



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: Innovative Use of a Voluntary Payment for Environmental Services Incentive Program to Avoid and Reduce Greenhouse Gas Emissions and Enhance Carbon Stocks in the Highly Threatened Dry Chaco Forest Complex in Western Paraguay			
Country(ies):	Paraguay	GEF Project ID: ¹	5668
GEF Agency(ies):	CI	GEF Agency Project ID:	
Other Executing Partner(s):	Guyra Paraguay, Secretariat of the Environment	Submission Date:	3/23/2016
GEF Focal Area (s):	Climate Change	Project Duration(Months)	48
Name of Parent Program (if applicable):	N/A	Project Agency Fee (\$):	198,145
	<ul style="list-style-type: none"> ➤ For SFM/REDD+ <input type="checkbox"/> ➤ For SGP <input type="checkbox"/> ➤ For PPP <input type="checkbox"/> 		

A. FOCAL AREA STRATEGY FRAMEWORK²

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Cofinancing (\$)
CCM-5 (select)	To promote conservation and enhancing carbon stocks through sustainable management of land use, land-use change, and forestry	Good management practices in LULUCF adopted in forest landscapes Restoration and enhancement of carbon stocks in forests Greenhouse gas emissions avoided and carbon sequestered	GEF TF	2,201,614	2,117,460
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
Total project costs				2,201,614	2,117,460

B. PROJECT FRAMEWORK

¹ Project ID number will be assigned by GEFSEC.

² Refer to the [Focal Area Results Framework and LDCF/SCCF Framework](#) when completing Table A.

Project Objective: To promote conservation and enhancing carbon stocks through sustainable management of land use, land-use change, and forestry

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Cofinancing (\$)
<p>Component 1: Establishment of a PES Incentive Scheme for Carbon for the Dry Chaco Forest Complex</p>	<p>Inv</p>	<p>Outcome 1.1: A multi-sectoral and cross-institutional PES Incentive Scheme for Carbon is established and fully functional by the end of the project</p> <p>Outcome 1.2: At least 21 million tCO₂e emissions from deforestation and forest degradation in priority areas effectively avoided or reduced through natural ecosystems conservation and/or sustainable land use practices</p> <p>Outcome 1.3: Key government ministries and secretariats adopt and mainstream low carbon development,</p>	<p>Output 1.1.1: Design of the legal, institutional, and technical aspects of the PES Incentive Scheme for Carbon</p> <p>Output 1.1.2: PES Incentive Scheme for Carbon is formally institutionalized. Institutional arrangements are negotiated and agreed to operationalize PES Incentive Scheme for Carbon</p> <p>Output 1.1.3: Promotional video on PES Incentive Scheme for Carbon for the Dry Chaco Forest Complex</p> <p>Output 1.2.1: Landowners in priority areas are identified and enrolled in the PES Incentive Scheme</p> <p>Output 1.2.2: Sustainable forest and land management practices to reduce emissions and/or enhance carbon stocks in promoted and adopted by participating landowners through the PES Incentive Scheme for Carbon</p> <p>Output 1.3.1: Assessment of institutional capacities of key government bodies needed to mainstream low carbon</p>	<p>GEF TF</p>	<p>1,328,379</p>	<p>897,460</p>

		ecosystem accounting, and sustainable landscape management into their operations and budgets	development through avoided deforestation and enhancement of carbon stocks Output 1.3.2: Institutional reforms undertaken to implement PES Incentive Scheme for Carbon, in particular the preparation of carbon certificates and monitor eligibility and technical requirements to maintain the legitimacy of the certificates.			
Component 2: Field assessments and monitoring mechanisms for the certification of carbon	Inv	Outcome 2.1: Priority areas for carbon sequestration identified and carbon stocks and additional values will be assessed Outcome 2.2: Monitoring scheme implemented in all landholdings enrolled in the PES incentive program	Output 2.1.1: Priority areas of the Dry Chaco Forest Complex with high carbon stocks are identified and mapped Output 2.1.2: Assessments of carbon stocks in priority areas Output 2.2.1: Carbon sequestration monitoring and certification tools and their associated best practice methodologies per internationally-accepted standards are identified and adapted to the Paraguayan context, as well as piloted in the Dry Chaco Forest Complex Output 2.2.2: Greenhouse gas emission certificates prepared and traded for at least 21 million tCO ₂ e issued to landholders enrolled in the PES Incentive Scheme for Carbon	GEF TF	413,911	605,000
Component 3: Institutional	Inv	Outcome 3.1: Significantly	Output 3.1.1: Assessment and	GEF TF	349,711	375,000

strengthening and training		improved understanding and knowledge on various aspects of carbon assessments, certification and monitoring processes, and sustainable forest and land management best practices for carbon sequestration	identification of priority technical training needs and target stakeholders, including stakeholder knowledge baseline			
		Outcome 3.2: Implementation of the PES Incentive Scheme for Carbon is fully supported by an Internet-based National Online Platform	Output 3.1.2: Training program directed to key stakeholder representatives on the design, implementation, and monitoring of REDD+ projects			
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
Subtotal					2,092,000	1,877,460
Project management Cost (PMC) ³				GEF TF	109,614	240,000
Total project costs					2,201,614	2,117,460

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	SEAM	In-kind	450,000
GEF Agency	Conservation International Global Conservation Fund	In-kind	160,000
CSO	Guyra Paraguay/Paraguay Forest Conservation Project	Cash	850,000
Others	World Land Trust	In-kind	280,000
Others	World Land Trust	In-kind	12,460
Private Sector	Swire Pacific Offshore	In-kind	280,000

³ PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

Private Sector	Swire Pacific Offshore	In-kind	75,000
Private Sector	Smith & Werber	In-kind	10,000
Total Co-financing			2,117,460

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

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in \$)		
				Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
CI	GEF TF	Climate Change	Paraguay	2,201,614	198,145	2,399,759
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Grant Resources				2,201,614	198,145	2,399,759

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

² Indicate fees related to this project.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)
International Consultants	90,000	0	90,000
National/Local Consultants	877,000	0	877,000

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

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

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF⁴

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

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

A.3 The GEF Agency’s comparative advantage: N/A

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

⁴ For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter “NA” after the respective question.

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

The 100,000 ha in the PIF have been increased to 300,000 ha during PPG to allow for the 21 million tons of CO₂e emissions to be avoided or reduced from deforestation or forest degradation or through enhanced carbon stocks.

Although the project target is to avoid the emission of 21 million tCO₂e, we also recognize that the success rate of similar projects is between 20-25%, depending on stakeholder enrollment and permanence in the program, amount of CO₂ effectively certified, and amount of carbon credits sold in the market. Taking this success rate into consideration, we estimate that the amount of avoided emissions that will be directly attributable to and trackable by the project will be at least 5.25 million tCO₂e (see tracking tool).

On co-financing, the \$6 million compensation in PIF is not actually co-financing but rather expected revenues from the trade of carbon certificates. The Paraguayan Institute on Environmental Law and Economics estimated that landowners are likely to accept approximate US\$100 per hectare to maintain forest cover on their properties as this is that amount that they could realistically receive through alternative land uses. Taking into account that 300,000 ha is the target area of forest land to be certified, this represents approximately US\$30 million of potential revenue. However, the institute makes the assumption that only 40% of this amount would be successfully paid for 10% of the certified forests per year. Over five years, this comes to the estimated US\$ 6 million. Overall, on a per hectare basis, this comes to US\$20 per ha per year. The calculation is as follows:

$$300,000 \text{ ha} \times 100 \text{ US\$/ha/year} \times 40\% \times 10\% \times 5 \text{ years} = \text{US\$6 million.}$$

$$\text{US\$6,000,000} / 300,000 \text{ ha} = 20\text{US\$/ha.}$$

Of this US\$ 6 million of generated revenues, land owners may use a portion to pursue sustainable forest and land management best practices that will be demonstrated by the project.

- A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks: Risk added: Non realization of the carbon market and expected financing. Mitigation: A Contingency Plan (see Appendix 13 in the ProDoc) has been developed and this outlines a number of alternative options to ensure the project is successful as possible, should the voluntary carbon market not be realized.

- A.7. Coordination with other relevant GEF financed initiatives N/A

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

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

To ensure that the project meets the Stakeholder Engagement Policy, the Indigenous Peoples Policy, and the Gender Mainstreaming Policy of CI's Environmental and Social Management Framework, SEAM and Guyra Paraguay developed three provisional plans during the PPG phase. These plans include preliminary recommendations to ensure stakeholder engagement, ensure the protection of indigenous rights and support their development needs, as well as facilitate and catalyze the integration of gender issues in policy and programme formulation and intervention. During the first three months of project implementation, each of the three provisional plans will be discussed, revised, and validated.

Project preparation was guided by the guidelines set forth in the provisional plans for stakeholder engagement, participation of indigenous peoples, and the mainstreaming of gender issues. The initial activities identified in each of the provisional plans have been assessed to ensure compliance of the planned project activities and to make any necessary adjustments for all phases of the project. During the initial stakeholder engagement phase of the project, the following sectors and stakeholders were contacted:

- Environment: Minister of the Environment, GEF Operational Focal Point, and the institutional team created for the project within SEAM
- Forestry: President of INFONA and the UN-REDD team.
- Local Governments: Meetings with stakeholders including the Governor of Boquerón Department, and Councilor for Mariscal Estigarribia.

- Producers: Environmental Commission of the Rural Association of Paraguay, and ranchers with properties/interests in the project area.
- Indigenous Peoples: President of Paraguayan Institute of Indigenous Peoples.
- Finance: Sustainable Finance Roundtable

With regard to consulting with indigenous peoples, the project coordinated with the National Joint Program on UN-REDD+ implemented by SEAM, Federation for the Self-Determination of Indigenous Peoples, and INFONA in order to learn lessons from that project's consultation process and the materials used to support the consultation process. The SEAM, in its role as a member of the National Technical Team for the project, has been asked to provide the information leaflets used for the Joint National Program on the REDD+ socialization process. The project will be socialized following procedures established by Federation for the Self-Determination of Indigenous Peoples and using the guidelines in the proposed protocol for FPIC consultations prepared by 30 indigenous organizations. These documents are part of the Plan for the Participation of Indigenous Peoples prepared under the PPG (Guyra Paraguay, 2015). The Yshir have actively participated in the design of the project and have experience with forest conservation and the voluntary carbon market in a property close to Agua Dulce. During project preparation, representatives of Paraguayan Institute of Indigenous Peoples and SEAM were consulted regarding the most appropriate ways to incorporate indigenous interests within all phases of the project. Additional consultations will be held during project implementation with support of representatives from the Paraguayan Institute of Indigenous Peoples and SEAM, as required, and the participation of Federation for the Self-Determination of Indigenous Peoples will also be sought in these processes.

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

The project will finance the incremental cost of activities associated with providing financial incentives to private landowners under a market structure based upon the conservation of forest areas. While not a requirement or specific objective of the project, the Government of Paraguay is committed to this because it will help incentivize landowners to meet the legally-required minimum (25%) of native forests on their properties, thereby preventing and reducing emissions of greenhouse gases from deforestation and forest degradation. A major benefit that will facilitate these actions is the expected revenue generation of US\$6 million from the trade of carbon certificates.

A payment for environmental services scheme can empower low-income groups while allowing them to earn money from reforestation and conservation. This is a crucial since many local communities and indigenous groups earn their living from the use of forests and natural resources. Sustainable forest management activities supported by the project will help create other long-term benefits. For example, certain forest and land management best practices may increase the adaptability and resilience of these ecosystems thereby reducing individuals' vulnerability to climate change. This project may also lead to positive ripple effects such as an overall increase in economic development and more long term economic stability. The project will generate additional benefits including the transfer of knowledge and technology to citizens of Paraguay.

This project will develop activities that benefit all members of the community. Women and indigenous groups will be given particular attention to ensure that they receive equal benefits. Please see 4.I, 4.J, and the appendices on the Provisional Gender Inclusion Strategy, the Provisional Involvement Plan for Indigenous Peoples, and the Provisional Stakeholder Engagement Plan for further information about the inclusion and benefits to local communities, indigenous peoples, and women.

The gender perspective will be incorporated into the project through a number of different approaches and complementary activities such as a) preparation of a rural participatory diagnosis with a gender and intercultural approach to identify gender roles within medium- and large-scale agriculture, and in terms of access to land, livestock and soy production, management of natural resources, and access to the membership and leadership level in organizations (cooperatives, producer organizations, associations), b) design and implementation of training

programs on gender issues for all stakeholders in the project, c) the inclusion of gender-sensitive indicators in project work matrixes with qualitative and quantitative monitoring data disaggregated for men and women, iv) an assessment of gender roles in relation to the Dry Chaco ecosystem, in the short term and long-term, and benefits of the implementation of the project on men and women, and identify ways to minimize disparities, and v) promote the participation of women in all training and technical assistance (extension, credit, research) activities, both as institutional stakeholders and beneficiaries.

Gender equity will be sought in the project team, and in the appropriate participation of women's organizations in the different workgroups and project consultations, ensuring that the studies and evaluations that are undertaken incorporate gender perspectives and do not counteract the interests of women. Similarly, consideration has been given to highlighting and strengthening the role of women in protecting biodiversity and the preservation of traditional knowledge. To achieve this, training sessions with feedback will be held with groups of indigenous women and small-scale women farmers

As the implementing agency, CI/Guyra Paraguay will seek to work in partnership with the Ministry of Women, for the effective incorporation of gender issues into the processes of identification, description and preparation of activities throughout the life of the project. Particular consideration will be given to the differences in gender roles in the economic activities in the project area, and their links to changes in land-use. Data will be compiled, analyzed and reported separately by gender, allowing measurement of the impact of participation of women in the project. There has been a first approach with the Ministry of Women to identify the Ministry's activities within the project area, and to create synergies and implement a coordinated program of work with the relevant sections of the Departmental Governments.

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

The cost-effectiveness of this project lies not only in a comparison of the investment costs of the alternatives considered, but also in terms of its strategic complementary to other initiatives planned or underway, the return on investment, and likelihood of success.

A comparison of the costs of the project alternatives was not carried out during project preparation, and in the absence of this, any comparison would be superficial since the necessary quantitative data and information is not available. Notwithstanding, the cost-effectiveness of the proposed project is being made on its own merits. An indicator of cost-effectiveness is the US\$ 6 million of cash that this project will raise during project implementation through the expected sale of the carbon certificates.

The cost-effectiveness of this project also lies in the project's contribution to creating a mechanism by which funds can be raised over the long-term to finance on-going carbon certifications. Aside from the investments in trainings and institutional reforms, the estimated average cost of preparing carbon certificates is a relatively low US\$ 30,000 per certificate. This project estimates that it will need to prepare approximately 28-30 certificates to certify forest lands that could possibly generate an estimated 700% return on investment for the expected compensation of US\$ 6 million.

C. DESCRIBE THE BUDGETED M &E PLAN:

Project monitoring and evaluation will be conducted in accordance with established Conservation International and GEF procedures by the project team and Conservation International (the GEF Project Agency). The project's M&E plan will be presented and finalized at the project inception workshop, including a review of indicators, means of verification, and the full definition of project staff M&E responsibilities.

M&E Roles and Responsibilities

The Project Management Unit on the ground will be responsible for initiating and organizing key monitoring and evaluation tasks. This includes the project inception workshop and report, quarterly progress reporting, annual progress

and implementation reporting, documentation of lessons learned, and support for and cooperation with the independent external evaluation exercises.

The project Executing Agency is responsible for ensuring the monitoring and evaluation activities are carried out in a timely and comprehensive manner, and for initiating key monitoring and evaluation activities, such as the independent evaluation exercises. Key project executing partners are responsible for providing any and all required information and data necessary for timely and comprehensive project reporting, including results and financial data, as necessary and appropriate.

The Project Steering Committee plays a key oversight role for the project, with regular meetings to receive updates on project implementation progress and approve annual work plans. The Project Steering Committee also provides continuous ad-hoc oversight and feedback on project activities, responding to inquiries or requests for approval from the Project Management Unit or the Executing Agency.

Project Assurance: Conservation International will play an overall assurance, backstopping, and oversight role with respect to monitoring and evaluation activities. Conservation International's Internal Audit will be responsible for contracting and oversight of the planned independent external evaluation exercises at the mid-point and end of the project.

M&E Components and Activities

The Project Monitoring and Evaluation (M&E) Plan will follow agreed policies and procedures that meet GEF requirements as well as those by Conservation International. The cost of implementing this budget is estimated at approximately US\$221,000, of which approximately US\$61,000 will be financed using GEF resources.

Inception workshop: Project inception workshop will be held within the first three months of project start with the project stakeholders. An overarching objective of the inception workshop is to assist the project team in understanding and taking ownership of the project's objectives and outcomes. The inception workshop will be used to detail the roles, support services and complementary responsibilities of Conservation International as the GEF Project Agency and the co-Executing Agencies (SEAM and Guyra Paraguay).

Inception workshop Report: The Executing Agency should produce an inception report documenting all changes and decisions made during the inception workshop to the project planned activities, budget, results framework, and any other key aspects of the project. The inception report should be produced within one month of the inception workshop, as it will serve as a key input to the timely planning and execution of project start-up and activities.

Project Results Monitoring Plan: A Project Results Monitoring Plan will be developed by the Project Agency, which will include objective, outcome and output indicators, metrics to be collected for each indicator, methodology for data collection and analysis, baseline information, location of data gathering, frequency of data collection, responsible parties, and indicative resources needed to complete the plan. Appendix IV provides the Project Results Monitoring Plan table that will help complete this M&E component.

In addition to the objective, outcome, and output indicators, the Project Results Monitoring Plan table will also include all indicators identified in the Safeguard Plans prepared for the project, thus they will be consistently and timely monitored. The monitoring of these indicators throughout the life of the project will be necessary to assess if the project has successfully achieved its expected results.

Baseline Establishment: in the case that all necessary baseline data has not been collected during the PPG phase, it will be collected and documented by the relevant project partners within the first year of project implementation.

GEF Focal Area Tracking Tools: The relevant GEF Focal Area Tracking Tools will also be completed a) prior to project start-up, b) prior to mid-term review, and c) at the time of the terminal evaluation.

Project Steering Committee Meetings: Project Steering Committee (PSC) meetings will be held annually, semi-annually, or quarterly, as appropriate. Meetings shall be held to review and approve project annual budget and work plans, discuss implementation issues and identify solutions, and to increase coordination and communication between key project partners. The meetings held by the PSC will be monitored and results adequately reported.

Conservation International (GEF Project Agency) Field Supervision Missions: Conservation International will conduct annual visits to the project country and potentially to project field sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Oversight visits will most likely be conducted to coincide with the timing of PSC meetings. Other members of the PSC may also join field visits. A field visit report will be prepared by Conservation International staff participating in the oversight mission, and will be circulated to the project team and PSC members within one month of the visit.

Quarterly Progress Reporting: The Executing Agency will submit quarterly progress reports to the Conservation International as the GEF Project Agency, including a budget follow-up and requests for disbursement to cover expected quarterly expenditures.

Annual Monitoring Report: The Executing Agency will prepare an annual plan to monitor progress made since project start and in particular for the reporting period (July 1st to June 30th of the following year). The Annual Monitoring Report will summarize the annual project result and progress. A summary of the report will be shared with the Project Steering Committee.

Final Project Report: The Executing Agency will draft a final report at the end of the project.

Independent External Mid-term Review: The project will undergo an independent Mid-term Review within 30 days of the mid-point of the grant term. The Mid-term Review will determine progress being made toward the achievement of outcomes and will identify course correction if needed. The Mid-term Review will highlight issues requiring decisions and actions, and will present initial lessons learned about project design, implementation and management. Findings and recommendations of the Mid-term Review will be incorporated to secure maximum project results and sustainability during the second half of project implementation.

Independent Terminal Evaluation: An independent Terminal Evaluation will take place within six months after project completion and will be undertaken in accordance with CI and GEF guidance. The terminal evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The Executing Agency in collaboration with the PSC will provide a formal management answer to the findings and recommendations of the terminal evaluation.

Lessons Learned and Knowledge Generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation through lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. There will be a two-way flow of information between this project and other projects of a similar focus.

Financial Statements Audit: Annual Financial reports submitted by the Executing Agency will be audited annually by external auditors appointed by the Executing Agency.

The Terms of References for the independent evaluations will be drafted by Conservation International in accordance with GEF requirements. The procurement and contracting for the independent evaluations will be handled by CI's General Counsel's Office. The funding for the evaluations will come from the project budget, as indicated at project approval.


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)
Cristina Morales	GEF OFP (Paraguay) and Minister	SECRETARIAT DEL AMBIENTE	01/02/2014

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
Miguel Morales, Conservation International		03/03/2016	Orissa Samaroo	7033412550	osamaroo@conservation.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).
See Appendix 1 in the Project Document

Objective:	To avoid and reduce greenhouse gas emissions from deforestation and enhance carbon stocks in the Dry Chaco Forest Complex through the establishment of a stakeholder Payment for Environmental Services (PES) Incentive Scheme for Carbon Sequestration
Main Project Indicators:	<p>By the end of the project:</p> <ul style="list-style-type: none"> • At least 21 million tons of verified CO₂e emissions avoided or reduced from deforestation or forest degradation or through enhanced carbon stocks • A PES Incentive Scheme for Carbon is established and fully operational • At least 15% increase in the knowledge of target stakeholder representatives on various aspects of PES Incentive Scheme

Expected Outcomes and Indicators	Project Baseline	Key Project Targets	Expected Outputs and Indicators
Component 1: Establishment of a PES Incentive Scheme for Carbon for the Dry Chaco Forest Complex			
<p>Outcome 1.1: A multi-sectoral and cross-institutional PES Incentive Scheme for Carbon is established and fully functional by the end of the project</p> <p>Outcome indicator 1.1: <i>A PES Incentive Scheme for Carbon is established and fully operational. The program will oversee the certification of forest lands under the PES Incentive Scheme for Carbon under Law 3001/06. The program will be characterized as multi-sectoral with inter-institutional arrangements for collaboration and coordination</i></p>	<p>Paraguay's economy is based on primary production, livestock and forestry. Given the high global demand and the national policy of promoting the production of commodities and the agricultural and livestock industry, there are strong incentives to deforest the Dry Chaco Forest Complex.</p> <ul style="list-style-type: none"> • Law 3001/06 on the Valuation of and Compensation for Environmental Services provides the legal basis for creating incentives for avoided greenhouse gas emissions and enhancement of carbon stocks • However, there are no incentives in Paraguay that help landowners to make alternate development decisions and undertake sustainable land and forest management best practices 	<p>A PES Incentive Scheme for Carbon is established and fully operational</p>	<p>Output 1.1.1: Design of the legal, institutional, and technical aspects of the PES Incentive Scheme for Carbon</p> <p>Indicator 1.1.1a: <i>Project Inception Workshop on PES incentive schemes and carbon sequestration</i></p> <p>Indicator 1.1.1b: <i>Validated and approved PES feasibility study</i></p> <p>Output 1.1.2: PES Incentive Scheme for Carbon is formally institutionalized. Institutional arrangements are negotiated and agreed to operationalize PES Incentive Scheme for Carbon</p> <p>Indicator 1.1.2a: <i>Memoranda of agreement among stakeholder institutions to collaborate and coordinate efforts to implement the PES Incentive Scheme for Carbon</i></p> <p>Indicator 1.1.2b: <i>Staffed and operational institutional structures and mechanisms in Mariscal Estigarribia</i></p> <p>Indicator 1.1.2c: <i>PES Certificates that reflect the avoidance of an estimated 21 million metric tCO₂e</i></p>

	that will avoid greenhouse gas emissions and/or enhance carbon stocks		<p>Indicator 1.1.2d: <i>Lessons learned on early implementation of PES Incentive Scheme for Carbon</i></p> <p>Output 1.1.3: Promotional video on PES Incentive Scheme for Carbon for the Dry Chaco Forest Complex</p> <p>Indicator 1.1.3: <i>Promotional video shown at key fundraising venues</i></p>
<p>Outcome 1.2: At least 21 million tCO₂e emissions from deforestation and forest degradation in priority areas effectively avoided or reduced through natural ecosystems conservation and/or sustainable land use practices</p> <p>Outcome indicator 1.2: <i>Amount of verified metric tons of CO₂e emissions avoided or reduced from deforestation or forest degradation or through enhanced carbon stocks</i></p>	<ul style="list-style-type: none"> To date approximately 840,000 tCO₂e emissions avoided or reduced from deforestation and degradation has been achieved under the Paraguay Forest Conservation Project in the Dry Chaco While there are a number of efforts to promote sustainable forest management, there are none that are specifically targeted to avoiding deforestation for greenhouse gas emissions. Neither are there procedures or mechanisms to monitor these efforts. 	<p>At least 21 million tons of verified CO₂e emissions avoided or reduced from deforestation or forest degradation or through enhanced carbon stocks</p> <p>At least 5.25 million tCO₂e attributable to the GEF investment (considering a 25% project success rate)</p>	<p>Output 1.2.1: Landowners in priority areas are identified and enrolled in the PES Incentive Scheme</p> <p>Indicator 1.2.1: <i>Number of participating and registered landowners in the PES Incentive Scheme for Carbon</i></p> <p>Output 1.2.2: Sustainable forest and land management practices to reduce emissions and/or enhance carbon stocks in promoted and adopted by participating landowners through the PES Incentive Scheme for Carbon</p> <p>Indicator 1.2.2: <i>Monitoring reports of certified lands reflect the use of best practices</i></p>
<p>Outcome 1.3: Key government ministries and secretariats⁵ adopt and mainstream low carbon development, ecosystem accounting, and sustainable landscape management into their operations and budgets</p> <p>Outcome indicator 1.3:</p>	<ul style="list-style-type: none"> To some extent, all key government bodies have allocated budget lines to pursue development that can be deemed low-carbon or facilitate sustainable forest and land management. However, these operations are not sufficiently, if at all, coordinated with other ministries and institutions. Paraguay has weak legal 	<p>Policies and plans targeted to avoided deforestation and enhancement of carbon stocks are under implementation</p>	<p>Output 1.3.1: Assessment of institutional capacities of key government bodies needed to mainstream low carbon development through avoided deforestation and enhancement of carbon stocks</p> <p>Indicator 1.3.1: <i>SWOT and gap analysis of Paraguay's forest governance, with particular reference to avoided deforestation, enhancement of carbon stocks, and participation in carbon trading markets</i></p> <p>Output 1.3.2: Institutional reforms undertaken to implement PES Incentive Scheme for Carbon, in particular the preparation of carbon certificates and</p>

<p><i>Implementation of government policies and plans directly contribute to sustainable landscape management best practices that result in avoided deforestation and enhancement of carbon stocks</i></p>	<p>frameworks, including gaps in legislation, overlaps of regulations, and a lack of harmonization between national and local legislation.</p> <ul style="list-style-type: none"> • There is insufficient institutional and absorptive capacity of the government due to very limited financial resources. 		<p>monitor eligibility and technical requirements to maintain the legitimacy of the certificates. This output includes setting up the regional office in the Dry Chaco Forest Complex region (in Mariscal Estigarribia)</p> <p>Indicator 1.3.2a: <i>Staffed and operational institutional structures and mechanisms in Mariscal Estigarribia</i></p> <p>Indicator 1.3.2b: <i>Revised operational plans and budgets that catalyze the implementation of best practices under the PES Incentive Scheme for Carbon</i></p>
<p>Component 2: Field assessments and monitoring mechanisms for the certification of carbon</p>			
<p>Outcome 2.1: Priority areas for carbon sequestration identified and carbon stocks and additional values will be assessed</p> <p>Outcome indicator 2.1: <i>Number of priority areas identified and the value of their respective carbon stock assessed</i></p>	<ul style="list-style-type: none"> • Carbon stocks and other environmental services within priority areas have only been assessed in less than 0.01% of the Dry Chaco Forest Complex • Priority areas for certifying forested lands under Law 3001/06 for carbon sequestration through avoided deforestation remain to be identified 	<p>At least 30 priority areas for certification under the project are identified and the value of their respective carbon stock assessed</p>	<p>Output 2.1.1: Priority areas of the Dry Chaco Forest Complex with high carbon stocks are identified and mapped</p> <p>Indicator 2.1.1: <i>Final reports and maps of each priority area</i></p> <p>Output 2.1.2: Assessments of carbon stocks in priority areas</p> <p>Indicator 2.1.2a: <i>Final reports of field assessments and results disseminated and validated by landowners, government, civil society, and other key stakeholders</i></p> <p>Indicator 2.1.2bⁱ: <i>PES Certificates that reflect the avoidance of an estimated 21 million metric tCO₂e</i></p>
<p>Outcome 2.2: Monitoring scheme implemented in all landholdings enrolled in the PES incentive program</p> <p>Outcome indicator 2.2: <i>Number⁶ of priority areas identified and the value of their respective carbon</i></p>	<ul style="list-style-type: none"> • Despite the capacity building activities currently underway in Paraguay, there remains weak institutional capacity to assess and monitor climate change issues until a sufficiently large enough critical mass of expertise is developed and available. • The regional institutions with responsibility for the Chaco have insufficient financial, human, and technical resources to adequately 	<p>A monitoring scheme is implemented in all landholdings enrolled in the PES incentive program</p>	<p>Output 2.2.1: Carbon sequestration monitoring and certification tools and their associated best practice methodologies per internationally-accepted standards are identified and adapted to the Paraguayan context, as well as piloted in the Dry Chaco Forest Complex</p> <p>Indicator 2.2.1: <i>Best practice manuals are prepared and used in learning-by-doing training workshops</i></p> <p>Output 2.2.2: Greenhouse gas emission certificates prepared and traded for at least 21 million tCO₂e issued to landholders enrolled in the PES Incentive Scheme for Carbon</p>

	fulfill their mandates and responsibilities.		Indicator 2.2.2ⁱⁱ: PES Certificates that reflect the avoidance of an estimated 21 million tCO _{2e}
Component 3: Institutional strengthening and training			
<p>Outcome 3.1: Significantly improved understanding and knowledge on various aspects of carbon assessments, certification and monitoring processes, and sustainable forest and land management best practices for carbon sequestration</p> <p>Outcome indicator 3.1 <i>High percentage of target stakeholder representatives reflects an average increase of at least 15% in knowledge on various aspects of PES Incentive scheme</i></p>	<ul style="list-style-type: none"> • Knowledge about carrying out carbon assessments and preparing greenhouse gas emission certificates exists in Paraguay, but this is limited to a handful of individuals and institutions. • Despite the capacity building activities currently underway in Paraguay, there remains weak institutional capacity to assess and monitor climate change issues until a sufficiently large enough critical mass of expertise is developed and available. • The regional institutions with responsibility for the Chaco have insufficient financial, human, and technical resources to adequately fulfill their mandates and responsibilities. • Access in Paraguay to knowledge or information about best practices for sustainable land management is limited. Although best practice guidelines have been developed, there is little dissemination of the information due to data being scattered, the absence or weakness of extension services, and the long distances and lack of road infrastructure in many areas of the Chaco. 	At least 15% increase in the knowledge of target stakeholder representatives on various aspects of PES Incentive Scheme	<p>Output 3.1.1: Assessment and identification of priority technical training needs and target stakeholders, including stakeholder knowledge baseline</p> <p>Indicator 3.1.1: <i>Assessment report on training needs and target stakeholders</i></p> <p>Output 3.1.2: Training program directed to key stakeholder representatives on the design, implementation, and monitoring of REDD+ projects</p> <p>Indicator 3.1.2a: <i>Training program developed and implemented</i></p> <p>Indicator 3.1.2bⁱⁱⁱ: <i>Best practice manuals are prepared and used in learning-by-doing training workshops</i></p> <p>Indicator 3.1.2c: <i>Number of relevant stakeholder representatives actively participating in training workshops and their test scores on understanding of best practices for monitoring and certification for carbon sequestration and other relevant project issues</i></p> <p>Indicator 3.1.2d: <i>Participants in training workshops represent an appropriate balance in the diversity of their social location, e.g., indigenous representatives, gender, local communities, private sector, NGOs, government planners and decision-makers, among others.</i></p>
<p>Outcome 3.2: Implementation of the PES Incentive Scheme for Carbon is fully supported by</p>	<ul style="list-style-type: none"> • Information management by SEAM is outdated and relies on old systems, with many procedures handled by paper. Data and 	National PES Online Platform fully functional	<p>Output 3.2.1: Internet-based National Online Platform for sharing carbon certification information as well as providing marketplace functionalities for carbon certificates</p>

<p>an Internet-based National Online Platform</p> <p>Outcome indicator 3.2: <i>National Online Platform is operating cost-effectively and efficiently.</i></p>	<p>information that could be used for the PES Incentive Scheme for Carbon exists in different institutions, but sharing is ad hoc and negotiated on a case-by-case basis. There are no mechanisms or arrangements in place to facilitate the online trading of carbon certificates under PES.</p>		<p>Indicator 3.2.1: <i>Transactions under the PES Incentive Scheme for Carbon carried through the National Online Platform</i></p>
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ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

Response to GEF Sec comments

Component 1: Please describe the steps to be undertaken by the project to make proposed PES scheme usable through the REDD+ program as well, highlighting the critical aspects of the PES and REDD+ requirements that are similar.

Response: To address the issues related to REDD + in the project we have considered (and will reinforce during project implementation) methodologies developed by the UNREDD Program, including the analyses of the legal framework and recommended improvements needed to strengthen the enabling conditions to use PES in Paraguay. The project will take into account lessons learned from the REDD+ program as well coordinate with related activities currently underway, in particular the REDD+ Strategy under preparation, in order to ensure the project's strategic value. This includes demonstrating best practices for sustainable forest management that were promoted under the UN REDD Program.

With the acknowledgement of the influence of international investments in DCFC, the project is expected to define recommendations for legislations or for adherence to the existing ones through increased awareness of the land owners.

Response: This issue has been given careful consideration, and the project will work closely with the Secretariat of Environment (SEAM) as well as other stakeholders (in particular local and indigenous communities) in order to propose the required amendments to the PES legal framework. Indeed, Paraguay established the PES scheme through Law 3001/06, and its regulations created a mechanism to certify avoided deforestation, which is at the aim of the UNREDD Program. During the process of certification there are clear provisions that deal reasonably with the requirements of having social and environmental safeguards. The main difference between the PES scheme and the UNREDD Program is that the PES scheme does not consider the carbon reductions or carbon storage to grant certification. To make the PES scheme usable under the UNREDD Program it will be necessary to include the carbon measurement in the process of certification through regulations. Law 3001/06 would not be an obstacle for that purpose. However, the project may determine that certain legislative amendments or by-laws may be necessary to operationalize and institutionalize certification for PES and avoided deforestation.

Component 2. As the GEF Sec perceives no added value from taxonomic assessments of soil organisms and other biota, it expects the paragraph A.1.4.17 and all the related activities to be removed from the project by the CEO Endorsement Request.

Response: All relevant references have been removed. However, payments for environmental services also include conservation values of globally significant biodiversity and as such are reflected in the "plus" of REDD. Biodiversity conservation is therefore a co-benefit of avoided deforestation of native forests in that critical habitats for endangered endemic species are protected.

Assessment of socio-economic variables is encouraged and deemed valuable for the project results. However, the value of cultural assessments is unclear. Please describe what the cultural assessments would entail. GEF Sec is in support of such assessments only to an extent where it contributes or demonstrates sustainability of project outcomes mainly carbon storage.

Response: These recommendations have been incorporated into the design of the project, benefitting from the recently published "Mapping of Multiple Benefits derived from REDD+" by the Joint National Program of REDD+. The project will play very careful attention to socio-economic priorities by consulting with and engaging stakeholders throughout the design of the PES Incentive Scheme, which began during the PPG phase. Early considerations of socio-economic issues informed the project design, and provisional stakeholder engagement plans (in particular for indigenous peoples and gender mainstreaming) were prepared. These will be discussed during project inception and finalized through a stakeholder validation workshop.

Component 3. It is suggested to utilize the PPG state to further define the participants, specific operations and knowledge products to be developed in this component. Please limit the capacity building activities to incentive schemes and land-use practices that demonstrate direct contribution to carbon benefits. Biodiversity

conservation related capacity building is expected to be funded through different financial resource. Such benefits are expected to be monitored throughout the project life.

Response: During the PPG, provisional plans to engage stakeholders, in particular indigenous people and to mainstream gender priorities were developed in consultations with the affected stakeholders and/or their representatives. The project will include a training program that will be open to many stakeholders in order to build up a stronger baseline of adherents on the value of the payment for environmental services, in particular to local socio-economic development priorities. These will be carried out by expert facilitators through learning-by-doing activities that foster critical thinking. The capacity building activities will be targeted to strengthening that set of systemic, institutional, and individual capacities necessary to improve and institutionalize a cost-effective regime for applying PES. Taking into account a number of other project activities underway or planned in Paraguay, capacity building activities will be carefully coordinated among each other in order to create synergies and realize cost-effectiveness.

More detailed calculations in accordance with one of the standard methodologies (VCS) will be expected at CEO Endorsement.

Response: Calculations were based on the VCS methodologies and standards, and took into account lessons learned from national experience with other REDD+-related projects such as those developed by Guyra Paraguay. Annex 10 outlines the carbon assessment and forest inventory methodology

By CEO endorsement request specific details on which component outputs/outcomes will benefit from coordination and how such coordination will be undertaken is expected.

Response: Coordination is a fundamental requirement for the success of the project. The project document outlines the linkages of various baseline projects and initiatives, which include the PAS Chaco and the Paraguay Forest Conservation projects, as well as the UNREDD program and Green Commodities project. Section 4G outlines the particular linkages with the present project.

Coordination with these projects will take place through a variety of mechanisms. The first is through the Project Board and SEAM, which oversees the implementation of environmental projects in Paraguay. The Project Board serves the function of ensuring and facilitating coordination among the suite of environmental projects in order to reduce overlap and projects that work against each other. Activity 1.2.1 of the project will focus on consultations to strengthen collaboration and coordination among various stakeholder institutions in order to have a streamlined, transparent, and cost-effective process that fosters synergies.

Please use the PPG period to identify and secure CI co-financing that is appropriate for the project

Response: See project budget and co-financing letters.

Response to STAP review

Monitoring and measuring will use advanced satellite imagery, but it is not clear what happens if agreed conservation areas are subsequently harvested in say 20-30 years' time, although leakage is to be discussed as the project proceeds

Response: Among the criteria for certification over the long-term is the maintenance of the forests. Harvesting after 20-30 years may be an acceptable option for secondary forest stands if the harvesting is to be undertaken sustainably. The best applicable and sustainable forest management practice for the certified forest must be determined on a site-by-site basis. The design of the incentive scheme must also take into account the timings of the compensations. For example, the once the carbon certificates are sold, the revenues could be held in a trust fund, with the amounts and timings of the disbursements made to the landowner in such a way to ensure long-term conservation. Output 1.1 will take into account these and other important risks, benefiting from lessons learned and best practices from similar projects and initiatives. With respect to leakage, the project could create an increase of unintended pressure on other forested areas in Paraguay. It is for this reason that efforts to avoid deforestation must include multiple strategies, and most importantly to promote alternatives to deforestation. The project will undertake regular monitoring of deforestation events in the wider region of the Dry Chaco Forest Complex, comparing trends with the baseline data.

In component 2, it is stated that the geographic scope of the project will be determined by a multi-criteria analysis, using carbon storage as the main ecosystem service. Please elaborate on what type of analysis will be used and how the different components (e.g., biodiversity value, cultural services, etc.) will be selected and weighted. Are the necessary data available? Will a GIS be used? How will the analysis incorporate land owners who have expressed interest in participating in the project? Does the location of their plots coincide with the areas of highest tree cover, as indicated by the AVHRR continuous field satellite data? How will consistency and compatibility be ensured among the different scales of data? Is Landsat or SPOT or higher resolution (cloud free) imagery available for further delineation?

Response: The geographic scope of the project was determined by various surveys, assessments, and consultations with a number of stakeholders during the PPG phase, and outlined in section 2A and Annex 10. A multi-criteria analysis was used for the delimitation of the study area, the following factors were considered: SEAM Resolution # 614 where Paraguayan Chaco ecoregions were set; the canopy of forests according to the analysis by the University of Maryland, considering that the area with the highest canopy cover and greater amount of carbon stored, the areas occupied by indigenous peoples and deforested areas were also considered (up to 2014). Also, Satellite Images Landsat 8 were used, as well as the AVHRR-Tree Cover products. All data were used in the Coordinate System UTM Zone 21 South Datum WGS1984. For a first approach, the canopy cover (Tree Cover) product AVHRR sensor was used to identify the areas of greatest density of coverage. Using carbon storage as the main ecosystem service, all the data required for the development of this analysis were available, also with expert consultation and GIS tools.

Through a participatory process with local authorities during the PPG phase, the project defined the methodology for the selection of the properties within the project area that could be part of the incentive program with a minimum of criteria compliance.

Identification of priority areas: (Output 2.1). During the PPG, a preliminary area of 4,521,915 ha was defined to help guide the program of incentives. This includes Cerrado forest, sand dunes, palm savanna and water bodies with potential for conversion to agro-livestock use. Annex 9 presents the methodology used to select the area of project intervention. The area also meets the criteria of SEAM Resolution No 614/2013 which defines ecoregions within the Paraguayan Chaco; using vegetation parameters as an indicator of high carbon stocks; areas occupied by indigenous peoples, and areas deforested by 2014

The project will define through a participatory process with the authorities, the methodology for the selection of the properties within this area that could be part of the incentive program. The minimum criteria that a site must meet will be:

- Location of the property within the project area; including the spatial relationship with biological corridors and the distance to protected areas;
- Compliance with national legislation: land tax, environmental licenses, land-use plan;
- Owner consent that the property can be used as a demonstration project area and for biological inventories to be undertaken in sample plots.

- Owner commitment to protect and conserve certified forests for at least the period of validity of the certificate (five years).

Assessment of carbon stock, biodiversity value, and cultural services in the priority areas (Output 2.2)

Carbon stock: Carbon stocks will be estimated through a combination of an analysis of vegetation cover and of carbon stocks in each vegetation type. The objective of the project is to mitigate for 21 million tCO_{2e} of emissions through sustainable land-use mechanisms. Landowners participating in the project can certify their forests under Law 3001/2006. One requirement is to submit a technical report on the extent of natural forests or plantations. This requires an inventory plot of 60 m x 60 m in every 5000 ha as per the National Forest Inventory methodology (FAO 2014, Walker et al. 2012). The plot is also used to estimate carbon stocks, and once the Certificate of Environmental Services has been issued, this will be added to the total of carbon sequestration until the goal of mitigating 21 million tCO_{2e} is achieved. Priority will be given to private properties and indigenous communities of more than 5000 ha.

Forest Inventory: During project implementation permanent inventory plots will be established following the National Forest Inventory methodology (FAO 2014, Walker et al. 2012). Annex 3 presents the methodology to be used for the evaluation of carbon and the forestry inventory.

Method used to select priority areas (A.9). To define the project area, Landsat 8 satellite images and AVHRR-TreeCover products were used. All data were managed in the UTM Zone 21 South, Datum WGS1984 coordinate system. Images with displacements were corrected using reference Landsat 5 TM and 7 ETM+ images from the USGS, which have L1T level corrections (ground-level corrections). The L1T data provide systematic radiometric and geometric precision through the incorporation of ground control points, while using a digital elevation model (DEM) for topographic precision. These tools were all important for determining the project area as, after consultation with experts, it was considered important to take into consideration the tree-top-carbon ratio, available through TreeCover. Socio-economic aspects were also considered, to take into account other types of land tenure and to evaluate possible carbon – deforestation relationships.

Definition of the project area and forest cover. Within the project area, land-cover data for 1987 were evaluated, revealing a predominance of natural cover in almost the entire area. Sand dune formations, Cerrado, palm savannas and Dry Chaco forest were all in a nearly pristine state, with agriculture covering just 0.2% of the project study area.

In general, Payments for Ecosystem Services (PES) is a promising approach. However, several recent studies have indicated that effects could ultimately be detrimental to the environment and local communities due to distortion of the local economy and risks of self-selection [scientific contributions follow]. How will this project design the PES scheme to avoid pitfalls such as rent seeking, unequal bargaining power, and the volatility of payments (the latter being of particular importance given the uncertainties related to the carbon market)? Please also consider how quantifiable evidence will be generated over the life of the project, which can tangibly link these schemes to generation of global environmental benefits.

Response: There are risks associated with the payment for ecosystem services concept, and these have been outlined in section 4L, which also describes risk mitigation measures. Very careful consideration to these risks and other unintended consequences of the project will be given, and why this project will include exchanges with similar schemes in the region to learn from past lessons and identify best practice options for the design of the Incentive Scheme for Carbon. The various project analyses and recommendations will be peer reviewed independently and revised to strengthen their quality, in particular output 1.1.

Regarding the volatility of payments (and, consequently, the volatility of certified areas), it has to be considered that most of the buyers of certificates of environmental services will be landowners that have not complied with Art. 42 of Law 422/73 and that use their plots of land for agriculture, and in order to continue having its environmental licenses and avoid penalties and criminal prosecution they will do their best efforts to maintain the benefits of having the certificates. It also has to be considered that the alternative for them is to reforest with native species (and lose agricultural land) or work without complying with the law.

The project proposes the strengthening of the regime of the environmental services taking into consideration the legal and institutional framework defined by Law No. 3001/06 and its corresponding regulations. The project aims to promote the establishment of a pilot incentives scheme which will include as an innovation, carbon certificate. The incentive scheme will be implemented by the SEAM through its Department of Environmental Services. The project

will promote both the demand and supply of environmental services, providing an opportunity for participation by landowners based in the CBCS.

Law 1561/00 that creates the SEAM considers the establishment of an environmental fund. Several proposals have been prepared to this end, but have never been implemented. Through the project and in coordination with other initiatives, it is expected that the PES incentive scheme will, in the medium-term, be incorporated through the carbon certificates. The project will support the revision of the existing proposals and contribute to the consolidation of a proposal that includes a PES incentive scheme as a key instrument to balance the costs of ecosystem conversion and their conservation and sustainable management; costs which currently favor ecosystem conversion. The piloting of demand and supply of PES incentive scheme by the project will provide the basis of a fund for the effective implementation of the incentive scheme, with competitive prices compared to those obtainable through land-use change (less the costs of that change). Furthermore, this pilot experience will help define the type or form of financing that could be provided by the fund for activities that generate income from sustainable management of the remaining forests. The project will work closely with the SEAM and local stakeholders to propose the amendments to the legal framework required to improve implementation of the Payment for Environmental Services scheme.

The quantifiable evidence under this project will be limited to the indicators described in the GEF Tracking Tool for Land Use, Land Use Change, and Forestry, i.e., calculations of metric tonnes CO₂e per hectare per year and the indicators in the Results Framework, e.g., number of hectares of forests certified. These will be generated through output 2.5 that will develop monitoring and certification tools and methodologies for assessing carbon sequestration. These will also be generated by activity 2.6.4 that will carry out the annual verification of carbon certificates.

In the section of GEBs (A.1.6), it is stated that the project will contribute to increased adoption of low-carbon development approaches through technology transfer, market transformation, and enabling livestock and other agricultural practices which are complementary or additional to the traditional slash-and-burn practices used to clear lands for cattle ranching; however, no specific alternative technologies or practices are identified. STAP looks forward to further elaboration on this point.

Response: The project is focused on land-use, land-use changes, and forestry (LULUCF), and as such will contribute to the transformation of Paraguay's market to facilitate important financial transfers as compensation for sequestering of carbon to reduce greenhouse gas emissions. An important part of the project is to demonstrate best practices, but these will largely be those applicable to the landowners in order that they elect socio-economic activities to compensate for the lost income from deforesting their properties. The compensation that would receive from the sale of the carbon certificates would help finance the switching costs to these alternative development approaches.

The choices of best practices were not selected during the PPG as these must be site and landowner specific. For example, best practice ranching for large numbers of livestock, e.g., greater than 5,000 head of cattle may not be an appropriate best practice for ranchers with just 100 head of cattle or different species of livestock. Output 2.4 specifically addresses this issue by identifying and demonstrating relevant best practices, building on lessons learned and experiences from other parts of Paraguay and the wider region.

may be appropriate for ranchers with large number of livestock To address this recommendation, good practices have been identified that contribute to a low carbon development, reducing deforestation these mechanisms for identification and systematization of sustainable land-use practices also that conserve soil, restore and / or enhance coal stocks in the CBCS such as incentives that will be promoted in areas with environmental certification, include certification schemes for basic products and access to new and more profitable markets, including: alignment with the Law of Payments for Environmental Services; Sustainable Forest Management and Conservation Ranching.

Alignment with the Law of Payments for Environmental Services: Law No. 3001/2006 on "Valuation and Payment of Environmental Services" seeks to promote the conservation, protection, recovery and sustainable development of the biodiversity and natural resources of the country, through the valuation and fair, timely and adequate payment for environmental services. The requirements and conditions for certification are:

- The areas destined to the provision of Environmental Services must be additional to the legally-obligated reserve of natural forests under the Forest Law 422/1973;
- In rural properties greater than 20 ha, the extent of natural forest or reforestation with native species should be additional to 25% of the existing forest as of 17 December 1986;

- In rural properties greater than 20 ha, the extent of reforestation with native species should be more than 5% of the area deforested as of 17 December 1986;
- The extent of natural forests or reforestation with native species in rural properties greater than 20 ha.

Sustainable Forest Management: The belief that the Chaco Forest is unproductive has led to development based on the elimination of forest cover. This historical belief sees the forest as an ecosystem without value or importance, and is attested to by deforestation rates, which are monitored on a monthly basis by Guyra Paraguay. To minimize this trend, land-use activities need to be carefully planned, taking into consideration ecological factors and aiming for a sustainable management of natural resources. To this end, it is important to understand the potential that properties have for agricultural use. To develop Sustainable Forest Management, the project will promote alignment with Resolution SFN No. 07/2002.

Conservation Ranching: In the near future the demand for biodiversity-friendly products in both the domestic and international markets will increase. Consequently, businesses should be at the forefront of requirements to be able to access more demanding markets at lower costs. Conservation Ranching and environmentally-friendly labels is one such approach. The criteria and standards for Conservation Ranching in the Chaco (Sforza & Yanosky, 2015) that will be promoted on certified properties are:

Ecosystem Conservation: The ranch should implement a plan to maintain or restore the connectivity of natural ecosystems at the landscape level, taking into consideration the connectivity of habitats at the landscape level; for example through maintaining native vegetation along watercourses, or trees in the middle of pastures and hedgerows along roads. If the ranch has a forest deficit then there is an obligation to implement a conservation program (habitat restoration). In the case of forest corridors functioning as windbreaks, these must not be degraded as that decreases their protective function.

Protecting wildlife: Hunting, harvesting and the extraction and trade of wildlife should be prohibited. However, indigenous groups are allowed to hunt and harvest fauna in a controlled manner, and in areas designated for these purposes under the following conditions:

- The activities do not involve threatened or endangered species;
- Existing legislation recognizes the rights of these groups to hunt or harvest wildlife;
- The hunting and harvesting activities do not have a negative impacts on ecological processes or those important for the sustainability of agriculture or local ecosystems functions;
- The long-term viability of the populations is not affected;
- Hunting and harvesting are not for commercial purposes;
- Sport hunting of certain species is permitted and regulated by the SEAM. The risk of attacks on livestock by predators should be minimized through appropriate livestock management and in collaboration with local environmental authorities or specialist groups.

Environmental requirements: The negative impact of livestock on aquatic ecosystems must be effectively reduced, ensuring that cattle receive adequate food and water within pasturelands, but that there are appropriate barriers between livestock and aquatic ecosystems. The routes by which cattle cross aquatic ecosystems should be carefully selected and managed in ways that minimize the impact. Ranches must have a land-use plan, which identifies and maps the areas intended for:

- Grasslands and other sources of food for livestock;
- Conservation and restoration of ecosystems;
- Restricted and vulnerable areas;
- Other land uses.

Endnote

Law 3001/06 Valuation and Retribution of Environmental Services sets a minimum term of five-year certificates, which can be automatically extended (Art. 4 of the Act). To ensure the protection and sustainable management of forests certified with the support of the project in the longer term, they will review and adjust any legal, technical and market aspects that encourage landowners to maintain forest certification for a period more than five years.

One mechanism to work will be the promotion of certified through the National Stock Exchange. While the enforcement authority progress in the implementation of the Act; due to inconsistencies in Law and gaps in regulations itself, the certificates do not meet the legal requirements to be offered in the international market through the Stock Exchange. The project will support the comprehensive review of the legal gaps and propose mechanisms to ensure transaction certificates on the Stock Exchange.

As an innovation the project will incorporate the evaluation of carbon in forests and develop technical and administrative to become available in the domestic and international market mechanisms. Currently the Act has regulated the valuation and remuneration of general forest ecosystem services, and has established and mechanism for payment for services in the field of national law. The certificates can be traded with owners who do not have the legal area of forests. However this figure is not attractive in the international market where compensation is sought by the carbon emitted.

With innovations in carbon valuation certificates of environmental services, through the issuance of Carbon; Regime Environmental Services will strengthen and promote international transactions. It is hoped that the new regime for carbon certificates, the owners will be attracted to extend the duration of their certifications to the extent required by the market.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS⁷

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

PPG Grant Approved at PIF: 90,263			
<i>Project Preparation Activities Implemented</i>	<i>GEF/LDCF/SCCF/NPIF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
Management and administration	16,214	16,214	0
Legal Advice	6,000	6,000	0
Preparation Coordinator	14,800	14,800	0
Project document editor	11,100	11,100	0
Consultant - Forestry expert	9,600	9,600	0
Consultant - Financial architecture design	4,500	4,500	0
Consultant - Social dimensions and geoprocessing	9,000	9,000	0
Supervision Team - Travel & DSA	19,049	19,049	0
Total	90,263	90,263	0

⁷ 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)
