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Report No: PAD2091

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT PAPER

ON A

PROPOSED ADDITIONAL GRANT

IN THE AMOUNT OF US$12 MILLION

FROM THE GLOBAL ENVIRONMENT FACILITY (GEF)

TO THE

PATRIMONIO NATURAL FONDO PARA LA BIODIVERSIDAD Y AREAS PROTEGIDAS – PNF

FOR A

FOREST CONSERVATION AND SUSTAINABILITY IN THE HEART OF THE COLOMBIAN AMAZON PROJECT

October 12, 2017

Environment and Natural Resources Global Practice
Latin America and the Caribbean

(Exchange Rate Effective September 27, 2017)

Currency Unit	=	Colombian Peso (COP$)
COP$ 2,936.52	=	US$1.00
US$ 0.0003	=	COP$ 1.00

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AATI	Traditional Indigenous Authority Association
AF	Additional Financing
ASL	Amazon Sustainable Landscapes
BAU	Business as Usual
BCR	Benefit-Cost Ratio
CBD	Convention on Biological Diversity
CDS	Sustainable Development Corporations (*Corporaciones de Desarrollo Sostenible*)
CDA	CDS for the Northern and the Eastern Amazon
CDD	Community-Driven Development
CORPOAMAZONIA	CDS for the Southern Amazon
CPF	Country Partnership Framework
DMI	Integrated Management District
ENREDD	National REDD+ Strategy
ESMF	Environmental and Social Management Framework
EX-ACT	Ex-Ante Carbon-balance Tool
FAO	Food and Agriculture Organization
FARC-EP	Revolutionary Armed Forces of Colombia-People's Army
FCPF	Forest Carbon Partnership Fund
FM	Financial Management
GDP	Gross Domestic Product
GEF	Global Environment Facility
GEO	Global Environmental Objective
GHG	Greenhouse Gas
GoC	Government of Colombia
IDB	Inter-American Development Bank
IDEAM	Colombian Institute of Hydrology, Meteorology, and Environmental Studies
IPP	Indigenous Peoples Plan
IPPF	Indigenous Peoples Planning Framework
M&E	Monitoring and Evaluation
MADS	Ministry of Environment and Sustainable Development
METT	Management Effectiveness Tracking Tool
NGO	Nongovernmental Organization
NPAS	National Protected Areas System
NPV	Net Present Value

PA	Protected Area
PCU	Project Coordination Unit
PDO	Project Development Objective
PNF	Patrimonio Natural Conservation Trust Fund (*Patrimonio Natural Fondo para la Biodiversidad Y Areas Protegidas*)
PNN	National Natural Parks Administrative Unit
PNNAFIW	Alto Fragua Indiwasi National Natural Park (*Parque Natural Nacional Alto Fragua Indiwasi*)
PNNPaya	La Paya National Natural Park (*Parque Natural Nacional La Paya*)
PNNSCH	Serranía de Chiribiquete National Natural Park (*Parque Nacional Natural Serranía de Chiribiquete*)
PNNSCHAW	Serranía de Churumbelos Auka Wasi National Natural Park (*Parque Natural Nacional Serranía de Churumbelos Auka Wasi*)
PPSD	Project Procurement Strategy for Development
REDD	Reducing Emissions from Deforestation and Forest Degradation
SA	Social Assessment
SFM	Sustainable Forest Management
SFPMOIA	Orito Indi Ange Sanctuary of Flora and Medicinal Plants (*Santuario de Flora y Plantas Medicinales Orito Ingi Ande*)
SIATAC	System of Environmental Information of the Amazon
SINCHI	Amazon Institute for Scientific Research Sinchi (*Instituto Amazónico de Investigaciones Científicas Sinchi*)
SMByC	Forest and Carbon Monitoring System
TEEB	The Economics of Ecosystems and Biodiversity
TOR	Terms of Reference
UNDP	United Nations Development Programme

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COLOMBIA
FOREST CONSERVATION AND SUSTAINABILITY IN THE HEART OF THE COLOMBIAN AMAZON PROJECT

CONTENTS

ADDITIONAL FINANCING DATA SHEET

Colombia

Additional Financing - Forest Conservation and Sustainability in the Heart of the Colombian Amazon (P158003)

LATIN AMERICA AND THE CARIBBEAN

Environment and Natural Resources

Basic Information – Parent			
Parent Project ID:	P144271	Original EA Category:	B - Partial Assessment
Current Closing Date:	30-Jun-2019		

Basic Information – Additional Financing (AF)			
Project ID:	P158003	Additional Financing Type (from AUS):	Scale Up
Regional Vice President:	Jorge Familiar	Proposed EA Category:	
Country Director:	Gerardo M. Corrochano	Expected Effectiveness Date:	December 22, 2017
Senior Global Practice Director:	Karin Erika Kemper	Expected Closing Date:	June 30, 2022
Practice Manager/Manager	Valerie Hickey	Report No:	PAD2091
Team Leader(s):	Claudia Sobrevila, Adriana Goncalves Moreira		

Borrower				
Organization Name	Contact	Title	Telephone	Email
Patrimonio Natural	Alberto Galán Sarmiento	Director Ejecutivo	57-1-7565602	agalan@patrimonio natural.org.co

Project Financing Data - Parent (Forest Conservation and Sustainability in the Heart of the Colombian Amazon-P144271) (in US$, Millions)							
Key Dates							
Project	Ln/Cr/ TF	Status	Approv al Date	Signing Date	Effectivenes s Date	Original Closing Date	Revised Closing Date
P144271	TF-18478	Effective	8-Dec-2014	21-Jan-2015	02-Mar-2015	30-Jun-2019	30-Jun-2022

Disbursements									
Project	Ln/Cr/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P144271	TF-18478	Effective	US$	10.40	10.40	0.00	4.49	5.91	43.2

Project Financing Data - Additional Financing (Forest Conservation and Sustainability in the Heart of the Colombian Amazon-P158003) (in US$, Millions)

[ ] Loan [X] Grant [ ] IDA Grant

[ ] Credit [ ] Guarantee [ ] Other

Total Project Cost: 12.00 Total Bank Financing: 00.00

Financing Gap: 00.00

Financing Source – Additional Financing (AF)	Amount
Counterpart Finance	0.00
Global Environment Facility (GEF)	12.00
Financing Gap	0.00
Total	12.00

The funding in this table only refers to GEF. The co-financing for the project provided by the Government of Colombia (GoC) is US$60 million.

Policy Waivers

Does the project depart from the CAS in content or in other significant respects?	No
Explanation	
Does the project require any policy waiver(s)?	No
Explanation	

Team Composition

Bank Staff

Name	Role	Title	Specialization	Unit
Adriana Goncalves Moreira	Co-Team Leader	Senior Environmental Specialist		GEN04
Claudia Sobrevila	Co-Team Leader (ADM Responsible)	Senior Environmental Specialist		GEN01
Sandra Ximena Enciso Gaitan	Procurement Specialist	Procurement Specialist		GGO04

	(ADM Responsible)			
Jeannette Estupinan	Financial Management Specialist	Senior Financial Management Specialist		GGO22
Agnes Velloso	Safeguards Specialist	Environmental Specialist		GEN04
Arelia Jacive Lopez	Safeguards Specialist	Social Development Specialist		GSU04
Elena Segura Labadia	Team Member	Senior Counsel		LEGLE
Jeannette Ramirez	Team Member	Operations Officer		GEN04
Marcelo Jorge Fabre	Team Member	Senior Social Development Specialist		GSU04
Raquel Campos	Team Member	Consultant	Environment	GEN07
Alejandra Torres Dromgold	Team Member	Consultant	Environment	GEN07
Sofia Keller Neiva	Team Member	Program Assistant		LCC5C
Tanya Lisa Yudelman	Team Member	Consultant	Environment	GEN07

Extended Team

Name	Title	Location

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments
Colombia	Guaviare	Departamento del Guaviare	X	X	
Colombia	Caquetá	Departamento del Caquetá	X	X	
Colombia	Meta	Departamento del Meta	X	X	
Colombia	Amazonas	Departamento del Amazonas	X	X	

Colombia	Putumayo	Departamento del Putumayo	X		
Colombia	Guainía	Departamento del Guainía	X		

Institutional Data
Parent (Forest Conservation and Sustainability in the Heart of the Colombian Amazon-P144271)
Practice Area (Lead)
Environment & Natural Resources
Contributing Practice Areas
Agriculture and Climate CCSA
Additional Financing (Forest Conservation and Sustainability in the Heart of the Colombian Amazon-P158003)
Practice Area (Lead)
Environment & Natural Resources
Contributing Practice Areas
Agriculture, Climate Change, Energy & Extractives, Water
Consultants (Will be disclosed in the Monthly Operational Summary)
Consultants will be required

I. Introduction

1. This Project Paper seeks the approval of the Executive Directors to provide an additional grant in an amount of US$12 million from the Global Environment Facility (GEF) to the Colombia Forest Conservation and Sustainability in the Heart of the Amazon Project (P144271, TF018478). The original project is funded through a US$10.4 million grant from GEF to the Government of Colombia (GoC). It was approved on December 8, 2014 and is expected to close on June 30, 2019. The proposed Additional Financing (AF) would extend the project for an additional three years to June 30, 2022. The project objective, which remains unchanged, is to improve governance and promote sustainable land-use activities to reduce deforestation and conserve biodiversity in the project areas.

2. The proposed AF will consolidate project activities initiated in the original project and support the expansion of protected areas (PAs) equivalent to 1.3 million ha and the consolidation of five existing PAs equivalent to 3.4 million ha in the Amazon. By expanding the project's scale, its impact will increase, adding new activities, outcomes, and indicators, while maintaining the four original components. New key outcomes include

(a) Improved management effectiveness of 5 existing PAs,[1] expansion of the Serranía de Chiribiquete National Natural Park (*Parque Nacional Natural Serranía de Chiribiquete*, PNNSCH), and creation of three new PAs;[2]

(b) Conservation agreements implemented with three traditional indigenous authority associations (AATIs);

(c) A mechanism for funding the National Protected Areas System (NPAS) designed and operational (Colombia Heritage);

(d) An early warning system with deforestation alerts in the Amazon region that is under way as a result of improved, intensive monitoring capabilities;

(e) Conservation agreements and management plans implemented for two Ramsar sites and key indigenous territories;

(f) Agreements in place with at least three sectors driving deforestation (agriculture, extractive industries, and infrastructure) on land-use planning and development;

(g) Conservation and restoration agreements signed with 400 farmer households; and

[1] The area where the project will intervene includes a mosaic of PAs with different management categories from strict conservation to sustainable use management. These are national PAs, areas of special management, proposed Ramsar sites, *resguardos indígenas* (indigenous territories), forest reserve, and areas subtracted from the forest reserve. The protected areas that will be supported by the AF include: La Paya National Natural Park (PNNPaya); Mountainous Area of Churumbelos National Natural Park; Alto Fragua Indiwasi National Natural Park, PNNAFIW); PNNSCH; and PNN Orito.

[2] The proposed new regional areas are (a) *Corredor Complejo de Paramos Miraflores/Picachos*, (b) *Bajo Caguan*, and (c) *Serrania La Lindosa, Capricho, Cerritos y Mirolindo*.

(h) 9,746,487 tCO_2eq of total lifetime direct greenhouse gas (GHG) emissions avoided (see Food and Agriculture Organization [FAO] Ex-Ante Carbon-balance Tool [EX-ACT]) and 11,384 ha under low-GHG management practices (disaggregated between maintenance 9,784 ha and direct restoration 1,600 ha).

3. The indicators and Results Framework are presented in Annex 1. The list of intervention areas for the parent project and the AF is included in Annex 2. Finally, the list of project activities by component for the parent project and the AF is found in Annex 3.

4. The parent project and AF are being undertaken in the context of the GEF Amazon Sustainable Landscapes (ASL) Program approved by the GEF Council in October 2015 with total GEF financing of US$113.6 million. The ASL Program will enable Colombia to exchange experiences with other program-supported countries (Brazil and Peru) as well as provide a platform for capacity building and learning exchange, to improve the effectiveness of conservation and sustainable resource use initiatives in the wider Amazon biome. Parallel to the project and the proposed AF, the United Nations Development Programme (UNDP) is formulating a complementary project to implement sustainable production systems and agroforestry initiatives in the amount of US$9 million. While the World Bank-supported AF will consolidate selected areas in the Amazon through conservation, restoration, monitoring, capacity building, and the signing of conservation agreements, the UNDP project will implement sustainable production initiatives and low-carbon development strategies with the same indigenous and farmer households to be selected in the proposed World Bank intervention areas.

II. Background and Rationale for Additional Financing

A. Country Context

5. Over the last decade, Colombia has experienced strong economic performance, which has been accompanied by poverty reduction and shared prosperity. The Colombian economy sustained an average gross domestic product (GDP) growth of 4.8 percent between 2004 and 2014, more than 1 percentage point above the average for the previous three decades (3.5 percent). Extreme poverty fell from 17.7 percent in 2002 to 8.1 percent in 2014, while total poverty fell from 49.7 percent in 2002 to 29.5 percent in 2014. From 2002 to 2014, extreme poverty in rural areas fell from 33 percent to 18 percent, while in urban areas, poverty fell from 12.2 percent to 5.1 percent.

6. Colombia is one of the five mega-diverse nations in the world. It ranks third in terms of biodiversity and is home to almost 15 percent of all known terrestrial species, including the largest number of species of birds and amphibians in the world. PAs and indigenous reserves (known as *resguardos*) represent 34 percent of the national territory. The Colombian Amazon represents 6.5 percent of the biome's rainforest and 42 percent of the country's land mass. Over 1.2 million people live in this region; 12.4 percent are indigenous peoples and 2 percent are Afro descendants.

7. The consolidation of Colombia's PAs is considered a priority in a number of environmental policies in Colombia. Over several decades, Colombia has developed an extensive system of 59 national parks, 15 of which are in the Amazon, encompassing 9.3 million ha, and 189 indigenous reserves covering 25.6 million ha. The passage of Forest Law Number 2 in 1959 declared the vast majority of the Colombian Amazon forest an 'Amazon Forest Reserve Area', which covers 37.8

million ha of territory in 10 departments. This, in turn, granted a general degree of protection for this biodiversity-rich area of global importance. At the United Nations Climate Change Summit in Copenhagen in 2009 and in Cancun in 2010, Colombia indicated its commitment to curb deforestation in the Amazon to 'net zero' by 2020, provided that international financing and support are available. In addition, the updated National Development Plan 2014–2018 sets a goal for reducing deforestation by 2018 to 90,000 ha per year and to 0 by 2030.

8. In October 2013, the GoC, through the Ministry of Environment and Sustainable Development (MADS), presented its 'Low Deforestation Development Vision for the Colombia Amazon' (*Visión Amazonía*), ratifying its commitment to build "a desired partnership model between Colombia and international parties, addressing Colombia's overall vision for the establishment and scaling up of low-carbon development models in all of its forested areas." The starting point for this venture was the enlargement of the largest PA in southern Colombia, spanning over 2.7 million ha and known as the *Parque Nacional Natural Serranía de Chiribiquete* (PNNSCH). In its vision, the GoC recognizes that the Amazon "cannot simply be a large protected area, but ought also to provide additional alternatives for development and integration into the global economy for its population, as well as wealth and prosperity for the country at large." *Visión Amazonía*, supported by a multi-donor strategy with over US$100 million in commitments, establishes a results-based payment mechanism to which international and national development partners contribute by rewarding the protection of the climate change mitigation services provided by the Colombian Amazon forests. Through the implementation of this project and its AF and the support from GEF and other international donors, Colombia is positioning itself to fulfill this vision as well as its multilateral environmental commitments.

9. Additional sector and institutional context information for the AF can be found in Annex 4.

B. Status of the Original Project

10. The Colombia Forest Conservation and Sustainability in the Heart of the Colombia Amazon Project (P144271) was approved by the Board on December 8, 2014, was signed on January 21, 2015, and became effective on March 2, 2015. The original project is financed with GEF grant resources in the amount of US$10.4 million and counterpart contributions (GoC, nongovernmental organizations [NGOs] and Sustainable Development Corporations [*Corporaciones de Desarrollo Sostenible*, CDSs]) of US$35.45 million, totaling US$45.85 million. As of August 30, 2017, 41 percent (US$4.3 million) of the GEF grant proceeds have been disbursed. The original PDO "to improve governance and promote sustainable land use activities in order to reduce deforestation and conserve biodiversity in the Project Area" has not been revised, and there has not been any other AF provided to the project to date.

11. **Performance.** The project has been under implementation for two years. Project ratings related to the PDO, overall implementation progress, and safeguards have consistently been rated Satisfactory over the last 12 months, and the project is in compliance with all legal covenants.

12. **Key achievements.** Project implementation has advanced well under the leadership of MADS and supported by the *Patrimonio Natural Fondo Para la Biodiversidad y Areas Protegidas* (PNF); the National Natural Parks Administrative Unit (PNN); the Amazon Institute for Scientific

Research Sinchi (*Instituto Amazónico de Investigaciones Científicas Sinchi*, SINCHI); and IDEAM, both with respect to meeting project-specific objectives and the coordination of the different groups participating in the project (small farmers and technical staff for national and subnational agencies). Specifically, the Operational Manual has been revised and the Procurement Plan has been updated to improve execution of the agro-environmental subcomponent of the project, as well as to allow the participation of indigenous communities and small farmers in the procurement processes. Consequently, SINCHI has advanced its activities related to the agro-environmental sub-component, signing 300 conservation agreements with rural producers and members of community action boards in the Cartagena del Chairá, San José del Guaviare, and Calamar municipalities. PNN is implementing the Management Plan for the Chiribiquete National Park and supporting a multi-stakeholder dialogue to agree on land-use measures for the park's buffer zone, including a dialogue with indigenous authorities and the implementation of Indigenous Peoples Plans (IPPs). The project is also actively monitoring IPPs in the seven indigenous reservations in the target area. Finally, the project has launched a website and is regarded a pioneer in the implementation of *Visión Amazonía*, the GoC's low-carbon development strategy for the Amazon.

13. Forest cover and deforestation monitoring activities under IDEAM are progressing well. Annual deforestation rates for the Amazon are being disclosed by MADS and IDEAM and 'early warnings' of deforestation are being disclosed on a quarterly basis, enabling the detection of hotspots in areas prone to deforestation. This last activity has led to the development and implementation of various strategies to combat deforestation, such as field inspections with relevant authorities, inter-sectoral meetings as part of the National Commission to Fight Illegal Logging (*Mesa Nacional de Lucha contra la Tala Illegal*), and the design of the National Deforestation Protocol.

C. Rationale for Additional Financing

14. The GoC (through the GEF Focal Point for Colombia) has requested the utilization of the additional GEF resources to scale up and enhance the project's impact.

15. In response to the challenges and priorities described above, Colombia intends to consolidate and scale up the design and implementation of comprehensive approaches to land management that promote ecological connectivity, avoid deforestation, and encourage sustainable production systems, thereby helping to conserve biodiversity-related resources and reducing the vulnerability of human populations. The proposed AF will expand the parent project's scale and increase its impact, and add new outcomes and indicators, while maintaining the four original components. As a general criterion, the proposed AF will target areas where it is necessary to reestablish the structure and function of the ecosystems and, at the same time, would offer an opportunity to implement sustainable systems that generate income for farmer households.

16. The proposed AF areas include Caquetá, Meta, Guaviare, and Putumayo, four departments with the highest deforestation rates nationally, as well as Amazonas and Guainía departments where the project will support integrated strategies in two Ramsar sites (see Annex 2). Deforestation in these 'hot spots' is largely due to the expansion of the agricultural frontier, illegal crops, and the establishment of pastures for extensive cattle grazing. The fragmentation of habitats in these departments is of particular significance because they represent one of the last remnants

of connectivity between the Andes and the Amazon ecosystems and play a critical role in the provision of water to the Amazon watershed. The oil and gas, infrastructure, and mining sectors are also important drivers of deforestation in the Colombian Amazon. There is a pressing need to generate cross-sectoral agreements with these sectors to incorporate environmental considerations in their development plans.

17. The project's key beneficiaries will remain largely the same under the AF: (a) indigenous peoples, including their authorities (AATIs) living in indigenous reserves; (b) farmer households in Cartagena de Chairá, San Jose de Guaviare, Calamar, San Vicente del Caguan, and Puerto Leguízamo municipalities; (c) agricultural and rural producer associations; (d) the municipal and regional governments of Caquetá, Guaviare, Amazonas, Putumayo, and Guainía (the latter two of which represent new departments included under the AF); and (e) regional environmental authorities (that is, CDS of the Northern and Eastern Amazon [CDA] and CDS for the Southern Amazon [CORPOAMAZONIA]). It is estimated that the AF would support agreements with 400 farmer households, increasing the initial 300 covered under the original project.

18. The project includes a diverse number of partners that will provide technical assistance to the implementation of the different components. These include MADS, the PNF, the PNN, IDEAM, the CDA, CORPOAMAZONIA. In addition, SINCHI will be executing certain project activities. The project partners will work closely with UNDP, the World Wildlife Fund, the Conservation and Sustainable Development Foundation, and the Gordon and Betty Moore Foundation.

19. The multisectoral dialogue initiated under the parent project will be continued and expanded under the AF. The detailed institutional arrangements are outlined in Section III on pages 11-12. This dialogue is giving rise to key agreements with sectors that drive deforestation:

(a) With the infrastructure sector, through MADS, discussions are under way to begin including connectivity considerations in the planning of future road infrastructure.

(b) In the agriculture sector, five agreements have been signed: two with the Fund for Financing the Agricultural Sector to support the commercialization of sustainable products and access to finance, two with the Ministry of Agriculture and local governments to implement technical assistance, and one with the Caquetá governorship to implement integrated rural development at a landscape level. These agreements will be deepened under the proposed AF and are consistent with priority actions included in the Rapid Response and Peace Building Plan, particularly those related to rural and small infrastructure development.

20. The proposed AF would ensure that the results of the ongoing operation are sustained in the future. Original project areas will require further support to ensure their long-term sustainability. Proposed activities under the AF will consolidate ongoing interventions, ensure permanent financial mechanisms, build institutional capacity, and increase the number of beneficiaries. Adding this additional GEF grant to an already well-performing project will bring procedural and other cost-effectiveness gains compared to processing a new operation. In addition, the ASL Program and UNDP Project will generate complementarities as well as strengthen

ongoing cross-border initiatives, peace-building efforts, and low-carbon development strategies across the Amazon region and into Brazil and Peru.

D. Foreseen Risk Factors

21. The overall implementation risk for the AF is rated Substantial as was the parent project. The specific risks rated substantial are discussed below.

22. *Political and governance*. The unfolding peace process presents a challenge to implementing the IPPs in the remote and somewhat politically unstable regions around the PNNSCH. To mitigate these risks, the AF focuses on building local social capital and involves a wide range and number of stakeholders from local and indigenous communities, civil society, and the private sector, as well as municipal governments and actors across central government. The risk of presence of armed conflicts in the project areas was also assessed. For this risk, the PCU and its partners will closely monitor the security reports issued for different areas in the country about any activities of armed groups and take appropriate measures to avoid risks. If needed, project sites might be amended from time to time with previous agreements between the client and the World Bank.

23. *Institutional capacity for implementation and sustainability*. PNF has proven capacity managing the National PAs Conservation TF Project (P091932) and the additional financing for that operation (P112106). The technical capacity of partner entities, SINCHI, MADS and PNN, is robust and adequate. In particular, MADS has staff responsible for execution of Bank projects who have sound skills in Bank procedures and policies, as well as experience in implementing GEF projects. This risk was rated substantial in the parent project due to the inclusion of SINCHI and IDEAM as new partner implementing agencies. For the AF, CDA and CORPOAMAZONIA are also new partner. This risk is maintained as Substantial. New partners may pose some challenges to project execution given their limited experience in Bank-financed projects. The most significant capacity risk, however, stems from implementation in the field, that is, the PA itself, which is difficult to access, and where there has been limited state presence. The AF will continue to address this directly by providing training related to the different expected AF outcomes to all the stakeholders.

24. *The Stakeholders* risk is rated substantial. The AF will build local social capital and involve a wide range and number of stakeholders from the local and indigenous communities, civil society, private sector, as well as municipal governments and actors across central government. Effective coordination in the implementation of Project activities, particularly at the local level, is vital for successful implementation and to ensure that local stakeholders are involved and activities respond to beneficiaries' needs. Indigenous groups and other social actors in the area are highly organized and have been actively involved in consultations that have led to agreements upon activities that are aligned and/or included in the proposed AF. Two key lessons learned during the parent project's implementation that are considered critical to the success of the AF's implementation are (a) securing effective coordination of project activities, particularly at the local level, and (b) ensuring that local stakeholders are involved and activities respond to beneficiaries' needs. To ensure these are well reflected in the AF design, coordination mechanisms and definition of roles and responsibilities have been expanded, particularly with respect to indigenous peoples' areas. An associated related risk is the perception of creating new PAs and expanding existing ones. To

mitigate this risk, the PCU and its partners are following the consultative procedures required by the Government and by the project's safeguard policies to establish new areas and are recording the results of these consultations. In addition, a communication strategy for the AF will be developed by the PCU to ensure that these processes are communicated in a format that is easily understandable to the key AF stakeholders.

25. Procurement arrangements are discussed in the datasheet below. Fiduciary arrangements under the AF will remain the same as those of the parent project and are also discussed in the datasheet below. The fiduciary risk related to a projected increase in the fiduciary team's workload and thus the need to strengthen the fiduciary team will be addressed by the following measures prior to effectiveness: an updated Operational Manual, additional support and training provided to the financial management team responsible for the Project, and the recruitment of a procurement specialist.

III. Proposed Changes

Summary of Proposed Changes	
There are no anticipated changes to the PDO, although component activities and costs will be adjusted to reflect additional activities and an expanded geographic scope. No new safeguard policies are triggered by the AF activities. The project closing date will be extended by three years (extending total project duration to eight years). Institutional arrangements will be modified to include the participation of the following CDSs - CORPOAMAZONIA and CDA. In addition, the Advisory Committee will include UNDP as a key project partner; therefore, UNDP will be invited to participate in this committee. The co-executing agencies, 'partner entities', will amend the Inter-Institutional Agreement to reflect the execution of specific AF activities, according to their technical area of expertise. These entities are the PNF, SINCHI, MADS, PNN, IDEAM, CDA, and CORPOAMAZONIA. The Advisory Committee will continue to provide strategic guidance and facilitate project mainstreaming into key productive sectors.	
Change in Implementing Agency	Yes [ ] No [X]
Change in Project's Development Objectives	Yes [ ] No [X]
Change in Results Framework	Yes [X] No [ ]
Change in Safeguard Policies Triggered	Yes [ ] No [X]
Change of EA category	Yes [ ] No [X]
Other Changes to Safeguards	Yes [ ] No [X]
Change in Legal Covenants	Yes [ ] No [X]
Change in Loan Closing Date(s)	Yes [X] No [ ]
Cancellations Proposed	Yes [ ] No [X]
Change in Disbursement Arrangements	Yes [ ] No [X]
Reallocation between Disbursement Categories	Yes [X] No [ ]
Change in Disbursement Estimates	Yes [X] No [ ]

Change to Components and Cost	Yes [X] No [ ]
Change in Institutional Arrangements	Yes [X] No [ ]
Change in Financial Management	Yes [ ] No [X]
Change in Procurement	Yes [X] No [ ]
Change in Implementation Schedule	Yes [X] No [ ]
Other Change(s)	Yes [ ] No [X]

Development Objective/Results

Project's Development Objectives

Original GEO/PDO

The project's Global Environmental Objective (GEO) is the same as the project's development objective (PDO), namely, to improve governance and promote sustainable land use activities in order to reduce deforestation and conserve biodiversity in the Project areas.

Change in Results Framework

Explanation:

There are no changes to the PDO. The AF revised some of the indicators and targets of the original Results Framework. These changes are presented in Annex 1 of this project paper.

Compliance

Covenants - Additional Financing (Forest Conservation and Sustainability in the Heart of the Colombian Amazon-P158003)

Source of Funds	Finance Agreement Reference	Description of Covenants	Date Due	Recurrent	Frequency	Action
GEFU	Schedule 2, Section 1, B.1	The recipient shall enter into an Inter-institutional Agreement with Partner Entities, on terms and conditions acceptable to the World Bank		☐		

Covenants will be added once Negotiations of the Grant Agreement is completed)

Conditions (Will be added once Negotiations of the Grant Agreement is completed)

Source of Fund	Name	Type

GEFU	**Withdrawal of Grant Proceeds Schedule 2, Section IV, B.1 (b)**	**Withdrawal**

Description of Condition

No withdrawals shall be made for payments made prior to the date of the Agreement or for Category (2), until the Sub-Grant Agreement has been amended, in form and substance acceptable to the World Bank, has been executed by the Recipient and SINCHI

Source of Fund	**Name**	**Type**
GEFU	**Effectiveness Condition in Section 5.01 of Article V**	**Effectiveness**

Description of Condition

(a) The execution and delivery of this Agreement on behalf of the Recipient have been duly authorized o ratified by all necessary governmental and corporate action.
(b)If the World Bank so requests, the condition of the Recipient, as represented or warranted to the Worl Bank at the date of this Agreement, has undergone no material adverse change after such date.
(c) The Inter-institutional Agreement has been amended and executed on behalf of the Recipient and eac of the Partner Entities, respectively.
(d) The Project Operations Manual has been updated and adopted by the Recipient in a manner acceptabl to the World Bank.

Risk

Risk Category	**Rating**
1. Political and Governance	Substantial
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	High
8. Stakeholders	Substantial
9. Other	
OVERALL	Substantial

Finance

Loan Closing Date - Additional Financing (Forest Conservation and Sustainability in the Heart of the Colombian Amazon - P158003)

Source of Funds	**Proposed Additional Financing Loan Closing Date**
Global Environment Facility (GEF)	30-Jun-2022

Loan Closing Date(s) - Parent (Forest Conservation and Sustainability in the Heart of the Colombian Amazon - P144271)

Explanation:

The project closing date will be extended by 3 years to June 30, 2022.

Ln/Cr/TF	Status	Original Closing Date	Current Closing Date	Proposed Closing Date	Previous Closing Date(s)
TF-18478	Effective	30-Jun-2019	30-Jun-2019	30-Jun-2022	

Change in Disbursement Estimates

Expected Disbursements (in US$, Millions) (including all Sources of Financing)

Fiscal Year	2017	2018	2019	2020	2021	2022			
Annual	3.44	6.23	5.21	3.86	2.42	1.25			
Cumulative	3.44	9.66	14.88	18.73	21.15	22.40			

Allocations - Additional Financing (Consolidating Forest Conservation and Sustainability in the Amazon - P158003)

Source of Fund	Currency	Category of Expenditure	Allocation	Disbursement % (Type Total)
			Proposed	Proposed
GEFU	US$	Goods, works, non-consulting services, consultant's services, Training & Operating Costs under Components 1, 2.a, 2.b, 2.c, 2.d, 3.a, 3.b, 3 c(iii) and 4 of the Project (implemented by Patrimonio Natural)	10,642,292	100.00
GEFU	US$	Goods, non-consulting services, consultants' services, Training and Operating Costs under Components 2.e, 3.c(i) and 3.c(ii) of the Project (implemented by SINCHI)	1,357,708	100.00
		Total:	12,000,000	

Components

Change to Components and Cost

Explanation:

Component activities and costs have been adjusted to reflect the original and additional activities as well as the expanded geographic scope of the project. The description includes in bold the additional activities:

Component 1: Protected Areas Management and Financial Sustainability

a. Strengthen the management effectiveness of **five (5) existing protected areas in the project areas**, including PNNSCH and its buffer zone, through *inter alia*, the design and implementation of a management plan for the PNNSCH, and minor works for the rehabilitation of research and surveillance posts in the protected areas.

b. Increase the financial sustainability of about 2.7 hectares of existing protected areas within the PNNSCH and its buffer zone.

c. **Establish three (3) new regional protected areas and expand PNNSCH**.

d. **Establish and operationalize an endowment fund to ensure the financial sustainability of the protected areas**.

Component 2: Forest Governance, Management and Monitoring

a. Enhance the institutional capacity and financial sustainability for sustainable landscape governance, management, and monitoring of the Project Areas.

b. Enhance the institutional capacity of the Recipient and Partner Entities to monitor GHG emission reductions in the Project Areas.

c. Enhance the capacity of indigenous peoples' authorities for sustainable land-use practices and forest governance within indigenous territories in the Project Areas.

d. Support the **collection** and disclosure of data on reduction of deforestation in the Project Areas.

e. **Design and implement a technical coordination mechanism to support the operational interface between, *inter alia*, the System of Environmental Information of the Amazon (SIATAC), the Forest and Carbon Monitoring System (SMByC**).

Component 3: Sectoral Programs for Sustainable Landscape Management

a. Support improvement of cross-sectoral policy coordination and consistency to achieve long term-reductions in deforestation in the Project Areas.

b. Support the development and adoption of guidelines and programs in, *inter alia*, agriculture, extractive industries and infrastructure sectors, aimed at reducing pressures on forests and biodiversity, and GHG emissions and restoring ecosystems in the Project Areas.

c. (i) Develop plans to promote sustainable land-use and natural resource management practices that contribute to, *inter alia*, reducing pressure on forests and advancing the livelihoods of local communities in the Project Areas; (ii) implement plans for the development of agro-productive systems in the Project Areas; and (iii) implement plans for the restoration of vegetation in the Project Areas.

Component 4: Project Coordination, Management, Monitoring and Evaluation

a. Strengthen the PCU to ensure coordination, management, monitoring, evaluation, and communication in connection with the implementation of the Project.

b. **Carry out regional knowledge exchange and capacity building activities, including the harmonization of information between the environmental authorities of the Member Country, and those of, *inter alia*, Brazil and Peru.**

For more details, refer to Annex 3.

Current Component Name	Proposed Component Name	Current Cost (US$, millions)	Proposed Cost (US$, millions)	Action
Component 1 - Protected Areas Management and Financial Sustainability	Component 1 - Protected Areas Management and Financial Sustainability	1.49	2.69 (4.18)	Revised
Component 2 - Forest Governance, Management and Monitoring	Component 2 - Forest Governance, Management and Monitoring	2.89	1.05 (3.94)	Revised
Component 3 - Sectoral Programs for Sustainable Landscape Management	Component 3 - Sectoral Programs for Sustainable Landscape Management	4.78	5.55 (10.33)	Revised
Component 4 - Project Coordination, Management, Monitoring and Evaluation (M&E)	Component 4 - Project Coordination, Management, Monitoring and Evaluation (M&E)	1.23	2.71 (3.94)	Revised
	Total:	10.40	12.00 (22.40)	

Other Change(s)

Implementing Agency Name	Type	Action
Parques Nacionales Naturales	Implementing Agency	No Change
IDEAM	Parastatal/Independent Government Institute	No Change
SINCHI	Implementing Agency	No Change

Change in Institutional Arrangements

Explanation:

The PNF, which has an established PCU, will continue to be the grant recipient. The PNF will continue to administer the project funds, supervise compliance with safeguard policies, and carry out procurement and FM, as well as have oversight of all project activities through the PCU. The PNF will also maintain a Sub-grant Agreement with SINCHI.

The Inter-Institutional Agreement will be amended to include the CDSs - CORPOAMAZONIA and CDA in addition to the original entities: the PNF, MADS, PNN, IDEAM, and SINCHI, for the execution of specific AF activities, according to their technical area of expertise.

In addition, the Advisory Committee will continue to comprise the same entities and will continue to provide strategic guidance and facilitate project mainstreaming into key productive sectors. UNDP, as implementer of the complementary project to support sustainable production activities component in the Amazon, will be invited to participate in the Project Advisory and Executive Committees.

Change in Financial Management

Explanation:

The PNF, in its capacity as grant recipient, has adequate financial management (FM) capacity, clearly demonstrated by its long-standing experience and satisfactory performance in executing the original

project and other World Bank-financed projects. The project's most recent implementation support mission confirmed that appropriate fiduciary arrangements continue to be in place. The PNF has a sound internal control environment, as evidenced by the following:

(a) A revised Operational Manual is in place.

(b) Implementation of the sub-grant (Components 2 and 3) by SINCHI is subject to standard World Bank procurement, FM, financial reporting, and audit arrangements.

(c) An integrated FM Information System is in place to record and track project budgeting, accounting, and payments. Disbursements can be monitored by component, subcomponent, category of expenditures and source of funds through this system and the Interim Financial Reports.

(d) There is a suitable organizational structure, which allows for the proper segregation of primary FM functions; however, it is suggested that additional support be provided to the FM team responsible for the project.

(e) There is a requirement in place for the preparation and submission to the World Bank of semiannual non-audited Interim Financial Reports.

(f) Annual financial audits are to be conducted by eligible external auditors, based on Terms of Reference (TOR) acceptable to the World Bank.

2. The first audit report for the ongoing project grant (TF018478) for the April 2015-June 2016 period includes an unqualified opinion.

Change in Disbursement Categories

Explanation:

The description of the disbursement categories was adjusted to reflect the new activities under the project and changes in implementation arrangements, as follows:

Category	**Amount of the Grant Allocated (expressed in USD)** **TF 18478**	**Percentage of Expenditures to be Financed (inclusive of Taxes)**
(1) Goods, works, non-consulting services, consultants' services, Training and Operating Costs under Parts 1, 2.A, 2.B, 2.C, 2.D, 3.A, 3.B, 3.C(iii), and 4 of the Project	6,794,872	100%
(2) Goods, non-consulting services, consultants' services, Training and Operating Costs under Part 2.E and 3.C(i) and (ii) of the Project	3,605,128	100%
TOTAL AMOUNT	10,400,000	

Change in Procurement

Explanation:

1. Procurement will be conducted according to the World Bank's Procurement Regulations for Investment Project Financing Borrowers, issued in July 2016, for the supply of goods, works, and non-consulting and consulting services under the parent project and the AF.

2. Procurement capacity assessment. The institutional arrangement for procurement under the AF would remain the same as in the parent project. The PNF will continue to carry out its own procurement activities, as well as those of the technical partner entities. SINCHI, under the agreement with the PNF, will continue to carry out its own procurement activities. An update of the capacity assessment of the PNF and SINCHI was carried out. The analysis concluded that both entities have experience in dealing with projects funded by the World Bank and procurement activities. However, in the implementation of the parent project, inconsistencies were detected in the compliance of some procurement procedures by the two entities. In addition, the AF will double procurement activities, project resources and will increase the number of technical partner entities so a dedicated and experienced procurement specialist should be hired to support the project's implementation.

3. Procurement arrangements. A Project Procurement Strategy for Development (PPSD) was prepared that identified the appropriate selection methods, market approach, and type of review by the World Bank, as follows: Procurement of works, goods, and non-consulting services will be carried out following Request for Bids, Request for Quotations, and Direct Selection methods. Under open international competitive procurement approach, the World Bank's Procurement Standard Documents will apply. When approaching the national market, the procurement documents will be agreed with the Bank.

4. Community-Driven Development (CDD). Both the Recipient and SINCHI will implement Sub-component 3.3 directly with peasant families and indigenous communities to establish agroforestry productive arrangements, ornamental fish, sustainable productive systems, restoration and transfer of knowledge in forest conservation techniques. In most cases, there will be participation by indigenous communities, communal action boards (Juntas de Acción Comunal), and associations of producers as suppliers of goods and non-consulting services in line with the CDD approach, which will include Request for Quotations. SINCHI will be responsible for monitoring and supervising the procurement activities conducted by the beneficiaries (communities). The simplified documents to be used, as well as model contracts would be presented in the Operational Manual.

5. Commercial practices. Both the PNF and SINCHI are subject to private sector legislation and practices; therefore, commercial practices applied by the PNF and SINCHI as described in the Operational Manual would be acceptable up to the thresholds established in the PPSD for the procurement of works, goods and non-consulting services.

6. Consultant services will be procured following Quality- and Cost-Based Selection, Selection Based on Fixed Budget, Least-Cost Selection, Quality-Based Selection, Selection Based on Consultant's Qualification, Direct Selection, and Individual Consultants methods. Under the International Market Approach, the World Bank's Request for Proposals Standard Document will apply. When approaching the national market, the procurement documents will be agreed with the Bank.

7. Procurement risk mitigation plan. The following table summarizes the mitigation actions proposed for the procurement-related risks identified above.

Procurement Improvement Action Plan

Risks - Areas for Improvement	Mitigation Actions	Responsible Entity	When
A PPSD and a Project Procurement Plan for the first 18 months of the AF execution established by the PNF and SINCHI	A comprehensive PPSD and a detailed Procurement Plan are under preparation and are almost finished.	PNF SINCHI	Finalized
Responsibilities related to the procurement activities	The Operational Manual must be updated with a clear definition of the processes, roles, and	PNF SINCHI	By effectiveness

	responsibilities of the staff related to the implementation of the procurement activities. It is necessary to establish, both by the PNF and SINCHI, the monitoring and control that will be carried out for procurement activities to avoid errors in the application of the procurement procedure. For the implementation of CDDs and commercial practices, the final Operational Manual shall include: • Capacity assessment methodology for the beneficiaries (communities), which will be conducted by SINCHI; • Eligible expenditures under CDDs; • Procurement methods that will apply under CDDs; • Templates for CDDs (Procurement Plan, request for quotations, contracts, and so on); • Supervision arrangements for CDDs; • Audit arrangements for CDDs; and Description of commercial practices that will apply the PNF and SINCHI in accordance with the provisions of the PPSD.		
Staff with expertise in procurement	A procurement specialist with TORs acceptable to the World Bank shall be recruited to support the project's implementation.	PNF	By effectiveness

Procurement of works, goods, non-consulting services, and consulting services under the parent project and AF will be governed by the Procurement Regulations for IPF Borrowers, dated July 2016. The client prepared the PPSD, and the project team received specific training.

Change in Implementation Schedule

Explanation:

The project's Closing Date will be extended by three years (extending the total project duration to eight years). The new Closing Date will be June 30, 2022.

IV. Appraisal Summary

Environmental and Financial Analysis

Explanation:

The ex-ante economic efficiency analysis conducted for the proposed AF results in positive economic outcomes under the proposed AF. The consideration of only a few of the benefits in the quantitative analysis suffices to yield positive economic results. The results of the quantitative simulations are also robust across a range of sensitivity analyses assuming significant changes in discount rates and key simulation parameters, notably, benefit-value parameters. Throughout the analysis, assumptions of benefits were always done conservatively, using lower-bound values, especially regarding non-market

benefits, such as watershed and carbon benefits, but also existence values. In particular, absolute carbon benefits estimated in tCO_2eq for the project are likely to be underestimated rather than overestimated, which is further magnified by applying very low assumptions for the opportunity costs of carbon and not including broader climate regulation benefit values. All of these would have resulted in significantly higher simulation results across all assumed parameter changes, hence underlining the robustness of the economic rationale for the proposed AF, even in the undesired scenarios where project benefits would have to be downgraded in the course of project implementation.

Applying an incremental difference of 0.5 percent deforestation between the 'with-' and 'without-project' situations, the analysis yields positive results across all sensitivity assessments. The 0.5 percent deforestation increment situation mirrors a situation where the PA would reduce deforestation to zero if the national deforestation average is used as a reference. Sensitivity analyses included benefit-value estimations that underwent reductions of 10 percent, 20 percent, and 50 percent and discount rate variations of 5 percent, 10 percent, and 20 percent, respectively. Furthermore, the analysis was also differentiated regarding the inclusion or exclusion of wetland benefit values. Though not included in the assessment, one of the most important impacts of the proposed AF probably relates to the capacity building of government institutions at central and decentralized levels. Enhanced capacities of government institutions should improve public service delivery, which in turn leads to numerous benefits and positive economic impacts. Given the ongoing challenges in natural resources management—not least due to climate change—the aspect of improvements in the way in which public institutions function cannot be underestimated, particularly in 'with-' and 'without-project' scenarios. Enhanced functioning of government institutions would also facilitate the implementation of future projects and investments that would build upon and continue the expected achievements of this proposed additional financing. Similar considerations apply to knowledge generation and management achieved by the proposed AF.

Technical Analysis

Explanation:

From a technical point of view, the proposed AF seeks to consolidate the expansion of PAs in the project area and improve forest governance and management, with a landscape approach perspective. The creation and implementation of PAs has been found to be one of the most effective ways to reduce deforestation and safeguard indigenous peoples' territories. Although there is a debate about whether PAs really reduce deforestation or simply divert it to other areas, the strategic use of PAs, in tandem with other policies, has proven effective in deforestation control. In addition, PAs are the best way to protect particular conservation targets such as endemic and endangered species. Their design draws upon the lessons learned with the establishment of PA systems in other parts of the Amazon, particularly in Brazil, seeking to avoid and mitigate identified risks stemming from, among others, poor system design and weak stakeholder participation. In addition to the more traditional protection schemes, the landscape approach is a framework for making landscape-level conservation decisions beyond the jurisdiction of the PNNSCH. It contributes to broad-scale approaches to conservation. The landscape approach helps reach decisions about the advisability of particular interventions (such as a new road or plantation) and to facilitate the planning, negotiation, and implementation of activities across a whole landscape. It integrates top-down planning with bottom-up, participatory approaches.

Social Analysis

Explanation:

The proposed AF will not trigger additional safeguard policies. The AF remains a 'Category B' project. During the preparation of the AF, the Social Assessment (SA) was updated and concluded that new activities proposed under the project will not have negative social impacts. The project will have positive social benefits through the strengthening of monitoring procedures, implementation of management plans,

and strengthening of indigenous lands management. The new activities involving PAs include the consolidation of a Ramsar site, the design and planning of new PAs, and strengthening of national and regional policies, including land-use delimitation and zoning. The SA and the process of implementation of the 'road map to create new PAs' identified the existence of indigenous reserves (*resguardos*) in the new project implementation areas. The Borrower has prepared an adequate Indigenous Peoples Planning Framework (IPPF).

The IPPF establishes actions and strategies that will prevent and mitigate possible adverse impacts to the indigenous population and recognize their collective rights through: (a) the design and execution of prior, informed consultation processes and the implementation of agreements with the communities and with the indigenous territories certified by the Ministry of the Interior as subject to prior consultation for the declaration of PAs and Ramsar site, and (b) the provision of guidelines and clear and flexible procedures for the development and/or updating of IPPs.

The IPPF includes, as annexes: (a) seven IPPs elaborated in the parent project, (b) one new IPP for the seven *resguardos* neighboring the Ramsar '*Estrella Fluvial of Inirida*', and (c) three new IPPs prepared for *resguardos* neighboring the Area of the Paya. One new IPP is being elaborated for the indigenous reserves neighboring the wetland '*Lago Tarapoto*' and several IPPs will be prepared for *resguardos* neighboring the new regional areas to be protected in the Bajo Caguán region and the proposed expansion of the Chiribiquete. The project team is working with the Ministry of the Interior to design and implement the prior, informed consultation process for these new IPPs. The IPPF establishes criteria to develop new IPPs for the cases where indigenous reserves have not been identified in the preparation phase or if their participation is not yet well determined in the area of influence for the project.

The IPPs were prepared with the full collaboration of the Indigenous Leaders and Traditional Authorities of the Indigenous *Resguardos* involved in project activities. The process of free, prior, and informed consultation was carried out by the National Parks Agency (PNN) and the Ministry of the Interior (October 13-15, 2016, March 9, 2017, October 24-26, 2016, December 15, 2016 and February 13 to 17, 2017). If necessary, any future modification or re-planning of IPP activities should be agreed with the traditional leaders of each indigenous reservation and be carried out according to the IPPF.

An Institutional Guide for Avoiding Contact and Managing Negative Impacts on Indigenous Peoples Living in Voluntary Isolation was already prepared under the first phase of the project, based on international best practice, and was peer reviewed by the Amazon Conservation Team. The final version of the IPPF was disclosed on the websites of the PNF and PNN on March 13, 2017 and the World Bank's external website on June 2, 2017, before the Decision Meeting.

Similarly, the Process Framework has been updated and disclosed following an extensive consultation process, in order to screen for and manage any involuntary restrictions on access to natural resources in the forest buffer zone that can be caused during the process of declaring new regional protected areas. In those cases, where the implementation of 'road maps' to create new PAs as part of the AF involves indigenous reservations, the project will prepare IPPs. A SA has determined both the positive and negative impacts that will result from the AF. This assessment has also determined the potential risks related to the implementation of the safeguards instruments and the impact the post-conflict strategy could have on them. In addition to safeguard considerations, other social issues that have been considered during the implementation of the parent project include the particular impact of poverty on land-use decisions and management and the unique socioeconomic challenges that inhabitants in the Amazon region face, such as insecure land tenure, ensuring equal participation in terms of gender and ethnicity in participatory natural resource management, indigenous peoples collective rights, and economic migration. The social safeguards instruments have followed the required disclosure and dissemination processes.

With respect to safeguards, the existing project has adequate human resources and tools for their implementation. To date, the project's safeguards performance has been rated Satisfactory; however, in two of the seven indigenous reservations (*Resguardos de Mesai and Yaguara II*), the parent project has not made sufficient progress due to conflict-related issues (the presence of the FARC), limited accessibility to target areas, and the presence of elderly populations with health and disability issues. The PCU is diligently addressing these issues. In December 2015, the World Bank received requests for information related to: (a) project implementation status, (b) status of the IPPs, and (c) new needs to be taken into consideration since consultations took place between an NGO and representatives from two indigenous reserves in the project area. The World Bank has responded to these requests and proactively enhanced supervision of the indigenous-related aspects of the project, including conducting a specific field trip.

Environmental Analysis

Explanation:

The Environmental and Social Management Framework (ESMF) prepared under the parent project was updated for the proposed AF. The revised ESMF was subject to public consultation and was disclosed locally, before AF appraisal.

The proposed AF is classified as 'Category B' for environmental safeguard purposes. Its investments seek to protect critical natural habitats by significantly expanding and consolidating existing PAs and supporting governance (institutions, zoning, action plans, dialogue, and policies) for the entire area. Significant environmental impacts are not expected. Hence, the proposed AF is essentially a conservation initiative, expected to generate positive and long-lasting social, economic, and environmental benefits. Deforestation is a threat to Colombia's natural capital, including its biodiversity and ecosystem services. Consolidation of PAs will help preserve this natural wealth. The following environmental safeguard policies are triggered under the parent project and the AF will not trigger additional policies: Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Forests (OP/BP 4.36), Pest Management (OP 4.09), and Physical Cultural Resources (OP/BP 4.11).

An ESMF has been prepared for the parent project and updated for the proposed AF, which will scale up the original activities to a broader geographical area to protect ecologically important habitats. The ESMF describes the process and criteria to create new PAs and consolidate the expanded PAs; prepare and implement land-use plans in the buffer zone, including pest management and physical cultural resources provisions; and develop enforcement capacity, as well as guidance for other activities to be financed by the project. Guidance is also provided for the limited infrastructure investments foreseen under the project, which involve the construction of a small field research base and vigilance and control base and towers, all to be located in remote forested sites far from local communities and settlements. Works are expected to be of short duration and require small construction teams, and existing rules for building inside PAs will be followed. The ESMF analyzes gaps in existing systems, best practices in different sectors, and how sustainability practices can be improved, establishing complementary procedures and tools to be applied in addition to these systems and practices in the design, delimitation, and management of new PAs to fully comply with World Bank safeguards. The ESMF has sought consistency with the activities surrounding the FCPF/REDD+ process in Colombia presently supported by the World Bank.

Four consultations were held between December 2013 and August 2014, to obtain feedback regarding the parent project and incorporate it into its design. Specific consultations for the safeguards instruments were held between May and August 2014, and additional consultations with affected *resguardos* were held during the preparation of the AF (October 13-15, 2016, March 9, 2017, October 24-26, 2016, December 15, 2016 and February 13 to 17, 2017). The original ESMF was disclosed locally and on the World Bank's

website, and the updated ESMF was disclosed on March 13, 2017, on the World Bank's website, as well as in-country on the websites of the PNF, PNN, and SINCHI.
Risks
Explanation:
Policy Exceptions and Readiness
The AF does not require any exceptions to World Bank policies and complies with regional criteria for readiness.

V. World Bank Grievance Redress

26. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel, which determines whether harm occurred, or could occur, as a result of the WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the WB's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the WB Inspection Panel, please visit www.inspectionpanel.org.

Annex 1: Revised Results Framework and Monitoring Indicators

COLOMBIA: Forest Conservation and Sustainability in the Heart of the Colombian Amazon Project

A. Revised Results Framework

PDO: to improve governance and promote sustainable land use activities in order to reduce deforestation and conserve biodiversity in the Project areas		
PDO Indicators		
Original PAD	**Changes**	**Rationale for Change**
Indicator 1 Areas of environmental significance brought under protection measures and effectively managed in the medium and long term	Three indicators: PDO1: New areas of environmental significance brought under legal protection (biodiversity conservation, avoided deforestation) (Baseline: 0; EOP target: 1.3 million ha) PDO2: Increase in the average METT score[a] of five existing PAs (PNNSCH, PNNAFIW, PNNSCHAW, SFPMOIA and PNNPaya) PAs totaling 3.4 million ha increased (from 47 to 59)	This change was made to reflect the distinction between newly created areas versus improving the management of five existing areas through the METT score.
	PDO3: Total lifetime direct GHG emissions avoided (See FAO EX-ACT) (Baseline: 0; EOP target: 7,000,000 tCO_2eq)	Given the importance of measuring GHG emissions, this indicator was moved from Intermediate results level to PDO level.
Indicator 2 Governments and indigenous authorities are strengthened for the sustainable management, monitoring, and/or enforcement of the Amazon frontier, including the capacity to account for GHG emissions	PDO4: Number of hectares under low GHG management practices (disaggregated between maintenance and direct restoration) 11,384 ha (9,783 ha in maintenance and 1,600 ha in direct restorations) *Revise and move to intermediate level:* Strengthened capabilities of environmental authorities for forest monitoring according to specific action plans (low, medium, high)	This indicator was added to reflect the fact that GEF-6 funding is using the sustainable forest management and land degradation GEF focal areas, and therefore, it is important to measure the restoration and conservation of forests along corridors reached through conservation agreements with local farmers. The indicator related to strengthened capabilities of environmental authorities continues to be the same, except that it is now an intermediate indicator in Component 3.
Indicator 3 Areas subject to land or other management practices agreed among authorities to reduce	Dropped - outcome capture by above revised and new indicators	This indicator is already captured by PDO1 and PDO4.

pressures on forests and biodiversity and control main drivers of deforestation		
Intermediate Indicators		
Indicator 1.1 PNNSCH with increased management effectiveness measured by Tracking Tool Increase in 80% of the tracking tool measure of management effectiveness	Dropped	Captured by PDO indicator
Indicator 1.2 Increased funding to meet total expenditures required for management of PNNSCH	Revised - Mechanism for funding of PA system in Colombia designed and operational (Colombia Heritage)	Captured by PDO indicator. The GEF-6 funds will not be used to capitalize Colombia Heritage but to design and support its operation. This indicator was added to reflect the impact that a funding mechanism can have on leveraging various sources of funding.
Indicator 2.1 Capacity to monitor for GHG emission reduction and increase in carbon stocks	Revised - GHG emission levels established annually for the Amazon Region by IDEAM	IDEAM, entity in charge of monitoring forest carbon stocks, already has capabilities to report on carbon emissions. Under the AF, these reports will be made public and be used to support compliance and vigilance efforts in the Amazon.
Indicator 2.2 Validated, public data of reduction of deforestation in the Project area compared to the Amazon forest subnational reference emission level, including updated carbon estimations in natural forests generated for the Project area	Revised - Early warning system ('deforestation alerts') in the Amazon region operational according to defined criteria (Yes/No) (4 times per year, presence/absence, new deforestation and persistence of it)	Early warning systems are more effective mechanisms to orient decision making in real time, versus the original indicator yielding annual deforestation data
Indicator 2.3 Conservation of at least 95% of the PNNSCH's forest carbon stock, barring natural	Dropped and replaced by PDO3 - Total lifetime direct GHG emissions avoided	The project is adhering to the indicator that is contained in the Tracking Tool for SFM and climate change, to better link the parent project and AF to the PDO.

disturbances, by the lifetime of the Project		
Indicator 3.1 Amazon Forest Reserve area of "A type", with a management proposal in place	Dropped	Captured by PDO1
Indicator 3.2 Number of agreements with sectors driving deforestation (agriculture, extractive industries and infrastructure) on land-use planning, strategies for integrated landscape management, policies or regulations, achieved or implemented	Revision of wording - Number of agreements with sectors driving deforestation (agriculture, extractive industries and infrastructure) on land-use planning, strategies for integrated landscape management, policies or regulations, signed and under implementation Revision of EOP target - increase with 1 original target: 3 achieved (only agriculture) AF: add 1 sector (oil mining) EOP target AF: 6	This revised wording qualifies the indicator better and makes its scope more precise.
Indicator 3.3 Local population benefiting from sectoral programs by improvements in their livelihoods	Revise - People in project areas with improved access to conservation-friendly livelihood activities (number) Progress to date: 1,072 (farmers) EOP target: 7,075 (distinguish between male versus female and farmers versus indigenous peoples)	The revised indicator makes more measurable the contribution of the project to its beneficiaries.
Indicator	New - Area of sustainably managed forest (ha) (predominantly forest areas include Ramsar, indigenous territories, and areas under project use agreements) EOP: 672,202	This indicator expresses a new strategy in place under the AF to develop complementary conservation strategies in the Amazon, such as Ramsar, and indigenous and integrated management land-use categories.
Indicator 3.4	New - Number of properties at the agricultural frontier that have been subject to zoning EOP target: 100	This indicator is an indirect measure of the agricultural frontier stabilization, which contributes to the peace process.
Component 4: Project Coordination, Management, Monitoring and Evaluation (M&E)	New - **Indicator 4.1.** Number of regional and South-South exchanges that address sustainable integrated landscape development in the Amazon	This indicator expresses the incorporation of an action line of coordination with the World Bank ASL Program and between Colombia, Peru, and Brazil.

Note: EOP = End of project; METT = Management Effectiveness Tracking Tool; PNNSCHAW = Serranía de Churumbelos Auka Wasi National Natural Park (*Parque Natural Nacional Serranía de Churumbelos Auka Wasi*); SFPMOIA = Orito Indi Ange Sanctuary of Flora and Medicinal Plants (*Santuario de Flora y Plantas Medicinales Orito Ingi Ande*).
a. Indicator captures improved management of PAs as measured by the METT assessment. This scorecard is GEF's standard tool for assessing the evolution in PA management effectiveness, evaluating it across six categories: content, planning, inputs, processes, outputs, and outcomes.

B. PDO and Intermediate Indicator Targets

Project Name:	Additional Financing Forest Conservation and Sustainability in the Heart of the Colombian Amazon (P158003)			Project Stage:	Additional Financing	Status:	Final
Team Leader(s):	Adriana Goncalves Moreira, Claudia Sobrevila	Requesting Unit:	LCC1C	Created by:	Jeannette Ramirez on 18-Aug-2016		
Product Line:	Global Environment Project	Responsible Unit:	GEN04	Modified by:	Jeannette Ramirez on 20-Dec-2016		
Country:	Colombia	Approval FY:	2018				
Region:	LATIN AMERICA AND CARIBBEAN	Lending Instrument:	Investment Project Financing				
Parent Project ID:	P144271	Parent Project Name:	Forest Conservation and Sustainability in the Heart of the Colombian Amazon (P144271)				

Global Environmental Objectives

Original Project Development Objective - Parent:

The project's Global Environmental Objective (GEO) is the same as the Project Development Objective (PDO), to improve governance and promote sustainable land use activities in order to reduce deforestation and conserve biodiversity in the Project areas.

Results

Core sector indicators are considered: Yes

Results reporting level: Project Level

Project Development Objective Indicators

Status	Indicator Name	Core	Unit of Measure		Baseline	Actual (Current)	End Target
New	New areas of environmental significance brought under legal protection (biodiversity conservation, avoided deforestation)	☐	Hectare (ha)	Value	0.00	0.00	1,300,000.00
				Date	21-Aug-2014	31-Dec-2016	30-Jun-2022
				Comment			
New	Increase in the average METT score of 5 existing PAs (PNNSCH,	☐	Average METT score of 5 existing PAs	Value	0	47	59

	PNNAFIW, PNNSCHAW, SFPMOIA and PNNPaya)			Date	21-Aug-2014	31-Dec-2016	30-Jun-2022
				Comment			
New	Total lifetime direct GHG emissions avoided	☐	tCO_2eq	Value	0.00	0.00	7,000,000
				Date	21-Aug-2014	31-Dec-2016	30-Jun-2022
				Comment			
New	Number of hectares under low GHG management practices (disaggregated between maintenance and direct restoration)	☐	Hectare (ha)	Value	0 maintenance 0 direct restoration	10,110 maintenance 0 direct restoration	11,384[a] 9,784 maintenance 1,600 direct restorations
				Date	21-Aug-2014	31-Dec-2016	30-Jun-2022
				Comment			

Intermediate Results Indicators

Status	Indicator Name	Core	Unit of Measure		Baseline	Actual	End Target
Revised	1.1 Mechanism for funding of PA system in Colombia designed and operational (Colombia Heritage)	☐	Signed Document submitted by partners	Value	0.00	0.00	1.00
				Date	21-Aug-2014	30-Dec-2016	30-Jun-2022
				Comment			
Revised	2.1 GHG emission levels established annually for the Amazon Region by IDEAM	☐	Public Annual Reports (Y/N)	Value	No	Yes	Yes
				Date	21-Aug-2014	30-Dec-2016	30-Jun-2022
				Comment			
Brought from PDO	2.2.1 Strengthened capabilities of environmental authorities for forest	☐	Level	Value	Low	Low	Medium
				Date	21-Aug-2014	30-Dec-2016	30-Jun-2022
				Comment			

	monitoring according to specific action plans (low, medium, high)						
Revised	2.2.2 Early warning system ('deforestation alerts') in the Amazon region operational according to defined criteria	☐	Number Reports per year	Value	4.00	4.00	4.00
				Date	21-Aug-2014	30-Dec-2016	30-Jun-2022
				Comment			
New	3.1. Area of sustainably managed forest (ha) (predominantly forest areas include Ramsar, indigenous territories and areas under project use agreements)	☐	Hectare (ha)	Value	10,110	10,110	672,202
				Date	30-Dec 2016	30-Dec 2016	30-Jun-2019
				Comment			
Revised	3.2. Number of agreements with sectors driving deforestation (agriculture, extractive industries and infrastructure) on land-use planning, strategies for integrated landscape management, policies or regulations, signed and under implementation	☐	Number	Value	0.00	5.00	6.00
				Date	21-Aug-2014	30-Dec-2016	30-Jun-2019
				Comment			
Revised	3.3. People in project areas with improved access to conservation-friendly livelihood activities e	☐	Number (distinguish between male versus female and farmers versus indigenous peoples)	Value	0.00	1,072.00 568 men 504 women	7,075.00 3,750 men 3,325 women
				Date	21-Aug-2014	30-Dec-2016	30-Jun-2019
				Comment			
New	3.4.	☐	Number	Value	0.00	20	100

	New - Number of properties at the agricultural frontier that have been subject to zoning[3]						
New	4.1. Number of regional and South-South exchanges that promote sustainable integrated landscape development in the Amazon	☐	Number	Value	0.00	00.00	8.00
				Date	21-Aug-2014	30-Dec-2016	30-Jun-2019
				Comment			

Note: a. The GoC requested that a conservative approach be used for the emission reduction calculation and indicated that if the estimated 19,830 ha of sustainable forest were to be conducted, 11,384 ha would be used for the emission reductions calculations as follows: 70 percent of the 9,208 ha of properties with mixed forest and agroforestry systems; 30 percent of 8,120 ha of new forest areas that will have conservation agreements; 100 percent of 902 ha of new farms to be registered by December 2017; and 100 percent of 1,600 ha of new areas to be restored.

[3] This indicator relates to chapter 1 of the Peace Agreement that talks about the importance of a comprehensive rural reform for the peace process. The rural reform includes as one of its instruments, the definition of the agrarian frontier that will support the stabilizing of the population, control colonization and prevent further deforestation beyond the frontier. The project will work with the population that is living near this rural/forest border. Selected families will receive technical assistance to zone their farm, learn about the sustainability of their resources, how to improve production and the economic returns. This indicator will measure the results of these activities.

Annex 2: List of Project Areas

The project areas have been selected to improve the ecosystems connectivity between the national parks and reserves in the Amazon and the landscape that surrounds them. The table below shows the project areas identified in the parent project and under the AF:

Parent Project	Hectares	Additional Financing	Hectares
National parks and reserves			
PNNSCH	2,780,000	Expansion of PNNSCH and of three regional areas: • *Corredor Complejo de Paramos Miraflores/Picachos* • *Bajo Caguan* • *Serrania La Lindosa, Capricho, Cerritos y Mirolindo*	1,300,000
		PNNAFIW	76,050
		PNNPaya	442,440
		PNNSCHAW	97,819
		SFPMOIA	10,233
Indigenous *resguardos*			
Indigenous reserves in the project area (seven *resguardos*): • Puerto Zábalo-Los Monos • Monochoa • Aduche • Nonuya de Villazul • Mesai • Miritíi-Paraná • Yaguará II	2,530,000	22 additional resguardos: • *Resguardos* neighboring the Ramsar "Estrella Fluvial of Inirida" • *Resguardos* neighboring the area of the PNNPaya • *Resguardos* neighboring the wetland "Lago Tarapoto" • *Resguardos* neighboring the four new regional areas to be protected in the Bajo Caguán region and the proposed expansion of the Chiribiquete	645,334
Amazon forest reserve areas and other areas, located in Caqueta, Guaviare, Guainia and Amazonas departments			
'Type A' zones	3,280,000	Ramsar areas, namely the Lagos de Tarapoto and Estrella Fluvial del Inírida sites	289,962
'Type B' zones	230,000		
Distrito de Manejo Integral DMI Ariari-Guayabero (ZRPROS)	61,000		
Areas removed from the Amazon forest reserve in the project area	46,000		

Note: DMI = Integrated Management District.

Annex 3: Detailed List of Activities by Component for the AF

Component 1: Protected Areas Management and Financial Sustainability (GEF, US$2.69 million)

The activities under the AF will aim to:

(a) Support the implementation of management plans (governance, coordination with indigenous people and rural communities, control, and vigilance) for five existing national natural parks: PNNPaya, PNN Mountainous Area of Churumbelos, PNNAFIW, PNNSCH, and SFPMOIA.

(b) Support the PAs' declaration process for three regional PAs (including consultations), support the additional expansion of the PNNSCH, and prepare and initiate the implementation of management plans for the three new regional PAs:

(i) *Corredor Complejo de Paramos Miraflores/Picachos*

(ii) *Bajo Caguan*

(iii) *Serrania La Lindosa, Capricho, Cerritos y Mirolindo*;

(c) Design and implement a 'funding for permanence' financing scheme for selected areas of the NPAS: *Herencia Colombia* to ensure financial sustainability of the NPAS in the Amazon.

Component 2: Forest Governance, Management, and Monitoring (GEF, US$1.05 million)

The activities under the AF will support:

(a) Implementation and operation of an intensive monitoring network in selected project areas to provide scientific and technical information on the role of forests in the hydrometeorological cycle;

(b) Support the collection and disclosure of data on reduction of deforestation in the Project Areas.

(c) Design and implementation of a technical coordination mechanism to support the operational interface between, inter alia, the System of Environmental Information of the Amazon (SIATAC), the Forest and Carbon Monitoring System (SMByC).

Component 3: Sectoral Programs for Sustainable Landscape Management (GEF, US$5.55 million)

Activities under the AF will:

(a) Support improvement of cross-sectoral policy coordination and consistency to achieve long term-reductions in deforestation in the Project Areas, including:

(i) Management plan implementation for *Distrito de Manejo Integral DMI Ariari-Guayabero (ZRPROS)*;

(ii) Two Ramsar areas, namely the *Lagos de Tarapoto* and *Estrella Fluvial del Inírida* sites; and

(iii) Conservation strategies signed with selected AATIs;

(b) Support the development and adoption of guidelines and programs in, *inter alia*, agriculture, extractive industries and infrastructure sectors, aimed at reducing pressures on forests and biodiversity, and GHG emissions and restoring ecosystems in the Project Areas.

(c) Support the promotion of sustainable land-use and natural resource management practices that contribute to the restoration of vegetation, reduce pressure on forests and advance the livelihoods of local communities in the Project Areas**.** Conservation, restoration, and sustainable use agreements would be signed with 400 new farmer households in 1,600 ha as a result of an integrated methodological approach that includes:

(i) Develop plans to promote sustainable land-use and natural resource management practices that contribute to, *inter alia*, reducing pressure on forests and advancing the livelihoods of local communities in the Project Areas, implemented by SINCHI.
(ii) Implement plans for the development of agro-productive systems in the Project Areas, implemented by SINCHI; and
(iii) Implement plans for the restoration of vegetation in the Project Areas, implemented by Patrimonio Natural.

Component 4: Project Coordination, Management, Monitoring and Evaluation (M&E) (GEF, US$2.71 million)[4]

The AF will support the following activities:

(a) Strengthen the PCU to ensure coordination, management, monitoring, evaluation, and communication in connection with the implementation of the Project. The project will finance a communication strategy as part of the safeguards implementation and to ensure that activities related to the expansion of protected areas is communicated to the potentially affected communities.

(b) Carry out regional knowledge exchange and capacity building activities, including the harmonization of information between the environmental authorities of the Member Country, and those of, *inter alia*, Brazil and Peru. Regional knowledge exchange and capacity building to support regional program implementation, in coordination with the overarching GEF ASL Program through a World Bank-executed Amazon Coordination

[4] This component should not be seen as supporting only administrative costs of managing the project. It also includes costs for technical assistance for knowledge generation and exchanges to support all the other project components.

Technical Assistance (P159233). Concretely, the AF will support eight work-study exchanges between the three countries, to build capacity and align regional Amazon conservation and sustainable use strategies, such as the multipurpose cadaster, permanent financial mechanisms for PAs, payments for environmental services, indigenous land management practices, and best practices for the incorporation of sustainability guidelines with extractive sectors. This sub-component will also support:

(i) Harmonization of visions regarding sustainable landscapes through a series of regional exchange workshops between environmental authorities in Colombia, Brazil, and Peru.
(ii) Design of management and/or policy instrument to address border issues related to deforestation and sustainable use between Colombia-Brazil and Colombia-Peru in areas of importance to biological connectivity.

In addition, effective coordination will be achieved between the PCU for this proposed AF and the UNDP and its complementary project in the amount of US$9 million that will implement sustainable production systems and agroforestry initiatives. Effective coordination and complementarity are essential for the two agencies to ensure seamless project execution.

The GoC-based project team has updated carbon stock calculations, including baseline and targets and following World Bank/GEF-accepted methodology in the 'Tracking Tool for GEF-6 Amazon Sustainable Landscapes Program' that has been proposed by the GEF Secretariat.

Annex 4: Detailed Sector and Institutional Analysis

1. The Amazon is the largest carbon stock in the world and acts as a powerful climate regulator; it is the Earth's greatest biological reservoir, home to millions of endemic species, an irreplaceable provider of ecological services, and an ancestral home for indigenous peoples. Colombia is an important carbon sink as it has the world's eighth most extensive forest coverage. Its preservation is of utmost importance. In the Amazon, poverty rates tend to be higher, and social development indicators are often lower than in the rest of the country. In Colombia, for example, a recent report[5] by the Inter-American Dialogue found that areas in which the armed conflict has been most intense are also home to a significant share of the country's natural resources and are titled to nature parks and forest reserves. Despite representing over 40 percent of the national territory, the Colombia Amazon today contributes only 1 percent to national GDP.

2. Between 1990 and 2010, about 6.2 million ha of forests were lost in Colombia at a rate equivalent to 310,349 ha per year. The Colombian Institute of Hydrology, Meteorology, and Environmental Studies (IDEAM) estimates that 124,035 ha of forests were converted to other uses in 2015, indicating a 12 percent reduction in the deforestation rate with respect to 2014 (140,356 ha). By 2030, an additional 13 million ha of rainforest could be lost in the Colombian Amazon. If left unchecked, current deforestation rates could lead to losing the ecological connectivity between the Andean and Amazonian forests, which is crucial for hydrological regulation, climate stability, and vital species exchange.

3. Agricultural activities (including illicit crop cultivation) and cattle pasture are the main causes of deforestation in Colombia. Deforestation 'hot spots', like those found in Guaviare and Caquetá, are places where the Government has historically lacked an adequate presence. This situation has limited the opportunity to promote sustainable land-use practices. Other causes of deforestation include the clearing of forests for growing illicit crops, mining, timber extraction, and wildfires. In addition, the ongoing exploration for oil and minerals, as well as the construction of roads in the Amazon, in the context of the peace accords and the potential colonization of large areas of land in this region, could lead to rapid population growth and increasing pressures on the forest. The situation is complicated by incipient land-use planning and low land tenure security. In the coming years, Colombia has the challenge to ensure proper land use and zoning and restore degraded areas by adopting an integrated landscape management approach that harmonizes sustainable development plans with conservation goals.

4. The parent project and proposed AF activities remain fully consistent with Pillar I – *Fostering Balanced Territorial Development* - of the WBG Country Partnership Framework (CPF) for Colombia for the period from FY2016 to FY2021 (Report # 101552-CO) discussed by the Executive Directors on April 7, 2016, particularly objective 2 related to 'Enhanced Capacity for Natural Resource Management in Target Regions'. The AF aims at fostering a balanced territorial development and includes an objective related to improving climate-smart regional development. The AF also aligns with the cross-cutting theme under the CPF 'Constructing the Peace' by

[5] Morales, L. (2017). Peace and Environmental Protection in Colombia: Proposals for Sustainable Rural Development. Inter-American Dialogue.

promoting an approach that responds to the dual goal of peace building and environmental sustainability.

5. The AF supports the GEF Strategic Frameworks for Biodiversity (BD-1, Programs 1 and 2), Climate Change (CCM-2, Program 4) and Sustainable Forest Management (SFM-1, 2 and 3).

The GoC and the World Bank have a long-standing and deep engagement on biodiversity and forests. The World Bank's Programmatic Knowledge Services for Colombia's Green Growth and Sustainable Development Programmatic Approach (P161334) supports the long-term planning of Colombia's green growth policy and implementation of high-priority activities of the Green Growth Strategy in selected sectors and regions. In addition, GEF has financed two biodiversity projects in recent years that are of relevance to this operation: (a) the National Protected Areas Conservation Trust Fund (P091932), approved by the Board of Directors in March 2006, with AF (P112106) approved in 2011 to support the financial sustainability of the NPAS, and (b) Mainstreaming Sustainable Cattle Ranching (P104687), whose Project Development Objective (PDO) is to promote the adoption of environment-friendly silvo-pastoral production systems for cattle ranching.

6. The proposed AF is also consistent with Colombia's legally binding multilateral environmental commitments to achieving land-based GHG emissions reductions (Paris Agreement), landscape restoration (The Bonn Challenge), and biodiversity conservation (Aichi Targets). To contribute toward achievement of global environmental priorities, the GoC: (a) is formulating its National REDD+ Strategy (ENREDD) as well as other actions in the land sector that contribute to low-carbon development; (b) has signed a Joint Declaration of Intent with the Governments of Germany, Norway, and the United Kingdom on cooperation on Reducing Emissions from Deforestation and Forest Degradation (REDD+) and promoting sustainable development; (c) has presented the Nationally Determined Contribution submitted during the United Nations Framework Convention on Climate Change COP21, committing to a 20 percent reduction in GHG emissions by 2030 through the implementation of the National Low Carbon Development Strategy; and (d) Convention on Biological Diversity (CBD) commitments to increase PAs to 20 percent of national territory by 2020. Although Colombia represents a marginal part in global GHG emissions (about 0.37 percent), it has developed and implemented a number of policies that promote sustainable, low-carbon development. These strategies are also part of the GoC National Development Plan (2014–2018).

7. With regard to forest governance, the country is implementing the National Forest Strategy for Prevention, Monitoring, and Law Enforcement. In addition, Colombia is one of 53 partner countries participating in the UN-REDD Program that supports the development and implementation of these national strategies. The ENREDD+ for Colombia is in advanced stages of development. The Readiness Proposal Preparation (R-PP) for the National Strategy was carried out by MADS. The Colombia FCPF REDD Readiness (P120899) is under preparation and will support a participatory and inclusive process with key stakeholders for the preparation of Colombia's REDD+ strategy.

8. The proposed AF is also aligned with the actions and goals set forth in the National Action Plan for Implementation of the Protected Areas Work Program of the CBD and the supporting Policy for Consolidation of the National System of Protected Areas, established in 2010, as well

as Aichi Targets 7, 11, and 15. The project will help preserve the ecological integrity of the existing network of PAs and connectivity between the Andes and the Amazon through the *Serranía de la Macarena*. The Macarena National Natural Park is internationally known the *Caño Cristales*, known by people who have visited it to be one of the most beautiful rivers in the world. This PA encompasses the ecologically unique meeting point for the flora and fauna of the Amazon, Orinoco, and Andes regions.

9. Finally, the proposed AF will take place against the backdrop of the developing peace process between the Government and the illegal armed group Revolutionary Armed Forces of Colombia-People's Army (FARC-EP) that was signed in November 2016. The peace process aims to find a solution to the armed conflict that has been occurring in Colombia for over 50 years. Integrated rural development is one of the five pillars of this process, and Guaviare, Caquetá, and Putumayo, within the project and AF areas, have been selected to receive demobilized ex-combatants, through the assignment of productive lands. Incorporating environmental considerations into this process becomes crucial to guarantee sustainable development in the region. As mentioned in the GoC's *Visión Amazonía* document, "the relationship between environment, peace and livelihoods has become central to the post-conflict scenario that Colombia hopes to enter." While fully recognizing the limits of its contribution, the project and the proposed AF would support the advancement of this higher goal and are aligned with the World Bank's Programmatic Approach to Peace and Post-Conflict Consolidation (P153567) in Colombia. See Annex 6 for explanation of how the AF will support the peace process in Colombia.

Annex 5: Economic and Financial Analysis

Introduction

1. The significance of ecosystems is seldom adequately recognized in economic markets, government policies, or land management practices. The tendency to underestimate the value of ecosystems is related, for the most part, to their 'public good' quality. Ecosystems and the services they provide are owned by all and, thus, protected by none. They generate shared benefits and, so, encourage free riding. Being publicly provided, they are underpriced or unpriced and thus tend to be overused and abused. Because the benefits are shared and ownership is collective, there is a tendency to free-ride on contributions for the provision of these goods. Collectively, these features lead to pervasive degradation of ecosystems as a consequence of systemic market failures.[6]

2. Acknowledging the continuous challenge of sustainable natural resource management and conservation of the environment, the proposed AF will strengthen and scale up activities under each of the parent project's four components. The Forest Conservation and Sustainability in the Heart of the Colombian Amazon Project is designed to improve governance and management of a PA and its buffer zone with the objective of preserving and sustainably managing the tropical forest and land area in the heart of the Colombian Amazon. The GoC is committed to fighting climate change by building on four mutually reinforcing strategies: (a) Strategy for Low-Carbon Development, (b) ENREDD+, (c) National Climate Change Adaptation Plan, and (d) Financial Protection Strategy against Disasters. These strategies were also part of the National Development Plan 2010–2014.

3. This annex presents an analysis of the project's economic and financial benefits. By estimating the (partial) values of changes to ecosystem services, one can compare the economic and financial benefits at different degrees of project achievement by considering various interventions.[7]

Country Context

4. Colombia is one of the five mega-diverse nations in the world. It ranks third in terms of biodiversity and is home to almost 15 percent of all known terrestrial species, including the largest number of species of birds and amphibians in the world. PAs and indigenous reserves (*resguardos*) represent 34 percent of the national territory. The Colombian Amazon represents 6.5 percent of the biome's rainforest and 42 percent of the country's land mass, with over 1.2 million people living in the region, 12.4 percent of which are indigenous peoples.

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[6] http://www.esa.org/education_diversity/pdfDocs/ecosystemservices.pdf.

[7] Nunes, P. A. L. D., and J. C. J. M. van den Bergh. 2001. "Economic Valuation of Biodiversity: Sense or Nonsense?" *Ecological Economics* 39 (2): 203–222.
Ecosystem valuation is a difficult and controversial task, and economists have often been criticized for trying to put a 'price tag' on nature. However, agencies in charge of protecting and managing natural resources must often make difficult spending decisions that involve trade-offs in allocating resources. These types of decisions are economic decisions and, thus, are based, either explicitly or implicitly, on society's values. Therefore, economic valuation can be useful, by providing a way to justify and set priorities for programs, policies, or actions that protect or restore ecosystems and their services. http://www.ecosystemvaluation.org/1-02.htm.

5. Between 1990 and 2010, the country lost 6.2 million ha of forest, equivalent to a deforestation rate of 310,349 ha per year or about 0.5 percent annually.[8] Preliminary projections by IDEAM indicate that, if current trends continue, by 2030, an additional 13,000 km² of rainforest will be lost in the Colombian Amazon. This will lead to losing the ecological connectivity between the Andean and Amazonian forests in the country completely.

6. As mentioned elsewhere in the project paper, deforestation has several causes, with the main driver being extensive cattle ranching, followed by disorganized peasant colonization, including that prompted by people fleeing from conflict areas. Hot spots of deforestation, like those found in Guaviare and Caquetá Departments near the PNNSCH, are places where the Government has historically lacked an adequate presence.[9] This situation has decreased the prospects for the adoption of sustainable land-use management practices in these areas. Other drivers of deforestation include clearing of forests for growing illicit crops, mining, timber extraction for sale or personal use, and wildfires. In addition, the projected expansion of oil and mineral exploitation and construction of road projects in the Amazon will require the development of infrastructure, which is expected to lead to rapid population growth and increasingly negative pressures on the forest. The situation is complicated by lack of land-use planning, land titling, and zoning of the Amazon forest reserve. In the coming years, Colombia must ensure proper land use and zoning and restore degraded areas by adopting an integrated landscape management approach that integrates sustainable development plans with conservation goals.

Without-Project Situation

7. For this analysis, a 'business-as-usual' (BAU) baseline case is used that assumes that future development trends follow those of the past and no changes in policies will take place. This approach follows recommendations by the Intergovernmental Panel on Climate Change and the FAO (2011) and uses past trends to model the BAU- or without-project scenario. The approach is more sophisticated than a no-change scenario but less complex than a future-trends scenario would have been. The past-trends scenario supposes that the changes in land use and practices will evolve in the same way as they have in the past. In developing countries, land-use patterns are changing very quickly; so it is more relevant to use recent past trends than long-term past trends in this case. Therefore, this analysis uses recent trends instead of long-term trends because the recent changes seem to be more representative of the current evolution. In the BAU scenario, it is assumed that the average deforestation rate of 0.5 percent is maintained.

Economic Benefits Generated by the Project

8. The project would generate a diverse portfolio of economic benefits ranging from direct use values to indirect, non-use values. A direct use value is, for example, the use of forest products, while a commonly referred to indirect, non-use value is related to the mere existence of virgin tropical rainforests. The transition from direct use to existence values is characterized by a

[8] Colombia National Programme Submission Form - Colombia UN-REDD Programme Tenth Policy Board Meetings 25–28 June 2013 Lombok, Indonesia; (UNREDD/PB10/2013/V/5a).

[9] Despite recent important advances in the peace process, the FARC are still present in a few areas by the forest frontier. Historically, this occupation has contributed to deforestation through extensive land clearings for cultivation of illicit crops.

decreasing tangibility of these values. The total value of tropical rainforest comprises the sum of a large number of different values from each value category.

9. For this ex-ante economic analysis, only a few selected benefits—that have been used to assess the parent project—are used for the quantitative economic assessment of the feasibility of the AF. These are: (a) carbon storage benefits, (b) existence values, and (c) watershed values. These values have been chosen for the economic analysis due to the objectives of the project and because these benefits are commonly referred to as the core environmental benefits of the Amazon basin rainforest. Accordingly, the associated economic benefits have been assessed in several studies that allow relying on a broad set of data for this economic assessment. Other economic benefits, as listed in Table 1~~Table 1~~, are additional and will be considered in the qualitative discussion of project feasibility, especially if quantitative simulation results indicate a borderline economic feasibility of the project.

Table 1. Selected Environmental Values of Forest Resources

Use Values			Non-use Values
1. Direct Use	**2. Indirect Use**	**3. Option**	**4. Existence**
Wood products (timber and fuel)	Watershed protection	Future direct and indirect uses	Biodiversity (wildlife)
Non-wood products (food)	Nutrient cycling		Culture and heritage
Educational, recreational, and cultural uses	Air pollution reduction		Intrinsic worth
Human habitat	Micro-climatic regulation		Bequest value
Amenities (landscape)	Carbon storage		

Source: Bishop (1999).

The With-Project Scenario - Stratification of Project Area

10. For assessing the benefits generated by the project, the different ecosystems targeted by the project need to be identified and differentiated benefits have to be assigned. The additional funding will extend the total project area to about 15.4 million ha, supporting an additional 6.3 million ha, and the economic analysis assumes that the benefits identified below are generated from the additional 6.3 million ha of forest that are protected as a result of the AF. The core area targeted by the project can be subdivided into two zones: (a) PA and (b) Amazon forest reserve surrounding the PA. The ratio of core PAs and buffer zones is maintained from the original project proposal.

Quantification of Selected Benefits

(a) Carbon

11. Given the existence of a wide variety of different geographical features in the Amazon forests, it is especially difficult to quantify its forest carbon stock. Estimates for density cover a range between 70 tons and 120 tons of carbon per ha (tC/ha) (Rovere 2000), 191 tC/ha (Fearnside 1997), or 150 tC/ha (Andersen et al. 2001). Considering that in the transitional areas (with less biomass) deforestation is more pronounced, the latter probably represents the best average density of the region. A carbon stock of 100 tC/ha was assumed as the base value for the tropical forest area.

12. The quantification of carbon benefits applied for this economic analysis follows an extremely conservative approach. It only assumes avoided carbon emission resulting from enhanced forest conversation compared to the 'without-project' situation, but it does not assume enhancing overall carbon stocks, for example, in areas where currently degradation of forest may be present. As explained further below, these incremental carbon benefits are only modeled over a period of 15 years, although it can be expected that project impacts will last for a longer time. Consequently, the absolute carbon benefits of this economic analysis may differ from other carbon assessment undertaken for the project, which—most likely—will exceed those modeled here. This would only increase project benefits and economic returns of the project; however, it complies with the 'threshold' approach taken for this analysis (compare also section (e) Methodology below).

13. The valuation of project carbon benefits requires the assignment of a dollar value per ton of carbon. In the original economic analysis, the carbon price was aligned with the price of carbon on global carbon markets. The reasoning was that because the assigned carbon value serves as a shadow price that should reflect a market value if all associated values could be marketed, recent carbon price developments can be used as a conservative proxy measure to estimate a shadow price. In this regard, a baseline value of US\$1/tCO_2 was assumed. To deviate as little as possible from the original analysis, the price of US\$1 was maintained. However, in this context, the market price of carbon does not reflect the social value of carbon storage of forests. Using the official guidance for the social value of carbon as provided by the World Bank, a second analysis using the shadow value of US\$70/tCO_2 is applied. Given the uncertainty about the correct shadow price and the need to conduct a conservative economic assessment of project benefits, the shadow price is kept constant at US\$1/tCO_2, whereas the storage potential of the three ecosystems is subject to sensitivity analysis of −20 percent and −50 percent.

14. Carbon storage values of tropical forests are different from climate regulation benefits. Climate regulation benefits are additional values provided by forest ecosystems. For a case study in Cameroon, TEEB (2009) states that associated values range between US\$842 and US\$2,265 per ha per year. Pearce et al. (2001) state values for the same service to range from US\$360 to US\$2,200 per ha per year. The current assessment focuses on carbon storage benefits only, so that these climate regulation values are not considered in the analysis.

(b) Existence Values

15. Estimates related to the 'existence value' associated with preservation (non-use) of tropical forests show a wide variety of values in the literature. The studies carried out tend to be based upon contingent valuation in rich countries where people appear to be willing to pay for the costs of preserving natural species and places. Horton et al. (2003) use a contingent valuation study that is applied to the specific case of the willingness to maintain conservation units in Amazonia detected among a sample of people in the United Kingdom and Italy. Two possible conservation scenarios are presented, based on conservation values of 5 percent and 20 percent. The study identifies an annual value in the form of an additional tax in each country and not a single fixed value to be allocated by an international fund. The average value estimated, combining the samples in both countries, was US\$50 per ha per year for 5 percent of the area of Amazonia and US\$67 per ha per year for 20 percent conservation. When the order of the questions was inverted (first 20 percent, followed by 5 percent), the average estimates changed to US\$36 per ha per year and

US$50 per ha per year, respectively. Referring to the same study, TEEB (2009) estimates existence values at US$43 per ha per year. This value is used in the analysis.

(c) Watershed Values

16. Given the important role of tropical forests in the Amazon with respect to hydrological functions, watershed values are the third and last category of benefit values included in the quantitative economic assessment. Another reason for including watershed values in this assessment is that they are clearly distinguishable from the other two value categories, which is important for avoiding double counting of benefits. For example, TEEB (2009) states the economic value of intact tropical forests as US$6,120 per ha per year, which is significantly higher than any of the values assumed in this assessment (however, it is not fully clear which values are considered in TEEB's assessment).

17. Pearce (2001) values watershed benefits for tropical forests at a range between US$15 and US$850 per ha per year, with the higher-bound value applying to tropical forests. Consequently, a differentiation of benefit values is applied according to the three ecosystems within the core area and the surrounding zone. For the tropical forest area, a base value of US$50 per ha per year was applied. As for the other benefit values, sensitivity analysis of benefit reductions of −20 percent and −50 percent was applied.

(d) Project Costs

18. Project costs are approximated using the investment costs of the project, totaling US$12 million. A total project duration of 2.5 years was assumed, with a linear disbursement of project investments resulting in annual costs of about US$4.8 million. These allocations are used for the cost calculations in the analysis.

(e) Methodology

19. A threshold analysis identifying the break-even point where the project's net benefits equal net costs is applied. Sensitivity analysis is applied for the key simulation parameters, notably discount rate, benefit assessment, and the inclusion or exclusion of water body-related benefits. Quantitative results will be contrasted with qualitative benefits to arrive at overall project feasibility.

20. As is required for the economic analysis of projects, a 'with-' and 'without-project' situation is used for estimating incremental benefits generated by the project. The incremental difference between the 'with-' and 'without-project' situation is simulated in deforestation increments of 0.1 percent, 0.2 percent, and 0.5 percent. It is assumed that due to the project, the deforestation rate in the project area is lower compared to the national average—and ideally zero. According to national assessments cited in recent REDD+ documentation (UN-REDD 2013), average deforestation rates in Colombia at the national level are about 0.5 percent annually. Therefore, the difference between the 'with-' and 'without-project' situations is simulated in possible deforestation increments. For example, a 0.1 percent increment indicates very low project impacts, because the difference between the national average and the project situation is rather small. In contrast, the 0.5 percent increment assumes a zero-deforestation scenario compared to

the national average. Net present value (NPV) and benefit-cost ratio (BCR) are used as criteria to assess the economic feasibility of the project.

21. A 15-year period is assumed to assess the economic feasibility of the project. While project costs are only assumed for the first five years of the project, according to the projected disbursements, benefits are assumed to be generated beyond the lifetime of the project. To harmonize project benefits and costs through the calculation of a present value of costs and benefits, a discount rate needs to be determined. Given the often-significant impact of the choice of the discount rate on economic analysis outcomes, and the common difficulty in determining discount rates reflecting economic discounting behavior, a sensitivity analysis is applied considering discount rates of 5 percent, 10 percent, and 20 percent.

22. In addition to testing the impact of different discount rates on simulation results, other sensitivity analyses are applied that account for possible variations in key input parameters to test the robustness of simulation results. First, changing project impacts are simulated by applying increment variations in the deforestation rate of 0.1 percent, 0.2 percent, and 0.5 percent for the 'with-' and the 'without-project' situation, representing increasingly project success: at the 0.1 percent increment, the project would only achieve a 0.1 percent increment, whereas at the 0.5 percent increment, a higher achievement is seen. Next, simulation results are tested against changing benefit values. Although all assumed benefit values are already lower-bound estimations, focus on three core benefit categories only, and are only applied for the core project area, benefit reductions of minus 20 percent and minus 50 percent are tested.[10] Finally, two sets of simulations are run—one including the economic benefit value of water bodies, and one without it. As discussed above, the very high value derived from the literature for associated economic values demands a test regarding its impact on overall project outcome. This set of sensitivity assessments enables a comprehensive analysis of the economic robustness of the project in relation to changing or differentiated value parameters.

(f) Results

23. Simulation results are summarized in tables 2 through 4, which represent different deforestation increments between the 'with-' and 'without-project' scenario. Each table shows the NPV and BCR for different discount rates and benefit variations.

Table 2. Results for Project Impacts at 0.1% Deforestation Increment

	Discount Rates					
Benefit	**5%**		**10%**		**20%**	
Variations	**NPV**	**BCR**	**NPV**	**BCR**	**NPV**	**BCR**
0%	9,200,031	1.70	2,197,179	1.18	−3,591,739	0.64
−10%	6,972,868	1.53	783,773	1.07	−4,243,677	0.58
−20%	4,745,706	1.36	−629,634	0.95	−4,895,614	0.52
−50%	−1,935,780	0.85	−4,869,855	0.59	−6,851,425	0.32

Note: NPV - All values stated in US$, millions.

24. Overall, results show positive simulation outcomes for the project, thus confirming economic feasibility. Only for situations in which combined input parameters are set at very

[10] As discussed above, benefit values associated to carbon storage.

'extreme' values in terms of project impacts does the analysis yield negative results. For example, this is the case at 10 percent discount rate (and higher), a benefit reduction of 20 percent and more, and only assuming a project impact of 0.1 percent of deforestation reduction increment between the 'with' and 'without-project' scenarios (Table 2~~Table 2~~). Under the 0.1 percent of deforestation reduction increment the results are only negative if either the discount rate is extremely high (20 percent) or the benefits are reduced by 50 percent. Both are extreme scenarios on top of a pessimistic outcome expectation of a 0.1 percent deforestation reduction.

Table 3. Results for Project Impacts at 0.2% Deforestation Increment

	Discount Rates					
Benefit	**5%**		**10%**		**20%**	
Variations	**NPV**	**BCR**	**NPV**	**BCR**	**NPV**	**BCR**
0%	31,471,652	3.41	16,331,248	2.37	2,927,632	1.29
−10%	27,017,328	3.07	13,504,435	2.13	1,623,758	1.16
−20%	22,563,003	2.73	10,677,621	1.89	319,884	1.03
−50%	9,200,031	1.70	2,197,179	1.18	−3,591,739	0.64

Note: NPV - All values stated in US$, millions.

25. Increasing the incremental project impact to a deforestation reduction equivalent to 0.2 percent compared to the 'without-project' scenario improves simulation results significantly (Table 3~~Table 3~~). Only at high discount rates of 20 percent and a benefit reduction of 50 percent does the simulation yield negative results. In other scenarios, even a reduction of benefit values by 50 percent—for which the baseline values are already conservative—continue yielding positive results.

Table 4. Results for Project Impacts at 0.5% Deforestation Increment

	Discount Rates					
Benefit	**5%**		**10%**		**20%**	
Variations	**NPV**	**BCR**	**NPV**	**BCR**	**NPV**	**BCR**
0%	98,286,515	8.52	58,733,456	5.92	22,485,748	3.22
−10%	87,150,705	7.67	51,666,421	5.33	19,226,062	2.90
−20%	76,014,894	6.82	44,599,387	4.74	15,966,376	2.58
−50%	42,607,462	4.26	23,398,283	2.96	6,187,318	1.61

Note: NPV - All values stated in US$, millions.

26. The last set of simulations applies an incremental difference of 0.5 percent deforestation between the 'with-' and 'without-project' situation (Table 4~~Table 4~~). This mirrors a situation where the PA would reduce deforestation to zero if the national deforestation average is used as a reference. However, given the previous inaccessibility to the area, the current non-existence of infrastructure, and possible increased development dynamics in the area without the creation of the PA, deforestation rates may in fact be much higher than national averages. Furthermore, PAs have frequently been identified as effective means to slow down or stop deforestation. Therefore, this scenario seems realistic regarding the project framework. The simulated benefits are still believed to be lower bound because the full project area is not considered in the simulation and many values have been estimated conservatively for the simulation.

Discussion

27. This ex ante economic efficiency analysis conducted for the project results in positive economic impacts and supports the project from an economic viewpoint. The results of the quantitative simulations are also robust across a range of sensitivity analyses assuming significant changes in discount rates and key simulation parameters notably benefit value parameters. Throughout the analysis, it was emphasized that benefit assumptions were always done conservatively, using lower-bound values, especially regarding non-market benefits, such as watershed and carbon benefits, but also regarding existence values. Especially absolute carbon benefits estimated in tCO_2e for the project are likely to be underestimated rather than overestimated, which is further magnified by applying very low assumptions for the opportunity costs of carbon and not including broader climate regulation benefit values. All of these would have resulted in significantly higher simulation results across all assumed parameter changes, hence underlying the robustness of the economic rationale of the project even in the undesired scenarios where project benefits would have to be downgraded in the course of project implementation.

28. The quantitative analysis was also strictly limited to values that can be clearly attributed to the project. The assessment focused only on the core project area encompassing the PA and its surrounding zone, and it did not take into account possible areas outside this core zone where additional positive impacts might be achieved. Moreover, the assessment did not take into account benefits accruing beyond the project site that may result from improved capacity to manage PAs in the Amazon and beyond in Colombia.

29. Analyzing the project impacts in the broader economic context of Colombia implies that the project will pilot and catalyze important development momentum for the sustainable management of natural resources in the Amazon region beyond the specific project. Given the increasing pressure on natural resources (for example, though ranching, mining, and population pressure) and growing ecosystem stress through climate change, the project investments and associated achievements are highly relevant in today's context. The existence and ecosystem values generated by the Amazon rainforest are of outmost importance for the region's economic, social, and environmental stability and incremental for global, regional, and local weather and climate regulation.

30. Though not included in the assessment, probably one of the most important impacts of the project relates to the capacity building of government institutions at central and regional levels. Enhanced capacity of government institutions will improve public service delivery, thus leading to numerous benefits and positive economic impacts. Given the ongoing challenges faced in natural resources management—not least due to climate change—improvements in the functioning of public institutions cannot be underestimated, particularly in a 'with-' and 'without-project' scenario. Enhanced functioning of government institutions should also facilitate the implementation of future projects and investments that can build on this project's envisioned achievements. Similar considerations apply to knowledge generation and management to be achieved by the project.

31. In summary, based on this economic evaluation, it is concluded that the project will result in significant positive development impacts. The consideration of only a few of those impacts in

the quantitative analysis sufficed to yield positive economic results. The assessment focused only on part of the area the project is anticipated to create impacts and did not include other secondary impacts, such as broader capacity building. This demonstrates that investments in biodiversity conservation in the Amazon rainforest contribute significantly to the economic development ambitions of countries such as Colombia, because they generate and safeguard important direct environmental services that are important at local, regional, and global levels.

Annex 6: Relationship between GEF-5 and GEF-6 and Colombia Peace Agreements

1. The AF is being designed and will be implemented in the context of Colombia's peace building strategy.[11] In this regard, an integrated and territorial approach to pursuing the post-conflict agenda is critical to ensure the legitimacy and sustainability of peace efforts and poverty reduction, especially those with environmental implications. The project will work in some of the municipalities that have been prioritized in the Peace Building Plan. Due to the nature of project activities, which include participatory processes, building governance, sustainability, and livelihoods, the project will indirectly contribute to the Rapid Response and Peace Building Plan. The project has set up criteria for selecting the beneficiaries of the AF (particularly farmers) that will support victims of the conflicts and ex-combatants. Also, as the AF project team will support management plans and IPPs, it will work closely with the Agency for Territorial Renovation as it implements Development Plans with a Territorial Focus (*Planes de Desarrollo con Enfoque Territorial*). The AF is working with SINCHI and GESTANDO, a social entrepreneurship incubator, to build governance, democratic processes, and good citizenship within project areas, which in turn can be a solid foundation to support peace processes locally.

2. The agreements related to rural development of the Havana Peace Accord have a large number of points in common with the GEF-5 and GEF-6 projects. These projects in the heart of the Amazon have a comprehensive strategy that includes the planning and sustainable use of land and natural resources in the Amazon region. The actions taken in the framework of these projects will be critical to guarantee an economic development of the Amazon inhabitants that is aligned with the conservation and sustainable use of the Amazon in the medium and long term.

3. **Thematic convergences.** Both GEF-5 and GEF-6 and the Peace Accord state that it is necessary to:

- Have diverse spaces of multicultural participation that allow to make decisions on territorial zoning that take into consideration the cultural and ecological context;
- Ensure the closure of the agricultural frontier and protection of reserve areas with the purpose of delimiting the agricultural frontier, protecting the areas of special environmental interest, and generating balanced alternatives between environment and the livelihoods and well-being of the inhabitants living at this frontier;
- Take measures and create incentives to prevent and promote solutions to conflicts between suitable land use and actual use; and
- Promote an integrated development model that benefits local communities.

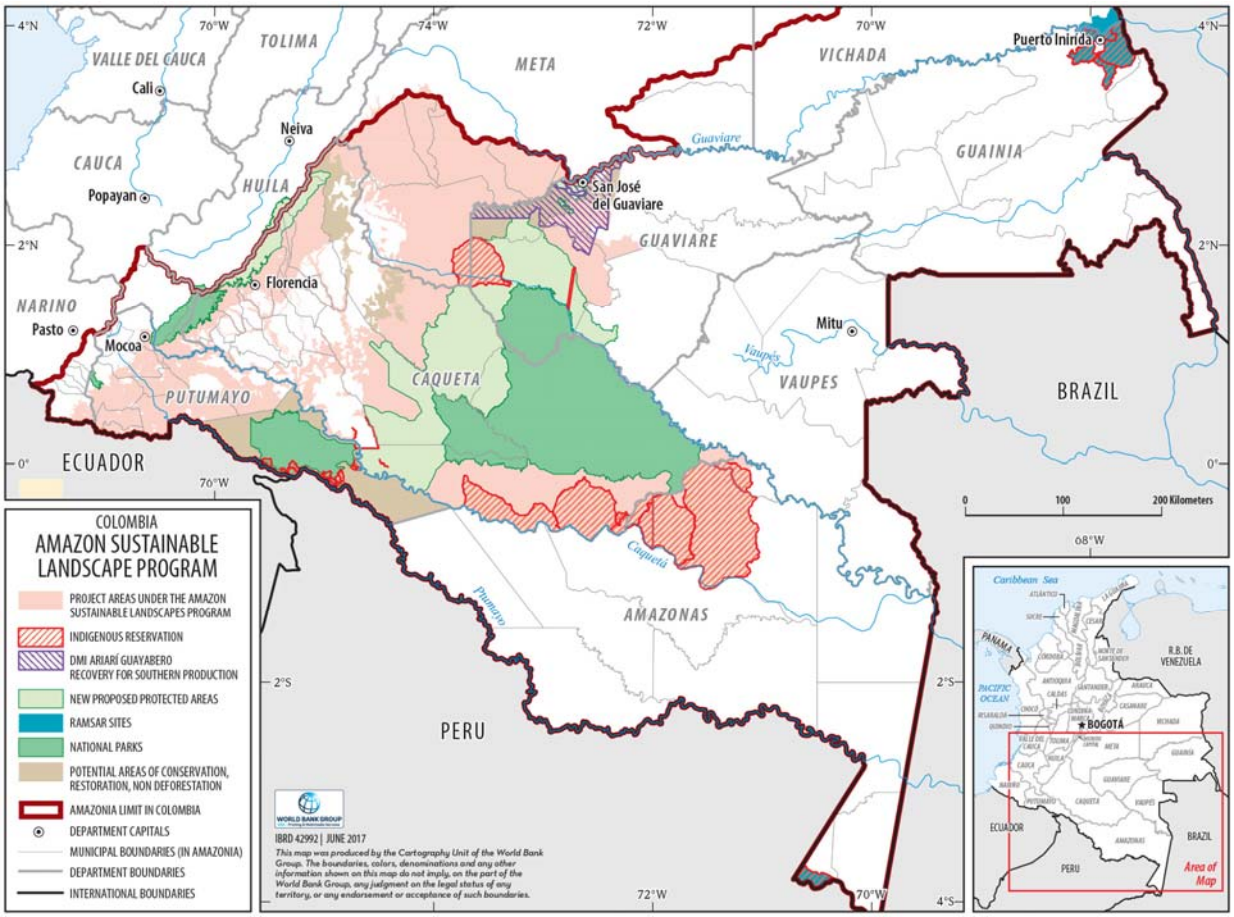
[11] The peace agreement signed between the Colombian Government and the FARC in late 2016 will enable the country to move forward with plans for rural economic development, land restitution, and reintegration of former combatants. Implementing the peace agreement will require enacting major rural reforms, fighting illicit economies, and creating a democratic opening that allows marginalized sectors of rural, indigenous, and Afro-Colombian communities to participate in the political process while facilitating the economic reintegration of former combatants.

4. These thematic convergences are aligned with the reality of the Amazonian departments, especially those of Caquetá, Guaviare, and Putumayo, and converge in a high-priority category for the post-conflict agenda. These are also municipalities that present a large number of early warnings for deforestation.

5. Since GEF-5 and GEF-6 projects will focus on reducing deforestation, they will have some interactions with persons engaging in deforestation who may be associated with illicit crops. The study carried out by SINCHI in 2014 on the engines of deforestation[12] indicated that agricultural producers in this particular area are rooted to their land and seek regulation of land tenure. They combine subsistence agricultural activities with livestock activities as well as some coca cultivation as the main source of family livelihood. They may or may not own livestock on their farm, depending on any income they can derive from coca cultivation. These circumstances are typical of these areas of the agricultural frontier. Although they do not condition GEF-5 and GEF-6 activities, if possible, they can generate some positive results in the implementation of point 4 of the Peace Agreements.

[12] Analysis of engines, agents, and underlying causes of deforestation for the area of the REDD Early Implementation Project in the Colombian Amazon, located in the northwestern sector of the Guaviare department and in the area of reference (SINCHI 2014).

MAP: Amazon Sustainable Landscape Program



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