities and private stakeholders for implementation of restoration activities, including: i) passive reforestation; ii) active reforestation; and/or iii) analogue forestry;
- Complete the GEF SFM-REDD+ tracking tool at mid-term and end of project.

Minimal Requirements:

- University degree in Forestry Sciences, or other related fields.
- At least 5 years of professional experience in sustainable forest management including the design and implementation of participatory strategies.
- Proven capacity to conduct fieldwork and ability to work in teams and establish working relationships central and local government institutions and civil society organizations.
- Experience in training processes to Decentralized Autonomous Governments.
- Preferably have working experience in the Province of Napo.
- Excellent oral and written communication skills.

Duration: 42 months

Location: Tena, Province of Napo with regular field visits to project intervention areas.

Languages: Spanish

N.10: Draft Terms of Reference: BIOLOGY SPECIALIST

Under the overall coordination of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the direct supervision of the Project Technical Chief, the Biology Specialist will support the NPG with technical assistance, supervision and monitoring and evaluation to achieve Outcomes 1.1 (protected areas roundtable) and 2.2 (co-management plans for protective forests). He/she will coordinate with the project team of specialists and with the FAO Representation in Ecuador (FAOEC) in carrying out the following tasks:

- Prepare the annual work plan and budget for the activities that fall under his/her responsibility and contribute to preparation of the project's Annual Work Plan and Budget (AWP/B);
- Prepare periodic reports of the activities developed and contribute to the preparation of the Project Progress Report (PPR);
- Support periodic Monitoring and Evaluation of the project, collecting information related to progress in achieving outcome and output indicators, means of verification and identifying lessons learned;
- Draft Terms of Reference for the study for identification of synergies between land use and development plans (LUDPs) and protected area (PA) management plans to generate inputs for the establishment and operation of the PA roundtable;
- Identify and propose key PA related stakeholders and support the organization and realization of meetings to establish the roundtable;
- Provide technical support to the members of the roundtable for drafting of the rules and procedures for functioning and decision making;
- Participate in the roundtable meetings, providing advice to the members in issues such as preparation of work plans, joint working agreements and monitoring of activities agreed upon at the roundtable, as well as coordination with other roundtables within the framework of Components 2 and 3;
- Draft Terms of Reference for preparation of co-management plans in the Colonso, Cerro Sumaco and La Cascada Protective Forests (PF), and follow the development of the studies;
- Provide technical support to the MAE for implementation and monitoring of the co-management plans;
- Coordinate actions with the Natural Heritage Department of MAE R2 to harmonize the Protected Areas and Protective Forests (PF) management plans with the community-based co-management plans, in areas bordering PFs.
- Implement activities with the Project Technical Chief to promote biotrade principles and biotrade criteria
- Complete the GEF Biodiversity tracking tool at mid-term and end of project.

Minimal Requirements:

- University degree in Biology, or other related fields.
- At least 5 years of professional experience in biodiversity conservation and protected area management, including the preparation of management/co-management plans.
- Proven capacity to conduct fieldwork and ability to work in teams and establish working relationships central and local government institutions and civil society organizations.
- Experience in training processes to Decentralized Autonomous Governments.
- Preferably have working experience in the Province of Napo.
- Excellent oral and written communication skills.

Duration: 42 months

Location: Tena, Province of Napo with regular field visits to project intervention areas.

Languages: Spanish

N.11: Draft Terms of Reference: TIMBER TRACEABILITY SPECIALIST

Under the overall coordination of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the direct supervision of the Project Technical Chief, the Timber Traceability Specialist will support the NPG with technical assistance, supervision and monitoring and evaluation to achieve Outcome 2.2 (timber traceability system). He/she will coordinate with the project team of specialists and with the FAO Representation in Ecuador (FAOEC) in carrying out the following tasks:

- Prepare the annual work plan and budget for the activities that fall under his/her responsibility and contribute to preparation of the project's Annual Work Plan and Budget (AWP/B);
- Prepare periodic reports of the activities developed and contribute to the preparation of the Project Progress Report (PPR);
- Support periodic Monitoring and Evaluation of the project, collecting information related to progress in achieving outcome and output indicators, means of verification and identifying lessons learned;
- Provide technical support to MAE for the design of the timber traceability system on the basis of MAE's Forestry Administration System (FAS);
- Provide technical support to the MAE and NPG for the preparation of comprehensive farm management plans and forest harvesting plans for piloting of the traceability system in the communities of Akoki and Wamani.
- Prepare training materials and contents on timber traceability and the operation of the traceability system; support the organization and implementation of training workshops to small producers and forest industries;
- Provide technical support to monitor the implementation of the traceability system in order to extract lessons learned for upscaling;
- Provide assistance to the NPG to formulate regulations for consumption of legal timber in public works by the DAGs of the province;
- Systematize and publish the experience and lessons learned resulting from piloting the traceability system in the Province of Napo.

Minimal Requirements:

- University degree in Forestry Sciences, or other related fields.
- At least 5 years of professional experience in sustainable forest management, including the design and implementation of timber traceability systems.
- Proven capacity to conduct fieldwork and ability to work in teams and establish working relationships central and local government institutions and civil society organizations.
- Experience in training processes to Decentralized Autonomous Governments.
- Preferably have working experience in the Province of Napo.
- Excellent oral and written communication skills.

Duration: 36 months

Location: Tena, Province of Napo with regular field visits to project intervention areas.

Languages: Spanish

N.12: Draft Terms of Reference: FORESTRY PROMOTERS

Under the overall coordination of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the direct supervision of the Specialists (Agricultural, Forestry, and Biology Specialist), the Forestry Promoters will support the NPG with technical assistance, supervision and monitoring and evaluation to achieve Outcomes 2.1 (technology packages for good practices in cocoa, naranjilla and livestock production) and 2.2 (co-management plans and timber traceability). He/she will coordinate with the project team of specialists and with the FAO Representation in Ecuador (FAOEC) in carrying out the following tasks:

- Carry out comprehensive farm planning and prepare the details for conservation agreements with landowners and communities;
- Support the implementation of forestry, agro-forestry, restoration, concurrent reforestation activities as well as field activities within the framework of biotrade products management plans.

Minimal Requirements:

- Bachelor degree in agronomy or forestry with proven training in natural resources management (e.g. forestry technician, ELA, agro-forestry promoter), or other related fields.
- At least 3 years of experience in natural resources conservation and management.
- Native of the Province of Napo or work experience in that region.
- Proven capacity to conduct fieldwork and ability to work in teams and establish working relationships with central and local government institutions and civil society organizations.
- Excellent oral and written communication skills.

Duration: 42 months

Location: Tena, Province of Napo with regular field visits to project intervention areas.

Languages: Spanish

N.13: Draft Terms of Reference: BIOTRADE AND TOURISM SPECIALIST

Under the overall coordination of the Planning Director of the Napo Provincial Government (NPG), the Project Technical Chief and the direct supervision of the Project Technical Chief, the Timber Traceability Specialist will support the NPG with technical assistance, supervision and monitoring and evaluation to achieve Outcome 3.1 (community tourism good practices, management plans for biotrade products and conservation agreements). He/she will coordinate with the project team of specialists and with the FAO Representation in Ecuador (FAOEC) in carrying out the following tasks:

- Prepare the annual work plan and budget for the activities that fall under his/her responsibility and contribute to preparation of the project's Annual Work Plan and Budget (AWP/B);
- Prepare periodic reports of the activities developed and contribute to the preparation of the Project Progress Report (PPR);
- Support periodic Monitoring and Evaluation of the project, collecting information related to progress in achieving outcome and output indicators, means of verification and identifying lessons learned;
- Provide technical support to MINTUR for preparation of a manual of sustainable community tourism good practices and supervise its implementation;
- Draft Terms of Reference for preparation of management plans for biotrade products and supervise the development of the studies;
- Prepare training materials and contents on sustainable community tourism good practices and biotrade products management plans; support the organization and implementation of training workshops;
- Provide technical support to the NPG for defining and supplying materials and inputs to support implementation of sustainable tourism good practices and biotrade products management plans;
- Provide technical support to the NPG in the design of the "chakra" eco-label;
- Provide technical support to the NPG in tourism, biotrade and "chakra" fairs;
- Implement activities with the Project Technical Chief to promote biotrade principles and biotrade criteria.

Minimal Requirements:

- University degree in Biology, Tourism, or other related fields.
- At least 5 years of professional experience community tourism and biotrade.
- Knowledge and experience in training communities in productive initiatives related with natural resources.
- Proven capacity to conduct fieldwork and ability to work in teams and establish working relationships with central and local government institutions and civil society organizations.
- Experience in training processes to Decentralized Autonomous Governments.
- Preferably have working experience in the Province of Napo.
- Excellent oral and written communication skills.

Duration: 42 months

Location: Tena, Province of Napo with regular field visits to project intervention areas.

Languages: Spanish

**N.14: Draft Terms of Reference:
ADMINISTRATIVE AND OPERATIONS OFFICER**

Under the general supervision of the FAO Representative in Ecuador (Budget Holder) and in close collaboration with the Project Technical Chief, project and the executing partners, the Administrative and Operations Officer will take the operational responsibility for timely delivery of the project outcomes and outputs. In particular, he/she will perform the following main tasks:

1. Ensure smooth and timely implementation of project activities in support of the results-based workplan, through operational and administrative procedures according to FAO rules and standards;
2. Coordinate the project operational arrangements through contractual agreements with key project partners;
3. Arrange the operations needed for signing and executing Letters of Agreement (LoA) and Government Cooperation Programme (GCP) agreement with relevant project partners;
4. Maintain inter-departmental linkages with FAO units for donor liaison, Finance, Human Resources, and other units as required;
5. Day-to-day manage the project budget, including the monitoring of cash availability, budget preparation and budget revisions to be reviewed by the Project Technical Chief and the National Project Director;
6. Ensure the accurate recording of all data relevant for operational, financial and results-based monitoring;
7. Ensure that relevant reports on expenditures, forecasts, progress against work plans, project closure, are prepared and submitted in accordance with FAO and GEF defined procedures and reporting formats, schedules and communications channels, as required;
8. Execute accurate and timely actions on all operational requirements for personnel-related matters, equipment and material procurement, and field disbursements;
9. Participate and represent the project in collaborative meetings with project partners and the Project Steering Committee, as required;
10. Undertake missions to monitor the outputs-based budget, and to resolve outstanding operational problems, as appropriate;
11. Be responsible for results achieved within her/his area of work and ensure issues affecting project delivery and success are brought to the attention of higher level authorities through the BH in a timely manner,
12. In consultation with the FAO Evaluation Office, the LTU, and the FAO-GEF Coordination Unit, support the organization of the mid-term and final evaluations, and provide inputs regarding project budgetary matters;
13. Undertake any other duties as required.

Minimal requirements:

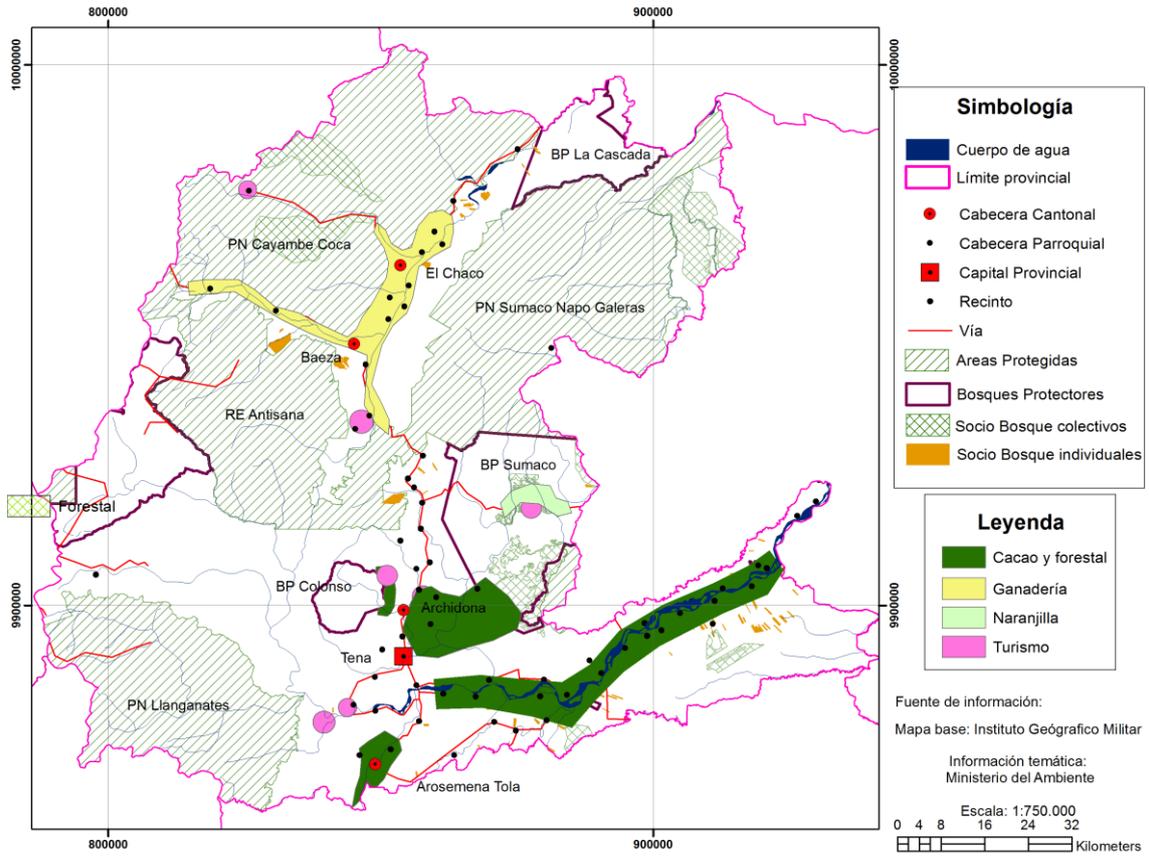
- a) University Degree in Economics, Business Administration, or related fields.
- b) Five years of experience in project operation and management related to natural resources management, including field experience in developing countries.
- c) Proven capacity to work and establish working relationships with government and non-government representatives.
- d) Knowledge of FAO's project management systems.

Location: Quito and Tena

Duration: 48 months

Language: Spanish

APPENDIX 7: MAP OF PROJECT INTERVENTION AREAS



APPENDIX 8: SOCIAL AND ENVIRONMENTAL REVIEW FORM

ENVIRONMENTAL AND SOCIAL REVIEW FORM

PROJECT NAME: Conservation and Sustainable Use of Biodiversity, Forests, Soil and Water to Achieve the Good Living (*Buen Vivir / Sumac Kasay*) in the Napo Province

Project description: The unsustainable practices used in production (agricultural, livestock and forestry) activities and forest harvesting exert pressure on the natural resources in the buffer zone of the Sumaco Biosphere Reserve (SBR) and the protected areas of the Province of Napo. It is estimated that 40-60% of the soils of the province are degraded, resulting in a continuous expansion of the agricultural and livestock frontier. An average of 2,932 ha/year is deforested according to most recent records; with 99% of this area converted for agricultural use. The long-term solution to the problem consists in making adjustments in the productive sector by mainstreaming principles of economic and environmental sustainability in the productive systems, the development of value chains based on sustainable production, sustainable forest management, and the promotion of biotrade and sustainable community tourism as new sources of revenue, as well as the incorporation of incentives for conservation of biodiversity, and food sovereignty.

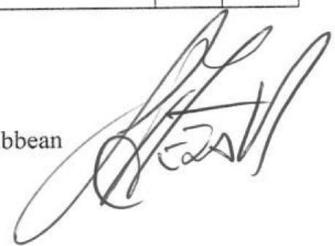
CERTIFICATION

Project Category C	Yes	No
I affirm that I have performed an environmental review of this project and certify that the project conforms to the pre-approved list of projects excluded from environmental assessment and that the project will have minimal or no adverse environmental or social impacts. No further analysis is required.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Title, name and signature of project leader:

Jorge Alberto Meza Robayo
Senior Forestry Officer for Latina America and the Caribbean

Date: 04/02/2014



ENVIRONMENTAL SCREENING FOR CATEGORY A & B PROJECTS

Would the project, if implemented:	Yes	No	Unable to determine
1. Have significant adverse impacts on public health or safety?		X	
2. Have significant or controversial environmental effects on biophysical resources such as land, water, soil, biodiversity?		X	
3. Have adverse impacts on unique characteristics, such as wilderness, natural rivers, aquifers, prime farmlands, wetlands, floodplains, or ecologically significant areas?		X	
4. Have adverse impacts on traditional practices or agricultural systems in the area?		X	
5. Have highly uncertain and potentially significant environmental and social impacts with unique or unknown risks?		X	
6. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental and social impacts?		X	
7. Set in motion or contribute to a progressive accumulation of significant environmental and social impacts?		X	
8. Have adverse impacts (direct or indirect) on natural habitats such as wetlands, mangroves, tropical forests?		X	
9. Have adverse impacts on important national or international species (listed or proposed) or on critical species habitats?			X
10. Have adverse impacts on local or indigenous populations residing in the area of interest?			X
11. Contribute to introduction, continued existence, or spread of non-native invasive species or promote the introduction, growth or expansion of the range of non-native invasive species?		X	
12. Threaten national, local, tribal or indigenous peoples' requirements for use of natural resources or protection of the environment?		X	
13. Trigger or exacerbate unresolved land tenure conflicts concerning rights or alternative uses of natural resources?		X	
14. Have a disproportionate, significant adverse effect on low-income or disadvantaged populations?		X	
15. Restrict access to traditional or ceremonial sites or adversely affect the physical integrity of such religious sacred sites?		X	
16. Have adverse impacts on natural resources or properties of historic or cultural significance?		X	
17. Lead to significant impacts indicated by a national, district or local community group?		X	
18. Have the potential to be controversial because of stakeholder disagreement?		X	
19. Encourage migration or other population shifts?		X	
20. Increase the workload of local communities or subgroups within the communities?		X	
21. Work in opposition with ongoing socio-economic development goals or efforts?		X	
22. Require Capacity Development of affected or involved individuals and organizations? Require Capacity Development to review and update of policies, laws, regulations, or to develop partnerships?	X		

Please answer the following questions:

1. Are the personnel preparing this form familiar with the site? Yes No
2. Are the personnel familiar with the populations living in or near the site? Yes No
3. List the name of those who have conducted or will conduct site visits and the dates (*N.B. If a Category B rating is made and no site visit is expected, then please explain*):

María Mercedes Proaño, Consultant Project GCP/RLA/183/SPA
 Dates: 19 – 22 November 2013

Valeria Gomez Riggio, Technical Officer TCID
 Dates: 19 – 22 November 2013

Andrew Kennedy, FAO Consultant
 Dates: 19 – 22 November 2013

Jorge Meza Robayo, LAC Senior Forestry Officer
 Dates: 1 - 2 January 2014

CERTIFICATION

Project Category A or B	Yes	No
I affirm the completion of an analysis of the potential environmental and social impacts for this project and certify it to be in Category B . The analysis included information to assess the potential negative and positive impacts and is addressed in the project design through appropriate prevention or mitigation measures. (Attach documentation).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I affirm the completion of an analysis of the potential environmental impacts and have determined this project should be classified as Category A . (Attach documentation).	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Title, name and signature of project leader:

Jorge Alberto Meza Robayo
 Senior Forestry Officer for Latina America and the Caribbean

Date: 04/02/2014



Environmental analysis

Specific impacts for attention	Probability of impacts/description	Significance of impacts	Likely affected population/natural resources/economic effects	Preventive actions and mitigation measures
9. Have adverse impacts on important national or international species (listed or proposed) or on critical species habitats?	Medium. – Selective logging of trees may lead to an impoverishment of the forest resources. Although a low impact selective logging may reduce the problems originated in forest harvesting, the fact that certain species are selectively harvested may result in significant changes in the structure of the forest.	High	The forests and its related fauna will be mainly affected, and in the mid-term the economy of the landowners, possessors or users of the forests.	The project will foster an adequate planning and implementation of forest harvesting through preparation and application of Comprehensive Management Plans and Sustainable Forest Harvesting Programmes. Harvesting through the Simplified Forest Management Plans will not be carried out.
10. Have adverse impacts on local or indigenous populations residing in the area of interest?	Medium.- The project will promote the development of tourism and biotrade with indigenous communities as a means to foster income generation while at the same time conserving the natural resources. The risks are that after project closure the indigenous communities adopt habits that are different to their traditions due to the frequent contact with tourists, and that biotrade activities are promoted with a low level of planning and sustainability.	High	Indigenous peoples that keep their traditions and culture would be affected, as well as biodiversity due to the intensive and unplanned commercial harvesting of certain species.	In regards to tourism the project will promote as one of its special features the culture, customs and knowledge of the indigenous peoples. The project will highlight the importance of maintaining culture and tradition as a condition necessary to maintain tourism. That is, tourism not only based in nature but also in the appreciation of the traditional habits and customs. Permanent monitoring will be needed by the national authorities to verify that legal biotrade activities are developed, planned and authorized by the relevant institutions.
22. Require Capacity Development of affected or involved individuals and organizations? Require Capacity Development to review and update of policies, laws, regulations, or to develop partnerships?	High.- Capacity building in the local institutions and organizations is needed to achieve the project's expected outcomes, as well as the development of certain skills and knowledge among the concerned population. Without adequate training the project's proposed outcomes will not be achieved.	High	The population will improve their knowledge and skills, which will have a positive effect in improving their productive activities, and at the same time an increased conservation of the natural resources	Participation and training of the communities will be a key aspect, as a right and social benefit of the project to which they are entitled. Component 1 will work in landscape planning and management with a participatory approach that will include civil society, and especially the community based organizations. These activities will empower these social stakeholders that represent indigenous and smallholders of the area. The ethnocultural characteristics of the communities in the area will be taken into account throughout the project, developing income opportunities and sustainable livelihoods in accordance to their realities and that deliver socioeconomic benefits to communities. Project activities contribute directly or indirectly to environmental sustainability through the development of an inter-institutional strategy for INRM and mainstreaming of the environmental dimension in LUDPs.

**APPENDIX 9: GEF TRACKING TOOLS (BIODIVERSITY,
LAND DEGRADATION, SFM-REDD+)**

See the Excel sheets attached to this Project Document.