REQUEST FOR CEO ENDORSEMENT

PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title: Promotion of climate-smart livestock management integrating reversion of land degradation and reduction of desertification risks in vulnerable provinces			
Country(ies):	Ecuador	GEF Project ID:	4775
GEF Agency(ies):	FAO	GEF Agency Project ID:	615693
Other Executing Partner(s):	Ministry of Environment (MAE), Ministry of Agriculture, Livestock, Aquaculture and Fisheries (MAGAP)	Submission Date:	
GEF Focal Area (s):	Multi-focal areas	Project Duration (Months)	48
Name of Parent Program (if applicable): ➢ For SFM/REDD+ ☐ ➢ For SGP ☐		Agency Fee ($):	**366,326**

A. FOCAL AREA STRATEGY FRAMEWORK

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount ($)	Co-financing ($)
LD-1	Outcome 1.2: Improved agricultural management	Output 1.2 : Types of innovative SL/WM practices introduced at field level	GEFTF	1,168,984	14,773,937
LD-3	Outcome 3.1: Enhanced cross-sector enabling environment for integrated landscape management Outcome 3.3: Increased investments in integrated landscape management	Output 3.1 Integrated land management plans developed and implemented Output 3.3 Appropriate actions to diversify the financial resource base	GEFTF	569,800	3,771,423
CCA-1	Outcome 1.1: Mainstreamed adaptation in broader frameworks at country level, and in targeted vulnerable areas	Output 1.1.1: Adaptation measures and necessary budget allocations included in relevant frameworks	SCCF	275,865	1,864,033
CCA-2	Outcome 2.2: Strengthened adaptive capacity to reduce risks to climate-induced economic losses	Output 2.2.1: Adaptive capacity of national and regional centers and networks strengthened to rapidly respond to extreme weather events	SCCF	551,729	635,661
CCA-3	Outcome 3.1: Successful demonstration, deployment, and transfer of relevant adaptation technology in targeted areas	Output 3.1.1: Relevant adaptation technology transferred to targeted groups	SCCF	551,729	320,300
CCM-5	Outcome 5.1: Good management practices in LULUCF adopted both in the forest land and in the wider landscape.	Output 5.1: Carbon stock monitoring systems established Output 5.2: Forest and non-forest land under good	GEFTF	519,685	546,400

		management practice			
		Sub-Total		**3,637,792**	21,991,755
		Project management cost		218,268	244,800
		Total project costs		**3,856,060**	**22,156,555**

B. PROJECT FRAMEWORK

Project Objective: To reduce soil degradation, increase adaptive capacity to climate change, and mitigate GHG emissions by implementing cross-sectorial policies and climate-smart livestock (CSL) management, with emphasis in the vulnerable provinces.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount ($)	Confirmed Co-financing ($)
1. Strengthening of institutional capacities and coordination to incorporate the CSL approach in territorial management and in the development of livestock-related policies and tools.	TA	**Outcome 1.1:** The CSL approach has been mainstreamed in climate change mitigation and adaptation policies in the livestock sector and land-use planning *Target: Indicator CCA-1.1.1: CSL approach mainstreamed in 5 Land-Use and Development Plans (LUDPs)[1], 1 CSL National Strategy and 5 Local Zoning Plans.* *Indicator LD-3.i Enhanced cross-sector enabling environment for integrated landscape management: 7 Integrated land management plans* **Outcome 1.2:** Institutional capacities for the implementation of CSL management strategies strengthened. *Target: Indicator CCA-2.2.1: Five (5) national*	**Output 1.1.1:** National Climate Smart Livestock Strategy, prepared and adopted. **Output 1.1.2:** One Nationally Appropriate Mitigation Action (NAMA) for the livestock sector **Output 1.1.3:** LUDPs of Provincial DAGs with CSL approach and livestock zoning plans. **Output 1.2.1:** Key representatives of MAE, MAGAP, provincial councils and municipalities with strengthened capacities for the implementation of CSL management measures in different livestock production systems. *Targets: Training plans on CSL for MAE, MAGAP and DAGs staff designed and implemented in 6 provinces.* *Indicator CCA-2.2.1.1: No. of*	GEFTF SCCF	321,474 493,934	2,198,033

[1] Land Use and Development Plans - at provincial or local level.

		institutions (regional branches); 2 national institutions (central government); 5 provincial agencies.	*staff trained on technical adaptation themes[2]: 100 (20% women).*			
2. Strategies of Technology Transfer, Deployment and Implementation for Climate-Smart Livestock Management	INV	**Outcome 2.1:** CSL approach adopted in degraded livestock areas. *Targets: 30,000 hectares in livestock degraded lands have adopted the CSL management.* *Indicator CCA-3.1.1: % of targeted groups adopting adaptation technologies by technology type: i) pasture management: 50% (men and women); ii) animal and herd management: 50% (men and women); iii) water management: 50% (men and women); iv) supplementary feeding: 50%; v) grazing management: 50%.* *Indicator LD-1.ii: 3 (medium)* *Indicator CCM-5: i) 2 (development of guidelines for sustainable livestock management); ii) emissions avoided:* *78 052 ton CO_{2eq} avoided in direct GHG emissions; 247 050 ton CO_{2eq} direct carbon sequestration* **Outcome 2.2:** Access to financing instruments for investments in CSL	**Output 2.1.1:** CSL practices disseminated in degraded livestock lands, with a participatory approach. *Targets: CSL management disseminated in 30,000 hectares of degraded livestock areas, with the participation of small- and medium-scale livestock producers.* *CSL practices packages are identified and analyzed for main livestock production systems.* *1000 beneficiaries* **Output 2.1.2:** Small-scale and medium-scale livestock producers' networks created and strengthened *Targets: 7 networks created/strengthened and trained to disseminate CSL practices.* *1000 small- and medium-scale producers participating and trained.* *7 provinces* *At least 20% participants are women* **Output 2.2.1:** Financing mechanisms and incentive schemes to support CSL *Targets: 1 pilot financing*	GEFTF SCCF	1,518,984 490,235	18,211,360

[2] Including: early warning systems, improvement in livestock systems resilience, support to livelihoods, erosion control, soil and water conservation, microfinance, water storage, dissemination of information.

		practices in degraded areas has been improved. *Target: Indicator LD-1.iv: + USD175 000 investment through 1 pilot financing mechanism and 1 existing incentive scheme strengthened.*	*mechanism (Microfinance Strategy) and at least 1 existing incentives scheme strengthened (AGROCALIDAD).* *470 producers have accessed a financing/incentives mechanism for CSL.*			
3. Monitoring of GHG emissions and adaptation capacity in the livestock sector.		**Outcome 3.1:** Livestock sector GHG emissions in selected areas have been reduced and monitored. *Target: Indicator CCM-5: Carbon monitoring system: 3 (compiling and analysis of information on carbon stocks)[3].* *Emission factors in the livestock sector for national inventory: 1 proposal* **Outcome 3.2:** Adaptation capacity of the livestock sector has been monitored[4]. *Target: The JICA monitoring tool for monitoring adaptive capacity in the livestock sector has been tested and evaluated.*	**Output 3.1.1:** Measurement of GHG emissions reduction *Targets:* *One GHG emissions monitoring system working in selected areas.* *MAE is trained to prepare national communications based on Tier2 of IPCC guidelines.* *There are emissions factors by systems, management practices and climatic zones.* **Output 3.2.1:** Tool for monitoring adaptive capacity in the livestock sector. *Target: The JICA adaptive capacity monitoring tool operational and tested (in the livestock sector)*	GEFTF SCCF	220,000 345,155	1,182,062
4. Monitoring, evaluation and dissemination of project information	TA	**Outcome 4.1:** Project implementation based on RBM and lessons learned/good practices documented and disseminated	**Output 4.1.1** Monitoring system project operating and providing systematic information on progress in reaching expected outcomes and targets	GEFTF SCCF	198,011 50,000	320,300

[3] It refers to a GHG emissions monitoring system at sectorial level, applied in selected provinces or areas.
[4] It refers to adaptation capacity of project selected areas, which is expected to improve through actions under Component 2 (30,000 hectares under CSL). This output is liked to Output 2.1.

		Target: Project implementation based on RBM and demonstrating sustainability	*Target: Project results matrix with outcomes and outputs indicators, baseline and targets* **Output 4.1.2** Midterm and final evaluations; implementation and sustainability strategy adjusted to recommendations. *Target: 1 mid-term evaluation and 1 final evaluation*			
			Subtotal		3,637,793	21,991,755
			Project management Cost (PMC)	GEFTF	218,268	244,800
			Total project costs		**3,856,060**	**22,156,555**

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 ($)
National Government	MAE	Grant	11,566,891
		In-kind	191,300
National Government	MAGAP	Grant	6,107,069
		In-kind	3,159,895
Project beneficiaries	Small-and medium-scale producers	In-kind	811,400
GEF Agency	FAO	In-kind	320,000
Total Co-financing			22,156,555

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY[1]

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in $)		
				Grant Amount (a)	Agency Fee (b)[2]	Total c=a+b
FAO	GEFTF	Land Degradation	Ecuador	1,843,111	175,096	2,018,207
FAO	GEFTF	Climate Change	Ecuador	550,866	52,332	603,198
FAO	SCCF		Ecuador	1,462,083	138,898	1,600,981
Total Grant Resources				3,856,060	366,326	4,222,386

[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 ($)	Co-financing ($)	Project Total ($)
International Consultants			
National/Local Consultants	1,912,600	459,440	2,372,040

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

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

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, I NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.

No changes from PIF. Please refer to the Section 1.1.5 of the FAO-GEF Project Document for further details.

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

The project is consistent with the following strategic objectives: Climate Change Mitigation Focal Area: CCM-5 *Promote conservation and enhancement of carbon stocks through sustainable management of land use, land-use change, and forestry*; Land Degradation Focal Area: LD-1 *Agriculture and Rangeland Systems: Maintain or improve flow of agro-ecosystem services sustaining the livelihoods of local communities*, and LD-3 *Integrated Landscapes: Reduce pressures on natural resources from competing land uses in the wider landscape*; Climate Change Adaptation Focal Area: CCA-1 *Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level*, CCA-2 *Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level*, and CCA-3 *Promote transfer and adoption of adaptation technology.*

Component 1 is aligned with Objective 1 of the Climate Change Adaptation focal area (CCA-1) of SCCF (GEF-5), Outcome 1.1: *Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas*; with Objective 2 (CCA-2) , Outcome 2.2: *Strengthened adaptive capacity to reduce risks to climate-induced economic losses*; with Objective 5 of the GEF 5 Climate Change Mitigation focal area (CCM-5) , Outcome 5.1 *Good management practices in LULUCF adopted both within the forest land and in the wider landscape*; with Objective 3 of the GEF-5 Land Degradation focal area (LD-3) , outcome 3.1: *Enhanced cross-sector enabling environment for integrated landscape management.*. Component 1 will support the mainstreaming of the CSL approach in the climate change adaptation and mitigation policies of the livestock sector, and in land-use planning. Component will help strengthen institutional capacities for the implementation of CSL strategies in the country.

Component 2 will be in line with Objective 1 of the GEF-5 Land Degradation focal area (LD-1) , Outcome 1.2: *Improved agricultural management*, with Objective LD-3, Outcome 3.3: *Increased investments in integrated landscape management*; with the Objective 3 of the Climate Change Adaptation focal area (CCA-3) , Outcome 3.1: *Successful demonstration, deployment, and transfer of relevant adaptation technology in targeted areas*; and with Objective CCM-5, outcome 5.2: *Restoration and enhancement of carbon stocks in forests and non-forest lands, including peatland.* Component 2 will promote the diffusion of the CSL approach in degraded livestock areas and will support the improvement of access to financing instruments from small-scale producers, in order to allow them to invest in CSL management practices in degraded areas.

Component 3 will be in line with Objective CCM-5, Outcome 5.1, Output 5.1 *Carbon stock monitoring systems established*; and with Objective CCA-2, Outcome 2.1: *Increased knowledge and understanding of climate variability and change-induced risks at country level and in targeted vulnerable areas.*. Component 3 seeks to monitor: i) reduced GHG emissions; and ii) increased adaptive capacity of the livestock sector, both in Project intervention areas.

A.3 The GEF Agency's comparative advantage:

No changes from 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 a) *Threats to Global Environmental Benefits (GEBs) and vulnerability to climate change;* b) Baseline *projects and investments;* and c) *Remaining barriers to address threats on GEB/CC vulnerabilities.*

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 project 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 GEF incremental financing of USD 321 474 and the additional SCCF financing of USD 493 934 for Component 1 will address the strengthening of institutional capacities and coordination through: 1) specialized technical assistance for the participatory design of a sustainable/climate-smart livestock management strategy; 2) specialized technical assistance for the design of a Nationally Appropriate Mitigation Action (NAMA); 3) mainstreaming of the CSL approach in provincial planning instruments; 4) design of a training program on CSL targeting national and provincial institutions staff and the implementation of training activities (courses and workshops); 6) conducting participatory workshops to design and validate the NAMA.

The GEF incremental financing of USD 1 518 984 and the additional SCCF financing of USD 490 235 for Component 2 will aim to promote and facilitate access to incentives, training, local networks, and best practices to provide livestock producers a range of possibilities for them to transform their production units in sustainable systems, taking into account their needs and the condition of their property. Families led by female producers will be particularly taken into account during the selection of local beneficiaries. Incremental resources will finance: 1) the dissemination of CSL management practices in 30 000 hectares of degraded livestock areas 2) training on CSL targeting local producers and farmers field schools; 3) workshops for the creation and strengthening of livestock producers' networks; 4) specialized technical assistance for the strengthening of financing mechanisms and incentive schemes to support CSL; 5) the design and implementation of a Technical Assistance and Training on Incentives Plan for small-scale livestock producers procurement of materials and supplies for good livestock practices; 6) procurement of equipment (computer, projector, trucks for each of the provinces).

The GEF incremental financing of USD 220 000 and the additional SCCF financing of USD 345 155 for Component 3 will be used to monitoring GHG emissions from the livestock sector in Project selected areas, and to test and evaluate the JICA tool for monitoring adaptation capacity in the livestock sector through: 1) a consultancy for the measurement of emissions reduction and data analysis; 2) workshops for GHG monitoring; 3) a training course on IPCC Guidelines and scenarios; 4) an analysis on the vulnerability of the livestock sector; and 5) testing of the JICA tool on field.

The GEF incremental financing of USD 198 011 and the additional SCCF financing of USD 50 000 for Component 4 will be directed to M&E activities, including monitoring project progress and fulfillment of indicators, midterm and final external evaluations, project systematization and preparation of dissemination materials.

Changes in the results framework compared to the PIF

The objective, components and outputs of the project remain largely unchanged and are described in detail in the FAO-GEF Project Document (Section 2). As recommended by the STAP, the project results framework has been streamlined.

Since 2012, when the PIF was submitted, the climate-smart agriculture (CSA) and climate-smart livestock (CSL) concepts and pilots have been further refined by FAO (see Section 2.1, Project Strategy). The project results framework now reflects the full integration among the three pillars of CSA: i) mitigation; ii) adaptation; and iii) food security. Sustainable land management is embedded throughout the CSA approach. The Project will implement CSL management and practices in a way of integrating and addressing both CCA and CCM. In light of this, some adjustments have been introduced into the project results matrix, as described below:

PIF	CEO Endorsement
Component 1	
1.1.1 A Climate-smart livestock management strategy for climate change adaptation, has been designed in an inter-institutional and participatory manner and mainstreamed into the existing National Climate Change Adaptation Plan (NCCAP).	**Output 1.1.1:** National Climate Smart Livestock Strategy, prepared and adopted.
1.1.2 A Nationally Appropriate Mitigation Action (NAMA) designed in an inter-institutional and participatory manner, and an appropriate MRV methodology designed/applied. The NAMA should have 2 end products: a) A climate-smart livestock management strategy (CSLMS) for climate change mitigation, b) A Policy for sustainable integrated livestock farm management.	**Output 1.1.2:** One Nationally Appropriate Mitigation Action (NAMA) for the livestock sector.
1.1.3 Climate-smart livestock approach incorporated into the LUDPs of the Decentralized Autonomous Govenments (DAGs) of the following provinces: Loja, Manabí, Santa Elena, Guayas, Napo, Pastaza and Imbabura, reducing vulnerability towards climate change impacts.	**Output 1.1.3:** LUDPs of Provincial DAGs with CSL approach and livestock zoning plans.
1.1.4. Five zoning plans for livestock production developed and included into existing vulnerable micro-watershed management plans (in arid, semi-arid and dry sub-humid zones in Loja, Manabí, Santa Elena, Guayas and Imbabura), which have been selected with replicability criteria.	*Streamlined into project output 1.1.3*
1.2.1 40 key representatives of MAE, MAGAP, provincial councils, and municipalities, with strenghtened capacities to implement climate change adaptation and mitigation measures for different livestock production systems (2 workshops for pilot province).	**Output 1.2.1:** Key representatives of MAE, MAGAP, provincial councils and municipalities with strengthened capacities for the implementation of CSL management measures in different livestock production systems.
Component 2	
2.1.1 Seven local networks have been created with 280 small- and medium-scale livestock farmers in the selected provinces, and have been trained through 7 Agrarian Revolution Schools (ERAs) on: (i) strategies for use, sustainable management and conservation of land and water incorporating management of risks and local vulnerabilities to face climate change, (ii) design of agroecological corridors in livestock landscapes and	**Output 2.1.2:** Small-scale and medium-scale livestock producers' networks created and strengthened *Note: ERAs are not existing in Ecuador anymore.*

implementation of best livestock and agrosilvopastoral practices aiming at increasing the resilience to adverse effects of climate change and to revert land degradation.	
2.1.2 Best management practices (see output 2.1.1) implemented in 35,000 hectares of degraded areas, with the participation of small- and medium-scale farmers.	**Output 2.1.1:** CSL practices disseminated in degraded livestock lands, with a participatory approach.
2.1.3 An on-line knowledge platform that gathers, systematizes and disseminates lessons learned of best practices for livestock management, established and running, involving the participation of local stakeholders, producers' associations, DAGs (7 provinces and 10 municipalities), and national and international organizations.	*The project will utilize the online platform of MAGAP, part of the co-financing contribution. Therefore, this output is no longer going to be financed by GEF.*
2.1.4 A livestock certification system for farms implementing climate-smart livestock practices, applied in degraded areas selected with replicability criteria.	*The certification of CSLM practices has been moved to output 2.2.1: financing mechanisms and incentive schemes.*
2.1.5. One CCA technology package deployed and implemented in 7 pilot areas (35.000 has) including: i) agro-climate and geo-referenced information systems (based on agro-meteorological stations at farm level) for grassland management, and ii) registration systems of pastures utilization and pregnancy synchronization that optimizes seasonal availability of dry matter.	*As part of the CSL approach, good practices of CCA and CCM are not considered anymore as separated, but as integrated. This output has been mainstreamed into output 2.1.1 (see above).*
2.2.1 Two existing financial mechanisms and two existing incentive schemes have been strengthened (including regulatory frameworks and sanctionary regimes in force), to facilitate the transfer of silvopastoral technologies and other climate-smart livestock practices.	**Output 2.2.1:** Financing mechanisms and incentive schemes to support CSL *Note: given the limited budget, and on the basis of project preparation analyses, it has been determined that the project will support one financing mechanism and one incentive schemes, so as to ensure feasibility and long-term sustainability.*
Component 3	
3.1.1 A GHG monitoring system established in each selected pilot area	**Output 3.1.1:** Measurement of GHG emissions reduction.
3.1.2. Best practices for climate change mitigation for small- and medium-scale farmers have been implemented in 35,000 hectare	**Output 3.1.2:** Tool for monitoring adaptive capacity in the livestock sector. *As part of the CSL approach, good practices of CCA and CCM are not considered anymore as separated, but as integrated. This output has been mainstreamed into output 2.1.1 (see above).* *Following the same CSL integrated approach, monitoring of both emission reduction and adaptive capacity should be included as part of the CSLM strategy proposed by the*

	project. For this reason, the monitoring of the adaptive capacity of the livestock sector by using a JICA tool developed for Ecuador but not yet tested, has been included as output 3.1.2.

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 and adaptation benefit indicators and targets at outcome level.

As a consequence of the regrouping of some Outputs and more detailed development of the project interventions there has also been some changes in the resources distribution between the PIF and CEO endorsement stages. Please refer to the Results Budget in Appendix 3 of the FAO-GEF Project Document for further details.

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 risks identified in the PIF remain. The mitigation measures have been further assessed and described. Please refer to Appendix 4 "Risk Matrix" of the Project Document for the full risk assessment.

A.7. Coordination with other relevant GEF financed initiatives

FAO, MAE, and MAE will collaborate with the executing agencies of other GEF-supported programs and projects to identify and facilitate synergies, as well as with other donor-supported projects. Collaboration will be undertaken through: (i) informal communications; and (ii) exchange of information. The project will coordinate actions mainly through periodic communication between these initiatives and the Project Implementation Unit to be established.

The project will coordinate actions with the following GEF projects:

- Project GEF-FAO # 4774: "*Conservation and Sustainable Use of Biodiversity, Forests, Soil and Water to Achieve the Good Living (Sumac Kawsay) in the Province of Napo*", which seeks 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 is composed of 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; and 4) M&E and information dissemination.
- The GEF Small Grants Programme (SGP). During the Fifth Operational Phase, the SGP implements the FSP "*Our Corridors for Good Living*" (#4375) with the objective of conserving biodiversity by reducing habitat fragmentation and strengthening ecological connectivity across production landscapes through community initiatives and actions in globally significant ecosystems in Ecuador. The Project is composed of the following components: 1) Effective community land use governance and planning for ecological connectivity; 2) Sustainable livelihood options for rural communities in fragile and globally important ecosystems; 3) Knowledge systematized and disseminated, and communities trained in project design, monitoring and evaluation for adaptive management and learning and 4) Monitoring and evaluation of program and project performance.

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

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

B.1.1 Project implementation and management arrangements

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

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 Ministries of Environment and Agriculture (or their delegates) and with the participation of 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 MAE, MAGAP, FAO and project participating partners and project support at the local level; (iv) advise the PC on other on-going and planned activities facilitating collaboration between the Project and other programs, 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 PSC; v) providing technical advice to the Project Steering Committee; vi) advising the PSC on other on-going and planned activities facilitating collaboration between the Project and other programs, 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 Under-Secretary of CC, or his/her delegate, the Under-Secretary of Livestock, or his/her delegate, with the cooperation of FAO (PTM). The PMC will meet on a bi-monthly basis, as minimum.

B.1.2 Stakeholder involvement plan

The stakeholder mapping carried out during project preparation is presented in the table below, including their roles and participation in project implementation.

Stakeholder	Interest in the project	Role in the project
FAO	To increase sustainable food security through the dissemination and promotion of climate-smart livestock strategies and policies. To draw lessons and systematize good practices, lessons learned and recommendations that might be useful for other projects in this region.	GEF implementing agency
Under-Secretariat of Livestock Promotion (SLP)- MAGAP	To implement the national livestock sector policy, channeling resources and institutional competencies for this purpose.	Co-executing partner. Technical-political coordination to ensure synergy between baseline programmes and project activities.
MAE	To promote policies of CCA, CCM and natural resources management (NRM), as well as strategies to combat desertification, in agriculture. To implement the national environmental policy in the rural (livestock) sector, channeling resources and institutional competencies for this purpose.	Co-executing partner. Technical-political coordination to ensure synergy between baseline programmes and project activities.
DAGs of the provinces of Napo, Morona Santiago, Guayas, Imbabura, Loja,	To promote the inclusion of sustainable livestock production into the provincial LUDPs, and vulnerable micro-watersheds located	Partner for implementation at local level. Local resources mobilization, monitoring and

Manabí and Santa Elena	in their provinces.	evaluation at local level.
National and regional livestock associations	To strengthen the livestock sector through sustainable production initiatives. To improve the living conditions of its members. To incentive local markets and to promote the access to climate-smart livestock technologies.	Partners for Component 2 and 3 implementation.
Local organizations of small- and medium-scale farmers	To improve the living conditions of the small- and medium-scale producers by increasing their incomes. To facilitate the access of local producers to climate-smart livestock technologies and services.	Local promoters and direct beneficiaries of project implementation.
Vulnerable local livestock producers and peasants	To improve their living conditions by increasing their incomes and reducing poverty. To avoid migration and achieve productivity levels that allow them to stay at their rural communities. To have access to climate-smart livestock technologies and services. To reduce climate-related economic losses.	Direct beneficiaries of project implementation.

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

Food security is one of the pillars of CSL. The Project will promote this objective through CSL practices dissemination, in order to increase producers' productivity and capacity for adaptation to climate change and reduce their economic losses due to drought and unexpected floods. Project activities focus on increase livestock production efficiency in a sustainable manner, avoiding agriculture frontier expansion, and improving the livelihoods of vulnerable rural population.

The main project's beneficiaries will be 1000 small and medium-scale livestock producers, including women who through the implementation of the CSL will improve their livelihoods, their resilience capacity in the face of drought, will increase livestock productivity and will receive higher income per family. These 1000 producers will benefit from the creation of provincial networks that will provide them with technical support and training. It is expected that at least 470 families out of 1000 producers will be able to access financing or incentive mechanisms for maintaining their production sustainable during project life.

Project's expected adaptive benefits at a local scale in the short term are: i) Improved production net incomes ii) Improvement of income generated from sale of milk and meat, generating a positive impact on poverty and local migratory pressure; iii) Greater access to credit/production incentives, especially for women; iv) Improved productivity of livestock farming; v) Less vulnerability of livelihood; vi) Improved association capacity.

Project's expected adaptive benefits at a local scale in the short term are: i) better resilience to environment changes, thus allowing the maintenance or improvement of income levels; ii) Greater information for decision making a priori and in the future; iii) Decreased exposure to predictable or expected environmental disasters and losses associated with them; iv) Increased responsiveness to extreme events; v) Improved levels of nutrition and health of family members.

The project will apply the gender approach in the four components. Under Component 1, women will be involved in the decision-making process both at the local level (training workshops, review of LUDPs to include CSL) and the national level (design of NAMA and CSL strategy). Under Component 2, microfinance activities, access to financing mechanisms and incentives will take into consideration women as key actors who manage household savings and have a huge influence on the dissemination of good livestock practice in their communities and villages. Women have a key role in cattle managing and FAO experience has demonstrated that involving female farmers is crucial for successful poverty reduction programs. Therefore, women's organization and capacity development contribute to improve their working conditions, sustenance and life quality indicators (health, nutrition, education and social inclusion). This project

addresses women's access to natural and productive resources (land, livestock, and credit) in order to increase their influence and social potentiality and thus their control over local resources.

The data will be disaggregated by gender for monitoring differential impacts of the project, and women farmers will be particularly involved and represented in all project activities.

There are no Indigenous Peoples settled in the Project intervention area.

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

The proposed project has the primary objective of ensuring long-term sustainability of Climate Smart Livestock in Ecuador.

To achieve this goal, the project has identified interventions that are a cost/effective way of removing the barriers and addressing the threats to global environmental benefits identified during full project preparation. The project is cost-effective because it complements the baseline initiatives, skills and infrastructure, national and local policies. The project have identified a number of strategies and methodologies that are complementary and synergic among them. The proposed intervention strategies are profitable and acceptable for small- and medium-scale producers. These interventions and methodological proposals will enable small- and medium-scale producers to increase their production levels and to improve the environmental quality of their property, reducing emissions, increasing carbon capture in soil through good practices and better adapting to climate change. Please see Section 2.6 of the FAO GEF Project Document for a full description of those.

C. DESCRIBE THE BUDGETED M &E PLAN:

Monitoring and evaluation activities will follow FAO and GEF monitoring and evaluation policies and guidelines. The table below summarizes the project Monitoring and Evaluation Plan. For further details please see the FAO-GEF Project Document, sections 4.5 and 4.6.

Type of M&E Activity	Responsible Parties	Time-frame	Budget
Inception Workshop	PC[5], FAO (PTM[6] supported by LTO[7], BH[8], and the FAO GEF Coordination Unit)	Within two months of project start up	USD 2 496
Project Inception Report	PC and FAO PTM, cleared by LTO, BH, and the FAO GEF Coordination Unit	Immediately after the workshop	-
Field-based impact monitoring	PC, institutions and indigenous and small-scale farmers organizations participating in the project	Continually	USD 14 836 (project coordination time, technical workshops for identification of indicators, M&E workshops)

[5] Project Coordinator
[6] FAO GEF Project Task Manager
[7] Lead Technical Officer
[8] Budget Holder

Type of M&E Activity	Responsible Parties	Time-frame	Budget
Supervision visits and rating of progress in PPRs and PIRs	PC 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)	PC with inputs by MAGAP, MAE and other participating partners	Six-monthly	USD 4 945
Project Implementation Review report (PIR)	FAO (LTO and PTM) supported by and PC. PIRs cleared and submitted by the FAO GEF Coordination Unit to the GEF Secretariat	Annual	Financed through GEF agency fee
Co-financing Reports	PC with inputs from other co-financiers	Annual	USD 1 649
Technical reports	PC, and FAO (LTO, PTM)	As appropriate	
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 external consultants
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 external consultants
Terminal Report	PC, FAO (PTM, LTO, FAO GEF Coordination Unit, TSCR report Unit)	Two months before the end date of the GCP Agreement	As completed by the PC
Total Budget			USD 103 926

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S):): (Please attach the Operational Focal Point endorsement letter(s) with this form. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Marcella Aguiñaga Vallejo	Minister of Environment	Ministry of Environment of Ecuador	November, 25, 2011

B. GEF AGENCY(IES) CERTIFICATION

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

Agency Coordinator, Agency Name	Signature	Date *(Month, day, year)*	Project Contact Person	Telephone	Email Address
Gustavo Merino Director, Investment Centre Division Technical Cooperation Department FAO Viale delle Terme di Caracalla 00153, Rome, Italy		April, 10, 2015	Valeria Gonzalez Riggio Chiara Pili		Valeria.GonzalezRiggio@fao.org chiara.pili@fao.org
Jeffrey Griffin Senior Coordinator, FAO GEF Coordination Unit. Investment Centre Division. FAO				+3906 57055680	GEF-Coordination-Unit@fao.org

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Project outcomes and impacts:

Objective/Impact	Baseline	Outcomes	Assumptions
Global Environmental Objective: To reduce soil degradation, and mitigate GHG emissions in the livestock sector of Ecuador. **Project Development Objective:**[9] To sustainably increase and improve the supply of goods and services from livestock production. **Specific Project Objective:** 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.	**Component 1:** **Outcome 1.1:** The Climate Smart Livestock (CSL) approach is not applied in livestock policies. **Outcome 1.2**: National and provincial institutions do not have knowledge on CSL.	**Component 1:** **Outcome 1.1:** The CSL approach has been mainstreamed in climate change mitigation and adaptation policies in the livestock sector and land-use planning. **Outcome 1.2**: Institutional capacities for the implementation of CSL management strategies strengthened.	**Component 1:** • Political will to adopt and implement the CSL approach. • Local authorities committed with Project actions and supported by central government. • Availability of human and technological resources to implement the actions. • Production sector's will and incentives for the adoption of good practices. • Increasing acknowledgement of the livestock sector's vulnerability.
	Component 2: **Outcome 2.1**: The CSL approach has not been applied on field. **Outcome 2.2**: No financing instruments have been utilized to incentivize climate smart livestock management practices in degraded areas.	**Component 2:** **Outcome 2.1**: CSL approach adopted in degraded livestock areas. **Outcome 2.2**: Access to financing instruments for investments in CSL practices in degraded areas has been improved.	**Component 2:** • Availability of human and technological resources to implement the actions. • Production sector's will and incentives for the adoption of good practices. • Existing co-financing resources for the implementation of CSL measures. • Sufficient ties to the land and property to implement actions. • Political will to adopt and implement innovative guidelines • Local authorities committed with

[9] In line with FAO SOs

			Project actions.
	Component 3: **Outcome 3.1**: Inappropriate and inefficient livestock management practices emit GHG and contribute to climate change. The country does not have a GHG emissions monitoring system at sectorial level. **Outcome 3.2:** The country has proposal for monitoring adaptive capacity to climate change in agriculture, but it has not been tested.	**Component 3:** **Outcome 3.1**: Livestock sector GHG emissions in selected areas have been reduced and monitored. **Outcome 3.2**: Adaptation capacity of the livestock sector has been monitored.	**Component 3:** • Existing co-financing resources for the implementation of CSL measures. • Sufficient ties to the land and property to implement actions. • Political will to adopt and implement innovative guidelines • Producers voluntarily offer to implement CSL actions. • Beneficiary producers accept that their farms are used as demonstration centres, selected with replicability criteria.
		Component 4: **Outcome 4.1**: Project implemented with a results based management approach.	**Component 4:** • Monitoring & Evaluation System designed and operational • Organigram with high interaction between central and provincial authorities. • Differentiated responsibilities, timeframe and budget assigned.

Project outputs and outcomes:[10]

Indicators	Baseline[11]	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: Strengthening of institutional capacities and coordination to incorporate the CSL approach in territorial management and in the development of livestock-related policies and tools.								

[10] Please insert/delete columns for project years and rows for outputs and outcomes as needed.

[11] Value in the case of quantitative indicators and description of situation in the case of qualitative indicators. Please insert the year of the baseline

Indicators	Baseline[11]	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 1.1 The CSL approach has been mainstreamed in climate change mitigation and adaptation policies in the livestock sector and land-use planning	The Climate Smart Livestock (CSL) approach is not applied in livestock policies. Indicator CCA-1.1.1: Adaptation actions implemented in national/sub-regional development frameworks: 0 CSL strategies. Indicator LD-3.i Enhanced cross-sector enabling environment for integrated landscape management: 0 Integrated land management plans	Indicator CCA-1.1.1: CSL approach mainstreamed in 5 Land-Use and Development Plans (LUDPs)[12], 1 CSL National Strategy and 5 Local Zoning Plans. Indicator LD-3.i Enhanced cross-sector enabling environment for integrated landscape management: 7 Integrated land management plans	Indicator CCA-1.1.1: CSL approach mainstreamed in 5 Land-Use and Development Plans (LUDPs), 5 Local Zoning Plans.	Indicator CCA-1.1.1: CSL approach mainstreamed in 1 CSL National Strategy and 5 Indicator LD-3.i Enhanced cross-sector enabling environment for integrated landscape management: 7 Integrated land management plans			LUDPs updated with CSL approach Local zoning plans designed with CSL approach CSL National Strategy integrated in the CC National Strategy NAMA PPR PIR	Project Coordinator (PC) NAMAs expert Project provincial technicians Livestock Policy Expert
Output 1.1.1	0 CSL Strategy	One strategy designed and	CSL strategy designed and	CSL Strategy incorporated in	CSL Strategy		Strategy summary	Secretariat of Livestock,

[12] Land Use and Development Plans - at provincial or local level.

Indicators	Baseline[11]	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
National Climate Smart Livestock Strategy prepared and adopted.		integrated into the Climate Change National Strategy (CCNS).	validated	CCNS, incorporation validated	implemented		reports Final Strategy Document reviewed by Project Steering Committee	supported by MAE[13] and APTA[14]. Livestock Policy Expert
Output 1.1.2 One Nationally Appropriate Mitigation Action (NAMA) for the livestock sector.	0 NAMA for the livestock sector. Lack of Measurement, Reporting and Verification (MRV) systems for the sector. General lack of knowledge of climate financing options.	One sectorial NAMA designed.	Baseline and mitigation scenarios finalized. Calculation of the potential for GHG emissions reduction in the sector	MRV system selected and co-benefits analysis finalized. NAMA management structure designed.	Concept document finalized.	Support to NAMA promotion	NAMA Concept document NAMA will be submitted to the UNFCCC	PC Livestock Secretariat MAE Mitigation Direction. NAMAs Expert
Output 1.1.3	0 LUDPs with CSL	5 provincial LUDPs[15] with	5 DAGs trained on CC and CSL	Livestock zoning plans designed,	CSL actions and livestock	M&E of zoning plans and CSL	Workshops attendance	MAGAP provincial

13 Ministry of Environment.
14 Agenda for the Production Transformation of the Amazon.
15 In Imbabura, Loja, Manabí, Santa Elena and Guayas.

Indicators	Baseline[11]	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
LUDPs of Provincial DAGs with CSL approach and livestock zoning plans.	approach No livestock production zoning plans	CSL approach and livestock zoning plans under implementation and replicable.	approach 5 LUDPs reviewed and updated with CSL approach[16].	validated and included in LUDPs.	zoning included in LUDPs implemented in livestock production areas. Constant monitoring.	actions[17].	lists. Schedules of support to DAGs, updated LUDPs. Zoning plans for each province. List of livestock production areas. Zoning progress report. Social and economic impact measurement reports.	directions and their technicians. Livestock Policy Expert Provincial technicians for LUDPs Capacity Development Expert.
Outcome 1.2 Institutional	National and provincial institutions have					12 government institutions	PPR	Livestock Secretariat, MAGAP and

[16] Including sustainable livestock activities.
[17] Including socio-economic evaluation impact.

Indicators	Baseline[11]	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
capacities for the implementation of CSL management strategies strengthened.	no knowledge on CSL. Indicator CCA-2.2.1: No. and type of targeted institutions with increased adaptive capacity to minimize exposure to climate variability: 0 for the livestock sector.	Indicator CCA-2.2.1: Five (5) national institutions (regional branches); 2 national institutions (central government); 5 provincial agencies.				with strengthened capacities in CSL management.	PIR Evaluation of capacity self-perception.	MAE CC. Livestock Policy Expert
Output 1.2.1 Key representatives of MAE, MAGAP, provincial councils and municipalities with strengthened capacities for the implementation of CSL management measures in different livestock	No plans for strengthening capacities on sustainable livestock in MAE, MAGAP, INIAP and DAGs. Indicator CCA-2.2.1.1: No. of staff trained on technical	Training plans on CSL for MAE, MAGAP and DAGs staff designed and implemented in 6 provinces. Indicator CCA-2.2.1.1: No. of staff trained on technical	Staff identified, trained and assessed on CC, CSL management, socio-economic and biophysical indicators monitoring, GIS.	Technicians monitored: performance tracking, and production indicators in the areas of their responsibility. Knowledge strengthening. Training on new	Technicians monitored: performance tracking, and production indicators in the areas of their responsibility. Knowledge	Technicians monitored: performance tracking, and production indicators in the areas of their responsibility. Knowledge	Assistance to training. Assessments Production and CCA and CCM indicators in Project areas.	PC Project team LUDPs Provincial Technicians Capacity Development Expert.

Indicators	Baseline[11]	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
production systems.	adaptation themes: 0	adaptation themes18: 100 (20% women).		themes required by circumstantial issues	strengthening. Training on new themes.	strengthening. Training on new themes.		

Indicators	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: Strategies of Technology Transfer, Deployment and Implementation for Climate-Smart Livestock Management								

[18] Including: early warning systems, improvement in livestock systems resilience, support to livelihoods, erosion control, soil and water conservation, microfinance, water storage, dissemination of information.

Indicators	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 2.1 CSL approach adopted in degraded livestock areas.	0 hectares under CSL practices Indicator CCA-3.1.1: % of targeted groups adopting adaptation technologies by technology type: i) pasture management: 10% (men and women); ii) animal and herd management: 5% (men and women); iii) water management: 10% (men and women); iv) supplementary feeding: 0%; v) grazing management: 0%. Indicator LD-1.ii: Community vulnerability: 2 (high vulnerability).	30,000 hectares in livestock degraded lands have adopted the CSL management. Indicator CCA-3.1.1: % of targeted groups adopting adaptation technologies by technology type: i) pasture management: 50% (men and women); ii) animal and herd management: 50% (men and women); iii) water management: 50% (men and women); iv) supplementary feeding: 50%; v) grazing	Indicator CCM-5: i) 2 (development of guidelines for sustainable livestock management)	10,000 hectares Indicator CCA-3.1.1: % of targeted groups adopting adaptation technologies by technology type: i) pasture management: 25% (men and women); ii) animal and herd management: 25% (men and women); iii) water management: 25% (men and women); iv) supplementary feeding: 25%; v) grazing management: 25%.	20 000 hectares Indicator CCM-5: ii) avoided emissions: 23 416 ton CO_{2eq} avoided in direct GHG emissions; 74 115 ton CO_{2eq} direct carbon sequestration.	30 000 hectares Indicator CCA-3.1.1: i) pasture management: 50% (men and women); ii) animal and herd management: 50% (men and women); iii) water management: 50% (men and women); iv) supplementary feeding: 50%; v) grazing management: 50%. Indicator LD-1.ii: 3 Indicator CCM-5: i) ii) emissions avoided:	PPR PIR Extension staff surveys Field technical assistance reports Samples Carbon stocks monitoring system developed under Output 3.1	PC Project provincial technicians and extension staff MAGAP provincial delegations and technicians Under-Secretariat of CC – Mitigation Directorate Incentives Expert

Indicators	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 CCM-5: i) good practices developed and adopted: 1 (without action); ii) GHG emissions avoided: 0. GHG emissions per product unit are approximately 4 CO_{2eq} and 32 CO_{2eq} for litre of milk and kilo of meat.	management: 50%. Indicator LD-1.ii: 3 (medium) Indicator CCM-5: i) 2 (development of guidelines for sustainable livestock management); ii) emissions avoided: 78 052 ton CO_{2eq} avoided in direct GHG emissions; 247 050 ton CO_{2eq} direct carbon sequestration.				78,052 ton CO_{2eq} in direct GHG emissions; 247 050 ton CO_{2eq} direct carbon sequestration.		
Output 2.1.1 CSL practices disseminated in degraded livestock lands, with a participatory	0 hectares under CSL practices. CSL management technologies (good practices) are not applied systematically in Project	CSL management disseminated in 30,000 hectares of degraded livestock areas, with the	CSL management practices identified and analysed for main livestock production systems.	10 000 hectares	Additional 10 000 hectares	Additional 10 000 hectares 1000 beneficiaries.	PC Project provincial Technicians	

Indicators	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
approach.	intervention areas. CSL packages are non-existent. Livestock production does not incorporate the environmental component.	participation of small- and medium-scale livestock producers. CSL practices packages are identified and analyzed for main livestock production systems. 1000 beneficiaries.	Pilot farms for the application of CSL will selected.				MAGAP provincial directions and technicians.	
Output 2.1.2 Small-scale and medium-scale livestock producers' networks created	Local livestock producers' networks do not include CSL approach.	7 networks created/strengthened and trained[19] to disseminate	7 networks created and trained on CC, CSL and associative capacity	500 producers trained[20]	Additional 500 producers trained[21].	7 networks created and trained[22] to disseminate CSL and sustainable		

[19] On topics such as early warning systems, improved resilience in livestock systems, sustainable livelihoods, microfinance, water storage, information dissemination, strategies for soil and water use, sustainable management and conservation, risk and local vulnerability management, design of agro ecological corridors in livestock landscapes, implementation of good livestock and agrosilvopastoral practices to improve resilience, registry management.

[20] On CSL themes: nutrition, rotational systems, genetics, silvopastures, forage stocking, livestock and climate indicators.

[21] Idem.

[22] On topics such as early warning systems, improved resilience in livestock systems, sustainable livelihoods, microfinance, water storage, information dissemination, strategies for soil and water use, sustainable management and conservation, risk and local vulnerability management, design of agro ecological corridors in livestock landscapes, implementation of good livestock and agrosilvopastoral practices to improve resilience, registry management.

Indicators	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
and strengthened		CSL practices. 1000 small- and medium-scale producers participating and trained. 7 provinces At least 20% participants are women	strengthening.			practices.		
Outcome 2.2 Access to financing instruments for investments in CSL practices in degraded areas has been improved	Indicator LD-1.iv: Increased investments in integrated landscape management: 1) small grant scheme.	Indicator LD-1.iv: + USD175 000 investment through 1 pilot financing mechanism and 1 existing incentive scheme strengthened.				Indicator LD-1.iv: + USD175 000 investments in SLM in the livestock sector.	PPR Financial reports PIRs	PC Incentives Expert Technicians in charge of promotion.
Output 2.2.1 Financing mechanisms and incentive schemes	The AGROCALIDAD certification system has 4 large-scale	1 pilot financing mechanism (Microfinance Strategy) and	A Technical Assistance and Training on Incentives Plan	Schemes and mechanisms promoted among producers'	120 producers accessed a financing/incentive mechanism to	350 producers in total accessed a financing/incentive	Technical assistance visits for advice on incentives	PC Incentives Consultant

Indicators	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
to support CSL	producers registered. It does not include CSL or CC. There is a credit line for SLM designed, but not operational.	at least 1 existing incentives scheme strengthened (AGROCALIDAD good livestock practices certification system). 470 producers have accessed a financing/incentives mechanism for CSL.	designed. Producers trained on financing mechanisms and incentives scheme through the networks. Operational strategy for financing and incentives mechanisms reviewed. 2 financing mechanisms and a 1 incentives scheme strengthened.	networks. 350 producers received technical assistance in their farm to access CSL mechanisms.	implement CSL management.	mechanism for CSL	and related reports. Financing mechanisms regulation updated. Inter-institutional memorandum of understanding. Database of beneficiary producers.	Capacity Development expert Technicians in charge of promotion.

Indicators	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: Monitoring of GHG emissions and adaptation capacity in the livestock sector.								
Outcome 3.1 Livestock sector GHG emissions in selected areas have been reduced and monitored.	Indicator CCM-5: Carbon monitoring system: 2 (forest mapping) Emission factors in the livestock sector for national inventory: 0	Indicator CCM-5: Carbon monitoring system: 3 (compiling and analysis of information on carbon stocks)[23]. Emission factors in the livestock sector for national inventory: 1 proposal	Indicator CCM-5: 3 (compiling and analysis of information on carbon stocks)		Indicator CCM-5: 3	Indicator CCM-5: 3 1 proposal for emission factors in the livestock sector to be considered in the national GHG inventory	PPR PIR Third national Communication	PC Emission Monitoring Specialist Directorate of Mitigation - MAE
Output 3.1.1 Measurement of GHG emissions reduction	There are institutions trained to provide livestock activities data. Annual surveys. National	One GHG emissions monitoring system working in selected areas. MAE is trained to	Technicians selected and trained. Selection of pilot areas.	Monitoring structure designed and established. Measurement and reporting protocols designed and	Measurement and reporting protocols tested. GHG emissions monitoring system	Variables processed and analysed with the related tool (e.g. IPCC software, web based NAIIS)	PPRs Third National Communication	PC MAE provincial directions and

[23] It refers to a GHG emissions monitoring system at sectorial level, applied in selected provinces or areas.

Indicators	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
	communications to the UNFCCC are based on Tier1 of IPCC guidelines. This does not allow to measure CSL practices effect.	prepare national communications based on Tier2 of IPCC guidelines. There are emissions factors by systems, management practices and climatic zones.		established.	applied.	MAE team in charge of preparing national communications trained. Development of emission factors specific by system management practices and climatic zones.	Report on measurement protocol and specific emissions factors.	technicians Directorate of Mitigation - MAE
Outcome 3.2 Adaptation capacity of the livestock sector has been monitored[24].	The JICA Project developed an adaptation capacity M&E tool in Ecuador. The tool hasn't been tested.	The JICA monitoring tool for monitoring adaptive capacity in the livestock sector has been tested and evaluated.	The JICA tool adapted to the livestock sector.	JICA tool tested in Project intervention areas. First monitoring data on adaptive capacity obtained and systematized.	JICA tool evaluated and adjusted.	JICA tool tested and evaluated in the livestock sector	JICA tool Data systematization JICA tool evaluation reports PPR	PC Direction of Adaptation – MAE CC Adaptation Consultant

[24] It refers to adaptation capacity of project selected areas, which is expected to improve through actions under Component 2 (30,000 hectares under CSL). This output is liked to Output 2.1.

Indicators	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
							PIR	
Output 3.2.1 Tool for monitoring adaptive capacity in the livestock sector.	Tool developed by the JICA project but not implemented. National need for monitoring the adaptive capacity.	The JICA adaptive capacity monitoring tool operational and tested (in the livestock sector)	Detailed analysis on the vulnerability of the livestock sector JICA Tool adjusted to the livestock sector and Project intervention areas	Tool pilot, monitoring, data collection and first systematization	Implementation. Continuous monitoring. Proposal for the adjustment of the JICA Tool at national level (in the livestock sector)	Implementation. Continuous monitoring. JICA Tool assessed in the livestock sector.	JICA Tool Data systematization JICA tool evaluation reports PPR PIR	PC Direction of Adaptation – MAE MAGAP provincial directions and technicians

Indicators	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: Project Management, Monitoring and Evaluation and Knowledge Management								

Indicators	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 4.1 Project implemented. Lessons learned and best practices have been documented and disseminated.		The project has been executed with a results based management approach. Project sustainability has been ensured.	33% progress in project target achievement	66% progress	85% progress	Project targets achieved Project evaluated. Sustainability demonstrated.	PIR PPRs Mid-term Evaluation Final Evaluation Final Project Report	PC FAO
Output 4.1.1 Project management, monitoring and evaluation system		Project Operational Unit functioning. Procedures established and fulfilled M&E system operational.	2 biannual reports (1 PPR and 1 PIR)	2 biannual reports (1 PPR and 1 PIR) Mid-Term Evaluation Tracking Tools completed (mid-term)	2 biannual reports (1 PPR and 1 PIR)	2 biannual reports (1 PPR and 1 PIR) Final Project Evaluation Tracking Tools completed (final)	Project national consultants reports Project management system and records MAE and MAGAP management system	PC FAO External evaluators
Output 4.1.2	There is no online	Mechanism for	Practices and learning shared	Practices and	Practices and	Practices and	No. of users	PC

Indicators	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
Project knowledge management system	platform for systematization of information on training and CSL. MAGAP is creating a virtual training platform	knowledge systematization and sharing. Online platform operational, linking users, systematizing lessons learned and good livestock practices and providing training.	with all beneficiaries, implementing units of Ministries and associated academies/institutes Coordination with MAGAP for using its platform. MAGAP online platform applied to project requirements	learning shared Information systematized for the platform 5 themes per province uploaded to the platform 5 trainings developed for the platform	learning shared Information systematized for the platform 5 themes per province uploaded to the platform	learning shared Information systematized for the platform 5 themes per province uploaded to the platform Preparation of the "*Implementation of the CSL approach in Ecuador, lessons learned and replication potential*" report.	registered on the platform No. of themes and training in the platform Platform online with the information generated Report on lessons learned and replication potential	Communication Consultant FAO

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 Council comments:

Council Comments	Responses
Germany's comments	
1. We recommend to revise the number of farmers that should be trained (Part I, Project Framework, point 2.1.1) since the stated number (280) appears too small in order to restore 35,000 ha of degraded grassland.	The number was increased to 1000 during project preparation, thanks to a more detailed assessment of direct beneficiaries. Hectares have been refined to be 30,000 has.
2. In the same section, point 2.1.3 mentions the development of an online knowledge platform to disseminate lessons learned for livestock management. It is recommended to integrate this function into the existing platform developed by the Agrarian Revolution Schools (ERAs), so as not to create additional platforms that could confuse users.	The recommendation was addressed in developing the project document. The project results framework has been revised to address the STAP's, Council Members' and GEFSEC's comments. The Project now includes a Component 4: Project Management, Monitoring and Evaluation and Knowledge Management. Output 4.1.2: Project knowledge management system will systematize and make public the information generated by the Project. Project experiences, best practices and lessons learned will be disseminated, including successes and failures. The information will be uploaded on the online platforms of MAGAP and MAE. In PY1 the Project will coordinate with MAGAP the use modality of its online platform to disseminate project results. Information on project practices and learning will be uploaded. In PY2 mid-term Project results will be systematized and published on the platform. Also, the project will select in coordination with Decentralized Autonomous Governments (DAGs) five relevant themes per province, which will be published as articles in the platform. Five online courses on CSL will be developed. In PY3 five additional themes, as well as Project learning, will be uploaded.
3. In addition to the Second National Communication to the UNFCCC, Part II, A.2 should also include the National Climate Change Strategy, which outlines the core of Ecuador's CC-related activities until 2025.	The recommendation was addressed in developing the project document. The National Climate Change Strategy has been included. It is described under Section 1.1 of the Project Document and is the baseline for incorporating the CLS approach into the policies (Component 1). See also Appendix 1 of the Project Document.

4. Part II, Section B.2, Component 2 mentions that the "potential of up-scaling of the project is enormous" without clarifying how such scaling-up can be achieved. Thus, the full project proposal should describe clearly what measures are necessary to ensure the project results being replicated and the scaling-up being financially feasible.	The potential for replication of the project is high given its complementarity with national and provincial policies and programs. The development of the CSL 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 the entire territory of the selected provinces. The Project includes measures for ensuring that the project results could be replicated. The measures are: • Early involvement of project stakeholders, from project design to project implementation. Government and civil society actors have participated in the project preparation workshops. They have known the project scope, activities included and non-included. • The NAMA will have a sectorial policy approach (livestock sector), and will promote the participation of livestock producers from the whole country. The financing mechanisms supported by the Project will further contribute to amplifying the practices developed in the context of the Project. • Project visibility: during full project implementation, the information about project achievements and results will be actively communicated and disseminated by MAE and MAGAP. This communication strategy will incentivize other beneficiaries to participate in other CLS initiatives in the country. • Lessons learnt: Project progress reports will have a section on lessons learnt which will be registered by future replication. • Learning curve and economy of scale: human talent involved in the project will require decreasing time to implement CSL initiatives. CLS at national level will allow expanding activities, reducing costs and incrementing feasibility. • The detailed monitoring and evaluation of the interventions carried out on the 30,000 ha will provide insights and lessons learnt for replication at scale. This detailed explanation has been incorporated in Section 5.6 of the Project Document.
5. In Part II, Section B.2, Component 3, under GEBs, it is recommended to specify whether the amount of CO2 to be sequestered in silvopastoral and agroforestry systems is indicated in annual values or values for the entire project duration. In the latter case, the values appear to be too small.	This issue was corrected in the Project Document. Kindly see Section 2.5 of the Project Document for updated values.
6. The research undertaken with regard to related initiatives in B.6 is recommendable. Nevertheless, in the case of the GIZ programme, GESOREN, it should be added	Point taken. FAO has been informed that GESOREN completed its cycle in Ecuador in 2013.

that the programme also works on adaptation and mitigation issues, including their relation to sustainable agriculture and livestock management. The programme's experience in the province of Tungurahua can be particularly useful for the development of incentive schemes for climate-smart livestock practices.	
7. It is highly recommended that FAO coordinate this project with MAGAP's Unit for International Cooperation, which was recently tasked with coordinating all CC-related activities within the Ministry of Agriculture.	Taking note of the recommendation, the project preparation team and FAO Ecuador liaised with the International Cooperation Office of MAGAP. This Office has been actively involved in the final project design. As well, representatives of this Office participated in the validation workshop of the project design phase (PPG), allowing for full coordination with FAO, and MAE.

Responses to GEFSEC comments

Review Criteria	Questions	GEFSEC comments	Responses
Recommendation at PIF Stage	Items to consider at CEO endorsement/approval.	1. CC-M: At CEO endorsement, it is expected that detailed estimation of the GHG emissions impact of the project will be provided, taking account of CO2, CH4 and N2O emissions, along with the assumptions and methodology used for these estimations. These estimations should detail in particular the resulting balance between carbon sequestration and avoided emissions on one hand, and potential CH4 and N2O emission increase due to production increase on the other hand.	Detailed estimates, including direct emissions and changes in carbon stocks were produced and are presented in Section 2.5 of the Project Document. They were generated by modeling emissions under business-as-usual and project scenarios using GLEAM (GLEAM is explained under Section 2.1 of the Project Document.). National statistics and expert knowledge were the major sources of information used in the process.
Recommendation at PIF Stage	Items to consider at CEO endorsement/approval.	2. CC-M: At CEO endorsement please clarify how the project will avoid redundancy of funding and activities between GEF funded activities and baseline funded	Baseline activities were scrutinized during full project preparation, in close collaboration with MAGAP and MAE. Project activities are designed with thorough attention to additionality. With regard to MICCA, this Programme is no longer active in Ecuador.

		activities, in particular concerning the potential overlap between the FAO MICCA programme.	

Responses to STAP comments

STAP Comment	Response
1. The outputs and outcomes are defined clearly, although some of the outcome indicators appear to target what will be achieved instead of what will be measured. STAP recommends for the project developers to include appropriate outcome indicators in the full proposal.	The recommendation was addressed in developing the project document. Outcome indicators have been revised in line with the CCA, CCM, and LD tracking tools. See Table B of the CEO Endorsement request, and Appendix 1 of the Project Document.
2. The project proponents indicate gender approaches will be used throughout the project intervention an initiative that STAP supports. However, STAP recommends detailing further what gender strategies, or approaches, will be used. For example, it would be useful to detail how capacity building (component 1) will integrate gender into livestock management, and how men's and women's coping mechanisms to climate change will be mainstreamed in component 1 and 2.	The recommendation was addressed in developing the project document. Gender equality and gender mainstreaming at institutional and community levels have been included. The Project will promote timely participation of women beneficiaries in all Project activities through: i) the generation of income opportunities for female-led households, especially under Component 2 (incentives and access to financial instruments to invest in Climate-smart livestock (CSL) practices); ii) specific technical assistance for women beneficiaries that request one of the current incentives at national level; iii) women participation in the creation of local small- and medium-scale producers networks (see Output 2.1.2); iv) promotion of participation of women in project trainings, meetings and technical assistance (at least 20% of female of community leaders and/or producers); v) mainstreaming a cross-cutting gender approach in the Land Use and Development Plans (LUDPs) and the CSL management strategy; 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. See Appendix 1 and Section 5.1 of the Project Document.
3. STAP notes from the Project Framework (cf. Output 1.2 and Footnote 5) that the project intends to introduce types of innovative SL/WM practices at field level. The footnote lists 'rotational systems of grazing management'. While many livestock and rangeland ecologists continue to promote rotational grazing, there is a compelling and increasing body of evidence that	Point taken. This was addressed in the project document. As shown by Briske et al., fixed rotational grazing is particularly infective when growing periods are erratic. It is however more effective when growth is constant. For this reason the practice may be relevant in the highlands and in the Amazonian provinces, where regularity of climatic conditions allows for planned grazing, i.e. systems in equilibrium.

STAP Comment	Response
such practices may not be superior, especially by comparison with herders' strategies (see Point 4 below). A good review paper on this is by D.D. Briske and colleagues (2008): Rotational grazing on rangelands: reconciliation of perception and experimental evidence. Rangeland Ecological Management 61:3-17 [http://allenpress.com/pdf/i1551-5028-61-1-3.pdf]. The conclusion to the paper states that continued advocacy for rotational grazing as the only superior strategy be questioned and that evidence-based conclusions be explicitly incorporated into rangeland management. STAP agrees with this and urges the proponents of this project to follow this advice.	Project preparation has thus identified a range of technical options that will be put in place for pasture restoration and efficiency gains. They include planned grazing, but also pasture improvement through introduction of legumes, silvopastoral systems and water management. On each production unit, pasture restoration, practices will be selected and tailored according to specific local conditions. They will be coupled with improvements regarding animal husbandry: feed balancing, animal health and manure management. It is through these suites of interventions that the project will achieve the adaptation, mitigation and productivity objectives of Climate Smart Livestock production.
4. The proposal appears to assume that livestock producers have insufficient knowledge, or experience, to impart sustainable livestock management that can reduce greenhouse gas emissions (section B.1 : definition of barriers), as well as adapt to climate change in the target region. STAP suggests supporting further this statement with more explicit details, and references (published or rigorous local unpublished evidence).	The analyses conducted during full project preparation worked with a range of small- and medium-scale farmers, selected with replicability and representativeness criteria in the seven targeted provinces of the project. The analyses demonstrated that those farmers noted the negative effects provoked by climate change on livestock productivity, but have no in-depth understanding of impact pathways and thus do not manage to face these impacts. They consequently suffer economic losses. Those small and medium-scale farmers also responded to surveys provided by the project preparation team regarding GHG emissions. The surveys reflected that farmers are rarely aware of the GHG emissions generated by their livestock sector. They tend to think more in terms of productivity and production gains over, and short term gains. In consequence, the project preparation team and FAO have identified three knowledge barriers, detailed in Section 1.1 of the Project Document, that are expected to be addressed by the Project: i. Barrier #4: Lack of knowledge on the level of vulnerability and related mechanisms, of the livestock sector in the face of CC. There are interesting initiatives in the country to determine the vulnerability to climate change. However none of them focuses on the livestock sector, although the sector is recognized as an important rural livelihood. Therefore an important remaining barrier is the lack of knowledge of the level of vulnerability facing the sector with his level of resilience; ii. Barrier #5: Lack of awareness among livestock producers regarding GHG emissions and mitigation potential. Although some producers have agreed to the adoption of good practices, they do so on the basis of the co-benefits they generate. This implies that the lack of capabilities in the areas of climate change mitigation is

STAP Comment	Response
	a barrier to the full implementation of sustainable livestock; iii. Barrier #6: Inadequate practices generate impacts on soil, GHG emissions and adaptation capacities at local level. Livestock, especially in vulnerable areas, is becoming an environmentally unsustainable activity due to the implementation of inadequate production practices generating impacts on soils, and increased GHG emissions.. The loss of vegetation and soil quality have generated degradation, reducing livelihoods and threatening food security of small and medium scale livestock producers,. Poverty is a key factor that emphasizes the depletion and excessive exploitation of natural resources and accelerates the land degradation process.
5. Additionally, it would be valuable to integrate local knowledge of livestock management and climate risk throughout component 2. This could include local knowledge on sustainable natural resource management (water and land); sustainable husbandry; and, combining meteorological information with indigenous knowledge. For the latter, the project developers may wish to refer to the following paper based on participatory experiences from sub-Saharan Africa - "Integrating meteorological and indigenous knowledge based seasonal climate forecasts for the agricultural sector, IDRC. 2010 http://web.idrc.ca/uploads/user-S/12882908321CCAA_seasonal_forecasting.pdf	The recommendation was addressed in developing the project document. At field level, the Project will promote best practices that are based on methodologies already used in the provinces (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 livestock practices, and land 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. The stakeholders' ownership of SLM/climate-smart livestock practices will contribute to the sustainability of the acquired capacities. Kindly see Appendix 1 and Section 5.4 of the Project Document.
6. With regard to global environmental benefits, STAP recommends defining the methodology that will be used to estimate the carbon emissions from grassland management practices. For example, will the FAO's sustainable grassland management methodology referred to in B.2, and currently being tested in China, be used in this project? If so, STAP suggests adding this information under the global environmental benefits section. Similarly, STAP recommends detailing the methodologies for all of the expected benefits.	The recommendation was addressed in developing the project document. FAO has used the Global Livestock Environmental Assessment Model (GLEAM) to calculate the GHG emissions (baseline and project targets). GLEAM is GIS-based model, that models the main livestock production activities and related resource flows in all countries, and covers the main 11 global livestock commodities, and predominant production systems. The system boundary is from cradle to retail point. Regarding impact categories, the current GLEAM version (v1.0) focuses on GHG emissions. Kindly see more in: FAO (2013) Greenhouse Gas Emissions from Pig and Chicken Supply Chains: A Global Life Cycle Assessment, Michael MacLeod, Pierre Gerber, et al.; and FAO (2013) Greenhouse Gas Emissions from Ruminant Supply Chains: A Global Life Cycle Assessment, by Carolyn Opio, Pierre Gerber et al. , Rome. GLEAM was also used to estimate adaptation benefits, through increased productivity. GLEAM is explained under Section 2.1 of the Project Document. The global environmental and adaptation benefits are detailed in Section 2.5 of the Project Document.

STAP Comment	Response
7. Furthermore, for CCA and LD activities, the tracking and monitoring of soil carbon is desirable (component 2). To control soil erosion, increase the presence of soil organic matter, reduce land degradation, and increase adaptive capacity to climate change, farmers invest in a number of practices including soil and water conservation. Additionally, FAO may wish to consider monitoring systems for husbandry that are farmer-friendly, and monitor rigorously the impacts of land use on soil quality. Providing land managers these tools can strengthen their ability to identify appropriate land management practices. To this effect, FAO may wish to rely on the following resource that outlines the use of bio-indicators for evaluating the impacts of land management on soil quality Rousseau, L. et al "Soil microfauna as indicators of soil quality and land use impacts in smallholder agroecosystems of western Nicaragua". Ecological Indicators 27 (2013).	The recommendation was addressed in developing the project document. Sustainable livestock practices, practice change and their effects on soil carbon, vegetation cover, productivity, vulnerability, and emissions (i.e. as entailed by the Climate-smart livestock approach) will be monitored: (i) on the 30000 ha where the project will invest (book keeping and technical support of extension workers), (ii) in the context of the NAMA, which includes a monitoring and evaluation plan, (iii) under Component 3, which will deliver a monitor system for adaptation and mitigation in the livestock sector; and (iv) at project level through the mitigation and adaptation monitoring plans developed in the context of Component 4. Kindly see Appendix 1, and Section 2.4 of the Project Document.
8. Section B.1. provides a basic description of the vulnerability context for Ecuador, and for the target regions. STAP suggests detailing further the vulnerability description for each of the seven provinces. It also would be good to define explicitly the vulnerability criteria used to select the target regions (provinces). This information may assist with refining further the interventions, contributing towards the proposed global environmental and adaptation outcomes mainly strengthening adaptive capacity to climate change for sustainable livestock management. These elements also may help define more comprehensively the adaptation benefits supported by the SCCF. For example, what indicators will be used to measure and monitor adaptation benefits?	This was done to the extent possible. Unfortunately data availability is extremely limited and the PPG budget would not allow for primary data collection on a large sale. This information will be collected during PY1. It should however be noted that this shortage of baseline information does not really affect project design since the principles of adaptation (efficiency gains and resilience), and their practical implementation are known and have driven project design. Adaption practices include, for example the improved capacity and management of water points, the development of fodder banks, the introduction of legumes in pasture and the sequestration of carbon in soils, to improve water and nutrient retention. The expected adaptation benefits and their indicators are detailed under Section 2.5 of the Project Document, and are in line with the SCCF CCA Tracking tool. Further, FAO has identified other indicators that are tailored to the project's objective and in line with the CLS approach.
9. Furthermore, STAP suggests defined explicitly the characterization of current and future vulnerability to climate change. The only place the proposal describes the way in which climate change is a source of risk for the	Climate scenario are associated with high uncertainty and are of course resolution in the region. It is thus not possible to use them for detailed project design. Instead, the project is developed on the concept of "no regret" options, i.e. interventions that generate positive outcomes for a range of climate trajectories.

STAP Comment	Response
livestock sector is in pages 11 and 12. However, this appears to be a limited description, with no quantification, and no indication of how this might change in the future. Thus, it would be useful to define further the following aspects: What climate change scenarios are appropriate? How will they be generated and evaluated? In this regard, STAP recommends defining clearly the additional cost reasoning. It also would be valuable to define what analysis has been carried out (or is proposed) to identify the consequences of future climate change? Perhaps the project developers may wish to rely on climate change tools to complement the information provided in the proposal on vulnerability and climate change projections. One source is the World Bank's climate change portal - http://sdwebx.worldbank.org/climateportal/index.cfm	The additional reasoning has been refined and is detailed in subsections 1.1 c) and 1.1 d) of the Project Document.
10. It would be useful to clarify further the basis of the determination of the proposed project activities to be NAMA's. For example, was this proposed by the host country?	The NAMA was proposed by the host country and its objective was elaborated during full project preparation. The full NAMA document will be elaborated through a multi-stakeholder process during project implementation.
11. It would be valuable to define explicitly how the proposed approaches are climate smart with regards to reducing vulnerability to climate variability and change. STAP recommends referencing published documents, or rigorous unpublished documents, when defining further these approaches.	The recommendation was addressed in developing the project document, see in particular Section 2.1 and 2.5 of the Project Document. Reference is made to the FAO Sourcebook on Climate-Smart Agriculture (http://www.fao.org/docrep/018/i3325e/i3325e00.htm).
12. STAP suggests clarifying whether the interventions proposed take the form of technical assistance - there is no investment proposed. Is technical know-how the only bottleneck for adoption of particular practices?	The recommendation was addressed in developing the project document. Component 2 is an investment component. See Table B of the CEO Endorsement. See its description in Section 2.4 of the Project Document and budget under Appendix 3 of the Project Document.
13. STAP would be grateful if the following points also were addressed - a) Page 9, last paragraph & page 10, first paragraph: Share of agriculture & livestock in GDP appears to have declined, and yet the next sentence claims that "the primary sector has grown rapidly in the	In Ecuador, the primary sector includes: agriculture and livestock, fisheries, forestry, oil and mining. In 1985-2005, during a period of low global crude oil prices, agriculture and livestock represented a 13% of the total GDP/year. In 2008, during the global oil price peak, agriculture and livestock still were 10.7% of the total GDP/year, raking only secondly after oil production – which due to the global context grew dramatically. Ecuador is in a crude oil producer country

STAP Comment	Response
last decade". What does it mean to say that the "sector registered an annual GDP variation of 5%"? In what way is the livestock sector essential for food security?; and, b)The linkages between interventions for mitigation and for adaptation need to be defined more clearly, and it would be desirable to further substantiate the way in which mitigation interventions could contribute to resilience.	and exporter. The primary sector continued growing, and in 2011 reached +5%. The recommendations were addressed in developing the project document. a. Livestock makes a substantial contribution to food security: Directly through the provision of energy, protein and key micronutrients to rural population, especially among those living in marginal lands and having limited alternatives to source food. It also contributes indirectly to food security, (i) through its positive effect on agriculture productivity (traction, manure) and (ii) by representing a source of income to rural households. b. these linkages and the concept of climate smart livestock are explained in detail in Sections 2.1 and 2.5 of the Project Document
14. The table in section B.4. is very useful. STAP suggests specifying the role of each stakeholder in relation to the project components. This information is provided for the national and regional livestock associations, but not for the rest of the stakeholders.	The recommendation was addressed in developing the project document. Please see Table 5 in subsection 1.1.3 of the Project Document.
15. The FAO may wish to refer to the Adaption Fund proposal in Ecuador "Enhancing resilience of communities to the adverse effects of climate change on food security, in Pichincha Province and the Jubones River basin". Both projects target the region of Loja. Perhaps the opportunity exists to share learning between these two proposals. The Adaptation Fund proposal can be found at this link - http://www.adaptation-fund.org/sites/default/files/ECU%20AF%20full%20project%20document%20revised%20%20clean%2082011+annexes.pdf	The recommendation was addressed. The project "Enhancing resilience of communities to the adverse effects of climate change on food security" is in its third year of execution. FAO will: i) develop synergies with the abovementioned project; ii) take into account lessons learned. During project preparation FAO and the World Food Program explored possibilities for generating synergies to ensure the sustainability of best methodological practices, knowledge management and learning exchange between the two projects, with a special focus on activities implemented in the Loja Province.
16. If the opportunity exists to share indicators for the proposed adaptation benefits and global environmental benefits, STAP encourages FAO to do so.	The indicators are detailed in Section 2.5, as discussed above. The project will carry out detailed monitoring of the implemented SLM/CSL practices. Results will be evaluated for effectiveness on GEBs, adaptation to climate change, productivity and economic viability. Lessons learned will be fed into global networks, such as the FAO facilitated Global Agenda for Sustainable Livestock. In PY4 a report on *"Implementation of the CSL approach in Ecuador, lessons learned and replication potential"* will be prepared with FAO technical support.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS[25]

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

NA

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

PPG Grant Approved at PIF: 100,000			
Project Preparation Activities Implemented	***GEF/LDCF/SCCF/NPIF Amount ($)***		
	Budgeted Amount	***Amount Spent To date***	***Amount Committed***
5011 Salaries Professional (Parent)	0		
5012 Salaries General Service (Parent)			
5013 Consultants (Parent)	71,660	52,375	14,000
5020 Locally Contracted Labour			
5014 Contracts (Parent)			
5021 Travel (Parent)	16,021	8,656	
5023 Training (Parent)	12,319	2,505	
5024 EXPENDABLE PROCUREMENT			
5028 General Operating Expenses (Parent)		2,852	
Total	**100,000**	**66,388**	**14,000**

[25] 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)

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)

NA