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R2018-0264/1

December 12, 2018

Closing Date: Friday, January 4, 2019
at 6:00 p.m.

FROM: Vice President and Corporate Secretary

Peru - Integrated Forest Landscape Management Project in Atalaya, Ucayali

Attached is the Project Appraisal Document regarding a proposed loan from the Forest Investment Program (FIC) of the Strategic Climate Fund (SCF) and a proposed FIP grant to Peru for the Integrated Forest Landscape Management Project in Atalaya, Ucayali (R2018-0264), which is being processed on an absence-of-objection basis.

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Document of

The World Bank

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Report No: PAD2639

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT FROM THE STRATEGIC CLIMATE FUND
IN THE AMOUNT OF US$5.8 Million

AND

ON A

PROPOSED LOAN FROM THE STRATEGIC CLIMATE FUND
IN THE AMOUNT OF US$6.4 Million

TO THE

REPUBLIC OF PERU

FOR AN

INTEGRTATED FOREST LANDSCAPE MANAGEMENT PROJECT
IN ATALAYA, UCAYALI

November 28, 2018

Environment & Natural Resources Global Practice
Latin America And Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective November 16, 2018)

Currency Unit	=	Peruvian soles
3.38 PEN	=	US$1
US$0.30	=	1 PEN

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Jorge Familiar Calderon
Country Director:	Alberto Rodriguez
Senior Global Practice Director:	Karin Erika Kemper
Practice Manager:	Valerie Hickey
Task Team Leader(s):	Angela G. Armstrong

ABBREVIATIONS AND ACRONYMS

AFU	Administrative and Finance Unit of the Ministry of Environment
AIDESEP	Interethnic Development Association of the Peruvian Rainforest (Asociación Interétnica de Desarrollo de la Selva Peruana)
ARA	Regional Environmental Authority (Autoridad Regional Ambiental)
BAU	Business As Usual
BCR	Benefit Cost Ratio
CAF	Development Bank of Latin America
CAM	Municipal Environmental Commission *(Comisión Ambiental Municipal)*
CAR	Regional Environmental Commission *(Comisión Ambiental Regional)*
CDD	Community Driven Development
CPF	Country Partnership Framework
CO2	Carbon Dioxide
CONAP	National Amazonian Confederation of Peru *(Confederación de Nacionalidades Amazónicas del Perú)*
COP	Conference of the Parties
CVCFC	Forest Community Monitoring and Oversight Committees *(Comité de Vigilancia y Control Forestal Comunitaria)*
DGM	Dedicated Grant Mechanism
DIRESA	Ucayali Regional Health Office *(Dirrección Regional de Salud Ucayali)*
ESMF	Environmental and Social Management Framework
ERR	Economic Rate of Return
FAO	Food and Agriculture Organization
FCPF	Forest Carbon Partnership Facility
FEMA	Attorney General's Office for Environmental Matters *(Fiscalía Especializada en Materia Ambiental)*
FIP	Forest Investment Program
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GORE	Regional Government *(Gobierno Regional)*
GRS	Grievance Redress Service
IDB	Inter-American Development Bank
IFR	Interim Financial Report
IGA	Initial Gender Analysis
IP	Indigenous Peoples
IPCC	Intergovernmental Panel on Climate Change
IPP	Indigenous Peoples Plan
M&E	Monitoring and evaluation
MEF	Ministry of Economy and Finance *(Ministerio de Economía y Finanzas)*
MINAGRI	Ministry of Agriculture and Irrigation *(Ministerio de Agricultura y Riego)*
MINAM	Ministry of Environment *(Ministerio del Ambiente)*
MRV	Monitoring, Reporting and Verification
NDC	Nationally Determined Contribution
NPV	Net Present Value

OCI	Internal Control Office *(Oficina de Control Interno)*
OEFA	Agency for Environmental Assessment and Enforcement *(Organismo de Evaluación y Fiscalización Ambiental)*
OM	Project Operational Manual
OSINFOR	Forest and Wildlife Resources Supervisory Agency *(Organismo de Supervisión de los Recursos Forestales y de Fauna Silvestre)*
PEN	Peruvian soles
PIP	Peru's Forest Investment Plan
PMT	Project Management Team
PNCBMCC	MINAM's National Program of Forest Conservation for Climate Change Mitigation *(Programa Nacional de Conservación de Bosques para la Mitigación del Cambio Climático)*
PPSD	Project Procurement Strategy for Development
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SERFOR	National Forest and Wildlife Service *(Servicio Nacional Forestal y de Fauna Silvestre)*
SIAF	Integrated System for Financial Administration *(Sistema Integrado de Administración Financiera)*
SERNANP	Peruvian National Protected Areas Service *(Servicio Nacional de Áreas Protegidas por el Estado)*
SPC	Social Price of Carbon
SUNARP	Property Registry Agency *(Superintendencia Nacional de los Registros Públicos)*
tc/ha	Tons of Carbon per Hectare
tCO2-e	Tons of Carbon Dioxide Equivalent
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank

BASIC INFORMATION

Country(ies)	Project Name	
Peru	Integrated Forest Landscape Management Project in Atalaya, Ucayali	
Project ID	Financing Instrument	Environmental Assessment Category
P163023	Investment Project Financing	B-Partial Assessment

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[ ] Fragile State(s)
[ ] Disbursement-linked Indicators (DLIs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
04-Jan-2019	31-Aug-2024

Bank/IFC Collaboration

No

Proposed Development Objective(s)

The project objective is to strengthen sustainable management and use of forest landscapes in the Raimondi, Sepahua and Tahuanía districts of the Atalaya province.

Components

Component Name	Cost (US$, millions)
Institutional Strengthening for Forest Conservation	2.27

Strengthening Sustainable Forest Landscape Management and Use	8.04
Project Management, Monitoring and Evaluation	1.89

Organizations

Borrower:	Ministry of Economy and Finance
Implementing Agency:	Ministry of Environment and Natural Resources

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	12.20
Total Financing	12.20
of which IBRD/IDA	0.00
Financing Gap	0.00

DETAILS

Non-World Bank Group Financing

Trust Funds	12.20
Strategic Climate Fund Credit	6.40
Strategic Climate Fund Grant	5.80

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2019	2020	2021	2022	2023	2024	2025
Annual	0.18	0.79	1.20	2.14	3.48	4.18	0.24
Cumulative	0.18	0.97	2.17	4.30	7.79	11.96	12.20

INSTITUTIONAL DATA

Practice Area (Lead)	Contributing Practice Areas
Environment & Natural Resources	

Gender Tag

Does the project plan to undertake any of the following?	
a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF	Yes
b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment	Yes
c. Include Indicators in results framework to monitor outcomes from actions identified in (b)	Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

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

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✓	
Performance Standards for Private Sector Activities OP/BP 4.03		✓
Natural Habitats OP/BP 4.04	✓	
Forests OP/BP 4.36	✓	
Pest Management OP 4.09	✓	
Physical Cultural Resources OP/BP 4.11	✓	
Indigenous Peoples OP/BP 4.10	✓	
Involuntary Resettlement OP/BP 4.12		✓
Safety of Dams OP/BP 4.37		✓
Projects on International Waterways OP/BP 7.50		✓
Projects in Disputed Areas OP/BP 7.60		✓

Legal Covenants

Sections and Description

Loan Agreement - Safeguards Aspects: The Borrower, through PNCBMCC, shall: (a) carry out the Project in accordance with the ESMF; (b) comply with the procedures detailed in said ESMF for environmental screening, evaluation, implementation and monitoring, including the procedures for the preparation of environmental and/or social management plans, and pest management plans, if applicable; and (c) if applicable, implement and/or cause to be implemented, the pertinent environmental and social management plan, in accordance with its terms and in a manner acceptable to the World Bank. - Section I.C of Schedule 2

Sections and Description

Grant Agreement - Safeguards Aspects: The Recipient, through PNCBMCC, shall: (a) carry out the Project in accordance with the ESMF; (b) comply with the procedures detailed in said ESMF for environmental screening, evaluation, implementation and monitoring, including the procedures for the preparation of environmental and/or social management plans, and pest management plans, if applicable; and (c) if applicable, implement and/or cause

to be implemented, the pertinent environmental and social management plan, in accordance with its terms and in a manner acceptable to the Bank. - Section I.D of Schedule 2

Sections and Description

Loan Agreement - Implementation Arrangements: The Borrower shall maintain throughout the period of Project implementation, a Project Management Team (PMT) within PNCBMCC, responsible for project coordination, management and administration (including financial management, procurement, monitoring, evaluation, and reporting), composed of qualified experts in adequate numbers with terms of reference, qualifications and powers acceptable to the World Bank as further described in the OM. - Section I.A.1(a) of Schedule 2

Sections and Description

Grant Agreement - Implementation Arrangements: The Recipient shall maintain throughout the period of Project implementation, a Project Management Team (PMT) within PNCBMCC, responsible for project coordination management and administration (including financial management, procurement, monitoring, evaluation, and reporting), composed of qualified experts in adequate numbers with terms of reference, qualifications and powers acceptable to the World Bank as further described in the OM. - Section I.A.1(a) of Schedule 2

Sections and Description

Loan Agreement - Implementation Arrangements: The Borrower: (a) within 90 days after Effective Date, through PNCBMCC, shall hire a financial management specialist, in form and substance satisfactory to the World Bank; (b) within 90 days after Effective Date, through PNCBMCC, shall hire a procurement specialist, in form and substance satisfactory to the World Bank; (c) carry out the Project in accordance with a manual (Operational Manual) satisfactory to the Bank; (d) enter into an agreement with the relevant Beneficiary ("Implementation Agreement") for the implementation of any Business Plan under Part 2.2 of the Project, under terms and conditions approved by the Bank and included in the OM; and (e) exercise its rights and carry out its obligations under each Implementation Agreement in such manner as to protect the interests of the Borrower and the World Bank and to accomplish the purposes of the Loan. - Section I.A.2 of Schedule 2

Sections and Description

Grant Agreement - Implementation Arrangements: The Recipient: (a) within 90 days after Effective Date, through PNCBMCC, shall hire a financial management specialist, in form and substance satisfactory to the World Bank; (b) within 90 days after Effective Date, through PNCBMCC, shall hire a procurement specialist, in form and substance satisfactory to the World Bank; (c) carry out the Project in accordance with a manual (Operational Manual) satisfactory to the Bank; (d) enter into an agreement with the relevant Beneficiary ("Implementation Agreement") for the implementation of any Business Plan under Part 2.2 of the Project, under terms and conditions approved by the Bank and included in the OM; and (e) exercise its rights and carry out its obligations under each Implementation Agreement in such manner as to protect the interests of the Recipient and the World Bank and to accomplish the purposes of the Grant. - Section I.A.2 of Schedule 2

Conditions

Type	Description
Effectiveness	SCF Loan Agreement: The SCF Grant Agreement has been executed and delivered and all conditions precedent to its effectiveness or to the right of the Recipient to make withdrawals under it have been fulfilled.
Effectiveness	SCF Loan Agreement: The Borrower, through PNCBMCC, has adopted the Project Operational Manual (OM) in form and substance satisfactory to the World Bank.
Effectiveness	SCF Grant Agreement: The execution and delivery of this Agreement on behalf of the Recipient have been duly authorized or ratified by all necessary corporate or governmental action.
Effectiveness	SCF Grant Agreement: The Recipient, through PNCBMCC, has adopted the Operational Manual (OM) in form and substance satisfactory to the World Bank.

PERU
INTEGRATED FOREST LANDSCAPE MANAGEMENT PROJECT IN ATALAYA, UCAYALI

TABLE OF CONTENTS

I. STRATEGIC CONTEXT

A. Country Context

1. Over the past decade, Peru has made great strides in its development. These achievements include significant growth, low inflation, macroeconomic stability, reduction of external debt and poverty, and significant progress in social and development indicators. Prudent macroeconomic policies and a favorable external environment enabled an average annual growth rate of close to 6% during the last ten years and 4.7% over the last two decades. This economic performance has allowed income per capita to double over the last ten years. Between 2007 and 2017, moderate poverty fell by more than half, from 42.4% to 21.7%, while extreme poverty fell from 11.2% to 3.8% (INEI, 2018). In the same period, the real income per capita of the poorest 40% grew over 35.9%, much faster than the 19.3% national average increase. Despite these gains, social indicators for Amazonian indigenous peoples remain the lowest in the country, with high levels of chronic malnutrition, limited access to education and primary health care, and disproportionate levels of maternal and infant mortality. Poor women are also particularly vulnerable in Peru.

2. Peru is the third largest country in South America and is divided into three large geographical regions: the coastal plains, the Andes, and the Amazon, which alone covers nearly 61% of the country. Largely due to the flora and fauna found in the Amazon region, Peru is considered one of the most megadiverse countries in the world. This high biodiversity, which ranks second in South America and ninth in the world, is threatened by high deforestation rates, unsound forestry practices and illegal logging. On average, over 134,000 hectares of forest cover were lost annually between 2005 and 2015 (Table 1). Forty-five percent (45%) of this deforestation has taken place on lands with no legal status.

Table 1. Annual Forest Cover Loss (2005-2015) (hectares)

Region	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	**147 622**	**74 499**	**106 184**	**105 704**	**152 157**	**136 202**	**123 563**	**149 470**	**150 280**	**177 566**	**156 462**
Amazonas	3 621	3 856	5 582	3 048	4 545	3 595	3 181	4 746	6 682	5 199	6 931
Ayacucho	497	798	719	193	1 088	603	563	897	803	771	813
Cajamarca	1 389	714	1 157	601	735	1 131	974	702	828	1 147	1 074
Cusco	3 641	3 325	2 867	2 453	4 362	3 610	3 329	4 190	3 542	5 089	4 808
Huancavelica	103	22	46	33	28	131	41	12	28	77	73
Huánuco	26 405	8 700	11 670	17 127	24 989	17 903	19 171	23 254	20 795	27 595	22 912
Junín	13 889	5 896	5 041	6 686	9 231	7 199	6 896	7 412	8 231	12 277	9 053
La Libertad	82	32	46	21	58	110	46	35	48	49	106
Loreto	23 010	12 637	20 056	25 516	28 222	25 197	21 287	33 055	28 821	37 564	31 668
Madre de Dios	8 288	5 756	7 338	10 503	5 691	14 286	11 768	11 702	12 401	15 767	17 802
Pasco	7 859	4 353	3 132	3 527	7 583	7 301	6 065	8 585	7 623	9 987	7 478
Piura	231	202	281	150	125	174	327	83	44	65	112
Puno	2 081	731	903	1 040	538	2 153	943	930	1 165	2 942	1 817
San Martín	34 253	15 173	37 119	17 773	39 285	34 883	25 052	29 113	22 517	26 400	22 101
Ucayali	22 273	12 304	10 227	17 033	25 677	17 926	23 920	24 754	36 752	32 637	29 714

Source: INEC, based on data from MINAM) / PNCB

3. These degradation trends are particularly crucial in Peru´s Amazon region, which contains 73 million hectares (94% of Peru's total forest area) of still well conserved tropical forests. Increasing pressure on forests and forest-related resources over the last few decades has resulted in growing social conflicts, as forests are

often a primary source of revenue and income for forest dwellers who are experiencing growing competition for forest resources and lands from agriculture and grazing. In fact, land use change for crop expansion, particularly in small- and medium-sized farm holdings, is the primary cause of deforestation in the Peruvian Amazon. The departments with the greatest cumulative forest cover loss from 2005 to 2015 were San Martin (303,669 hectares), Loreto (287,033 hectares), and Ucayali (253,217 hectares). The exploitation of other non-renewable resources also found in the Amazon – mainly gold, oil and gas – that contribute to Peru's national GDP, are another source of deforestation. These resources involve the use of extractive practices that often encroach dramatically on forest ecosystems. This situation is compounded by road construction in the region, as well as the limited capacity of communities and private industries to conduct sustainable forestry practices, and national and local government agencies to enforce regulations and promote more renewable forest uses. In addition, indirect causes of deforestation include increasing migration and population growth in the Amazon, as well as a lack of land use planning.

B. Sectoral and Institutional Context

4. **Forest Sector.** According to official sources, 80.1% of the country's total area is suitable for forestry uses, while only 5.9% is suitable for agriculture and 13.9% suitable for livestock-grazing activities. The forest sector encompasses a wide range of subsistence and productive activities, including timber logging from native forests and commercial plantations, and extraction of a variety of non-timber forest products, including wildlife. Despite its economic relevance, the forest sector only contributes 1.1% to the country's GDP (MINAM, 2013) and receives less than 0.01% of direct foreign investment (MINAM, 2013) and contributes to only 0.3% of national employment (FAO, 2011). Development of the forestry sector falls far short of its potential in terms of surface area. Peru is in fact a net importer of forest products, given low levels of industrialization and value added. The area under commercial plantation is still very low, and less than half of the exploitable forest area is under operating concession. This data, however, does not consider the thousands of people living in rural areas who depend on forests for their livelihoods. For example, although data on the rural population exists, the degree of dependence of these populations on forest resources is unknown. In addition, the Ministry of Agriculture notes that while the forestry sector currently represents only around 1% of GDP, it is considered that this share will rise to around 8% over the next ten years.

5. In addition, over half of national greenhouse gas (GHG) emissions come from land use change (predominantly deforestation) and Peru's Nationally Determined Contribution (NDC)[1] sets a target of a 30% reduction in emissions from a projected Business-As-Usual scenario by 2030. Forests offer a significant opportunity to support economic diversification and poverty reduction, and forest-smart interventions can play a key role in addressing climate change and contributing to Peru's green growth agenda. In addition to Peru's NDC, the National Strategy on Forests and Climate Change, approved in 2016, defines a long-term vision for mitigating climate change impacts in the forest sector. This strategy presents lines of action to reduce deforestation and forest degradation, as well as to increase carbon stocks and improve sustainable forest management.

[1] Intended Nationally Determined Contributions under the UNFCCC, mitigation and adaptation commitments defined prior to the 2015 COP in Paris and intended to contribute to the global mitigation efforts of global warming below 2 degrees, http://unfccc.int/focus/indc_portal/items/8766.php

6. **Institutional Context.** The General Environment Act of 2005 strengthened the country's environmental institutional framework, along with the subsequent creation in 2008 of the Ministry of Environment (*Ministerio del Ambiente,* MINAM), responsible for the design, implementation and supervision of national environment policies, and their compliance at the national, regional and local levels, the Peruvian National Protected Areas Service (*Servicio Nacional de Areas Naturales Protegidas por el Estado,* SERNANP), and the Agency for Environmental Assessment and Enforcement (*Organismo de Evaluación y Fiscalización Ambiental,* OEFA). MINAM coordinates the work of SERNANP and OEFA, primarily through Regional and Municipal Environmental Commissions, which serve as a forum for dialogue and coordination among State entities and civil society for addressing environmental issues of regional or municipal concern.

7. Regional governments (*Gobiernos Regionales,* GORE) are responsible for managing forest resources, issuing permits, and providing technical assistance to forest users, including indigenous peoples and small forest users. The GORE, which have political and administrative autonomy, organize and lead regional public management, contributing to regional sustainable development. The GORE have established Regional Environmental Authorities (*Autoridades Regionales Ambientales,* ARAs), with the same functions as MINAM at the regional level and to provide support to SERNANP, the National Forest and Wildlife Service (*Servicio Nacional Forestal y de Fauna Silvestre,* SERFOR), and the Forest and Wildlife Resources Supervisory Agency (*Organismo de Supervisión de los Recursos Forestales y de Fauna Silvestre,* OSINFOR). The assumption of responsibilities by subnational and local bodies has yielded uneven results, depending on regional and local capacities and resources. Some regional governments have been very proactive in developing environmental and territorial governance tools, while others have lagged behind and require support in strengthening their technical and financial capacity. In particular, some require support in ensuring that unauthorized expansion of productive activities on environmentally valuable forest lands is prevented, as well as in strengthening enforcement of compliance with land-use classification and territorial planning provisions. In addition, the 2014 Forest Law established Forest Community Monitoring and Oversight Committees (*Comités de Vigilancia y Control Forestal Comunitaria,* CVCFCs). However, these committees are not provided with funding under the law, and the cost of performing monitoring activities can be quite substantial, requiring approximately 32 days of work per CVCFC member annually.

8. Limitations are also evident in the institutional framework at the community level, where producers and forest enterprises often have limited organizational capacity. This typically inhibits their ability to access markets and influence market conditions, to gain access to financial and technical support, and to exploit opportunities for economies of scale through the sharing of post-harvest facilities. Existing governance and participation mechanisms are also often inadequate to guarantee the effective and equitable representation and participation in decision-making of different stakeholder groups, especially traditionally marginalized sectors such as indigenous groups, the poor and women. The Project will help ensure that elements such as improved productive capacities and planning are backstopped with effective enforcement and participation mechanisms.

9. **The Forest Investment Program (FIP) and Peru's Forest Investment Plan (PIP).** The FIP provides funding to support developing country efforts in reducing deforestation and forest degradation and to promote sustainable forest management that leads to emissions reductions from deforestation and enhancement of forest carbon stocks (REDD+). Peru was selected by the FIP Sub-committee as one of the first eight pilot countries to initiate its program in 2010. The FIP Sub-committee approved Peru's PIP in October 2013, with a total funding envelope of US$50 million (US$26.8 million in grant funding and US$23.2 million in loan financing). Peru's PIP is expected to strengthen enabling conditions (governance, innovation in sustainable forest

management, and land titling) to foster investments that reduce pressures on forests and restore degraded areas, as well as activities that promote the forest sector's competitiveness. Three geographic intervention areas were prioritized: Atalaya, Tarapoto–Yurimaguas, and Puerto Maldonado-Iñapari. These are areas where the PIP is expected to have the greatest impact on reducing emissions and producing the most important social and environmental co-benefits. The three areas are also representative of deforestation and forest degradation dynamics in the Peruvian Amazon and are expected to serve as pilot areas for climate-smart landscape models that can be replicated in other parts of the Peruvian Amazon.

10. The Government of Peru has selected the Bank to support the preparation and implementation of the Integrated Forest Landscape Management Project in Atalaya, Ucayali, while the Inter-American Development Bank (IDB) is responsible for three additional FIP projects. The three IDB projects support: (i) integrated forest landscape management along the main route between Tarapoto and Yurimaguas in the San Martín and Loreto regions (US$ 12.7 million); (ii) integrated landscape management along the main route between Puerto Maldonado and Iñapari and in the Amarakaeri Communal Reserve and beneficiary communities in the Madre de Dios (US$12.37 million); and (iii) strengthening national forest governance and innovation (US$ 12.46 million). Part of the grant allocation for the World Bank supported-project includes a Project Preparation Grant of US$400,000.00, which has supported project design and the definition of project implementation arrangements.

11. The FIP also includes a special initiative, the Dedicated Grant Mechanism (DGM), to promote the involvement and participation of Indigenous Peoples (IPs) in FIP and other related processes. For Peru, the FIP Sub-committee approved a US$5.5 million grant for the Saweto DGM, for which local IPs invited the Bank to be their delivery partner. The Project, which became effective in November 2015, is supporting IPs in selected communities in the Peruvian Amazon region in their efforts to improve their sustainable forest management practices. Through investments in native land titling, indigenous forest management, and governance, the Project aims to benefit approximately 2,250 native communities in targeted regions in the Amazon, and approximately 50% of the beneficiaries are expected to be indigenous women.[2] With implementation underway and 417 communities already benefiting from financing under the Saweto DGM (as of May 2018), important lessons are being generated. These include the importance of regional governments' political commitment to native community land titling, inter-institutional challenges in this regard, as well as the importance of citizen engagement in advancing land tenure security for indigenous communities. The FIP Forest Landscape Management Project in Atalaya has taken these lessons into consideration in the Project's design and will coordinate closely with the DGM as well as the other projects under the PIP to share data, results and experiences where relevant.

12. The Project area lies within three districts (Raimondi, Tahuanía, and Sepahua) of the Atalaya Province, in the Ucayali region of the Amazon (see Map). In Ucayali, 20.1% of children under the age of five suffer from chronic malnutrition and 57% of children aged 6 to 36 months have anemia (DIRESA Ucayali 2017). Sewage services cover 54.5% of urban households and only 3.9% of rural households. Poor women are particularly vulnerable in Ucayali, with an illiteracy rate of 7.2%, compared to 2.7% among men. Nearly 27% of women between the ages of 15 and 19 have had their first pregnancy, which is significantly higher than the national average of 12.7%.

[2] The DGM has a sub-project funding window of US$500,000 dedicated exclusively to forest management subprojects proposed or managed by indigenous women.

13. Atalaya is one of the most important productive forest regions in the country, with 3.98 million hectares of forests, of which almost 3 million are relatively well-conserved tropical forests. Most of the province's land area (over 90% in each Project district) is covered with forest. The construction of the Federico Basadre highway 70 years ago, linking Lima to Pucallpa (Ucayali's capital city), made it possible to reach forests in central and northern Ucayali and also triggered agricultural practices, primarily by migrants, in areas along the highway that are not adequately supervised. Today, with over 769,000 hectares of deforested land, Ucayali is the fifth most deforested region of Peru. Deforestation is caused by a number of inter-related factors, including agricultural expansion, migration, and illegal logging. Over half (66%) of indigenous communities with extraction permits in the Project area have been fined for forest violations.

Table 1. Project Area

Province	District	Area (ha)	Área (%)
Atalaya	Raimondi	1,453,920.5	48.6%
	Tahuanía	767,200.4	25.6%
	Sepahua	773,700.7	25.8%
Total		**2,994,821.6**	**100%**

14. Around 64% of Atalaya´s population of about 47,000 are IPs, mainly from three Amazonian ethnic groups, Ashaninka, Yine and Asheninca, settled in approximately 50 communities located in more than one million hectares of forest, many of whose members are living in conditions of extreme poverty. The classification of land use in the Atalaya province includes: (i) IPs territories totaling 1.46 million hectares, with some IPs still awaiting land allocation, regularization and/or titling; (ii) forty-six forest concessions under Permanent Production Forest areas, granted by the government to the private sector since 2001, and totaling 320,000 hectares (70% are currently inactive or under inspection for lack of compliance with forestry laws and regulations); (iii) 6,000 hectares under small and mid-sized land holdings, held by 1,200 forest dwellers called "ribereños" and "colonos," most of them with unrecognized land rights; and (iv) a very small proportion of buffer zones in three protected areas (El Sira Communal Reserve, Otishi National Park and Alto Purus National Park).

15. Atalaya faces others challenges in moving towards a more sustainable and climate-smart forest landscape, including: (i) IPs' and other forest dwellers' limited capacity and knowledge of how to sustainably manage their commonly owned forest resources (e.g., limited technical capacity to prepare and implement forest management plans, understand conventional forest management, administrative and regulatory processes, as well as limited knowledge of local markets and negotiation of logging contracts with third parties); (ii) a lack of institutional capacity by community institutions, producers associations and national/local governments to enforce land tenure rights and sustainable forest management rules and regulations that are needed to ensure a fair articulation of indigenous communities to Peru's mainstream market economy; as well as (iii) limited capacities of small-sized enterprises that affect their ability to access markets and to process, modernize and diversify activities. To better manage the range of challenges, including those associated with climate variability and change, transformation of land management at both community and government agency levels is required. Adoption of sustainable forest landscape management strategies and practices (e.g., silviculture, agroforestry, among others) will help communities address these issues, including the recovery of degraded areas and fostering a low carbon development trajectory. These management strategies can improve local livelihoods and food security, and restore productive natural resources.

16. As described in more detail in Annex 5 on Drivers of Deforestation and Theory of Change, the Project assumes a correlation between the effects of tenure security, access to credit, productivity, and ultimately better local community level governance. Awarding land titles to indigenous and/or local communities can, at least in the short term, help to protect forests and ensure cascading effects in terms of biodiversity conservation, carbon sequestration, and other ecosystem services that are vital on both local and global ecological scales. The theory of change considers that titling can reduce forest cover change positively in a community by: increasing formal regulatory pressure (adherence to forest management plans); improving internal governance mechanisms at the community level (e.g., better physical demarcation, communication, and adherence to land use plans); boosting the communities' interaction with public sector entities, and enhancing their ability to access technical extension services, educational programs, and conservation incentive payment schemes. The Project also recognizes that, to ensure the longer-term sustainability of titled lands and improve the livelihoods of rural populations, land titling needs to be accompanied by capacity building and support to enhance communities' managerial and technical skills in improved forest management and in planning and implementation of new income options in forest landscapes.

C. Higher Level Objectives to which the Project Contributes

17. The activities to be supported under the Project are aligned with Peru's FY17-21 Country Partnership Framework (CPF), Report No. 112299-PE, dated April 4, 2017, and in particular with Objective 8 on strengthening the management of natural resources under the Natural Resources and Climate Change Pillar (Pillar III). This Objective recognizes the need to decrease the annual rate of deforestation and forest degradation in the Amazon region, as well as the importance of land tenure and sustainable use of forests and biodiversity. The CPF acknowledges not only the costs of land and forest degradation, but also the importance of forests as an essential source of income and livelihood, as well as forests' important role in mitigating and adapting to climate change. The FIP operation is also aligned with the Bank's Climate Change Action Plan and the Bank's Forest Action Plan for FY16-20. FIP Project activities are fully consistent with the focus areas of the Bank's Forest Action Plan, namely sustainable forest management and forest-smart interventions in other sectors. These focus areas aim to strengthen the foundations for positive forest outcomes, including climate change and resilience, rights and participation, and institutions and governance.

18. As mentioned, the Project is also a key part of Peru's Forest Investment Plan, which is expected to generate a transformative impact within the next 10-15 years and aims to reduce GHG emissions produced by deforestation and forest degradation, and enhance carbon reserves in sustainable forest landscapes, thereby helping to reach the national target of "Declining net emissions to equivalent to zero in the category of Land Use, Land-Use Change and Forestry by 2021." In achieving this objective, the PIP is expected to generate two types of co-benefits: (i) reducing the poverty of indigenous communities and other local populations, under a gender equality approach, by increasing income from the management of sustainable forest landscapes and productive agroforestry mosaics; and (ii) reducing the loss of biodiversity and maintaining forest ecosystem services.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

19. The Project objective is to strengthen sustainable management and use of forest landscapes in the Raimondi, Sepahua and Tahuanía districts of the Atalaya province. This objective is consistent with the project objective approved in MINAM's own project processing documentation (on project viability), which highlights the Project aim of strengthening the sustainable use of forest landscape ecosystems in the project area. [3]

B. Project Beneficiaries

20. The Project's primary beneficiaries include small forest users and indigenous communities, comprising 5,997 households in 120 communities, who use forest resources for their businesses and livelihoods in the Raimondi, Sepahua and Tahuanía districts of the Atalaya province. Small forest users are comprised of forest concessionaires with timber and non-timber forest product enterprises, or small producers that maintain forests on their property. The majority of beneficiaries (80%) are indigenous and at least 30% are expected to be women. The Project will further provide incentives for women's participation in grant-funded forest landscape investments and businesses by requiring that at least 20% of the beneficiaries of a business initiative be women, as well as by prioritizing those proposals that demonstrate a greater participation of women. In addition to the three primary Amazonian ethnic groups (Ashaninka, Yine and Asheninca) in the Project area, the area's IPs also include Shipibo-Konibo, Amahuaca, Yaminahua, Nahua, and Machi-guenga. Each family has less than two hectares for farming production purposes, primarily for self-sufficiency purposes. The average household income for indigenous communities is US$2,122 per year, compared to US$2,621 per year for other small forest users in the area. These communities are located in districts with a Human Development Index that is lower than the national average (0.43 versus 0.5). The poverty conditions are also reflected in the high rates of social vulnerability and food insecurity. Indigenous women have lower educations levels and are more likely to lack identification documentation compared with non-indigenous women. In Ucayali, over 29% of female Spanish speakers lack their own income, but this proportion rises to nearly 55% for female speakers of native languages.[4]

C. PDO-Level Results Indicators

21. The following key indicators and targets will be tracked under the Project:

- Land area under sustainable landscape management practices (ha) (Corporate results indicator). *(**Target**: 380,500 ha)*
- Indigenous communities with registered usage or ownership rights. This includes forest communities with land holdings registered, demarcated and/or titled. *(**Target:** 23 communities)*
- Land users adopting sustainable land management practices as a result of the Project (number) (of which female). Includes beneficiaries who receive general technical assistance and capacity

[3] By strengthening sustainable forest landscape management, the Project will contribute to greenhouse gas emission reductions from deforestation and forest degradation, promoting local livelihoods and protecting the biodiversity and ecosystems provided by forests.
[4] Speakers whose native languages are *quechua*, *aymara* and other native languages.

building, as well as those beneficiaries who participate in the incentive grant program. ***(Target:*** *2,300 households, with at least 3,450 individual female beneficiaries)*

- Share of target beneficiaries satisfied with their participation in forest and land-use interventions (percentage) (of which female) (Core indicator). Indicator will measure Project beneficiaries considered "satisfied" according to criteria detailed in Operations Manual and measured by survey taken at Project outset (baseline), mid-term, and closure. ***(Target****: 75%)*
- Index for forest entrepreneurship. This indicator measures the capacity of forest enterprises to add value in processing and marketing of forest products from the targeted forest landscapes. The index is expected to be comprised of the following dimensions: (i) establishment and organization of forest enterprise, (ii) number of value chains, (iii) number of products sold on the market, and (iv) production volume. ***(Target:*** *60%)*

III. PROJECT DESCRIPTION

A. Project Components

22. **Component 1. Institutional Strengthening for Forest Conservation (US$2.27 million in FIP Grant financing)**

23. **Sub-component 1.1. Provision of land use rights in forest landscapes and promoting community-level land-use planning.** The objective of this sub-component is to work with national government agencies (e.g., Ministry of Agriculture and Irrigation [*Ministerio de Agricultura y Riego,* MINAGRI], Property Registry Agency [*Superintendencia Nacional de los Registros Públicos,* SUNARP]), sub-regional government agencies (e.g., regional and municipal land regularization and forestry agencies), and indigenous and other forest dependent community organizations to support local efforts to secure forest land ownership and use (e.g., forest concessions). In particular, this component will support the registering of indigenous peoples and native communities with SUNARP, through the provision of technical and legal assistance to native communities. Recognition of a native community as a legal entity is a prerequisite for initiating the land titling process. The component will also finance the demarcation and titling process, which establishes the geographic location and physical boundary for native communities' land and formally registers title for native communities, as well as territorial expansion, by covering the costs charged by the respective entities (e.g., regional agricultural offices) to carry out these processes.

24. **Sub-component 1.2. Strengthening enabling conditions for forest management.** This sub-component aims to foster reduced forest-related illegal activities and to ensure compliance with sustainable forest management practices, through improving information management, increasing institutional transparency and accountability across relevant institutions, and building the skills base and capacity of forest stakeholders around sustainability principles. Technical support will be provided to ARA personnel, responsible for law enforcement within forest areas, to improve the prevention, inspection, and detection of illegal activities in forested areas.

25. Technical support, including workshops, will also be provided in strengthening the planning, operation, and coordination of the CVCFC responsible for oversight and surveillance within the indigenous communities,

in coordination with corresponding environmental and forestry authorities (OSINFOR, ARA, Attorney General's Office for Environmental Matters (*Fiscalía Especializada en Materia Ambiental,* FEMA), SERFOR, and others). The technical support will include tailored activities (such as training and outreach campaigns) to encourage the participation of women in these Committees.

26. This sub-component will also foster citizen participation in the Municipal Environmental Commission (*Comisión Ambiental Muncipal,* CAM) and Regional Environmental Commission (*Comisión Ambiental Regional, CAR)* to develop a common vision for community landscape management. This common vision is expected to contribute to more sustainable land-use decisions and also support the incorporation of this vision into indigenous communities' life plans, a land planning and resource management instrument that sets out indigenous communities' vision for the development of their lands.[5] Technical assistance will be provided to communities to support them in preparing and updating their life plans. The Project will also encourage the participation of women, youth, and other vulnerable groups in these life plan development exercises.

27. **Component 2. Strengthening Sustainable Forest Landscape Management and Use (US$8.04 million in FIP Grant and Loan financing, of which US$6.40 million financed with FIP Loan and US$1.64 million financed with FIP Grant)**

28. **Sub-component 2.1 Strengthening technical and business capacities of forest communities and small producers to better manage forests.** Under this sub-component, local technical advisors will support communities in developing, strengthening, and implementing business plans (to be supported under sub-component 2.2), optimizing and modernizing processes, and conducting seminars to share experiences with other communities. The sub-component also aims to support communities in organizing and developing forest enterprises and community associations, and to provide guidance on accessing markets for their products (timber and non-timber), and alliances with the private sector in an effort to improve profitability. In addition, this sub-component will seek to address gender and social inclusion issues, in which community support and training methods will take into account the preferred methods of learning of women and others, e.g., single-sex groups, women-to-women exchanges. Likewise, the sub-component will also include targeted training on climate change co-benefits related to improved forest landscape management and use thereby contributing to increasing mitigation and/or resilience potential of selected investment proposals.

29. **Sub-component 2.2 Investing in forest landscapes.** This component aims to promote the development of forest landscape investments and businesses, by providing small-scale grants at the community level that contribute to sustainable forest management, food security, and income generation. Communities and community enterprises will prioritize investments, such as agroforestry, silviculture, ecotourism, and other landscape management measures. Community members will develop business plans in accordance with criteria outlined in an incentive fund handbook, with technical and business development support provided by project-financed local technical advisors (see sub-component 2.1). This handbook incorporates a listing of best practices to ensure that the investments selected are the most appropriate to sustainably manage forest resources. Incentive grant financing will require beneficiary co-financing of 30% from small forest users and 20% from

[5] Community life plans outline a community's development plans for a particular area, including information on land-use patterns, hunting and fishing grounds, and areas of cultural importance, with a view to protecting areas of biodiversity and/or cultural importance. These layers of information are digitized and returned to communities, where they are used as strategic tools for developing sustainable resource management plans. Indigenous communities have adopted life plans in lieu of traditional development plans.

indigenous communities. In the case of small forest users, 10% of co-financing should be provided in cash, with the remaining 20% in-kind. In addition, this sub-component will seek to address gender and social inclusion issues, drawing on community support and on training methods that take into account the preferred methods of learning of women. Moreover, the investment proposals that demonstrate a greater participation of women will receive a higher score and higher probability of receiving grant support. Lastly, this sub-component is also expected to contribute to climate change adaptation and mitigation by ensuring that selected investment proposals are supported (via accompanying capacity development under sub-component 2.1) and evaluated in such a way that ensures these opportunities are maximized.

30. **Component 3. Project management, monitoring and evaluation. (US$1.89 in FIP Grant financing)** This component will finance the operating costs of a Project Management Team (PMT) within MINAM's National Program of Forest Conservation for Climate Change Mitigation (*Programa Nacional de Conservación de Bosques para la Mitigación del Cambio Climático,* PNCBMCC) to carry out Project oversight and management functions for Components 1 and 2. Support will be provided for procurement, financial management, coordination, social and environmental safeguard management, reporting, and monitoring and evaluation. The PMT will be responsible for coordinating with a Project Oversight Committee (see Annex 2).

B. Project Cost and Financing

31. The proposed operation provides Investment Project Financing in the amount of US$12.2 million, with financing from a Strategic Climate Fund FIP grant (US$5.8 million) and from a Strategic Climate Fund FIP credit (US$6.4 million). In addition, beneficiaries of small-scale grants under Sub-component 2.2 will provide contributions, primarily in the form of in-kind support, valued at 20% to 30% of Project financing for forest landscape investments.

Project Components	Project Cost	FIP Loan Financing	FIP Grant Financing
Component 1. Institutional Strengthening for Forest Conservation	2.27		2.27
Component 2. Strengthening Sustainable Forest Landscape Management and Use	8.04	6.40	1.64
Component 3. Project Management, Monitoring and Evaluation	1.89		1.89
Total Costs	12.20	6.40	5.80

C. Lessons Learned and Reflected in the Project Design

32. The Project design benefits from reviews of several previous World Bank operations in Peru, as well as Latin America more broadly. In particular, key lessons from the Indigenous and Afro-Peruvian Peoples

Development Project (P060499) and Indigenous Management of Protected Areas in the Peruvian Amazon (P065200) were considered during the preparation of this Project.

Table2: Lessons Learned and Incorporated in Project Design

Lessons Learned	How Incorporated in Project Design
Ensure that all the roles and responsibilities among the various implementation levels are clear at the outset.	The Project Operational Manual (OM) and Grant Agreement will include details regarding the respective roles and responsibilities, decision making authority, requirement of broad community support for community proposals, conflict resolution, etc.
Simple design, light bureaucracy	Contracting and procurement by MINAM will be under the World Bank's policies and procedures but Community Driven Development (CDD) rules will apply for procurement at the sub-project level. These rules and eligibility criteria will be clearly spelled out in the OM.
Stability in executing agency in terms of staffing and capacity is critical for timely and satisfactory execution	The core executing agency staff within MINAM will comprise staff who supported preparation to ensure continuity. Any change in the core team will require a no-objection from the World Bank.
Indigenous management of protected areas plays a positive role in ensuring biodiversity conservation.	Via its strengthening of community forest management, the Project is expected to also build environmentally sound practices at the community level.
Providing incentives for sustainable use of natural resources to enhance community livelihoods leads to a positive transformation in environmental management more broadly.	This approach, which provides direct investment support combined with facilitation and training, will help community beneficiaries assume responsibility for sustaining their livelihoods in environmentally sound ways.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

Project Management

33. ***Project Oversight Committee***. To guide overall Project management and oversight, the Government of Peru has established a Project Oversight Committee comprised of MINAM, Ministry of Economy and Finance (*Ministerio de Economía y Finanzas,* MEF), MINAGRI, the Ministry of Culture, and the Regional Government of Ucayali*)*. While this multi-sector/stakeholder committee has played a key role in ensuring the PIP was designed in a transparent, inclusive and participatory manner, both at the national and regional levels, the Committee

will now continue as the main oversight body for the implementation of the four PIP Projects (i.e., the three IDB FIP Projects and Bank FIP Project) to provide higher-level government coordination. In particular, this Committee will approve the four projects' annual implementation plans and review their implementation progress. The Committee will also ensure individual project as well as collective results and lessons learned are disseminated among the IDB, WB, and government teams.

34. ***Institutional arrangements for project implementation.*** A PMT within MINAM's PNCBMCC, comprising existing MINAM staff and contracted technical assistance, will be responsible for project management and coordination functions. The PMT will prepare overall project work plans and budgets, update operational manuals, facilitate inter-ministerial coordination, and carry out project administration (e.g., financial management, procurement, specialist recruitment, monitoring, evaluation, and reporting). The ARA will provide additional coordination, as well as technical and project management support at the local level. The PMT will contribute to the overall FIP program, including reporting project results, lessons learned, etc., into the broader FIP results framework, participation in programmatic knowledge management activities and annual reviews, etc.

Project Implementation

35. The Project's incentive program under Component 2 follows the concept of community-driven development with communities taking responsibility for the choice, design and management of rural investments. Experienced locally-based consultants will facilitate community mobilization (e.g. through the information workshop on the grant's incentive program opportunities and eligibility criteria); participatory planning aimed at facilitating the application process; and rural investment planning and implementation, and the consultants will help build the technical and administrative capacities of these groups throughout different phases of the investment proposals' development and implementation. These consultants will coordinate with local government, local NGOs, community-based organizations and other supporting organizations to provide these services as needed. Fund flow arrangements are designed to be transparent with the transfer of grant funds from MINAM to communities. ARAs will be included in a review process of rural investment proposals.

B. Results Monitoring and Evaluation

36. MINAM is strengthening its monitoring and evaluation system for all four FIP Projects, to monitor both individual and collective project results. This system involves developing a monitoring platform, supported by sub-national governments and indigenous communities, to monitor titling and land registries, forest concessions and contracts, and permits for timber activities. Monitoring support for this system is being provided under the IDB FIP National Forest Governance Project. In addition, MINAM has developed a Monitoring, Reporting and Verification (MRV) system (an essential piece of the REDD+ scheme) to support monitoring and reporting under an upcoming Forest Carbon Partnership Facility (FCPF) Emission Reductions Program.

37. The Project's monitoring and evaluation (M&E) system involves the PMT, ARA, technical advisors, community-based organizations, project beneficiaries, and other stakeholders, as needed, with individual roles and responsibilities provided in the Operations Manual. Data collection and reporting formats for field-based partners, technical advisors and beneficiaries (e.g., field surveys) will aim to capture essential information while being relatively straightforward to implement. Outcome monitoring and project impact assessments will make

use of the data collected by field-based partners, as well as specialized data collection and analyses conducted with external technical assistance as needed. Monitoring and evaluation will make sure of primary data collected from the project sites and beneficiaries.

C. Sustainability

38. The Project will create the enabling conditions for change in forest and land management, specifically by promoting land tenure security, strengthening governance, and enhancing investments in and opportunities for entrepreneurship in forest communities. Strengthening community land rights is expected to reduce deforestation and to provide long-term benefits for communities. Land rights are the basis for communities to capture the economic opportunities linked to investments in land use. It has been demonstrated that strengthened land rights combined with support to community-level land-use planning supports communities to engage more effectively with outside interests such as potential investors and other business opportunities. At the same time, improved governance will foster transparency, inclusion, and effectiveness of investments and decision-making. By promoting institutional strengthening of various stakeholders (e.g. the regional forest authority and SERNANP, community authorities, concession holders, etc.) at all levels (national, provincial, local), capacity will be built for more sustainable land use practices. Such improved capacity will in turn facilitate the replication and scale-up of grant financed investment proposals. In terms of environmental sustainability, developing a shared vision for landscape management will help to ensure that the aggregate effect of the different land-use investments supported by the Project will promote long-term sustainability. A landscape vision will allow stakeholders to consider the trade-offs from different land-uses and to plan them at a landscape scale and translate this into the “life plans” of indigenous communities.

39. In addition, landscape management investments that provide an incentive framework and sources of financing for improved environmental land management, including forest management, food security, and income generation, will contribute to the sustainability of rural investments and mitigating climate risks. The use of community-driven development is also expected to contribute to generating long-term benefits. Communities will be key decision-makers on what investments to implement and the distribution of financial resources, thus building ownership. Investment proposals will require that participants consider economic, environmental, and social/institutional sustainability, e.g., cash flow, environmental conservation and mitigation measures. Communities will be responsible for financial management of and procurement for investments. Furthermore, the requirement of beneficiary contributions will help build ownership and also contribute to the sustainability of investments, together with the efforts to foster partnerships, including through multi-donor workshops and coordination activities. Institutional sustainability will be addressed through capacity building of the participating rural population, community-based organizations, MINAM and relevant line ministries. Through field-based implementation and collaboration with facilitating organizations and others on how to better support communities in better managing their forest landscapes, it is expected that MINAM will be better equipped to mainstream these approaches in regional and national programs and planning exercises. Lastly, via the community-based investments, including through increased capacity to design and implement innovative business models, the Project will help create enabling conditions for scaled-up private sector investment in community business development.

D. Role of Partners

40. As mentioned, a Project Oversight Committee comprised of representatives from MINAM, MEF,

MINAGRI, the Ministry of Culture, and Regional Government will serve as the Project's main oversight body. This Committee will approve annual implementation plans, and review project progress. General project oversight will be the responsibility of MINAM, which will assess the incentive projects proposed by forest communities under Component 2 and verify their eligibility based on agreed criteria. MINAM will also ensure communities are adequately supported in preparing and implementing their incentive projects, as well as approve fund transfers for incentive projects.

41. In addition to ensuring alignment through the Consultative Committee's strategic oversight of all FIP Projects, the Project will collaborate with the IDB and government teams supporting implementation of the other FIP Projects, including via joint missions and sharing of results and lessons learned. In particular, the Project will coordinate closely with the two IDB community forest management projects in Tarapoto–Yurimaguas and Puerto Maldonado-Iñapari to share data, results and experience where relevant. The Project will also contribute to distilling results and lessons learned at the program level to help achieve the overall goals of the FIP in Peru.

42. In addition, the UNDP-implemented GEF Sustainable Productive Landscapes in the Peruvian Amazon Project is contributing to the reduction of deforestation and forest recovery, in production landscapes in the Huánuco and Ucayali regions in the Peruvian Amazon. Even though the project area does not coincide with the area of FIP-supported interventions, the Project will explore opportunities for collaboration in strengthening the institutional capacities at national and regional levels.

V. KEY RISKS

A. Overall Risk Rating and Explanation of Key Risks

43. The overall implementation risk is considered Substantial, with the Project's main risks pertaining to the political climate, stakeholder risks and implementation complexities (particularly with respect to titling and local institutional capacities), as summarized below. These risks are being mitigated via strong and continuous communication with and participation of indigenous local communities and local authorities. To mitigate stakeholder risks, the Project has also taken on board lessons from the ongoing and complementary Saweto Dedicated Grant Mechanism for Indigenous Peoples and Local Communities in Peru, in particular regarding titling and registration, as well as lessons learned during the preparation of the IDB's Forest Investment Program.

Risks/Issues	Proposed mitigation measures
Political and Governance	
Political climate and related future uncertainties	The Project is fully aligned with MINAM's strategies and programs and Government commitment to the Project is high; however, any changes in agency personnel could result in implementation delays. To mitigate this risk, capacity building will be provided as needed, and tools and documentation to ensure transfer of in-house knowledge will be developed.

Stakeholders	
Boundary conflicts in communal forest territories, or with concessions and other public forest lands	Strengthen/support participatory territorial zoning, boundary demarcation, land regularization, and local alternative dispute resolution mechanisms *(*e.g., local registry offices, *Defensoría del Pueblo e Interculturalidad)* including through the use of modern technology (e.g. remote sensing, GPS, and setting up of master digitalized registries).
Illegal logging and related trade in and outside community forests	Improve law enforcement and governance capacity of local government agencies to use tools to improve forest control and supervision, including field verification of annual harvesting plans. Promote the integration and operation of community-based monitoring systems and brigades, such as the *Veedurías Forestales Communitarias* (VFCs). This mitigation measure has been mainstreamed in sub-component 1.2 Support legal livelihood alternatives, including implementing rural production, land management, and ecotourism investments in forest landscapes. This mitigation measure has been mainstreamed in sub-component 2.1.
Conflicts within and between communities, or between communities and private forestry firms over productive forest management activities.	Strengthen community institutions and regulation mechanisms such as the VFCs. Mainstream the use of available tool kits for forest control and supervision and use of forest industry-community logging contracts based on socially and environmental sound principles. The Project's Grievance Redress Mechanism will play an important role in monitoring mitigation measures, including addressing complaints, concerns, suggestions, and requests for information from the public.
Unplanned community and public forestland occupation and unsustainable production activities by migrating peasants (e.g. the Atalaya-Puerto Ocopa highway)	Community land demarcation and legal registration program; participation of VFC and implementation of grassroots forest land use planning awareness campaigns.
Indigenous organizations' concern and perception that the needs of communities may not be taken on board in project design and implementation	The team has built a direct relationship with indigenous organizations and leaders to ensure that they are able to participate in all aspects of project preparation and implementation that may impact their constituents.
Institutional Capacity for Implementation and Sustainability	

Limited institutional capacity of national, regional and provincial government agencies to enforce sustainable forest management (SMF) and perform land regularization/titling activities	Promote the establishment of specialized offices to handle and assisting indigenous communities and other forest dependent stakeholders in all forestry related transactions in national and local sectoral agencies (e.g., OSINFOR Forestry Directorate in Atalaya, etc.).
Fiduciary	
Community Driven Development Approach	There is a lack of procurement and financial management knowledge and capacity at the community level. To mitigate this risk, procurement and financial management training will be provided at the local level, including to consultants providing community support, to support communities in preparing incentive plan proposals, as well as to assist communities in implementation and oversight.

VI. APPRAISAL SUMMARY

A. Economic and Financial Analysis

44. The ex-ante economic efficiency analysis conducted for the proposed project results in positive economic outcomes that will be achieved with project funding. The consideration of even only a few of the benefits in the quantitative analysis yielded significant positive economic results. The results of the quantitative simulations are also robust across a range of sensitivity analyses assuming changes in discount rates and of a core benefit parameter, the Social Price of Carbon (SPC) as per World Bank guidelines.

45. Sensitivity analyses included benefit value estimations that underwent reductions of minus 10% and 20% and discount rate variations of 5%, 10%, 15%, and 20%, respectively. The economic assessment has focused exclusively on values associated with carbon benefits. Other economic values, such as those related to watershed management benefits, biodiversity conservation, among others, have not been considered due to lack of data availability. Had those project benefits been included in the quantitative analysis, the overall economic efficiency outcome would have been higher.

46. Avoided emissions are valued using the official price of US$7.17 per ton of CO2. The benefits of the Project's avoided emissions are estimated taking into consideration the areas of direct intervention, with the following goals: 200,000 ha of timber forest management, 105,000 ha of non-timber forest management, 500 ha of agroforestry systems, 75,000 ha of areas for other forest products and services and 60,000 ha of implementation of enabling conditions (including titling and recognition of native communities) and a monitoring and surveillance system for deforestation and degradation of forests of the entire project area. In total, the area of direct intervention is 440,500 ha through which it is expected to achieve a gradual reduction of deforestation by 49% at the end of the Project's implementation.

47. It is anticipated that at the end of the Project's five and a half-year timeframe, taking into consideration 85% of project financing, there will be 6,211 ha of avoided deforestation, equivalent to 3,108,737 tCO2-e.

48. While Peru is vulnerable to climate change impacts, which are expected to exacerbate the country's development challenges, poor and indigenous groups who depend on climate-sensitive sources of income are likely to suffer the most significant impacts. As shown, sustainable management of natural resources in forest landscapes can play a major role in climate change mitigation through REDD+, as well as in adaptation. Sustainable management of forests secures the survival of a variety of ecosystems and enhances their environmental, social, and economic functions, while helping forests and forest-dependent people adapt to new weather and physical conditions caused by climate change. Climate change mitigation can be achieved through forest carbon stocks conservation and carbon sequestration. In addition, climate change adaptation can strengthen the adaptive capacity of forests while reducing climate vulnerability and increasing forest ecosystems' resilience.[6] It is estimated that the Project could provide significant mitigation co-benefits, amounting to as much as 100% of the Project's financing.[7]

B. Technical

49. The Project promotes a number of management practices in forest landscapes, including timber and non-timber, as well as sustainable agriculture in forest lands. Beneficiaries will develop business plans for the development of timber products, non-timber products, or agroforestry that support income generation along with conservation. Throughout, the Project will build on local knowledge and technologies, as well as relevant international good practices. No significant technical challenge is expected, but technical capacity support to foster adoption of good practices will need to be strengthened and increased.

Financial Management

50. The World Bank conducted an FM assessment in accordance with OP/BP 10.00 and the Guidelines for Assessment of Financial Management Arrangements in World Bank-financed projects to determine the adequacy of MINAM's PMT - PNCBMCC financial management arrangements to support the implementation of the Integrated Forest Landscape Management Project in the province of Atalaya, Ucayali. Annex 2 provides the main characteristics of the financial management arrangements under the Project.

51. In accordance with proposed institutional arrangements, the Project will be implemented by MINAM's PMT through establishment of a project implementation team, fully dedicated and responsible for project implementation. As part of these arrangements, MINAM will hire finance professionals responsible for financial management tasks required under the Project, in particular a financial management specialist. Project implementation will comply with Peru's laws governing budget and financial management, including the use of the integrated system for financial administration (*Sistema Integrado de Administración Financiera,* SIAF) and the general chart of accounts established in SIAF. The General Comptroller's Office will carry out the selection of the Project's audit firm. Bank funds will be disbursed to a Designated Account and its respective operative

[6] FAO (2010), Managing forests for climate change *http://www.fao.org/docrep/013/i1960e/i1960e00.pdf*.
[7] This is the estimated mitigation co-benefit for FIP projects.

account, both opened in *Banco de la Nación*. Additional information on financial management arrangements is provided in Annex 2.

52. The FM risk is considered Substantial mainly due to the following factors: (i) MINAM's PMT has experience implementing projects financed by external financiers such as the Development Bank of Latin America (CAF); however, the PMT staff has limited experience implementing World Bank-financed projects and timely staffing of qualified and experienced professionals for the Project will ensure an effective operation of the Project; (ii) similar to other projects implemented by MINAM's PMT, the Project comprises decentralized arrangements through the involvement of indigenous communities and small forest users - with different level of capacity, which will be in charge of incentive project implementation under Subcomponent 2.2, including procurement, contract management and processing of payments; (iii) MINAM's PMT has controls, instruments and monitoring tools for incentive project implementation; however, its procedures and tools (information systems) for controlling, reporting and effectively monitoring the implementation of incentive projects require strengthening, including those arrangements to quantify/measure and report on communities and small forest users' contributions (in cash and in-kind). Given this situation, some processes and mechanisms have been designed to adequately strengthen community subproject monitoring and ensure timely and reliable financial information on the Project as a whole.

D. Procurement

53. **Procurement Arrangements.** Procurement will be conducted according to the World Bank's Procurement Regulations for IPF borrowers, issued in July 2016, for the supply of works, goods, non-consulting and consulting services.

54. **Procurement Capacity Assessment**. Procurement activities under Component 1, Sub component 2.1 and Component 3, will be undertaken by the Ministry of Environment's (MINAM's) PNCBMCC through its PMT. For sub-component 2.2., procurement will be conducted by beneficiaries of incentive projects, following a CDD approach. The capacity assessment concluded that while MINAM's PNCBMCC has adequate general procurement experience and capacity, it does, however, have limited experience working with Bank-financed projects (i.e., Bank procurement procedures). The PMT will therefore hire a procurement specialist fully dedicated to the Project. More details of the assessment are shown in Annex 2: Implementation Arrangements. Considering the proposed use of CDD, the OM shall include clear supervision arrangements as well as appropriate simplified templates for the Procurement Plan, contracts, requests for quotations, and others.

E. Social (including Safeguards)

55. The World Bank's OP 4.10 (Indigenous Peoples) is triggered for this Project because the main community beneficiaries will be from the Raimondi, Sepahua and Tahunía districts of the Atalaya province that comprise primarily (80%) IPs. As IPs are the Project's direct and main beneficiaries, this Project is an IP project. As such, the Project has incorporated safeguard measures related to OP 4.10 and there has been a process of free and informed consultation to foster community support. An Indigenous Peoples Plan (IPP) was not prepared, however, since IPs constitute the primary and direct beneficiaries. Further, given that Project investments will be carried out in isolated forest areas, the Project includes protocols and procedures to protect IP living in conditions of voluntary isolation or with sporadic contact with surrounding society.

56. With respect to OP 4.12 (Involuntary Resettlement), no involuntary resettlement of population or restriction of access to natural resources will result from any activities financed by the Project. The Project also does not anticipate any land acquisition.

57. Project social safeguards requirements will be carried out by MINAM, as well as by beneficiaries receiving incentives under the Project. MINAM will be responsible for all safeguards project requirements, including management and compliance. A Social Assessment of the Atalaya region was also prepared to inform and orient key design features of the Project, particularly socio-economic and cultural forest practices in the region as well as gender and social inclusion issues prominent to beneficiary communities.

58. **Gender.** In most communities in Atalaya, land ownership belongs to the community, so both men and women regardless of marital status can request a portion to work on, which is assigned by the community. However, due to social norms in these communities, men are perceived to have better knowledge of their land boundaries, as they usually perform activities outside of households such as hunting, fishing and wood extraction. As such, women are often excluded from demarcation activities. An Initial Gender Analysis (IGA) of indigenous communities in Atalaya, conducted as part of the Project's Social Assessment, found that women tend not to participate in timber forest management. Men lead commercial decisions for timber production (e.g., actively search for and contract potential buyers) and manage revenues from those activities. The IGA found that, although women tend to make decisions on non-timber production and commercialization, either individually or with their male partners, there are different perceptions among community members on who manages the proceeds from such activities. Although all interviewed men answered that women manage these revenues, only 50% of female interviewees confirmed this data. For 37.5% of the women interviewed, proceeds from non-timber production are jointly managed by the couple, while the remaining 12.5% said proceeds were managed by men. In those interviews, women also indicated that unsustainable timber extraction in Atalaya has affected their hunting activities and access to water resources.

59. The IGA also found that women have gained decision-making responsibilities at the community level. However, the average percentage of female board members in community associations in Ucayali is 16%, indicating that men still dominate these decision-making spaces. The analysis concluded that community forest management programs carried out to date in Atalaya have not been able to fully address gender gaps, including women's limited access to credit and technical assistance; unequal remuneration and constraints to manage proceeds from their production; and limited participation in local governance and participation mechanisms. Those programs that aimed to promote a gender focus rarely included gender specialists. As such, the analysis recommended additional analytical work to better understand the different needs, perceptions and goals of men and women in relation to their land and forest resources. These findings are key to identifying interventions that address constraints in women's engagement in forest landscape programs in Atalaya – and the Peruvian Amazon in general – and that also promote women's participation not only as beneficiaries, but also as community leaders. In light of these findings, the Project will support activities that foster women's participation in forest management (e.g., their participation in forest oversight committees, in community associations including as board members, in the development of community life plans, and in forest management training and investments) to close the gaps linked to technical assistance, and investment financing and income opportunities. Progress with closing these gaps will be measured by indicators in the results framework, measuring women's adoption of land management practices, satisfaction with their

participation in project activities, and the number of subprojects submitted by associations with women sitting on the board.

F. Environment (including Safeguards)

60. The Project is classified as Category B given that the proposed investments (e.g., agroforestry, silviculture, and other landscape management measures) are not likely to result in significant adverse impacts on human populations and / or environmentally important areas. The Project is likely to result in positive impacts for forest conservation and sustainable use.

61. Operational Policy on Environmental Assessment (OP 4.01) is triggered given that investments, although small in nature, will be carried out in the Peruvian Amazon region, an environmentally sensitive biodiversity hotspot already experiencing environmental degradation and natural resource depletion. An Environmental and Social Management Framework (ESMF) has been prepared as required by OP/BP 4.01 to screen, identify, avoid and mitigate the potential negative environmental and social impacts associated with project activities. This ESMF includes environmental and social aspects related to community forestry in the Peruvian Amazon region, as well as critical natural habitats sustained by these forests. The ESMF guides the preparation of site-specific safeguards instruments during project implementation and includes an exclusionary list, a screening plan for activities to identify, avoid, and mitigate any potential negative environmental and social impacts associated with project activities.

62. The ESMF considers the potential impact of activities, such as community forestry, silviculture, agro-forestry, sustainable management of forest landscapes, guidelines for sustainable exploitation of timber and non-timber products, value chain development, and access to markets. The ESMF provides the necessary recommendations to mitigate these potential impacts and measures and to ensure sound safeguards compliance during implementation. The ESMF was submitted for consultation to the Interethnic Development Association of the Peruvian Rainforest (AIDESEP) and National Amazonian Confederation of Peru (CONAP) (the two most important IP confederations in the Peruvian Amazon region), the Environmental Rights and Natural Resources NGO (DAR), and the subnational government of Ucayali on December 11, 2017. Only DAR provided comments which were included in the ESMF. The ESMF was disclosed on MINAM's website and the Bank's external website on May 31, 2017.[8]

63. Natural Habitats OP/BP 4.04. This policy is triggered given that project activities support forest management and conservation, as well as a number of environmental and ecosystem services that natural habitats in the Peruvian Amazon provide. The ESMF addresses issues related to natural habitats and ecosystem services, and potential project impacts. Specifically, the ESMF has appropriate screening criteria to ensure that impacts on natural habitats and biodiversity are properly evaluated and mitigated. In addition, the ESMF clarifies that no project activities which involve significant conversion of natural habitats will be financed.

64. Forests OP/BP 4.36. This policy is triggered given that the project activities are likely to have positive impacts on forest management in indigenous groups' lands and territories as a result of implementing community forestry activities (including reducing deforestation and forest degradation). However, screening mechanisms have been incorporated into the ESMF to ensure that any potential small scale impacts on forests

[88] https://hubs.worldbank.org/docs/imagebank/pages/docprofile.aspx?nodeid=29943501

and forest dwellers will be mitigated through measures defined as part of the broader approach on natural habitats. Small-scale and community forestry measures will follow applicable principles for sustainable forestry under the policy.

65. Pest Management OP 4.09. This policy is triggered as the Project will finance forestry activities which might include the use of pesticides and fertilizers at tree nurseries. Reforestation activities could also trigger this policy depending on the methods selected to manage pests. The Project will promote integrated pest management and the ESMF contains screening mechanisms to evaluate the use of pesticides, ensuring their responsible management and avoiding and mitigating associated environmental or health impacts. A stand-along pest management plan is not needed.

66. Physical Cultural Resources OP/BP 4.1. This policy is triggered on a precautionary basis, as project interventions are not anticipated to have a negative impact on any sites with the presence of physical cultural resources, including sites and areas of cultural and religious value to local communities. The ESMF includes provisions regarding how to protect known physical cultural resources and how to address chance finds.

67. Projects on International Waterways (OP/BP 7.50). This policy is not triggered as the Project will not finance activities involving the use or potential pollution of international waterways.

68. Safety of Dams (OP/BP 4.37). This policy is not triggered as the Project will neither support the construction or rehabilitation of dams nor will it support other investments which rely on services of existing dams.

69. Projects in Disputed Areas (OP/BP 7.60). This policy is not triggered as the Project will not finance activities in disputed areas as defined in the policy.

G. Other Safeguard Policies (if applicable)

70. MINAM has also developed a Grievance Redress Mechanism to address complaints, concerns, suggestions, and requests for information from the public. Citizens can present their concerns or requests via a number of channels at the regional and national levels, including via the two primary IP confederations. This mechanism, in particular, aims to provide special attention to those groups of people who may be isolated or excluded, due to geographic, economic, and/or gender reasons.

71. The Project specifically seeks to support engagement of stakeholders and beneficiaries through the use of transparent information, consultative processes, and feedback mechanisms to strengthen project design, build ownership, and thus, contribute to sustainability and to better project outcomes. Feedback mechanisms are being developed in project design to ensure transparency and a continuous dialogue with stakeholders and beneficiaries. Particular attention will be given during implementation to the capacity of MINAM to close the feedback loop and report on action taken in this regard. For example, the project includes a specific citizen engagement indicator in the results framework, measuring the share of registered questions and grievances, related to project benefit delivery, that are addressed. Also, the specific elements of the framework for citizen engagement include: (a) access to information and exchange platforms; (b) information campaigns on the Project and calls for proposals targeting IPs, civil society, academia, and local government; (c) community participation as a core feature of project investments; and (d) establishment of a feedback mechanism to

process complaints, concerns, and questions form stakeholders. The protocol and mechanisms for these citizen engagement framework elements are detailed in the Project's Operational Manual.

H. World Bank Grievance Redress

72. 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 WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank'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/en/projects-operations/products-and-services/grievance-redress-service*. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Peru

Integrated Forest Landscape Management Project in Atalaya, Ucayali

Project Development Objective(s)

The project objective is to strengthen sustainable management and use of forest landscapes in the Raimondi, Sepahua and Tahuanía districts of the Atalaya province.

Project Development Objective Indicators

Indicator Name	DLI	Baseline	End Target
Strengthened sustainable forest landscape management and use			
Land area under sustainable landscape management practices (CRI, Hectare(Ha))		0.00	380,500.00
Indigenous communities with usage or ownership rights (Number)		0.00	23.00
Land users adopting sustainable land management practices as a result of the project (direct beneficiaries disaggregated by gender) (Number)		0.00	2,300.00
Share of target beneficiaries satisfied with their participation in forest and land-use decisions that affect them (disaggregated by gender) (Percentage)		0.00	75.00
Index of forest entrepreneurship (Percentage)		0.00	60.00

Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	End Target
Strengthening enabling conditions for forest governance			
Forest area under monitoring and surveillance (Hectare(Ha))		0.00	380,500.00
Life plans approved by comunity (Number)		0.00	30.00
Number of Community Monitoring and Oversight Committees established and operating (Number)		0.00	50.00
Strengthening sustainable forest landscape management and use			
Number of incentive projects under implementation (Number)		0.00	50.00
Share of registered questions and grievances, related to project benefit delivery, that are addressed (Percentage)		0.00	85.00
Net greenhouse gas emissions (CRI, Tones/year)		0.00	3,108,737.00
Subprojects financed under the incentive fund, submitted by associations which have at least 30% women sitting on their boards. (Percentage)		0.00	30.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Land area under sustainable landscape management practices		Bi-annual reports	MINAM and ARA	Review of custom reports from MINAM	MINAM

			databases, as well as field survey conducted as part of participatory M&E. The indicator measures the capacity of forest dependent communities to apply technologies that will improve ecological and economic functions of selected forest landscapes, and hence contributes to the improvement of these.	and ARA.	
Indigenous communities with usage or ownership rights		Bi-annual reports	MINAGRI and SUNARP databases,	Review of custom reports.	MINAM

			based on field survey as part of the participatory M&E.		
Land users adopting sustainable land management practices as a result of the project (direct beneficiaries disaggregated by gender)	Cumulative number of households supported under the project, implementing activities under Component 2. Disaggregated by percentage of female and indigenous peoples.	Bi-annual reports	MINAM and ARA databases, based on field survey conducted as part of the participatory M&E.		MINAM
Share of target beneficiaries satisfied with their participation in forest and land-use decisions that affect them (disaggregated by gender)	Corporate results indicator. Share of target beneficiaries considered satisfied, according to criteria detailed in the Operations Manual and measured by a perception survey. The findings and results from the survey will be discussed with the target beneficiaries along with corrective measures (feedback loop). Target beneficiaries include households and individuals supported under	Baseline, mid-term, and end of project	Satisfaction survey.		MINAM

	Component 2.				
Index of forest entrepreneurship	Share of target beneficiaries that increase their range in the index of forest entrepreneurship by having an increment in at least one dimension. Target beneficiaries include all individuals and households supported under Component 2. The index of forest entrepreneurship is tentatively comprised of the following elements: (i) establishment of forest enterprise, (ii) added value, including increase in number of value chains by at least one, (iii) diversification, including increase in number of products sold on the market, and (iv) production, including increase in production volume by at least a certain percentage. This indicator takes into account improvement at different levels based on	Bi-annual reports	Business survey.		MINAM

	beneficiary's baseline.				

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Forest area under monitoring and surveillance		Bi-annual reports	MINAM databases, based on reports and other documentation from participatory M&E.		MINAM
Life plans approved by comunity		Bi-annual reports	MINAM databases		MINAM
Number of Community Monitoring and Oversight Committees established and operating		Bi-annual reports			MINAM
Number of incentive projects under implementation		Bi-annual reports	MINAM databases		MINAM
Share of registered questions and grievances, related to project benefit delivery, that are addressed		Bi-annual reports	Grievance Redress Mechanism		MINAM

Net greenhouse gas emissions		Baseline, mid-term, end of project	MINAM's Monitoring, Verification and Reporting System		MINAM
Subprojects financed under the incentive fund, submitted by associations which have at least 30% women sitting on their boards.					

ANNEX 1: DETAILED PROJECT DESCRIPTION

COUNTRY : Peru
Integrated Forest Landscape Management Project in Atalaya, Ucayali

1. **Component 1. Institutional Strengthening for Forest Conservation**

2. **Sub-component 1.1. Provision of land use rights in forest landscapes and promoting community-level land-use planning.** The objective of this sub-component is to work with national government agencies (e.g., MINAGRI, SUNARP), sub-regional government agencies (e.g., regional and municipal land regularization and forestry agencies), and indigenous and other forest dependent community organizations to support local efforts to secure forest land ownership and use (e.g., forest concessions). In particular, this component will support the registering of IPs located in the three districts, through the provision of technical and legal assistance to native communities. Recognition of a native community as a legal entity is a prerequisite for initiating the land titling process. Registration offers communities legal security, use of lands, and ancestral rights to native lands. The component will also finance the demarcation and titling process, which establishes the geographic location and physical boundary for native communities' land and formally registers title for native communities, by covering the costs charged by the respective entities (e.g., regional agricultural offices) to carry out these processes.

3. Under the Project, consultants will be contracted to support 23 indigenous communities with recognition, titling and demarcation processes in accordance with local legislation. Two communities, Matotencabo and Milagros, are prioritized for recognition, while one community, Tierra Prometida, has been prioritized for land titling. The remaining twenty communities are expected to be provided support with demarcation.

4. **Sub-component 1.2. Strengthening enabling conditions for forest management.** This sub-component aims to foster reduced forest-related illegal activities and to ensure compliance with sustainable forest management practices, through improving information management, increasing institutional transparency and accountability across relevant institutions, and building the skills base and capacity of forest stakeholders around sustainability principles. Activities will support ARA personnel, responsible for law enforcement within forest areas, in improving the prevention, inspection, and detection of illegal activities in forested areas.

5. Support will be provided in strengthening the planning, operation, and coordination of the CVCFC responsible for oversight and surveillance within the indigenous and native communities, in coordination with corresponding environmental and forestry authorities (OSINFOR, ARA, FEMA, SERFOR, and others).

6. This sub-component will also foster citizen participation in the CAM and CAR to develop a common vision for landscape management. This common vision is expected to contribute to more sustainable land-use decisions and also support the incorporation of this vision into native communities' life plans.[9] The Project will encourage the participation of women, youth, and other vulnerable groups in these Commissions and

[9] Community life plans outline a community's development plans for a particular area, including information on land-use patterns, hunting and fishing grounds, and areas of cultural importance. These layers of information are digitized and returned to communities, where they are used as strategic tools for developing sustainable resource management plans.

planning exercises. In particular, goods and consultants' services financed under the Project will help strengthen the CAM and CAR in carrying out their forest management responsibilities.

7. **Component 2. Strengthening sustainable forest landscape management and use.** This component provides grant financing to communities in three selected districts of the Atalaya province to implement rural production, land management, and ecotourism investments in forest landscapes. Technical assistance for planning, implementing, monitoring, and evaluating these investments is also provided.

8. **Sub-component 2.1. Strengthening technical and business capacities of forest communities and small producers to better manage forests.** Under this sub-component, local technical advisors will support communities in developing and strengthening investment plans, optimizing processes, and conducting seminars to share experiences with other communities. The sub-component also aims to support communities in organizing and developing forest enterprises and community associations, and provide guidance on accessing markets for their products (timber and non-timber), and alliances with the private sector, in an effort to improve profitability.

9. *Project orientation.* Activities will include a project orientation phase to share project goals, approaches, and activities with project partners and key stakeholders, such as line ministries, local government, local NGOs and community-based organizations.

10. *Knowledge and skills.* A program will be implemented to improve knowledge and skills in key topics such as environmental assessment and monitoring, forest conservation and management, integrated pest management, business development and marketing, and gender, among others. Activities will include practical training for project beneficiaries, community-based organizations and groups, local government specialists, and training courses, workshops, and seminars for project implementing partners and stakeholders.

11. *Dissemination and networking.* Dissemination will be supported through a focus on exchange and learning between project sites and with similar initiatives. The Project will support the documentation, dissemination, and knowledge exchanges of successful project tools and approaches for replication and support. The Project will generate a number of practical, how-to tools for various audiences, e.g., women, forest enterprises, etc. that will be shared widely. Annual project review meetings will be held to share results among project stakeholders.

12. **Sub-component 2.2. Investing in forest landscapes.** This component aims to promote the development of forest landscape investments and businesses, by providing small-scale grants at the community level that contribute to sustainable forest management, food security, and income generation. Examples of eligible investments include investments in agroforestry, ecotourism, and timber and non-timber forest products. Specifically, financing will be provided for strengthening community or enterprise management and technical capacities, equipment and tools, minor infrastructure, and market access. Grant beneficiaries include: (i) indigenous communities, which in accordance with Decree No. 20653 recognizes the property rights of indigenous communities, with property rights (in accordance with Decree No. 22175) limited to agricultural and fishing lands; and (ii) small forest users who have forest usage rights for agroforestry, private plots with forests, and small and medium-sized enterprises (ecotourism, as well as timber and non-timber

products). To be eligible for these small-scale incentive grants, community enterprises or households must have, as applicable, forest rights, title to land, and planning tools (e.g., a life plan) that identify the value chain to be supported. In addition, they must not currently be the recipient of other types of conservation support, nor have any outstanding fines or sanctions against them by the respective forest or environmental authority. In addition, investment plans must ensure women's participation (at least 20% of a plan's beneficiaries should be women), as well as a positive impact on the environment.

13. *Budget constraints and beneficiary contribution requirements.* Indigenous communities will prioritize investments based on a fixed budget, through the preparation of a life plan that identifies one or several incentive projects. Incentive plans should not exceed US$150,000 per community, or US$2,000 per household (see table below). Incentive grant financing will require beneficiary co-financing of 30% from small forest users and 20% from indigenous communities. In the case of small forest users, 10% of co-financing should be provided in cash, with the remaining 20% in-kind.

14. Four types of investment, differentiated by beneficiary (indigenous communities and small forest users, have been considered. Indigenous communities can form a smaller group than small forest users, as shown below, taking into consideration the respective sizes of these beneficiaries in the project area. Small forest users, however, are not eligible for timber product investments given that this economic activity might take place in locations that are not easily accessible and where oversight is not possible.

Financing by beneficiary group

Type of investment	Indigenous Communities	Small Forest Users
Timber products	Up to US$2,000 per household More than 50 beneficiaries in an investment plan Commitment of conserving more than 20,000 ha of forest or 400 ha per household	Not eligible
Non-timber products	Up to US$ 2,000 per household More than 20 beneficiaries Commitment of conserving more than 5,000 ha of forest or 250 ha per household	Up to US$2,000 per household More than 20 beneficiaries Commitment of conserving more than 5,000 ha of forest or 250 ha per household
Ecotourism	Up to US$2,000 per household More than 10 beneficiaries	Up to US$2,000 per household More than 10 beneficiaries

	Commitment of conserving more than 5,000 ha of forest or 500 ha per household	Commitment of conserving more than 5,000 ha of forest or 500 ha per household
Agroforestry	Up to US$2,000 per household More than 10 beneficiaries Commitment of conserving more than 5,000 ha of forest or 500 ha per household	Up to US$2,000 per household More than 30 beneficiaries Commitment of conserving more than 300 ha of forest or 10 ha per household
Other	Up to US$2,000 per household More than 10 beneficiaries Commitment of conserving more than 500 ha of forest or 50 ha per household	Up to US$2,000 per household More than 50 beneficiaries Commitment of conserving more than 500 ha of forest or 10 ha per household

15. **Component 3. Project Management, Monitoring, and Evaluation.** This component will finance the operating costs of project management functions to be carried out by the PMT within MINAM for both Components 1 and 2. Key functions include procurement, financial management, coordination, reporting, monitoring and evaluation.

16. Financing will be provided for fixed or long-term specialists in financial management, monitoring and evaluation, coordination, and technical assistance in forest management, agronomy, business development and marketing, social development, and in other areas as per approved work and procurement plans. The Project will support coordination with the overall country FIP program, including participation and contributions to programmatic monitoring and evaluation and knowledge management. The Project will support equipment, incremental operating expenses (including travel), and partial operating costs for the Regional Environmental Authority participating in the Project.

ANNEX 2: IMPLEMENTATION ARRANGEMENTS

COUNTRY : Peru
Integrated Forest Landscape Management Project in Atalaya, Ucayali

Project Institutional and Implementation Arrangements

Project implementation

The Project follows the concept of community-driven development with beneficiaries taking responsibility for the choice, design and management of investments. Experienced national organizations will facilitate community mobilization, participatory planning, investment plan development and implementation, and will help build the administrative and technical capacities of these groups. The contracted local organizations / NGOs will coordinate with local government to provide these services as needed.

Project management

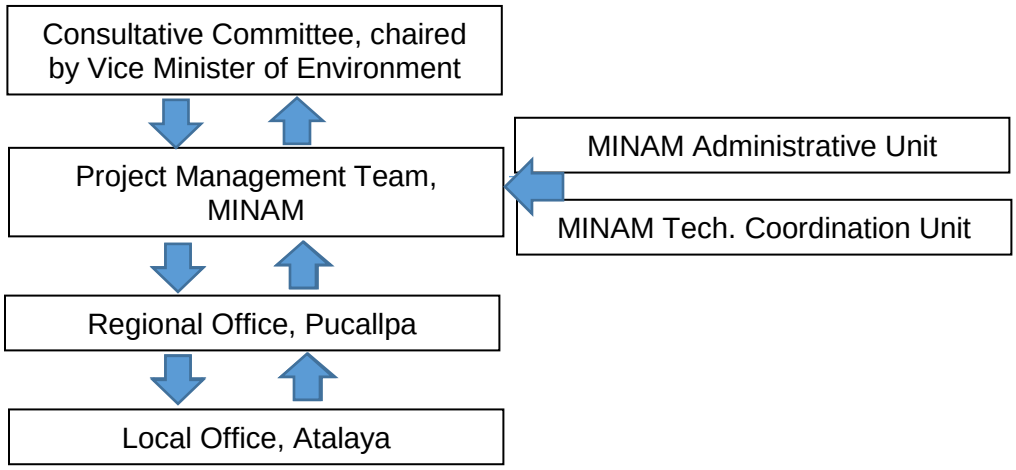
A Project Oversight Committee will provide strategic oversight, monitoring project advancement and inter-institutional coordination with participating agencies, such as MINAM and MINAGRI. The Consultative Committee will also monitor project compliance with environmental and social safeguards, and propose adaptive management methods to optimize social and environmental management. This Committee will meet two times per year. The Oversight Committee will be comprised of a Committee President (the head of MINAM's National Program of Forest Conservation for Climate Change Mitigation Department), a Technical Secretary (the PMT Project Coordinator), and representatives from MINAM, MINAGRI, the Ministry of Culture, GORE, MEF, and local government.

MINAM's PNCBMCC will have overall responsibility for project management. A PMT within MINAM's PNCBMCC has been established to oversee project implementation, which will receive administrative and financial management support from MINAM's Administrative Unit, including the Areas of Administration and Finance, Planning and Budget, Legal Advisory, and Communications. In addition, the PMT will coordinate with MINAM's Administrative Unit and the Technical Coordination Unit within MINAM's PNCBMCC in the implementation of the Project's components. Specialists (consultants) will be contracted to support the PMT in the areas of financial management, procurement, technical oversight, among others, exclusively for the Project's implementation.

The PMT will be responsible for implementation planning, procurement, supervision, and monitoring and evaluation. The Regional Environmental Authority, via a regional office in Pucallpa and a local office in Atalaya, will provide the PMT additional project oversight support at the local level. In particular, theses offices will support the PMT with safeguards oversight and will include technical and business specialists to support the implementation of Component 2 (see diagram of project implementation arrangements below).

The Project will be implemented based on an OM, which will be fully prepared by project effectiveness. The OM will include: (i) the Project's overall operating, fiduciary, and decision-making procedures; (ii) incentive fund guidelines; and (iii) the guide to project monitoring and evaluation. The OM may be amended by mutual agreement between the PMT in MINAM's PNCBMCC and the World Bank.

Diagram of Project Implementation Arrangements



Financial Management

MINAM's PNCBMCC, in coordination with the PMT, has acquired experience implementing externally financed operations, for example a community forestry project funded by CAF, and a recent Trust Fund financed by the Bank for the preparation of this project.[10] However, TF implementation has been characterized by staff turnover, budget allocation delays by PNCBMCC, and the postponement of audit contracting. Moreover, the Project design has a CDD approach comprising decentralized arrangements, and involvement of indigenous communities and small forest users with different levels of capacity, including procurement, contract management and processing of payments. Some financial management processes, as proposed by PNCBMCC, require strengthening to ensure adequate implementation of subprojects. On this basis, the financial management and fiduciary risk rating is considered Substantial. Therefore, some mitigation measures have been discussed for smooth project implementation.

Firstly, specific staffing needs have been discussed and agreed with PNCBMCC and the PMT to recruit financial management professionals according to terms of reference agreed with the Bank, following WB's policies and procedures, with annual renewable contracts. Additionally, PNCBMCC and the PMT have committed to coordinate and ensure timely budget allocation for the new project. PNCBMCC through the PMT will ensure the timely appointment of an acceptable audit firm for the Project.

The Bank has worked with PNCBMCC and the PMT to develop mechanisms for subproject implementation in order to ensure adequate use of funds, obtain timely and reliable financial information at the subproject level and for the PMT's effective monitoring of subproject implementation, including:

(i) Standardized funds flow and disbursement arrangements for subprojects, record keeping and control of expenditures, and simplified financial reporting at both the subproject level and the PMT level;

(ii) Agreement on the main content of subproject financing agreements, including FM roles and responsibilities, the costs of investment plans, and financing sources;

[10] *Project Preparation Grant - TFA4636 of US$400,000.*

(iii) Development of a questionnaire to assess beneficiaries' capacity to manage funds, and if required, to determine the need to strengthen their capacity and the level of assistance required;
(iv) Agreement with PNCBMCC on preparing a simplified guideline on financial management responsibilities at the subproject level;
(v) Agreement with PMT staff to provide training and continuous assistance to subproject beneficiaries on financial management processes, while also maintaining an active participation in subproject implementation.

On the basis of the last review performed and the actions taken by PMT, the FM team concludes that the proposed financial management arrangements are acceptable, subject to compliance with the following pending mitigation measures:

Conditions expected by Effectiveness (Loan and Grant Agreements):
(i) Project Operational Manual (OM), with no objection from the Bank, has been adopted by the PMT.

Summary of financial management arrangements

Organization and staffing. MINAM's PNCBMCC is a well-organized entity with technical and administrative autonomy. The Budgeting and Planning Units will be responsible for the budget recording of the credit and grant. The Administrative and Finance Unit (AFU) will be responsible for the financial management aspects of the Project including: accounting, internal control, funds flow, financial reports, and auditing. The AFU is staffed with qualified and experienced professionals and has experience implementing projects financed by external financiers, including recent experience implementing Bank funds.[11] However, considering project activities will increase the volume of operations, it will be necessary to strengthen the AFU. Thus, for project purposes, the PMT established within MINAM's PNCBMCC will be supported by experienced financial management professionals. A financial management specialist is expected to be hired before project implementation begins, while a financial management analyst will be hired if justified by the Project's workload. Both professionals would have to be hired under TORs agreed with the Bank. These professionals will be responsible for preparing the annual project budget, preparing supporting documentation and payment requests to AFU; preparing project financial reporting (including customized SOEs); and keeping track of the timely disbursement of approved financing. Both professionals will be financed by the grant proceeds. The FM team will prepare the Project's financial reports, as well as withdrawal applications for funds under the Project, and will provide hands-on training for subprojects and monitor their implementation. Detailed roles and responsibilities and TORs will need to be reflected in the Operational Manual.

Programming and Budgeting. As in other projects, the budget of the credit and grant will follow general government procedures regulated by the Annual Budget Law established by the Ministry of Finance. The PMT, in coordination with PNCBMCC, will ensure that credit and grant proceeds are incorporated on time into the Budget of MINAM after the project legal agreements are signed. The Annual Budget Law[12] allows for the transfer of public proceeds to private parties, such as indigenous communities and small forest users with a socially specific purpose.

The PMT, in coordination with PNCBMCC, will prepare the Project's annual operating plan and project budget to

[11] *Peru Strategic Climate Fund – Forest Investment Program Grant No. TF0A4636.*
[12] Article 60 of Law No. 28411

be incorporated into MINAM's institutional budget, and will be responsible for procurement planning. MINAM's annual institutional budget, including the project budget, will need to be approved by MEF. In this regard, MINAM has experienced some delays in the approval of the budget allocation for the previous preparation TF financed by the WB. Therefore, it is important that MINAM, through the PMT, ensure timely approval of budget resources under this new operation to avoid delays during project implementation.

Project budget execution will be processed and monitored through the SIAF information management system. The programmatic structure used by SIAF allows for the recording of project transactions classified by source of financing, component, and type of expenditure. A matrix with the budgeting structure to be used under the project, linked to project components, will be included in the OM. At the subproject level, MINAM will monitor the preparation and execution of subproject budgets, including tranche disbursements made under each subproject.

Accounting and Information System. As in other public institutions of Peru, the PMT must comply with local regulations in relation to accounting policies and procedures including the use of SIAF and the General Chart of Accounts established by SIAF. The Project will benefit from the use of SIAF for processing payments, including subproject disbursements. Under those arrangements, project transactions will be recorded and accounted for as part of PNCBMCC's general accounting, both for PNCBMCC's centrally managed expenditures and for disbursements/advances made to subprojects. SIAF will be complemented with the use of a SIAF MEP Excel spreadsheet or any other tool as necessary.

In accordance with current accounting practices, advances to subprojects will be identified with a specific project code and account in SIAF; however, subproject advances are considered as expenditures in SIAF and as such, monitoring of subprojects will be undertaken manually in Excel. Because this could result in a cumbersome process that could hinder the timeliness and integrity of the information, MINAM has worked on the design of key mechanisms, procedures and tools for recording, control and monitoring of subproject implementation, including specific reporting requirements from subproject beneficiaries on the use of funds in a format agreed with the Bank, and on consolidated reports on subproject implementation. The PMT, in coordination PNCBMCC, will maintain a complementary financial management system during project implementation that is acceptable to the Bank and that permits maintaining accounting and financial records of all transactions performed by project beneficiaries, in a manner adequate to reflect detailed operations, resources, and expenditures related to subprojects.

Internal Controls. PNCBMCC is regulated by its "Organization and Functions Regulation," which describes internal control procedures and roles and responsibilities. Procedures for approval and processing of payment to vendors will require the approval of their Director. These procedures are complemented by key controls, instruments and monitoring tools for subproject implementation. They provide for clear roles and responsibilities at ministerial and organizational levels, adequate segregation of duties in terms of authorization, recording, and approval of payments and disbursements. Additionally, PNCBMCC has defined standard financial reporting at the subproject level and minimum requirements from the subproject beneficiary to monitor subproject execution. These mechanisms are being reflected in the OM.

PNCBMCC in coordination with the PMT has designed key controls for monitoring subproject implementation, which include the following: (i) the PMT FM team will evaluate subproject beneficiaries' FM capacity and establish minimum requirements that need to be in place before initiating subproject disbursements; (ii) the PMT FM team

will provide introductory training to subproject beneficiaries on subproject implementation, including administrative and reporting requirements; (iii) the PMT FM team will accompany beneficiaries closely during project implementation; (iv) clear processes have been defined and reflected in the OM; (v) the PMT's and subproject beneficiaries' roles and responsibilities will be set out in the Financing Agreement (*Convenio de Otorgamiento de Fondos*); and (vi) simplified fiduciary guidelines to facilitate subproject implementation will be developed and issued by the PMT. These guidelines will include processes to request subproject funds; record keeping (i.e., receipts, invoices, etc.); reconciliation of funds received vs. funds executed; reconciliation of bank statements; and requirements for preparing reports, project expenditures, and execution of subproject budgets.

Internal Audit. PNCBMCC's organizational structure includes an Internal Control Office (OCI), which reports to the General Controller's Office of Peru (CGR). OCI may play a role in ex-post internal control on project transactions and will share their reports with the PMT and the Bank. On the basis of the process and procedures mentioned above, the internal control environment for the Project requires strengthening key mechanisms, procedures and reports, for recording, control and monitoring of subproject implementation, including specific reporting requirements from subproject beneficiaries on the use of funds under formats agreed with the Bank and consolidated reports on subproject implementation to provide an adequate control framework for processing project transactions. Such detailed processes and procedures designed for the Project have been reflected in the OM.

Project Financial Reporting. The PMT, in coordination with PNCBMCC, will prepare project financial statements, with support from the PNCBMCC, using the Module of Project Execution (MEP) of SIAF.

a) ***At Project level (on a semiannual basis).*** The PMT in coordination with PNCBMCC will prepare interim financial statements/reports (IFRs), issued not later than 45 days after the end of each calendar semester, following formats agreed with the Bank. The IFRs would include: (i) sources and uses of funds, expenditures classified by project category, and cash balances; (ii) a statement of investments by component and subcomponent, reporting the prior and current semester and the accumulated operations against ongoing plans, as well as footnotes explaining any important variances; (iii) a subproject statement reflecting amounts disbursed by the PMT that are documented by small forest users or indigenous communities, and outstanding balances that are not documented; (iv) explanatory notes to the financial statements; and (v) reconciliation of the Designated Account. These reports will include credit and grant proceeds, as well as local counterpart funds. Contributions from subproject beneficiaries will be in cash and in-kind; however, the reports will only reflect cash contributions. These reports would be prepared in local currency and US dollars. The final format of project financial statements has been reviewed and agreed with the PMT.

b) ***At Project level (on an annual basis).*** The PMT, in coordination with PNCBMCC, will also prepare project financial statements including items (i) and (ii) above, which are the basic financial statements for the Project as they will show the funds received and disbursements made during each period, as well as the cumulative investments from project inception to project completion, and item (iv) above.

c) ***At Subproject level.*** Beneficiaries will prepare simplified financial reports including: (i) a report that reflects the funds received, expenditures classified by main activity and cash balances reconciled with bank account statements; and (ii) reconciliation of the subproject bank account and bank statement. This information will be prepared monthly and submitted for PMT review when requesting new disbursement of funds. The PMT will maintain adequate procedures to enable the monitoring and evaluation of subproject progress and will maintain a simplified financial management system (such as an Excel report) to maintain updated records of

community drive initiatives, in a manner adequate to reflect the operations, resources and expenditures related to subprojects.

Audit Arrangements. The audit report on project financial statements, including the Management Letter, should be submitted to the Bank within six months of the end of each fiscal year. The audit should be conducted by an independent audit firm acceptable to the Bank and under terms of reference approved by the Bank. The selection of the audit firm should be performed through the General Audit Comptroller Office of Peru. Audit costs would be financed out of the grant proceeds. The scope of the audit would be defined by the audit's terms of reference (TOR) approved by the Bank and based on project specific requirements, and would respond, as appropriate, to identified risks and ensure compliance with agreed processes and procedures, beneficiaries' responsibilities and review of a sample of subprojects. Audit requirements will include an opinion on the Project's financial statements and a Management Letter regarding the evaluation of internal controls of the Project. In accordance with WB Access to information policy, the audited financial statements of the Project will be made publicly available.

Funds Flow and Disbursement Arrangements:
As in other projects in Peru, the Bank will disburse loan and grant proceeds using the disbursement methods of advance, reimbursement and direct payment. Under the advance method, the PMT, in coordination with PNCBMCC, will open a Designated Account – by financing source – in the *Banco de la Nación*. Funds deposited into each DA as advances will follow the Bank's disbursement policies and procedures described in the corresponding Legal Agreement and Disbursement Letter. Funds deposited in each DA will be withdrawn to a corresponding operating bank account in local currency, either to process payments for activities directly carried out by the PMT[13] or to process advances of resources to subprojects[14] as shown in the diagram. The loan will finance activities under Subcomponent 2.1 and subprojects under Subcomponent 2.2, and the grant will finance different activities under Components 1, 2.1 and 3.

Each subproject will open an exclusive bank account to receive small-scale grants provided by the PMT in coordination with PNCBMCC. Funds deposited in each subproject's exclusive bank account will be withdrawn against payments to suppliers/contractors. Local counterpart funding (in cash) from beneficiaries will be directly withdrawn from their own general bank account. All payments will be carried out in accordance with activities identified in the investment plan and only for subproject purposes as established in the subproject financing agreements. On a periodic basis (at least quarterly), subproject beneficiaries will report to the PMT on the use of funds, through a simplified financial report. Detailed funds flow arrangements will be reflected in the OM.

Disbursement of funds from WB to PMT. The ceiling for each Designated Account will be variable, where advances to the DAs would be made based on quarterly forecasts of planned project expenditures prepared by the PMT. To this end, the Project will prepare and send three-month forecasts requesting advances to each DA. Documentation of eligible expenditures paid out from each DA is expected to be at least on a quarterly basis or earlier. Specific supporting documentation will be established in the Disbursement Letter.

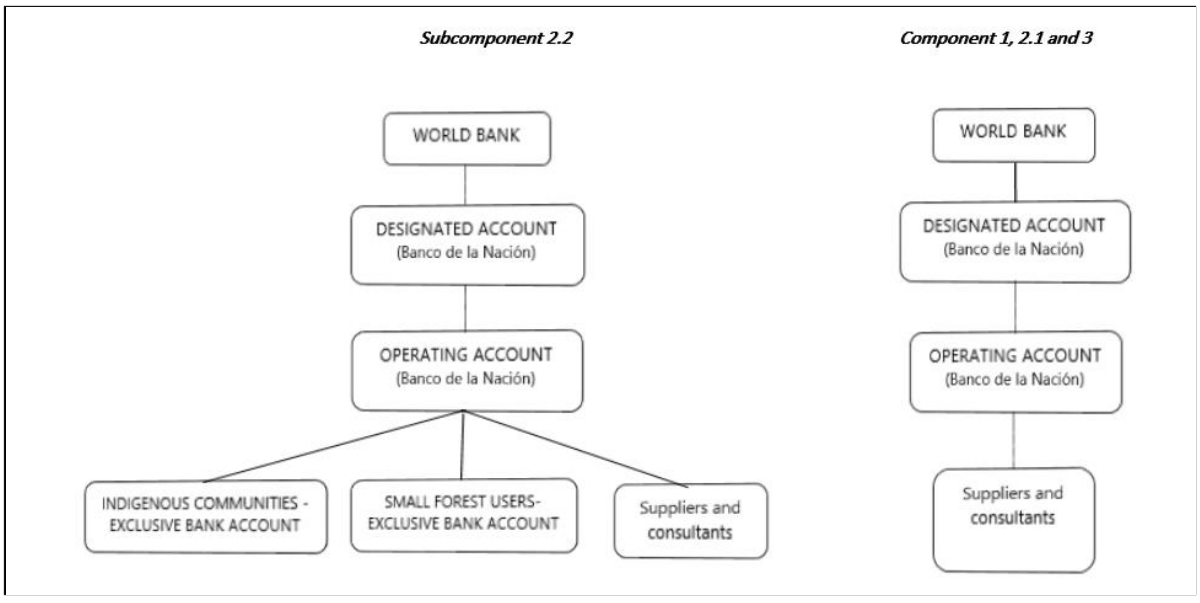
[13] *Components 1, 2 (except 2.2) and 3.*
[14] *Subcomponent 2.2.*

Type of summary reports	DA - Variable ceiling
Advance	Three-month forecast approved by the TTL
Reporting of advances	• Statements of expenditure • Any other documents specified in the Disbursement Letter

Disbursement from MINAM's PMT to Incentive Projects. The subprojects consist of incentive grants to indigenous communities and small forest users to promote the development of forest landscape investments and businesses. The Project would comprise approximately 50 incentive plans with an amount up to US$150,000 per subproject. Each subproject representative will sign a financing agreement with the PMT, including a financing plan that identifies the activities to be financed and the disbursement schedule. Subproject grant financing will require beneficiary co-financing of 30% from small forest users (10% in cash and 20% in-kind) and 20% (in-kind) from indigenous communities.

Disbursement arrangements for small-scale grants to beneficiary groups (indigenous communities or small forest users) will be defined in the subproject financing agreement[15] to be entered into between MINAM's PNCBMCC and subproject beneficiaries, based on cost estimates, and a defined outcome or delivery of a product. Disbursements will be made in two or more tranches and they are expected to be processed as transfers from the Project's operating account linked to the loan. It has been agreed the first disbursement will be approximately 30% of the total subproject financing. Subsequent disbursements will be processed only when the subproject beneficiary has documented 80% of the prior disbursement. The technical committee comprising the Project FM Specialist, will review the subproject financial report and documentation and recommend whether to proceed with the next disbursement.

Fund flow diagram follows:



[15] This includes rules and responsibilities, comprehensive list of activities, approximate timing, estimated costs and sources of financing (including community contributions) and estimated benefits.

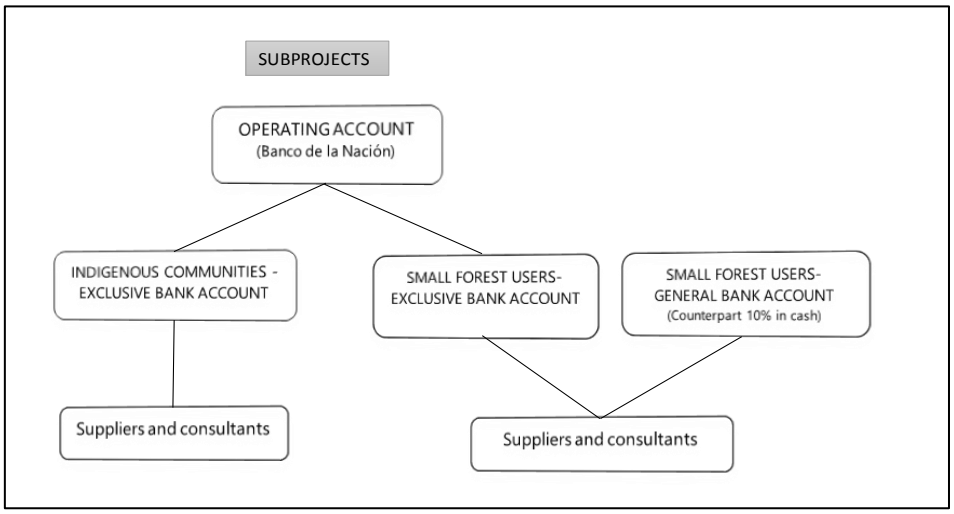


Table of Loan proceeds

Category	Amount of the Credit Amount	Percentage of Expenditures to be Financed (exclusive of taxes)
1. Goods, non-consulting services and consulting services under Part 2.1 of the Project	0.9	100%
2. Goods, minor works, non-consulting services, consulting services and training for Business Plans under Part 2.2 of the Project	5.5	100%*
TOTAL AMOUNT	**6.4**	

** As defined in the financing agreement, considering cash counterpart from local beneficiary.*

Table of Grant proceeds

Category	Amount of the Trust Fund Amount	Percentage of Expenditures to be Financed (inclusive of taxes)
1. Consultant's services, Goods, Training, Non-consulting Services and Operating Costs under Parts 1 and 2.1 and 3 of the Project	5.8	100%
TOTAL AMOUNT	**5.8**	

Supervision. Financial Management supervision will be done using a risk-based approach and include on-site and off-site supervision. On site supervision mission will be carried out twice a year to the extent possible during the first year, while the timing in subsequent years will be adjusted based on project performance. Off-site supervision will comprise desk reviews of interim financial reports and audited financial statements.

Procurement

Procurement will be conducted according to the WB Group's Procurement Regulations for IPF Borrowers, issued in July 2016 and revised in November 2017, for the supply of civil works, goods, consultants and non-consultant services. The World Bank's Standard Procurement Documents will govern the procurement of World Bank-financed Open International Competitive Procurement. For procurement involving National Open Competitive Procurement, and other methods, documents have been agreed with the Bank.

Procurement activities will be undertaken by MINAM through its Executing Unit -No2 -*Programa Nacional de Conservación de Bosques para la Mitigación del Cambio Climático*- (PMT). Procurement activities under Sub component 2.2 will be implemented by the beneficiaries of incentive projects, following a CDD approach.

A full assessment of the PMT's capacity to implement procurement activities was carried out to verify that the agreed arrangements have been fulfilled. The analysis concluded that the PMT has the adequate capacity to implement the procurement activities. However, it is necessary to complete the procurement team per the structure proposed in the project implementation arrangements, and to hire a qualified procurement professional fully dedicated to the procurement activities during the implementation of the Project. The Operational Manual will include a clear description of the procedures and responsibilities related to the procurement activities, including contract management.

Risk mitigation plan. The following table summarizes the mitigation actions proposed for the procurement-related risks:

Table 5. Procurement improvement action plan

Risks - Areas for Improvement	Mitigation Actions	Responsible	When	Status
Responsibilities related to the procurement activities	Preparation of the OM with a clear definition of the processes, roles, and responsibilities of the staff related to the implementation of the procurement activities. With respect to the execution of Subcomponent 2.2 under CDD approach, the OM shall include: - Capacity assessment methodology for the beneficiaries, which will be conducted by the PMT. - Eligible expenditures - Procurement methods that will apply - Simplified Templates (procurement plan, request for quotations, contracts, etc.) - Supervision arrangements - Audit arrangements	PMT	By effectiveness	The OM will be an effectiveness condition

Lack of staff with expertise in procurement processes with the Bank's procedures	The PMT will hire a fully dedicated procurement specialist with qualifications and experience satisfactory to the Bank	PMT	Within 90 days after effectiveness	Legal Covenant on implementation arrangements
Part of the procurement activities will be implemented through beneficiaries	The agreements to be signed between the PMT and the beneficiaries shall include a statement in which the beneficiaries agree that the procurement activities will be carried out in accordance with the procedures set forth in the OM. The PMT will conduct training to the beneficiaries	PMT	Project implementation	Legal Covenant on implementation arrangements

A Project Procurement Strategy for Development (PPSD) has been prepared and identifies the appropriate selection methods, market approach, and type of review by the World Bank, as follows:

Civil works, goods and non-consulting services will be procured following Request for Bids, Request for Quotations, and Direct Selection methods. Under the open international competitive procurement approach, the World Bank's Procurement Standard Documents will apply. For the national market approach, the procurement documents have been agreed with the World Bank.

Consulting services will be procured following Quality and Cost-Based Selection, Fixed-Budget-Based Selection, Least-Cost-Based Selection, Quality-Based Selection, Consultant's-Qualification-Based Selection, Direct Selection, and Individual Consultants methods. Under the International Market Approach, the World Bank's Request for Proposals standard document will apply. For the national market approach, the procurement documents have been agreed with the World Bank.

Operating Costs. Operating costs refer to reasonable recurrent expenditures that would not have been incurred by the implementing agency in the absence of the Project. The Project will finance operating costs, such as office supplies, communication and advertising costs, computers and equipment maintenance, and per diems, among others. The Project will also finance costs of training, travel and per diem of trainers and trainees, and rental of facilities.

PPSD and Procurement Plan

Based on the preliminary PPSD prepared by the PMT, no complex or high-value contracts are expected, and on the other hand, most of the procurement processes would not involve international competition. The PMT also prepared a detailed version of the procurement plan.

Summary of PPSD (for higher value contracts)

Description	Est. Cost (US$)	Review	Market approach	Procurement method
CONSULTING SERVICES				
Service for the development and approval of community management instruments (Life plan and forest conservation map) area (6 services)	680,000	Post	National, Limited	Short list, QCBS

Monitoring and evaluation service for the implementation of investment plans	570,000	Post	National, Limited	Short list, QCBS
Design Study	235,000	Post	National, Limited	Short list, QCBS
Environmental and social evaluation service	235,000	Post	National, Limited	Short list, QCBS

Procurement under Sub Component 2.2, will be conducted by the beneficiaries. The eligible expenditures will exclusively comprise goods, minor works, non-consulting services, consulting services, and training, following the CDD approach, which will include request for quotations and local competitive bidding. The PMT will be responsible for monitoring and supervising the procurement activities conducted by the beneficiaries.

The PMT will also prepare an acceptable Procurement Plan in the new Systematic Tracking of Exchanges in Procurement (STEP) system.

In addition to the prior review and supervision to be carried out from Bank offices, the capacity assessment of the implementing agencies has recommended annual supervision missions in the field to carry out the post review of procurement actions.

ANNEX 3: IMPLEMENTATION SUPPORT PLAN

COUNTRY : Peru
Integrated Forest Landscape Management Project in Atalaya, Ucayali

Strategy and Approach for Implementation Support

In order to facilitate the achievement of the PDO, the partnership between the Government and World Bank, and other stakeholders (e.g., civil society and IP organizations, development partners) requires systematic and sustained implementation support, covering fiduciary, technical, and analytical aspects as well as coordination needs. Additionally, implementation support will have a strong focus on mitigation measures to address key risks identified.

Given the diversity of activities that the Project supports, the task team will require a corresponding range of skills covering private sector development, market development, financial instruments, forestry management, sustainable land management, environment management, land titling and registration, general agriculture, and social development. The expertise should have sufficient versatility to cover operational and technical aspects of Project activities, as well as policy issues. The team will also require periodic expertise in communications to support Project dissemination activities. The team will additionally support MINAM in monitoring and evaluation of results, both in design and implementation, and making adjustments, as needed. Further, the multitude of activities by other partners on forest landscape management and climate change will necessitate frequent dialogue to maximize complementarities, capture lessons learned, and incorporate knowledge and information from analytical work. The task team will conduct missions on at least a bi-annual basis to review implementation progress, provide recommendations and guidance, and agree on the action plan/next steps. More frequent interaction will take place through videoconferences.

During implementation, the Bank will supervise the Project's financial management arrangements in the following ways: (a) review the Project's semiannual Interim Financial Reports and annual audited financial statements and any remedial action recommended in the auditor's Management Letter; and (b) during the Bank's on-site supervision missions, review the following key areas: (i) Project accounting and internal control systems; (ii) budgeting and financial planning arrangements; (iii) disbursement management and financial flows, including counterpart funds, as applicable, and (iv) any incidence of corrupt practices involving project resources.

With respect to procurement, the Bank will undertake supervision through a combination of prior and post reviews. A dedicated procurement specialist will meet with clients (MINAM) on a regular basis to ensure understanding of procurement guidelines and procedures. Implementation support missions will be geared towards: (i) reviewing procurement documents; (ii) providing detailed guidance on Bank procurement guidelines; and (iii) monitoring of procurement processes against the detailed procurement plan and discussing changes to the procurement plan as needs arise.

On safeguards compliance, the team will provide support to ensure proper implementation and monitoring of the Project's ESMF. The team will also provide support to ensure proper implementation of social aspects such as gender and citizen engagement. Regular monitoring will be done by the Bank's environmental and social development specialists.

Implementation Support Plan and Resource Requirements

The Implementation Support Plan will be reviewed at least once a year to ensure that it continues to meet the implementation support needs of the Project (for instance, need for technical skills).

Time	Focus	Skills Needed	Resource Estimate	Partner Role
First twelve months	- Financial management: functioning accounting systems, training, ensuring funds flow arrangements for CDD - Procurement: contracting facilitation support, training - Establishing M&E system	- Financial management and procurement with experience in CDD - Sustainable forest management - Business development and marketing - Social development and participatory processes - Monitoring and evaluation	$80,000	
12-48 months	- Project implementation - Procurement - Financial Management - Safeguards compliance - M&E	- Financial management and procurement with experience in CDD - Sustainable forest management - Business development and marketing	$160,000	

		- Social development and participatory processes - Monitoring and evaluation	
48 months to completion	- Project Implementation - Procurement - Financial Management - Safeguards Compliance - M&E	- Financial management and procurement with experience in CDD - Sustainable forest management - Business development and marketing - Social development and participatory processes - Monitoring and evaluation	$80,000

Peru Integrated Forest Landscape Management Project in Atalaya, Ucayali

Annex 4. Economic Analysis

Introduction

1. **The rationale for mobilizing investments through the FIP is to improve the climate benefits of forests through reduced deforestation and forest degradation.** In the context of this Project, this is being achieved by strengthening sustainable management and use of forest landscapes by forest dependent communities and enterprises. As the overarching rationale for the public investment is to reduce forest-related emissions, the principal economic benefit generated by the Project is also related to this rationale. Therefore, the economic analysis for this Project follows the technical assessment of emission reductions conducted for the Project's preparation.

2. **To date, the welfare benefits generated when successfully reducing deforestation and degradation have rarely been adequately recognized in economic analyses to assess the positive welfare benefits for society at national and international level, and thus, in decision-making processes with respect to government policies or land management practices**. Even though the emissions reductions are achieved through incentivizing private sector investments and triggering behavioral change at the level of private households vis-à-vis their management practices of forests, the overall welfare assessment of this investment has to be carried out at the economy-wide level and not at the private household level as this would not provide a coherent assessment of the benefits generated by the public investments. Further, although private-level financial analysis at the level of the activities and investments undertaken by private households could be separately assessed, it is very common that financial and economic values are interchangeably used although a stricter differentiation between a financial (investment) analysis and an economic (welfare) analysis is appropriate.

3. **This annex presents an analysis of the Project's economic and financial benefits, including selected benefit parameters generated by the Project.** 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.[16,17]

Without – project scenario

4. **For this analysis a "business-as-usual" (BAU) baseline assessment 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 IPCC 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

[16] Nunes, P.A.L.D. and J.C.J.M. van den Bergh. "Economic Valuation of Biodiversity: Sense or Nonsense?" *Ecological Economics*, 2001, vol. 39, issue 2, pp. 203-222.

[17] "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 tradeoffs 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

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 pace of evolution. In the BAU scenario it is assumed that the recent average deforestation rate of 0.5% per year is maintained.

Economic Benefits generated by the Project

5. **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 decreasing tangibility of these values. The total value of tropical rainforest is comprised of the sum of a large number of different values from each value category. However, for an economic analysis, even the direct use values would have to be assessed according to their economic value and not with respect to their financial benefits that they provide to a private household, for example.

6. **For this *ex-ante* economic analysis, only carbon benefits are used for the quantitative economic assessment of project feasibility.** 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 figure 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.

Figure 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, fuel)	Watershed protection	Future direct and indirect uses	Biodiversity (wildlife)
Non-wood products (food,	Nutrient cycling		Culture, heritage
Educational, recreational & cultural uses	Air pollution reduction		Intrinsic worth
Human habitat	Micro-climatic regulation		Bequest value
Amenities (landscape)	Carbon storage		

Bishop (1999)

Quantification of Carbon Benefits

7. **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 and 120 tons of carbon per hectare (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 tropical forest area.

8. **The quantification of carbon benefits applied for this economic analysis follows an extremely conservative approach.** It only assumes avoided carbon emission as a result of enhanced forest conservation compared to the "without project" situation, but it does not assume enhancing overall carbon stocks, e.g. 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 period. 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. However, as this would only increase project benefits and economic returns of the Project, it complies with the "threshold" approach taken for this analysis (also see the section on Methodology, below).

9. **The valuation of project carbon benefits requires the assignment of a dollar value per ton of carbon.** The economic analysis applies the SPC as recommended by the World Bank. Annual SPC values were derived from the minimum and maximum values stated for 2020 and 2050. The minimum value is US$40 and US$78 for 2020 and 2050, and the maximum values are US$80 and US$156 for 2020 and 2050, respectively. In addition, an average value was applied based on these max and min values.

10. **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, The Economics of Ecosystems and Biodiversity (2009) states that associated values range between US$842 and US$2,265 per hectare per year (ha/year). Pearce *et al.* (2001) state values for the same service to range from US$360 to US$2,200 per ha/year. However, as the current assessment focuses on carbon storage benefits only, these values are not considered in the analysis.

Project costs

11. Project costs are approximated using the investment costs of the Project, totaling US$12.2 million.[18] A total Project duration of 15 years was assumed, with a disbursement of Project investments over the first 5 years following the disbursement projections, as stated in the main text of this appraisal document.

Methodology

12. **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 the discount

[18] This excludes possible counterpart founding as the full amount and allocation to certain activities was not available and may still change.

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 assessment.

13. **A 15-year period is assumed to assess the economic feasibility of the Project.** While Project costs are only assumed for the first five and a half 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%, 10%, 15%, and 20%.

14. **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.** Although all assumed benefit values are already lower-bound estimations, changing Project impacts are simulated by applying increment variations in the benefit value of -20%, -10%, +10%, and +20% for the "with-" and the "without-" Project situation.

Results

15. Simulation results are summarized, which represent different deforestation increments between the "with-" and "without-" Project scenario.

Sensitivity Analyses for Net Present Value (NPC), Benefit Cost Ratio (BCR), and Economic Rate of Return (ERR)*

	Discount Rate								
	20%		**15%**		**10%**		**5%**		
	NPV	BCR	NPV	BCR	NPV	BCR	NPV	BCR	**ERR**
Low	16,160,170	3.16	26,859,157	4.21	45,330,196	5.82	78,431,807	8.36	49.3%
Medium	27,985,690	4.74	44,468,671	6.32	72,695,290	8.73	122,976,995	12.54	67.0%
High	39,811,210	6.31	62,078,185	8.43	100,060,384	11.64	167,522,183	16.72	84.5%

*NPV stated in US$

16. **Overall, results show positive simulation outcomes for the Project, thus confirming economic feasibility.** The welfare benefits calculated are significantly positive confirming a robust project proposal. This is confirmed by both, NPV and BCR results. The high ERR complements these results. It has to be noted that these are welfare values and do not represent real income flows to the government as this was not subject of this analysis.

Discussion

17. **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. Following the World Bank guidance on using the SPC to assess the welfare value generated by the proposed forest management interventions demonstrates that the project generates significant welfare benefits. The robust results also provide a buffer against possible underperformance of the project with regard to the total GHG mitigation achieved through the proposed forest management interventions.

18. **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.

19. **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 quantitative assessment focused only on part of the anticipated welfare benefits generated by the project and did not include hother secondary impacts, such as broader capacity building of government and non-government institutions. This demonstrates that investments in improved forest management in the Peruvian rainforest contribute significantly to improving the welfare situation of the country, since they generate and safeguard important direct environmental services that are important at local, regional, and global levels.

Annex 5: Drivers of Deforestation and Theory of Change

Peruvian Amazon: About 65% of Peru's land mass is covered by the Amazon forest, which expands over 69 million ha in Peru alone (Table 1) and constitutes 90% of all forest in the country. The entire Amazon ecosystem extends over nine countries, with the Peruvian portion being 15% of this largest contiguous forest system in the world. These large tracts of primary forest provide a wealth of global and local ecosystem services, including biodiversity conservation, carbon storage, water services, and climate regulation.

Table 1. Amazon Forest Area in Peru (2013-2015)

Department	2013			2014			2015		
	Department total area (ha)	Amazon forest area (ha)	Percentage of Amazon forest in department area	Department total area (ha)	Amazon forest area (ha)	Percentage of Amazon forest in department area	Department total area (ha)	Amazon forest area (ha)	Percentage of Amazon forest in department area
Total	**106 673 782**	**69 354 359**	**65.0**	**106 673 782**	**69 176 793**	**64.8**	**106 075 139**	**69 020 330**	**65.1**
Madre de Dios	8 504 597	8 018 317	94.3	8 504 597	8 002 550	94.1	8 504 587	7 984 748	93.9
Loreto	37 511 593	35 254 719	94.0	37 511 593	35 217 155	93.9	37 501 935	35 185 486	93.8
Ucayali	10 534 191	9 501 251	90.2	10 534 191	9 468 614	89.9	10 517 777	9 438 899	89.7
Amazonas	3 930 659	2 874 731	73.1	3 930 659	2 869 532	73.0	3 935 585	2 862 600	72.7
San Martín	5 096 117	3 450 072	67.7	5 096 117	3 423 672	67.2	5 103 141	3 401 571	66.7
Pasco	2 411 385	1 429 267	59.3	2 411 385	1 419 280	58.9	2 387 945	1 411 802	59.1
Huánuco	3 720 054	1 652 659	44.4	3 720 054	1 625 064	43.7	3 749 911	1 602 152	42.7
Junín	4 426 627	1 911 493	43.2	4 426 627	1 899 216	42.9	4 412 359	1 890 163	42.8
Cusco	7 213 030	3 110 510	43.1	7 213 030	3 105 421	43.1	7 207 445	3 100 613	43.0
Puno	7 321 345	1 449 740	19.8	7 321 345	1 446 798	19.8	6 789 166	1 444 982	21.3
Cajamarca	3 304 462	354 798	10.7	3 304 462	353 651	10.7	3 294 876	352 577	10.7
Ayacucho	4 357 112	217 465	5.0	4 357 112	216 694	5.0	4 349 091	215 881	5.0
La Libertad	2 529 604	68 719	2.7	2 529 604	68 670	2.7	2 529 593	68 564	2.7
Piura	3 606 506	42 442	1.2	3 606 506	42 377	1.2	3 583 763	42 265	1.2
Huancavelica	2 206 500	18 176	0.8	2 206 500	18 099	0.8	2 207 964	18 026	0.8

The Peruvian Amazon is home to 1,200 indigenous communities or 330,000 IPs, who live in collectives of families comprising on average 20-30 families or around 130 people that are linked by language and culture, and inhabit more than 11 million ha. The main economic activities are fishing, corn and rice cultivation, as well as wood extraction. Socio-economic indicators for indigenous communities are well below the national average with high rates of poverty, illiteracy, etc. Major drivers of deforestation include illegal logging, small-scale as well as commercial agricultural expansion, and – in some areas -gold mining (more on drivers further below).

Land tenure: Economic development and tenure security have been interlinked themes in the Peruvian government's approach for several decades and are still the main focus today. Over time, three laws have guided titling of indigenous communities in Peru:

i) the 1974 Law of the Agricultural Development of Indigenous Communities of the Rainforest and Rainforest Border, which provided a legal basis for granting indigenous communities rights to land;

ii) the 1978 Law of Indigenous Communities sets out detailed procedures for granting communities legal title by first recognizing communities as a legal entity and then awarding title; and

iii) the International Labor Organization's (ILO) Convention 169 on Indigenous and Tribal Peoples in Independent Countries, which Peru ratified in 1994. As energy exploration expanded in the Amazon in the 1990, the government granted formal title to several indigenous communities to comply with the convention.

However, the process of titling is complex, costly, and lengthy as it involves several legal, bureaucratic and technical steps. These begin with a desk review phase involving multiple public entities, and are followed by a phase of field work with community consultations and physical demarcation of the community's territory with stone markers, as well as a classification of land for different use according to suitability for agriculture, forestry, and forest protection. Subsequently there is a processing phase, during which maps and field reports are prepared by the Regional Agrarian Agency of the Ministry of Agriculture, which need to be approved by the community. An important aspect of the titling process is in Peru that land is categorized per its suitability for different land uses, i.e. suitable for agriculture and ranching, suitable for forestry, etc. The community owns only the land that is suitable for agriculture and ranching, while the state owns the land suitable for forestry, but cedes usufruct rights to the community.

Drivers of Deforestation: Thus far, no comprehensive, spatially explicit assessment of the drivers of deforestation and forest degradation has been completed for the entire Peruvian Amazon. Nonetheless, existing case studies show that shifting cultivation is a principal driver as small-scale agriculture tends to rotate, due to shallow, acidic soils that are quickly depleted of nutrients. Illegal logging is often conducted by small- and medium-scale independent contractors who harvest timber in indigenous communities. There are several incentives for small contractors to target indigenous lands, which include proximity to river transport (as indigenous land is often alongside rivers), and availability of high-value standing timber (as many forest concessions have already undergone selective logging for high value species, while indigenous lands have not yet).

Because most of the logging in the Peruvian Amazon is selective, its direct effects on deforestation are mostly limited to associated roads, skid trails, and tree-fall gaps. However, opening up access with roads is often an indirect cause for more direct drivers to follow, such as non-commercial and commercial agriculture.

Forest Governance: In 2000, a new Forest and Wildlife Law was adopted in Peru and aimed to promote sustainable timber extraction by designating new and existing institutions as forest management units, requiring these institutions to obtain permits and authorization, defining the scope and nature of their extractive activities, and setting up a system for enforcing compliance with these permits and authorizations. The new law mainly offers two options for forest management: large (5,000-40,000 ha), new, long-term (up to 40 years) forest concessions that are awarded through a public tender process and smaller, existing management units with title, including indigenous communities, small private land holders, and non-indigenous river communities. Both large and small types need to draw up and obtain approval for general forest management plans, which identify the total quantity and type of trees to be harvested over a 5-year period and more specific annual operating plans identifying the exact location, size, and type of individual trees to be harvested each year.

Permits for extraction are expected to align with the annual operating plans, as well as permits for timber transportation to markets. However, due to the large expanse of the Peruvian Amazon, timber extraction is rarely monitored at site by the only 29 local offices from the General Directorate of Forestry and Wildlife responsible for monitoring and enforcement. Instead, inspection mainly happens along checkpoints on main transportation routes, such as the river to Pucallpa, the main processing and export center in the

Ucayali region.

Theory of Change: The following describes the theory of change and causal chain between the proposed project interventions and the ultimate project impact on forest conservation and management.

Awarding land title to indigenous communities entails many steps as described above, including, first a community dialogue internally and subsequently with other stakeholders involved in the process, such as government agencies and NGOs that may assist in the titling process, and finally a physical demarcation process that awards the boundaries to land title, before the bureaucratic process of awarding title. There are several outcomes of titling indigenous communities that lead to reduced deforestation and forest degradation:

1) While regulations prohibit timber harvesting without permit, regulatory monitoring and enforcement are weak. Illegal logging and clearing happen particularly in areas were land tenure is not well defined as the culpability can't be easily pinned on anyone. Further, without legal title, a community managing a forest area does not have the legal backing to register a formal complaint with regulators about illegal encroachment on their lands. Titling indigenous communities that manage their forests can address both of these problems as it enhances formal regulatory pressure and accountability on those who are engaging in illegal deforestation.

2) Similar to improved formal regulatory pressure, informal regulatory pressure can equally reduce deforestation, as NGOs and the press can enhance information pressure on community leaders. Moreover, titling can give communities legal standing to complain to NGOs and other non-state actors about illegal activities.

3) Through the structured titling process, community governance is often enhanced. For example, the community meetings over the titling process can also enhance internal community dialogue and consensus on management of other areas, including effective forest management. Furthermore, the dialogue between the community and external stakeholders involved in the titling process (public entities, NGOs, etc.) can enhance community governance capacity. Finally, the physical demarcation can help focus community governance related to forest resources management.

4) Since titling is an iterative process of interactions between government entities and the community, it can have positive effects on community access to other support and resources, including eligibility to government programs, such as conservation cash transfers as well as support for livelihood activities, which in turn can reduce deforestation pressure.

5) Likewise, titling can also facilitate interactions between communities and private sector entities such as creditors as well as input providers (i.e. for technical assistance for coffee or cacao producers) and make it easier for communities to access credit for investments to intensify agriculture or improve silviculture.

In addition, the Project recognizes that, to ensure the longer-term sustainability of titled lands and improve the livelihoods of rural populations, land titling needs to be accompanied by capacity building and financial support to enhance communities' managerial and technical skills in improved forest management and in planning and implementation of new income options in forest landscapes.

Project activities will provide capacity building and financial support to communities in improved forest management, planning and implementation of innovative forestry production techniques, increased

forest productivity, and fostering community economic development by diversifying and promoting new income options from forest landscapes—including the creation and strengthening of community forest enterprises to promote value chains, expand market access, and improve competitiveness.

Research Evidence: Recent research in the Peruvian Amazon confirms the above theory of change.[19] Results show that titling significantly reduces both forest degradation (disturbance) and deforestation (clearing) – at least in the short term - when formal land titles are awarded. More specifically, *Blackman et al.* analyzed the effect of land titling between 2002-05 on forest impact using satellite imagery and found that titling reduced deforestation by more than three-quarters and degradation by about two-thirds in a 2-year window from the year the title was awarded, suggesting clearly that awarding formal land title to indigenous communities can advance forest conservation. The research underlines that the improved local governance improvements are critical intermediary impacts contributing to reduced deforestation, as indirect impact through improved livelihood activities only would have presumably resulted in a less immediate effect on deforestation with more of a lag between titling and impact on forest cover change.

These results support ongoing trends in developing countries that are increasingly decentralizing forest governance by granting indigenous groups and other local communities formal legal title to land. By one estimate, almost a third of all developing country forests are now managed by local communities, which is well over twice the amount currently found in protected areas. In Latin America and the Caribbean countries alone, title to at least 100 million ha of forest have been awarded to local communities until 2000, with trends continuing thereafter (but not complete data available).

On the flipside, weak property rights can promote deforestation and forest degradation in several ways; e.g. by enabling landless migrants to colonize frontier forest areas (as is also seen in Atalaya with migration from the Andes), by undermining community forest management with actions from powerful private sector actors, by tipping land users' preferences for productive activities with quick but often unsustainable returns (clear cut), and by creating incentives for squatters to clear forests to establish agricultural user rights and/or to block competing land right claims by other actors, and by preventing land users from participating in payments for environmental services schemes. In principle, granting title to indigenous communities can mitigate these challenges.

[19] "Titling Indigenous Communities Protects Forests." Allen Blackman, Leonardo Corral, Eirivelthon Santos Lima, Gregory P. Asner. Proceedings of the National Academy of Sciences, April 2017.