Forest Carbon Partnership Facility (FCPF)
Carbon Fund

Emission Reductions Program Idea Note (ER-PIN)

Country: PERU

ER Program Name: EMISSION REDUCTIONS FROM DEFORESTATION FRONTS IN THE PERUVIAN AMAZON

Date of Submission or Revision: May 26, 2014

Executive Summary

Peru proposes to offer a minimum of 10 MTCO2e in emission reductions to the FCPF Carbon Fund, equivalent to 50% of a total of 19.35 $MTCO_2e$ of reductions potentially generated during 2016-2020 by interventions in three deforestation "hotspots" in the Peruvian Amazon. The interventions are aimed at improving governance and enabling conditions, increasing agricultural and forestry productivity and competitiveness, and increasing institutional, organizational, and productive capacities and are expected to reduce the emissions reference level of 38.7 $MTCO_2e$ for the 2016-2020 period by 50%.

Beside reductions of emissions and deforestation, the Program will create substantial non-carbon benefits: the reduction of poverty, especially among indigenous peoples; the maintenance of biodiversity and ecosystem services; the empowerment indigenous and other local actors; improved forest and environmental governance; better systems for the monitoring, control, and assignment of land use and land use rights; improved productivity and competitiveness of forest land and resources; strengthened capacities of producers, organizations, and governments; and greater knowledge, access to capital, and linkages that underlie more effective market participation.

The proposal is based on synergy and complementarity between the FIP and ER Program - the FIP will invest in improving enabling conditions that will facilitate emissions reductions which, in turn, will be partially purchased by the ER Program. The Program has strong governmental and cross-sectorial commitment and will build upon numerous measures undertaken recently by the Peruvian government to reform the forestry and forest use (LULUCF) sector and enable REDD+. It will include vertical and horizontal multi-sectorial cooperation involving the Ministries of the Environment, Agriculture and Irrigation, Economy and Finances, and Cultural Affairs, Amazon regional governments and their council for inter-regional cooperation (CIAM), indigenous organizations, as well as civil society organizations.

The Program will be implemented in three priority areas, chosen from 14 potential deforestation "hotspots" based on the criteria of emissions reduction potential, social and environmental co-benefits, and cost-effectiveness: Tarapoto-Yurimaguas in the regions of San Martin and Loreto, Atalaya in Ucayali, and Puerto Maldonado-Iñapari in Madre de Dios. Taken together, the three areas exhibit the main drivers of deforestation in the Peruvian Amazon (shifting agriculture, medium to large scale agro-industrial production, and selective logging) as well as principal underlying causes (migration; competition for land use by legal and illegal activities; weak governance; an inadequate system of lands rights, titling, and land use zoning; weak systems of monitoring, control, and sanctions of inadequate land use; unproductive forestry and agricultural production systems; and weak linkages with markets and market support systems. They also represent the three principal socio-environmental contexts present: settled areas with agricultural-forest mosaics, the agricultural frontier, and relatively intact forest. These characteristics will enable the extension of Program results to other areas affected by deforestation in the Peruvian Amazon.

The three areas comprise a total of 4.2 million ha, of which approximately 3.4 million ha are presently forested; on average, 21% of the lands pertain to indigenous communities. The population in these areas is in the range of about 250,000, a third of which is rural.

Interventions focus on the causes of deforestation and are based on an integrated territorial approach in each of the three zones of intervention. The projects will include: 1) the generation of enabling conditions that improve the governance and control of forest land and land rights, and facilitate private investment, 2) the development of innovative productions systems, business models, and value chains, and 3) the strengthening of capacities of institutions, organizations, and producers and their access to resources and markets. The exact nature of these interventions will vary according to the socio-environmental and land use characteristics (settled agriculture vs. the agricultural frontier vs. relatively undisturbed forest). Additionally, a series of activities will be undertaken at the national level in order to strengthen the horizontal alignment of institutions and policies at the national level, the generation of improved knowledge and technology for production systems, and the development of financial instruments necessary to put improved technologies into practice.

The Program will be developed and implemented under the leadership of the National Forest Conservation and Climate Change Mitigation Program of the Ministry of the Environment, as part of its emerging National Conservation and Climate Change Strategy, which encompasses REDD+ and incorporates REDD+ international guidelines. Local implementation will be the responsibility of the participating regional governments and will incorporate IPCC and FCPF methodological guidelines. Key features of Program management include formal structures for the participation of cross-sectorial government stakeholders in overall direction and supervision and the inclusion of civil society stakeholders, especially indigenous groups, in Program consultation, oversight, and evaluation at the national and local levels.

Beside the World Bank and IADB assistance to R-PP and FIP, other donors such as KfW, UNREDD+, CAF, GIZ, and JICA will support REDD+ Readiness-related activities that complement and facilitate the ER Program. It is expected this support will also enable the completion of the Readiness Package by early 2016. Pending tasks include:

- Continue stakeholder training, consultation, and participation during the final design and implementation of the ENBCC, FIP, and ER Program, within the framework of the Plan for Stakeholder Engagement.
- Complete the creation of the R-PP and ER Program management structures at the national level and design the work plan for the coordination of institutions and policies.
- Gather and analyze data to update the reference levels to 2012.
- Detail and implement the National Forest Cover Monitoring System, including the plans for the involvement of local and indigenous groups.
- Consolidate the National REDD+ Initiatives Information Platform and the National REDD+ Initiatives Information Registry in a manner that will avoid: a) double or triple accounting of the reductions of emissions; b) ambiguity regarding the ownership of the emissions reductions; c) inconsistencies between national GG inventories and general REDD+ accounting, and d) nonfulfillment of the socio-environmental safeguards.
- Design the SESA, including the plan for monitoring the indicators of safeguards and co-benefits, and their inclusion in the National REDD+ Initiatives Information Registry.
- Consult and design the benefits distribution system.
- Align and coordinate the financing for investments in activities that enable results-based payments by the Carbon Fund and the future sustainability of similar types of payments.

Peru´s ER Program proposal is notable due to: 1) the efforts to include the indigenous communities in the decision-making related to the design, management and implementation of the interventions; 2) the FIP/ER Program synergy, 3) the potential inclusion of the concept of differentiated payments for carbon within the benefit distribution system; and 4) the effort to link Carbon Fund payments with a broader national system of payments for ecosystem services (the Peru Forest Fund).

It is expected that these processes will prepare the way for low-emissions-development in the Peruvian Amazon and at the national scale. Payments for emission reductions to producers will help to improve their competitiveness in markets based on sustainable or “green” supply chains. At the same time, the reduction of greenhouse gas emissions from the Amazon forests also represents a reservoir of relatively cheap carbon that can help neutralize the carbon footprint of other domestic sectors and thus improve national competitiveness in global markets oriented towards low emissions. The experiences from the ER Program can also serve as a seed for the development of a national market for emissions reductions, payments for environmental services, and environmental compensation, which will help give greater value to the forests and thus aid in reducing deforestation.

1. Entity responsible for the management of the proposed ER Program

1.1 Entity responsible for the management of the proposed ER Program
Please provide the contact information for the institution and individual responsible for proposing and coordinating the proposed ER Program.

Name of managing entity	NATIONAL FOREST CONSERVATION AND CLIMATE CHANGE MITIGATION PROGRAM (PNCBMCC) – MINISTRY OF THE ENVIRONMENT (MINAM)
Type and description of organization	The PNCBMCC was created by Supreme Decree No. 008-2010-MINAM on July 14, 2010. Its aim is to achieve the conservation of 54 million hectares of tropical forest as a contribution to the mitigation of climate change and sustainable development. The main action strategy of the PNCBMCC is to coordinate and link the efforts of the public, private and international cooperation sectors related to forest conservation and to strengthen the capacity for sustainable forest management at the national, local, and community levels.
Main contact person	Gustavo Suárez de Freitas
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Website	http://bosques.minam.gob.pe/

1.2 List of existing partner agencies and organizations involved in the proposed ER Program
Please list existing partner agencies and organizations involved in the development of the proposed ER Program or that have executive functions in financing, implementing, coordinating and controlling activities that are part of the proposed ER Program. Add rows as necessary.

Table 1: Organizations that are involved in the Emissions Reduction initiative.

Sector	Institution	Function	Role*
National Government Authorities			
Agriculture and Irrigation	Ministry of Agriculture and Irrigation (MINAGRI)	Governs National Agricultural Policy and the formalization of agrarian property, including lands held by native communities and private rural holdings. The MINAGRI is currently modifying policies and mechanisms related to land titling.	R
	National Forest and Wildlife Service (SERFOR) (to be set up upon approval of the regulations for Law 29763).	Governs the National Forest and Wildlife Management l System (SINAFOR). As its national technical-regulatory authority, it is responsible for issuing regulations and establishing procedures within its area of jurisdiction. Its advisory body is the National Forest and Wildlife	R

Sector	Institution	Function	Role*
		Commission (CONAFOR).	
	General Forest and Wildlife Bureau (DGFFS)	Responsible for the formulation of national policy, strategies, plans and programs for sustainable use of forest and wildlife resources and associated genetic resources. The DGFFS also coordinates effective implementation of those policies, including forest investments, with regional forest and wildlife authorities. Those functions will be assumed by SERFOR.	N
	National Institute for Agrarian Innovation (INIA)	Responsible for innovation of agricultural technology, aimed at increasing productivity and competitiveness, enhancing the value of genetic resources, and achieving sustainable agricultural and forest production.	R/E
	National Water Authority (ANA)	Responsible for sustainable, multi-sector use of water resources and watersheds, within the framework of integrated natural resources management and national environmental quality management, through the establishment of strategic alliances with regional governments.	R
	Rural Agrarian Productive Development Program (AGRORURAL)	Specialized in fighting rural poverty, initially in the Andes, but now including the Amazon, via strategies, activities and mechanisms for increasing the income and improving the quality of life of rural families.	E
	Program of Compensation for Competitiveness (AGROIDEAS)	Operates at the national and regional levels through grants in support of the increased commercial competitiveness of organizations of small- and medium-sized agricultural, forestry, or livestock producers, via the formation and improved management of producer organizations and the adoption of improved technology.	E
	General Bureau of Environmentally-related Agrarian Matters – DGAAA	Approves Environmental Impact Studies for the agricultural sector and performs environmental audits of agricultural, agro-	R

Sector	Institution	Function	Role*
		industrial, and renewable natural resources projects and activities. Approves the classification of lands by greatest use.	
Culture	Vice-Minister for Intercultural Affairs	Governing body for indigenous affairs in charge of designing and formulating public policy on intercultural affairs; serves as the principal public authority on matters of prior consultation.	R
Economy and Finance	Ministry of Economy and Finance, Vice-Ministry of Economy	Governing body responsible for designing and implementing national economic and financial policy, with a view toward achieving economic well-being. The focal point is the General Bureau of International Economic Matters, Competition and Productivity.	R
Office of the Chairman of the Council of Ministers	Supervisory Body for Forest and Wildlife Resources (OSINFOR)	Body responsible for the supervision and oversight of the sustainable use and conservation of forest and wildlife resources, as well as for forest-generated environmental services.	C
Environment	Ministry of the Environment (MINAM)	Governing body of the environmental sector that promotes conservation and sustainable use of natural resources, biological diversity, and protected natural areas. It is the national environmental authority and Focal Point for international negotiations on Climate Change. The MINAM is also responsible for technical aspects related to REDD+ and for coordinating with pertinent public and private, national, and sub-national (regional) institutions.	R
	General Bureau of Climate Change, Desertification and Water Resources (DGCCDRH)	Responsible for formulating national policy and regulations on climate change management in coordination with pertinent entities. It is the designated national authority for compliance with the commitments assumed under the United Nations Framework Convention on Climate Change.	R
	General Bureau of Land Use	Responsible for environmental	R

Sector	Institution	Function	Role*
	Planning (DGOT)	mapping and zoning.	
	General Bureau of Natural Heritage Assessment, Enhancement and Financing (DGEVFPN)	Formulates and promotes national policy, plans and instruments for the assessment and enhancement of the value of natural resources, biological diversity and environmental services.	R
	National Forest Conservation Program for Climate Change Mitigation (PNCBMCC)	Subordinate to the MINAM Vice-Ministry of Strategic Natural Resource Development, the PNCBMCC´s goal is the conservation of 54 million hectares of tropical forest, as a contribution to climate change mitigation and sustainable development. Responsible for the national REDD+ strategy.	E
	National Natural Protected Areas Service (SERNANP)	Specialized public agency under the Ministry of the Environment, whose primary function is to manage and operate the National Natural Protected Areas Service (SERNANP). Promotes, grants, and regulates rights to environmental services within the sphere of natural protected areas at the national level.	R/E
	Office of Environmental Assessment and Control (OEFA)	Governing body of the National Environmental Assessment and Control System (SINEFA). It exercises environmental assessment, supervision, and control and applies incentives in that area, in accordance with the environmental regulations established in Law 29325, the National Environmental Assessment System Law.	C
Sub-national Authorities			
	Regional Governments	Regional governments are responsible for: • Physical and legal titling of rural property, including that of farming and native communities and land belonging to the state. • Preparation of land registry. • Administration of government-owned lands within its jurisdiction. • Land Use Planning (Economic and Ecological Zoning). • Regulation of forestry	R / E

Sector	Institution	Function	Role*
		activities within its jurisdiction by granting forest licenses, authorizations, and concessions and carrying out control. These functions have been transferred to 6 regions: Loreto, Ucayali, Madre de Dios, San Martin, Amazonas, and La Libertad. • Processing and evaluation of private investments in regional irrigation projects, in order to advance the agricultural frontier (DL 994). • Surveillance and control to guarantee sustainable use of natural resources under its jurisdiction.	
	Forest and Wildlife Management Units (UGFFS)	Regional organization responsible for the management, administration, and public control of forest and wildlife resources. Operates under the aegis of each regional government. The UGFFS can establish community forest management units that include stakeholder participation in their administration.	E
	Regional Bureau of Agriculture (DRA)	Decentralized body subordinate to the Office of the Presidents of the regional governments. Promotes agricultural production and is the principal regional coordinating body of the Ministry of Agriculture. The regional governments' agricultural bureaus are also responsible for implementation of land titling and the formalization of rural agricultural property.	R /E
	Regional Environmental Authorities (ARA)	Regional government entities responsible for environmental affairs, protected areas, and land use planning. These bodies are governed by the Environmental Management Law and other provisions that regulate the Regional Environmental System.	R/E

R= Regulatory; E= Executor; C= Control

2. Authorization by the National REDD+ focal point

Please provide the contact information for the institution and individual who serve as the national REDD+ Focal Point and endorses the proposed ER Program, or with whom discussions are underway

Name of entity	MINISTRY OF THE ENVIRONMENT (MINAM)
Main contact person	Gabriel Quijandría
Title	Vice Minister for the Strategic Natural Resource Development
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Email	gquijandria@minam.gob.pe
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2.1 Endorsement of the proposed ER Program by the national government

Please provide the written approval for the proposed ER Program by the REDD Country Participant's authorized representative (to be attached to this ER-PIN). Please explain if the national procedures for the endorsement of the Program by the national government REDD+ focal point and/or other relevant government agencies have been finalized or are still likely to change, and how this might affect the status of the attached written approval. ER Program) must be located in a REDD Country Participant that has signed a Readiness Preparation grant agreement (or the equivalent) with a Delivery Partner under the Readiness Fund, and that has prepared a reasonable and credible timeline to submit a Readiness Package to the Participants Committee

The REDD+ focal point in Peru is the Vice-Ministry for Strategic Natural Resource Development of the Ministry of the Environment. The Vice-Minister has prepared and endorses this Project Idea Note for the Emissions Reduction initiative which will be carried out by the National Forest Conservation and Climate Change Mitigation Program as part of its mandate for drafting and implementing the National Forest and Climate Change Strategy of which REDD+ forms a part.

Peru´s proposal to the Emissions Reductions Initiative represents the continuation of a process begun in 2011 with the participatory formulation of the PI-FIP, a joint task assumed by the MINAM, MINAGRI, MEF, CIAM, the Ministry of Intercultural Affairs, AIDESEP, and CONAP, and involving wide stakeholder participation.

2.2 Political commitment

Please describe the political commitment to the ER Program, including the level of support within the government and whether a cross-sectorial commitment exists to the ER Program and to REDD+ in general.

Since January 2010, there has been significant progress in Peru in establishing and strengthening the regulatory framework and institutions related to forests, REDD+ and climate change. These changes provide evidence of the high level of political support for REDD+, the ERP, and climate change mitigation. They are directed at improving institutional performance, increasing coordination and linkage between institutions and their policies, and improving enabling conditions and governance (Tables 2 - 4). A high level of commitment also exists between the PNCBMCC, the MINAGRI, and Amazon regional governments with regards to inter-institutional coordination related to forest regulation, governance, management, and monitoring. Broader cross-sectorial support of REDD+ is evidenced by the composition of the Executive Committee which included representatives of the Agricultural, Environment, Economy and Finance, and Intercultural Affairs Ministries, Amazon regional governments, and indigenous organizations.

Table 2: Regulatory framework linked to REDD+.

Regulatory Framework	Objective
National Agreement	Stipulates, as an environmental mandate, the integration of the national environmental policy with the economic, social, cultural, and land use planning policies in order to contribute to overcoming poverty and achieving sustainable development; and to institutionalize environmental, public and private management to protect biological diversity and foster

	agrarian and rural development in the country, including sustainable forest exploitation.
Bicentennial Plan	Emphasizes a State that is efficiently decentralized and coordinated for the conservation and sustainable use of natural resources, applying an integrated, ecosystemic focus that facilitates a good quality of life for the people.
Law 29763, Forest and Wildlife Law	Recognizes the multiple uses of the forests, including goods and services as well as its diverse users, namely, indigenous peoples and other traditional users of the forest and wildlife resources and the other economic stakeholders in the forest sector. The Law regulates zoning processes and forest land use planning, the assignment of rights to each stakeholder or forest use in the forests that are of public domain, the respect for the rights of the indigenous peoples and of the landholders of lands that include forests and the obligatory nature of management plans, the definition of the new forest institutional system, and the mechanisms of oversight and control.
National Forest and Wildlife Policy	Details the functions and responsibilities of all the government levels and public and private stakeholders. Defines forest and wildlife management in Peru for the long term and establishes the strands of public policy.
National Environment Policy	The objective of the policy is to improve the quality of life of the persons, ensuring the existence of healthy, viable and functional ecosystems for the long term and the sustainable development of the country, in accordance with the principle of respecting the fundamental rights of the people. This policy has four thematic strands: (i) conservation and sustainable use of natural resources and biological diversity; (ii) integrated management of environmental quality; (iii) environmental governance and (iv) international environmental commitments and opportunities.
Law 28611, General Environment Law	Establishes the basic principles and standards to ensure the effective exercise of the right to a healthy, balanced and adequate environment for the proper development of life, contributing to effective environmental management and protection.
Law 29325, Environmental Evaluation and Oversight System Law	The aim of this system is to ensure compliance with the environmental legislation by individuals and corporations and to supervise and ensure that the penalizing functions regarding environmental issues are carried out expeditiously and impartially, within the framework of the National Environment Policy.
Law 26821, Fundamental Law of Sustainable Use of Natural Resources	Regulates the system of use of natural resources, promoting and regulating the sustainable use of renewable and non-renewable natural resources, establishing a framework to foster investment and fostering economic equilibrium and conservation of the natural resources and the environment.
Law 26839,	Regulates matters of biological diversity and sustainable

Law of Conservation and Sustainable Use of Biological Diversity	use of its components, fosters the conservation of biodiversity in ecosystems, just and equitable distribution of benefits resulting from the use of biological diversity, and economic development in the country.
Law 26834. Law of Protected Areas	Regulates aspects related to protected natural areas and their conservation, in accordance with Article 66 of the Constitution. Covers the definition of categories, the national system, regional areas and private areas. Regulates public use, use of resources in protected areas, the process of establishment of protected areas, planning, participation and other aspects.
Law 22175. Law of Indigenous Communities and Agrarian Development of the Jungle and High Jungle	The aim of this law is to establish an agrarian structure that contributes to integrated development in the jungle and high jungle regions helping the population in these regions to reach a level of quality of life that is in line with the dignity of the human being, through rural projects for the integral and integrated use of natural renewable resources, according to development plans
Law 29785 Law of Informed, Prior Consent	Regulates the right to free, informed previous consultation of the indigenous nations and peoples and of the small farmers, intercultural communities and afro-Peruvian peoples in order to reach agreements or achieve consent through appropriate procedures, taking as the basis the Constitution, ILO Convention 169 and the Declaration of the United Nations on the Rights of Indigenous Peoples.
Law 27658. Framework Law of Modernization of State Management	Regulates the process of modernizing State management with the final aim of reaching higher levels of efficiency within the state system in order to improve the services provided to the citizens, prioritizing and optimizing the use of public resources.
Law 27867. Fundamental Law of Regional Governments	Regulates the structure and organization of the state in a decentralized and democratic system. Fulfills the objective of organizing the territory and the environment in a sustainable manner, managing appropriately the natural resources and improving the quality of the environment as well as coordinating and reaching inter-institutional consensus with the participation of all the levels of the National Environmental Management System. Likewise, grants competencies in forest control and the granting of access rights (enabling titles) to forest resources. These stipulations are included in the forest regulation as of 2011.
Law 27972. Fundamental Law of Municipalities	Establishes the competencies for the rural municipalities. Among them are the promotion of sustainable management of human resources, soil, water, flora, fauna, and biodiversity in order to bring together the fight against environmental degradation and the fight against poverty, and to generate work in the framework of agreed upon development plans.

Table 3: Progress in building an institutional framework for forests and climate change in Peru.

Level	Process
National	Design and approval of the R-PP through a participatory, consensual process involving stakeholders.
National	Update of the National Climate Change Strategy (ENCC).
National	Preparation of the guidelines for the preparation of the National Forest and Climate Change Strategy (ENBCC) and the designation of the National Forest Conservation Strategy for Climate Change Mitigation (PNCBMCC) as the entity responsible for the ENBCC and, as such, the execution of REDD+ in accordance with Peru´s international commitments. The ENBCC will work with various institutions, especially the MINAGRI and the regional governments, to reduce deforestation and forest degradation, implement REDD+, and mitigate climate change related to the forest and to land use change sector (LULUCF).
National	Identification and analysis of mitigation measures (MM) and their associated costs for reducing greenhouse gas emissions by all national sectors, including the construction and analysis of abatement cost curves (PlanCC).
National	Reform of the forest sector, including the preparation of the regulations of the new Forest and Wildlife Law, the Forest Plan, the creation or reform of forest institutions, including the National Forest and Wildlife Management System (SINAFOR); the new national authority – the National Forest and Wildlife Service (SERFOR); recognition of the regional forest and wildlife authorities; and the existence of Forest and Wildlife Management Units (UGFFS). This institutional system includes venues for participation at the national level (National Forest and Wildlife Council – CONAFOR, as the consultative body of the SERFOR) and at the local level (Forest and Wildlife Management Committees – CGFFS). Additionally, it acknowledges the right of the national authority for protected areas (SERNANP) to exercise administration and control over the forests within these areas.
National	MINAM designated as the focus point for the UNFCCC, PIF, FPCF, and UNREDD+.
National	Modification of the environmental regulations and standards (SENACE).
National	The Presidency of the Council of Ministers is preparing a pilot project on modernizing forest management and climate change mitigation in the Peruvian Amazon. The objective is to modernize the public institutions involved in granting legal access to forests as well as their sustainable management.
Regional	The establishment and implementation of Regional Environmental and Natural Resource Authorities (ARAs) with a territorial focus.

Table 4: Progress on REDD+ related processes and mechanisms.

Level	Progress
National/ Regional	The Forest Investment Plan (FIP) PIN designed, and the proposal for the Preparation of REDD+ Readiness (R-PP) updated via participatory processes with civil society stakeholders and indigenous organizations.
National/ Regional	Creation of the National Indigenous REDD+ Roundtable and the creation of five Regional Indigenous REDD+ Roundtables in San Martin, Madre de Dios, Loreto, Ucayali, and Atalaya regions.
National	Strengthening of capacities of indigenous peoples and other local stakeholders to participate in the REDD+ Mechanism (UNREDD+ /UNDP and other projects).
National	Identification of safeguards required for the implementation of REDD+ and definition of how these will be handled in accordance with international commitments.
National/ Regional	Design of a national forest cover monitoring system and a system of Measuring, Reporting and Verification of REDD´activities (MRV) (in progress).
National	Start-up of the National Peruvian Forest Inventory and Sustainable Forest Management Project for Climate Change Project.
National	National REDD+ Initiatives Information Platform REDD+ /PNCBMCC (In progress).
Regional	Nested Jurisdiction initiative, based on the VCS-JNRI standard, are being piloted in two Amazon regions (San Martín and Madre de Dios) (In progress)
National/ Regional	The "REDD+ Road Map" for the joint construction and application of a nested jurisdiction established and agreed upon by 5 Amazon regions and the MINAM.

Regional	9 early initiatives registered under the VCS standard.

3. STRATEGIC CONTEXT AND RATIONALE FOR THE ER PROGRAM

3.1 Brief summary of major achievements of readiness activities in country thus far

Please briefly provide an update on REDD+ readiness activities, using the component categories of the R-PP as a guide. If public information is available on this progress, please refer to this information and provide a link.

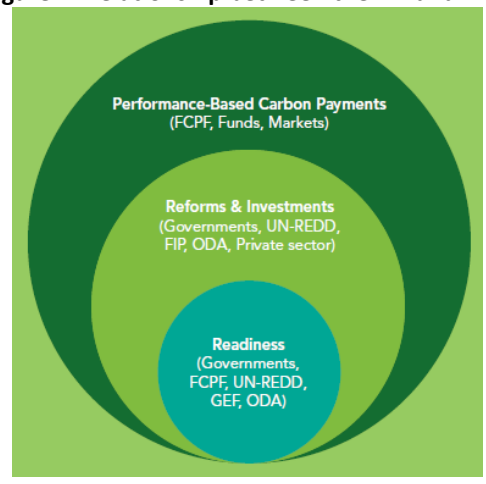
Summary of the R-PP Process to Date

In 2008, the Peruvian government requested to be included in the Forest Carbon Partnership Facility (FCPF) process and submitted a Readiness Plan Idea Note (R-PIN) which was approved the same year. Between 2009 and 2011 Peru prepared and submitted a number of drafts to the FCPF; at the eighth PC meeting, held in March 2011, Peru was granted REDD+ Preparation Funds on the condition that the country include additional information and respond to various observations made by the Participants Committee (PC). The new version of the R-PP was presented to the PC in December 2013, and on February 24th, 2014, Peru's compliance with the observations made previously was confirmed.

At present, the National Forest Conservation and Climate Change Mitigation Program (PNCBMCC) of the Ministry of the Environment (MINAM) is responsible for governmental activities related to REDD+ and climate change within the Land Use, Land Use Change and Silviculture (LULUCF) sector, which in turn forms para of the National Climate Change Strategy (ENCC). Accordingly, the PNCBMCC is charged with overseeing the *Readiness* process and the preparation of the present Emissions Reduction Program Idea Note (ER-PIN).

It should be noted that the ER-PIN builds upon and is complementary to the Forest Investment Program (FIP), which is presently being designed. The FIP will invest in establishing the enabling environment and conditions (governance; land rights and titling; monitoring, control, and oversight of land use; capacity strengthening; alignment of institutions and policies; and linking the private sector with credit and markets) that underlie and facilitate other activities directly responsible for reducing greenhouse gas (GHG) emissions, such as sustainable forest management, agroforestry, and reforestation. In turn, the Carbon Fund will compensate a part of the emissions reductions achieved by the FIP (Figure 1).

Figure 1. Relationship between the FIP and ERP.



Principal Achievements and Processes of R-PP

The current situation of the *Readiness Package* is summarized below.

Participation and consultation

Peru has improved and continues to improve the participation and consultation of the stakeholders, and the incorporation of their recommendations in the REDD+ process and in the socialization of the FIP and R-PP proposals. This process, which has included a broad spectrum of civil society, indigenous organizations and the public sector, has been carried out in a transparent manner and in accordance with the laws of Peru and the safeguards of the multilateral development banks.

The R-PP and the FIP used three mechanisms for consulting and sharing information with stakeholders at both the regional and national levels that will be extended to the ERP: 1) public workshops which included the participation of the Natural Resource and Environmental Management Office of the Regional Governments, representatives from the productive sectors, heads of Protected Natural Areas (ANPs), representatives of local governments, local and international NGOs, the private sector, and representatives of indigenous communities; 2) REDD+ Roundtables, composed of around 70 public and private institutions, and 3) coordination with Inter-ethnic Association for the Development of the Peruvian Forest (AIDESEP) and the Confederation of Amazonian Nationalities of Peru (CONAP) indigenous organizations and the Indigenous REDD+ Roundtable.

These processes followed the Stakeholders Engagement Plan (SEP) which was formulated to provide guidelines for incorporating stakeholder participation. In total, 40 events were held (23 for the R-PP and 17 for the FIP) and included the participation of more than 1,000 people.

Although the preparation of the R-PP and the FIP included a great variety of government and civil society stakeholders, special attention was given to indigenous groups. The participation of the latter was conducted in accordance with both national (Law No. 29785) and international regulations (ILO Convention 169) and incorporated the principles of access to information and transparency, good faith between the participants, respect for the rights and cultural diversity of the stakeholders, and inclusion and representation. In addition, AIDESEP and CONAP were named member of the FIP Executive Committee (EC), together with representatives from the MINAGRI, MINAM, MEF, the Ministry of Culture and the CIAM. This mechanism facilitated indigenous participation in the design of Peru's Forest Investment Plan and established a precedent for their participation in the design and implementation of the Emissions Reduction Program (ERP) projects.

Analysis of Drivers, Causes, and Barriers Related to Deforestation

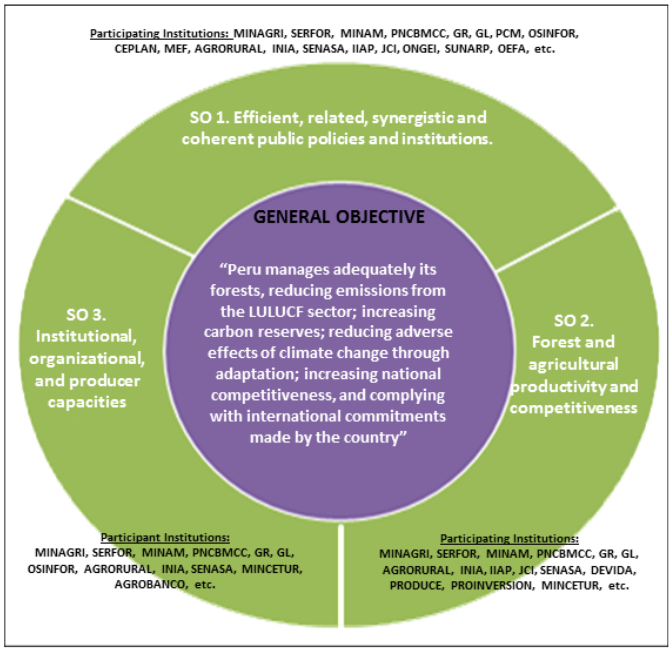
The process of preparing the R-PP and the FIP proposals aided in clarifying the drivers and causes of deforestation and identifying barriers to reducing deforestation:

- The rate of deforestation at the national level during the period 2000-2009 was 0.14%.
- The LULUCF sector is the primary source (41%) of greenhouse gas emissions nationwide. The great majority of the deforestation occurs on small areas of land (< 0.5 hectares) and on areas where rights are unallocated.
- The direct causes of deforestation are: migratory agriculture, industrial farming, logging, illegal activities (informal mining and coca production), and infrastructure (roads and hydroelectric) projects.
- There are a number of underlying causes of deforestation including social (migration driven by poverty); economic (low profitability of the forests compared to alternative land uses; increases in the prices of other commodities such as gold, biofuels, and other crops; and weak market linkages of forest goods and services); and institutional/governance causes (sector-based approaches; incoherent or contradictory regulations and policies; a lack of institutional coordination; incomplete land rights; and a weak capacity for land use planning, control, and sanctions).

National Forest and Climate Change Strategy (ENBCC)

The PNCBMCC, under the supervision of the Ministry of the Environment (MINAM), is in the process of preparing the National Forests and Climate Change Strategy (ENBCC). The ENBCC incorporates REDD+ and forms part of the framework of the National Climate Change Strategy (ENCC). The ENBCC includes three strategic objectives and diverse public institutions (Figure 2).

Figure 2. ENBCC objectives and participating institutions.



The design of the ENBCC strategy and interventions takes into account the analysis of the drivers and causes of deforestation:

- The causes of deforestation and forest degradation are often external to the forests and are economic and social, not necessarily biological or technical.
- The conservation of forest ecosystems requires good governance and the application of well-designed public policy instruments.
- Dealing with the causes of deforestation requires, above all, policies and actions outside the scope of the forest authorities. The problem is systemic and structural, thus the solution must also be systemic and structural.
- The continued existence of the forests requires that they generate greater income and value derived from their diverse goods and services, through an increase in their productivity and payments for environmental services; if alternative use of the forest is more economically attractive, the forest will be converted to that use.

The design of the ENBCC interventions also takes into account the analysis performed by PlanCC of the potential impact (amount of emissions reduced) and efficiency (cost/unit of emissions reduced) of mitigation measures for the LULUCF sector. The measures having the greatest impact, due to the number of hectares potentially involved, are detailed below, in order from the most to the least important:

- Sustainable forest management (SFM) of permanent production forests,
- SFM of forestry concessions,
- Community forest management (CFM),
- Agroforestry systems for coffee and cacao combined with timber trees, and
- Reforestation.

It is important to note that various mitigation measures have low net costs or generate positive returns, but that their adoption is limited due to factors such as the availability of capital, lacks of land rights, perceived risks, the low technical and management capacity of producers, weak governance, and the absence of other enabling conditions. Overcoming these limitations is a primary objective both of the FIP and the ERP as well as other programs and project supported by agencies of international cooperation.

The ENBCC will be articulated to several initiatives currently underway: the REDD+ MINAM Project for establishing a national carbon fund; the follow-up of the R-PP and FIP; and pilot projects related to the design and components of

REDD+, financed by the German KfW Development Bank, the Gordon and Betty Moore Foundation, the Japan International Cooperation Agency (JICA) and the Hatoyama Initiative. There are also a number of initiatives aimed at supporting the sustainable use of forest resources, such as the National Forest Inventory and Sustainable Forest Management for Climate Change in Peru project financed by FAO-Finland, the forest development support project (CAF-MINAGRI), as well as community forest management (JICA-MINAM) projects. Additionally, the ENBCC will be aligned with the National Forest and Wildlife Policy and Plan, the plans and policies of the regional governments, the plans of other sectors, and international cooperation on forest and climate change issues.

Reference Level

In line with UNFCCC guidelines, Peru has developed and documented historical reference levels for forest cover and emissions at the national level as well as in three regions (Cusco, Madre de Dios and San Martín). These reference levels are based on the analysis of changes in forest cover in satellite images for the period 2000 – 2009 or 2010. Work is presently underway to develop reference levels for the Amazon by 2014 and for other regions of the country in subsequent years. Additionally, activities are underway to reconcile data from the national and sub-national levels using a stepwise approach.

Design of National Forest Cover Monitoring (SNMCF) and Measurement, Reporting, and Verification (MRV) Systems

The National Forest Cover Monitoring System (SNMCF) is in the final stage of design, which includes the development of methods to monitor deforestation and forest degradation in the Andean, dry, and Amazon forests. A step-wise procedure is being used to establish a national forest cover monitoring system and the corresponding institutional coordination (see section 9); reconcile methods; design a sampling and monitoring system that includes local groups, especially indigenous populations; and determine the carbon density of the different types of forests. The need to develop methods for the monitoring of forest degradation has also been identified. Linkages between the regional governments and the national government, and the roles of other actors involved in the SNMCF, are included in the Plan.

As a complement to the SNMCF, the country is also designing a measurement, reporting, and verification system (MRV) in accordance with international REDD+ guidelines and commitments. The design will enable consistent accounting of emissions at national and sub-national levels. As a temporary option or first step, the use of a nested jurisdictional approach has been adopted for measuring and accounting for emissions resulting from deforestation and forest degradation. At present, the PNCBMCC is designing the procedures to reconcile data from the national and sub-national levels.

The National Forest Inventory and the completion of a forest carbon map are underway. Field information gathering by the National Forest Inventory will be complemented by the monitoring of permanent plots developed by the communities and other REDD+ stakeholders, following the guidelines established at the national level. The participation of indigenous groups in this process is essential due to their knowledge of the territory and will facilitate efficient and effective forest monitoring.

In relation to the reporting of emission reductions, within the framework of the Second National Climate Change Communication, Peru has proposed that a National Network of Inventories of Greenhouse Gases be created, which would sectorial responsibilities for information gathering and reporting. The legal version of this proposal is being prepared and analyzed.

Additionally, the MINAM is in the process of developing the National Information Platform for REDD+ Initiatives in order to enable the register and reporting of emissions related information. The Platform is the first phase of the National Registry of REDD+ Initiatives which will provide information on carbon transactions to order to avoid double accounting and to contribute to transparent information related to REDD+ projects and activities.

Safeguards and Non-carbon benefits

Activities related to the design and implementation of the Strategic Environmental and Social Assessment (SESA) are incipient and include stakeholder communication, technical consultation, and training. During the preparation of the R-PP and PIN-FIP, the institutional, social, and private sector stakeholders potentially impacted by REDD+

activities, and the most important social, environmental, and process-related criteria used in formulating the SESA, were identified. As part of the safeguard process, FIP has earmarked $14.5 million for themes of interest to indigenous groups (titling of community lands, governance, and community forest management); an additional $5.5 in Specific Donations have been dedicated to these themes outside the FIP pilot areas. The plans for the latter will be designed by AIDESEP and CONAP.

With regard to non-carbon benefits, a provisional list of institutional, environmental and social impacts has been identified (see section 16.1). At the national level, the baselines for non-carbon benefits will be established using information from the National Statistics and Information Technology Institute (INEI) and the National Agriculture Census (CENAGRO). At the sub-national level, REDD+ projects can potentially use socio-economic data required for projects funded by the National Public Investment System (SNIP).

Information and indicators for both the SESA and the ESMF, as well as non-carbon benefits, will be included in the MRV system. However, further, more in-depth, development of the SESA and the ESMF as well as non-carbon benefit monitoring is pending the full design of the ENBCC and the FIP/ERP projects, which are programmed for 2014 and 2015. This process should also include the definition of the methods for conflict management and resolution and the way in which the FIP/ERP will incorporate the results of the SESA. The REDD+ and Indigenous REDD+ Roundtables (and their SESA sub-groups) at the regional and national levels are ideal venues for developing these activities.

Design of the Framework for the Monitoring and Evaluation of Readiness

Due to internal reorganization within the MINAM, the PNCBMCC has been redefined and is in the process of establishing its internal program structure. As part of this redefinition, the PNCBMCC is formulating the National Strategy for Forests and Climate Change (ENBCC) and will name an overall Executive Committee, whose composition is likely to be similar to that of the FIP (the MINAM, MINAGRI, MEF, the Ministry of Intercultural Affairs, CIAM, and indigenous organizations such as AIDESEP and CONAP). The Executive Committee will be responsible for overseeing, coordinating, and advising the implementation of the ENBCC, FIP, ERP, as well as other programs under the aegis of the PNCBMCC.

Within the evolving structure of the PNCBMCC, REDD+ is viewed as cutting across the other programs (e.g. FIP, community forestry and conservation, etc.) managed by the PNCBMCC. Each of the other programs, as well as REDD+, will be linked with Technical Consultative Groups (TCGs), composed of members of the civil society, which will advise, monitor, evaluate, and provide channels for stakeholder input to each of the programs.

3.2 Current status of the Readiness Package and estimated date of submission to the FCPF Participants Committee (including the REL/FRL, REDD+ Strategy, national REDD+ monitoring system and ESMF).

Based on the above description, it is clear that the chief components of the *Readiness* Package are in the process of being developed. The main tasks pending consist of the following:

- Implement the Stakeholder Engagement Plan and the stakeholder training component in order to ensure effective participation and the inclusion of civil society priorities in the final design and implementation of the ENBCC, FIP, and ERP.
- Complete the creation of the R-PP management structure (EC) at the national level and design the work plan for the coordination of institutions and policies.
- Gather and analyze data to update the reference levels at the national level and for each zone of intervention.
- Complete and implement the National Forest Cover Monitoring System, including the plans for the involvement of local and indigenous groups.
- Consolidate the National REDD+ Initiatives Information Platform and the National REDD+ Initiatives Information Registry in a manner that will avoid: a) double or triple accounting of the reductions of emissions; b) ambiguity regarding the ownership of the emissions reductions; c) inconsistencies between

national GG inventories and general REDD+ accounting, and d) nonfulfillment of the socio-environmental safeguards.

- Design the SESA, including the plan for monitoring the indicators of non-carbon benefits, and include these data in the National REDD+ Initiatives Information Registry.
- Formulate the system for benefit distribution with stakeholders.
- Align and coordinate the financing for investments in activities that enable results-based payments by the Carbon Fund and the future sustainability of similar types of payments.

It is estimated that these tasks will require 18 – 24 months. Therefore, it is estimated that the MINAM will submit the Readiness Package to the PC in the first semester of 2016.

3.3 Consistency with national REDD+ strategy and other relevant policies

Please describe:

a) How the planned and ongoing activities in the proposed ER Program relate to the variety of proposed interventions in the (emerging) national REDD+ strategy.

b) How the proposed ER Program is strategically relevant for the development and/or implementation of the (emerging) national REDD+ strategy (including policies, national management framework and legislation).

c) How the activities in the proposed ER Program are consistent with national laws and development priorities.

The activities of the Emissions Reduction Program (ERP) are an integral part of the ENBCC and are consistent with the Law of Informed Prior Consent (Law 29785), environmental regulations and standards, the regulations of payments for environmental services, and the institutional reforms of the forest sector. As mentioned in sections 3.1 and 5.3, the objectives and types of intervention of the ERP are aligned with those of the ENBCC: 1) Public and institutional policies for forest management, climate change and the productivity of forest lands are efficient, articulated, synergistic, and coherent. 2) Productivity and sustainability of forestry and agricultural activities within the forest are increased in order to intensify agriculture and add greater value to the forest. 3) Knowledge, communication, and capacities of institutions, organizations and the various REDD+ stakeholders are strengthened so that they are able to participate more effectively in the management of forest lands. Additionally, most of the interventions contemplated in the ENBCC will be applied in the three zones of intervention of the ERP.

Within the framework of the ENBCC, the ERP will complement and will be complemented by various REDD+ initiatives. Among these, the most important is the FIP, since both the FIP and the ERP are based in the same zones of intervention and the ERP will partially compensate the emissions reductions achieved by the FIP.

Other initiatives within the ENBCC which are relevant to the ERP include: the UNREDD project which is financing the design of a national carbon fund (Peru Forest Fund) that would eventually will include future contributions from the FCPF Carbon Fund as well as other sources; and the MINAM-REDD+ project and other pilot projects related to the implementation of the architecture and components of REDD+, financed by the German Development Bank (KfW), the Gordon and Betty Moore Foundation, the Japan International Cooperation Agency (JICA) and the Forest Conservation Program (formely, the Hatoyama Initiative).

The ongoing linkage and feedback between the initiatives mentioned above and the ENBCC will contribute to the strengthening of the process of building a REDD+ institutional infrastructure and architecture and an adaptive management system that will incorporate lessons learned from these experiences. Likewise, the pilot experiences and lessons learned from the FIP and ERP intervention (institutions, policies, management techniques and enabling conditions such as land titling, land use planning, monitoring, control and oversight) and the payments which result from them will help to fine-tune and extend the REDD+ system to other zones of the country in the future.

In the Amazon region, the ERP will help establish the base for “green” development which can contribute to regional and national competitiveness in emerging markets that incorporate and value elements of environmental sustainability. Additionally, a series of non-carbon complementary benefits (improved institutions, policies, land titling, governance of forest lands and income) will be generated which will improve the well-being of the inhabitants of the participating regions.

At the national level, the ERP and the ENBCC will help the State to achieve consensus regarding the use of forests and climate change and their importance for development. They will also contribute significantly to the national efforts to reduce emissions resulting from deforestation and forest degradation, promote forest conservation and the sustainable use of natural resources and ecosystem services, and increase competitiveness at the national level within a framework of economic development and social inclusion. Furthermore, both will provide a stimulus for the establishment of a system of payments for ecosystem services at the national level (the Peru Forest Fund) and will facilitate the participation of the country in similar system at the international level in the future.

4. ER Program location and lifetime

4.1 Scale and location of the proposed ER Program

Please present a description and map of the proposed ER Program location and surrounding areas, and its physiographic significance in relation to the country. Indicate location and boundaries of the proposed ER Program area, e.g., administrative jurisdiction(s).

Country Context

Peru has a total land area of 1,285,216 km^2, making it the third largest country in South America. Geographically, the country is divided into three large regions: a) the western coast, which is largely dry, except for the river valleys which descend from the Andes, b) the mountainous Andean region, which runs from north to south throughout the country, and c) the Amazon, which begins on the eastern slopes of the Andes and runs through the northeastern, eastern and southeastern regions of the country, and contains 61% of the total land area and 94% of the country's forests (Figure 3).

Politically, the country is divided into regions or departments, which in turn are sub-divided into provinces, districts, and municipalities.

On a global scale, Peru´s extensive forests place the country in ninth place in terms of forest cover, fourth place in terms of tropical forests, second among the Amazonian countries in forest area, and a center of mega-biodiversity (Figure 3).

Figure 3. The forests of Peru.

FORESTRY POTENTIAL

68.7 millions ha of forests
(> 54% of the country)
(Forest and protected land > 80%)

- **Coast 4.6%**
- **Mountains 1.3 %**
- **Jungle 94.1%**

Although Peru has extensive forests, they contribute little to the national economy. Forest management is inadequate and scarce political attention has been paid to the forests, resulting in inadequate forestry budgets and the conversion of the forests into focal points of social conflict.

Population

According to the 2007 census, 54.6% of Peru´s population live in the coastal areas, 32% live in the highlands or Andean region, and only 13.4% live in the Amazon (Table 5). The latter houses over 300,000 indigenous people who belong to approximately fifty different ethnic groups, including fifteen language families. The indigenous peoples are organized in over 90 ethnic or inter-ethnic federations, grouped into regional organizations, primarily associated with AIDESEP and CONAP.

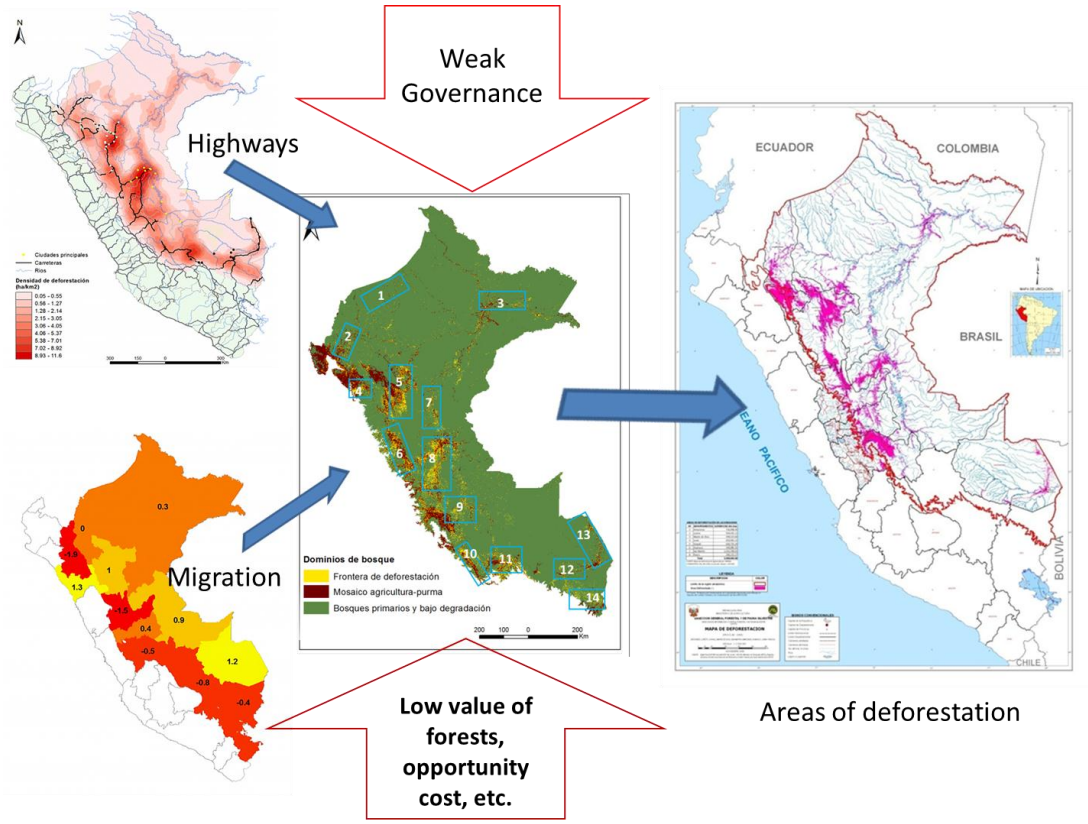
Table 5. Peru´s population by geographic region.

Regions	Population (millions of inhabitants)	Area (km^2)	Population density (inhab. / Km^2)
Coast	16.1	96,391	167.03
Andean	9.5	391,991	24.24
Amazon	3.9	796,834	3.03
Peru	29.5	1 285,216	22.95

Zones of Intervention

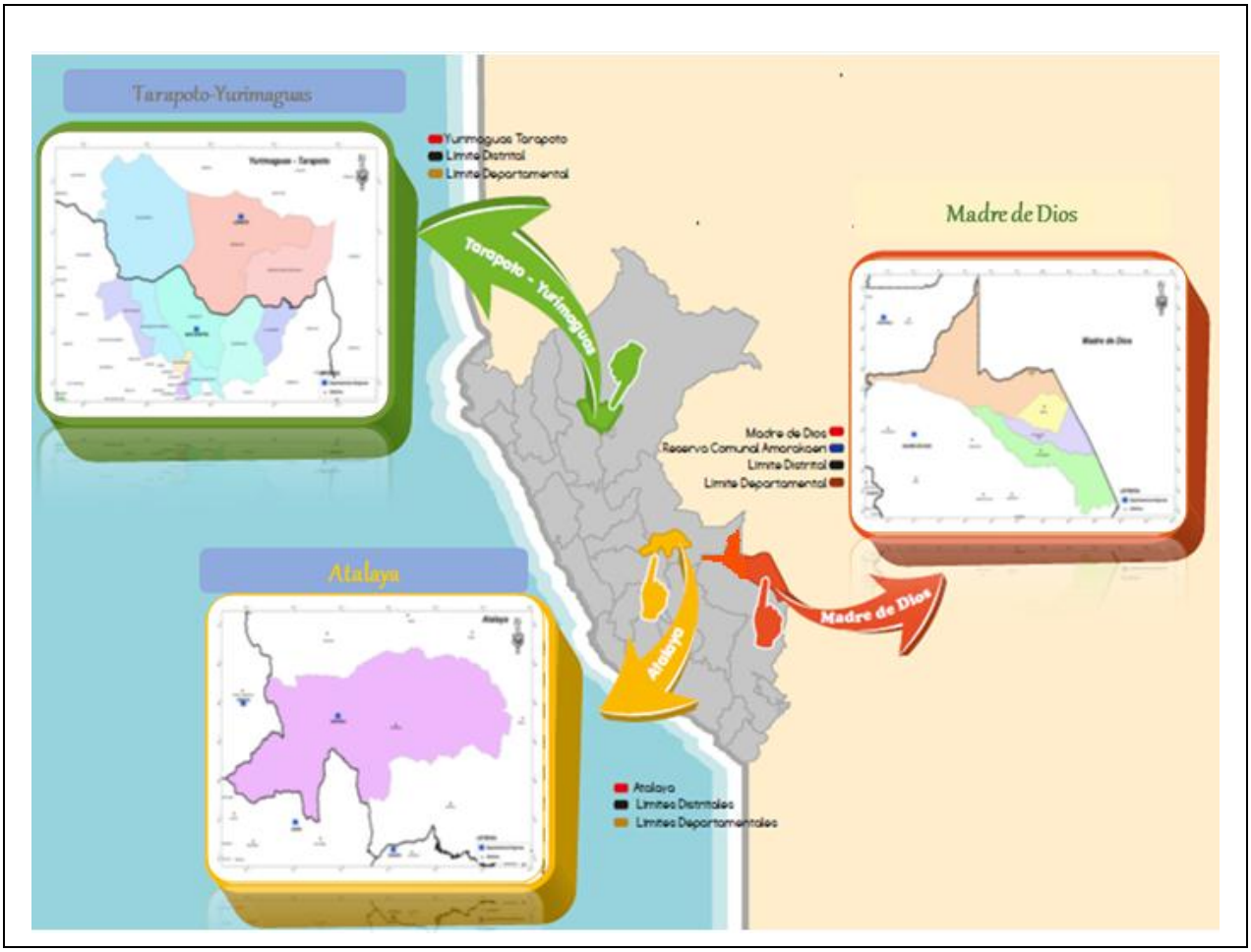
The ERP will focus on three geographic zones where the interventions are expected to generate high impact in terms of reducing greenhouse gas emissions and in producing social and environmental co-benefits. These areas were selected from a group of 14 deforestation and forest degradation "hotspots" that were identified based on four criteria related to national development: (a) potential for the reduction of GHG emissions, estimated by the rate of deforestation and forest degradation and of forest carbon stocks in each zone, (b) social co-benefits, estimated by the relative proportion of indigenous communities in each zone, (c) environmental co-benefits, based on biodiversity, and (d) cost-effectiveness, estimated from the opportunity cost of land. All 14 areas coincide with the principal axes of the highway system, particularly the sections of the highways that link the Andes with the Amazon, and with road density (Figure 4).

Figure 4. Causes of deforestation and forest degradation in Peru.


Weak Governance
Highways
Migration
Low value of forests, opportunity cost, etc.
Areas of deforestation
ECUADOR
COLOMBIA
BRASIL
BOLIVIA
CHILE
OCEANO PACIFICO
Dominios de bosque
Frontera de deforestación
Mosaico agricultura-purma
Bosques primarios y bajo degradación

Based on this analysis, three priority zones of intervention were selected: the Tarapoto-Yurimaguas zone in San Martin and Loreto; Atalaya in Ucayali; and Pto. Maldonado - Iñapari, in Madre de Dios, which together comprise approximately 4.2 million hectares (Figure 5). The total population in these zones is approximately 252,000: 208,000 in the zone of Tarapoto-Yurimaguas, 28,000 in Atalaya, and 16,000 in Pto. Maldonado-Iñapari. On average, the rural population comprises about 30% of the total, but is 61% of the population in Atalaya, 37% in Pto. Maldonado-Iñapari, and 24% of the population in the zone of Tarapoto-Yurimaguas.

Figure 5. FIP/ERP zones of intervention.



Taken together, the three zones exhibit the principal drivers and underlying causes of deforestation in the Peruvian Amazon. However, each zone represents a different socio-environmental context: a mosaic of mostly settled agricultural areas interspersed with forest (Tarapoto-Yurimaguas), the agricultural frontier (Pto. Maldonado-Iñapari), and large areas of relatively intact forest (Atalaya) (Table 6). The inclusion in the Program of these different typologies of the dynamics of deforestation will enable the application of a range of interventions contemplated in the national ENBCC/REDD+ strategy. At the same time, it facilitate the replication and extension of the results obtained to a wide range of other areas within the Peruvian Amazon and will contribute to the adaptive construction of a robust national REDD+ strategy.

Table 6. Characteristics of the zones of intervention.

Zones	Characteristics	Similar regions
Tarapoto – Yurimaguas, San Martín and Loreto Regions	• Geography: Transition zone with from upland to Amazon lowlands. • Expansion: Area where agricultural frontier and forest degradation are expanding rapidly. Mixed land use including agriculture, agro-forestry and forest (agricultural plots interspersed with exploited forests). • Level of titling/tenure security: 60% of the land in the zone of intervention does not have assigned property rights, particularly in Loreto. • Protected areas and concessions: The systems of forest concessions and protected areas are under severe pressure from invasion and overlapping rights. • Migration: There is much migration to the zone from mountainous regions, particularly from Cajamarca. • Indigenous communities: Many indigenous communities are found in the zone.	Transition regions from upland to lowland forest: Huánuco, Pasco, Cusco, Junín, Amazonas.
Atalaya, Ucayali Region	• Geography: Lowland forest. • Expansion: The zone includes area of both rapid expansion of the forest degradation frontier due to illegal logging and areas of slow expansion of the agricultural frontier; there is a high potential for forest conversion due to the newly built road. • Level of titling/tenure security: Property rights are not established on 20% land in the zone of intervention. • Protected areas and concessions: Forest concessions are under pressure from illegal logging. • Migration: Little migration at present, but with strong probability to increase due to the building of the Satipo-Atalaya road. • Indigenous communities: Many indigenous communities with established land tenure.	Loreto and other lowland forest areas with a high concentration of indigenous communities and permanent production forests.
Puerto Maldonado-Iñapari and the Amarakaeri Communal Reserve, Madre de Dios Region	• Geography: Lowland forest. • Expansion: Medium level of expansion of the agricultural frontier and high level of forest degradation, especially in the Brazil nut concessions. Mixed land use: agriculture, agroforestry, and forestry. • Level of titling/tenure security: 8% of the land in the zone of intervention is not titled. • Protected areas and concessions: A large portion of the land is under forest concessions which have halted deforestation, but the logging business model is uncompetitive, which threatens its viability as a strategy to contain deforestation. • Migration: There is much migration to the zone from the southern mountain locations such as Puno and Cusco. • Indigenous communities: Comparatively better than in Atalaya and concentrated around the Amarakaeri Communal Reserve.	Forest zones that include a mix of production forests, forestry concessions, indigenous communities, and protected areas (such as Ucayali, Loreto).

a. Atalaya: This zone of intervention is the Raymondi district in the province of Atalaya, Ucayali, which is located on the border between the Ucayali and Junín regions and is linked by a highway to Puerto Ocopa (Annex III). In this zone, there are approximately 1.2 million hectares of mostly forested land, including permanent production forests, forest concessions, and wide tracts of forest within indigenous community lands (there are 82 indigenous communities located partially or wholly within the district). Deforestation is relatively low, but the recent linkage to the national highway network via the highway from Atalaya, Ucayali to Puerto Ocopa, Junin provides access to lands for newly arrived immigrants as well as attracting legal or illegal forest extraction activities.

b. **Tarapoto – Yurimaguas:** This intervention zone includes a land area of approximately 1.2 million hectares distributed between the departments of San Martín and Loreto (Annex IV), which are located along the Northern Inter-oceanic Highway. The zone includes eight districts (Barranquita, Caynarachi, El Porvenir, La Banda de Shilcayo, Pinto Recodo, San Antonio, San Roque de Cumbaza, and Tarapoto) in San Martin and three in Loreto (Yurimaguas, Balsa Puerto, and Teniente Cesar Lopez Rojas). Deforestation in the zone extends from the northeastern region of San Martín to the Alto Amazonas province in Loreto, and is driven primarily by small-scale agriculture and livestock-raising, although a growing cause of deforestation is the establishment of agro-industrial farms such as oil palm and heart-of-palm. Agricultural colonization has caused a large quantity of degraded lands.

c. **Puerto Maldonado-Iñapari and Amarakaeri Communal Reserve in the Madre de Dios Region:** This zone is located along the Puerto Maldonado – Iñapari highway and includes the Amarakaeri Communal Reserve and its associated communities, which lies to the southwest of the aforementioned zone (Annex V). It includes the districts of Iberia, Iñapari, Tahuamanu, and Las Piedras. The area of approximately 1.8 million hectares is largely forested but is under severe pressure due to migration related to the building of the Southern Inter-Oceanic Highway and indirectly from gold mining in nearby areas. Forest land use planning is well-advanced and includes important protected areas and timber concessions in permanent production forests as well as concessions for non-timber forest products (Brazil nuts), all of which have the potential to become effective barriers to deforestation and degradation.

4.2 Expected lifetime of the proposed ER Program

Please describe over how many months/years the proposed ER Program will be:

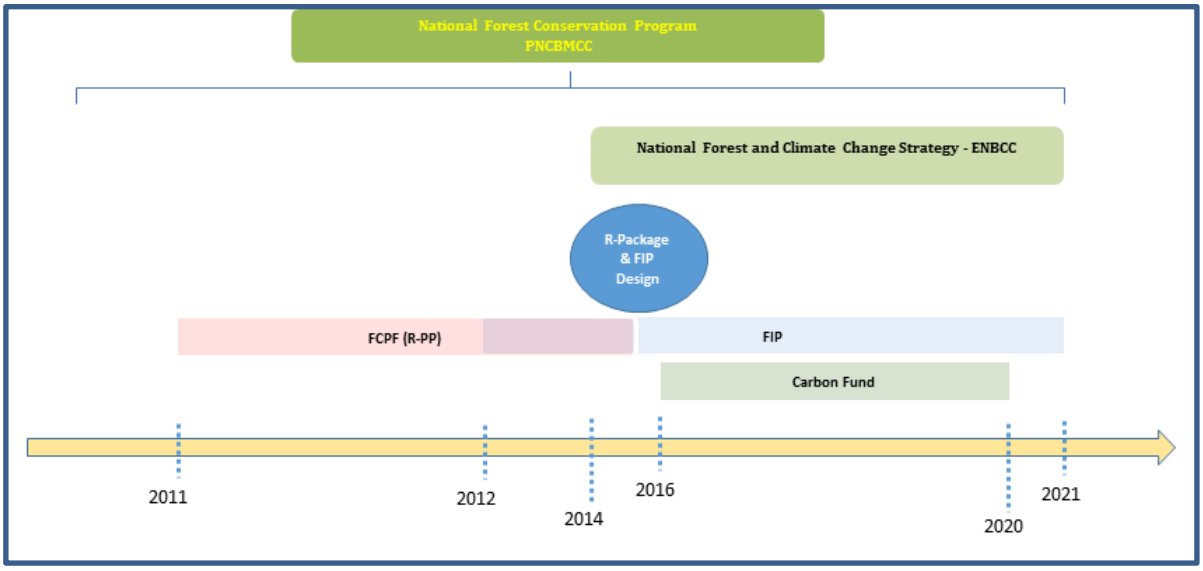
a) prepared; and

b) implemented (including expected start date of the proposed ER Program).

The preparation of the ERP will overlap that of the FIP, even though the focus of each differs. In the case of the FIP, the Program is currently in the process of soliciting proposals for the design of the projects. It is estimated that during 2014 the proposals will be reviewed and the bids awarded, which will be followed by the design of the plan of intervention. Although the time required to design the FIP projects is, on average, 21 months, it is estimated that Peru can complete this process in 12 to 18 months due to the progress already made in the consultation and design of the FIP-PIN and the ENBCC. The FIP will be implemented between 2016 and 2021.

Compared to the FIP timetable, that of the ERP is shorter and the tasks included are somewhat different. During the period 2015 - 2017, the ERP will complete the Readiness Package (including MRV, the preparation of the SESA and ESMF, the design and implementation of the monitoring and reporting of safeguards and non-carbon benefits system, the design of benefits sharing arrangements, etc.); it will also concentrate on defining financial requirements, procedures, and negotiations to access results-based payments from the FCPF Carbon Fund and to assure financial sustainability. It is estimated that this preparatory process will be concluded by 2017. The implementation of the ERP will cover the period 2017-2020 and will partially include the emissions reductions achieved through the FIP during the period 2016-2020 (Figure 6).

Figure 6. Timeline for FIP/ERP.



5. Description of activities and interventions planned under the proposed ER Program

5.1 Analysis of drivers and underlying causes of deforestation and forest degradation, and conservation or enhancement trends

Please present an analysis of the drivers, underlying causes and agents of deforestation and forest degradation. Also describe any policies and trends that could contribute to conservation and enhancement of carbon stocks. Please distinguish between both the drivers and trends within the boundaries of the proposed ER Program, and any drivers or trends that occur outside the boundaries but are affecting land use, land cover and carbon stocks within the proposed ER Program area. Draw on the analysis produced for your country's Readiness Preparation Proposal (R-PP) and/or Readiness Package (R-Package).

Deforestation, degradation, and emissions

Given that 94% of the forests of Peru are in the Amazon, the analysis of deforestation usually focuses on that region. During 2000 - 2009, nearly 110,000 ha of Peru´s Amazon forests were deforested annually, an annual deforestation rate of 0.14%. Peru ranks fourth among the seven Amazon countries in terms of the rate of deforestation, after Brazil, Venezuela and Bolivia.

The analysis of deforestation also shows that most of the accumulated deforestation is located on the eastern slopes of the Andes, which has historically been the zone with the highest level of migration. This pattern, however, is changing since the 14 deforestation "hotspots" are now located in the lowland forests where new roads connecting these regions to the rest of the country have been built (Figure 4).

Deforestation occurs mostly in small land areas used for agricultural activity. Seventy five percent of the deforestation in the country takes place on small, non-adjacent land areas approximately half a hectare in size. Deforestation is primarily caused by migrants from other regions of the country or by recently resettled local populations and, for the most part, is related to the opening of roads in areas of weak governance. However, deforestation in indigenous regions is also on the rise as these groups become incorporated into the national economy.

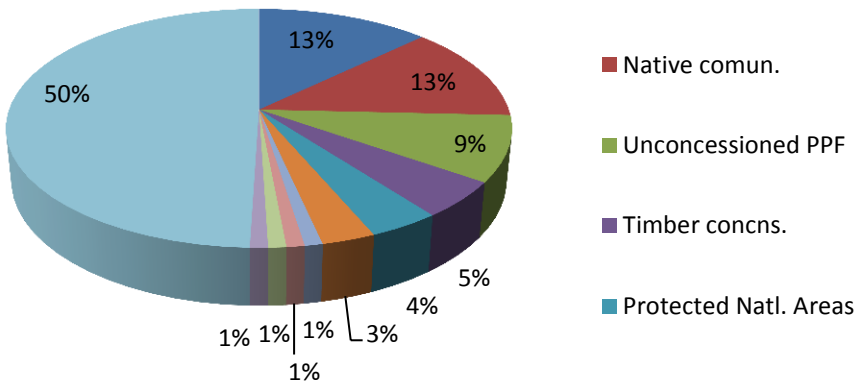
The relationship between deforestation and land titling and land use suggests that an important factor in deforestation is the lack of assigned rights to land. Approximately 50% (55,750 hectares) of the 110,446 ha deforested annually occurs on lands categorized as Forests with Unassigned Rights and a further 9% of deforestation

occurs on Permanent Production Forests Without Concessions. Indigenous Communities and Farm categories each contribute about 13% to total deforestation (Table 7 and Figure 7). These data suggest that the lack of land rights, small-scale migrant agriculture, and selective logging are fundamental factors in deforestation and forest degradation.

Table 7. Deforestation in the Peruvian Amazon by land use category and tenure of forest land.

Land use category and type of tenure		Remaining forests		Anual Deforestation Rate
		2000	2009	
Private and Community holdings[23]	Rural holdings	649,083	515,765	2.27%
	Farming Communities	1,053,788	1,026,937	0.26%
	Native Communities	11,510,213	11,383,967	0.11%
Production[24]	Timber Concessions	7,413 846	7,364,880	0.07%
	Permanent Production Forests (non-concession)	9,552,645	9,463,294	0.09%
	Non-timber concessions	889,758	886,019	0.04%
	Reforestation concessions	132,665	123,121	0.74%
Conservation	Protected Natural Areas	16,885,055	16,848,661	0.02%
	Conservation and Ecotourism Concessions	710,556	701,012	0.14%
Special treatment[25]	Territorial Reserves	1,820,519	1,817,439	0.02%
Forest areas with no assigned forest rights		20,806,729	20,305,072	0.24%
TOTAL PERUVIAN TROPICAL FORESTS		**71,424,855**	**70,436,169**	**0.14%**

Figure 7. Percentage deforestation, by land tenure.



Direct drivers of deforestation

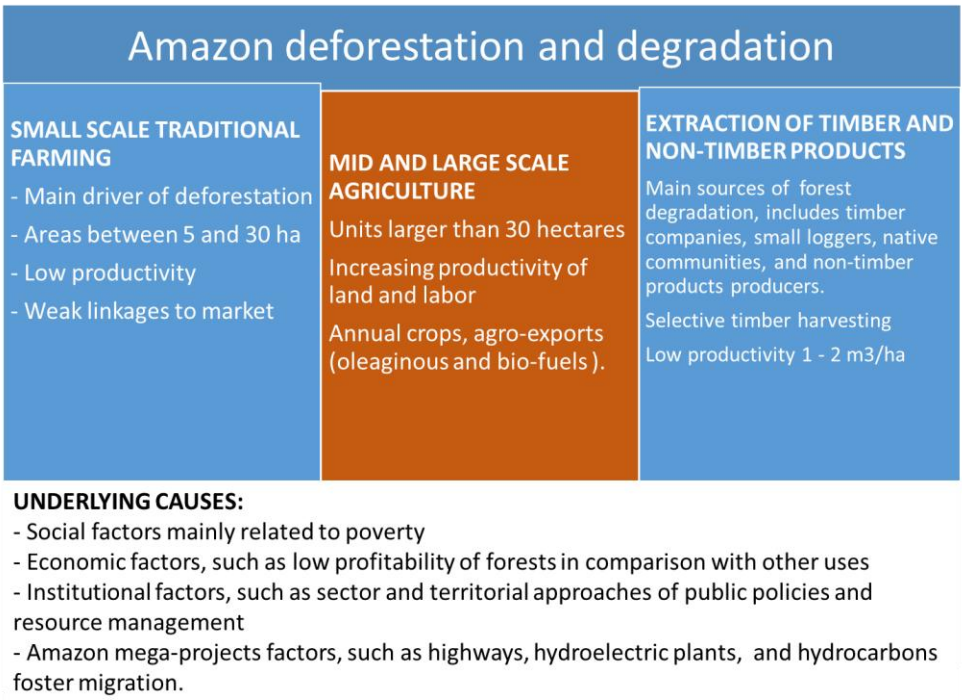
In the Peruvian Amazon, the following drivers are the main sources of deforestation and forest degradation (Table 8):

Traditional small-scale agriculture: This is the primary driver of deforestation in the Peruvian Amazon. This driver consists of traditional, extensive farms of 5- 30 hectares, having low profitability due to poor productivity and weak market ties. In these systems, increases in agricultural production are the result of forest conversion, since the lack of capital and limited access to credit limit agricultural intensification. Farms are diversified and include annual crops (rice, cassava, corn, etc.), perennial crops (coffee, cacao, and palms), cattle, and forestry (timber and non-timber products).

Medium and large-scale agriculture: This group includes farms larger than 30 hectares where agriculture is more intensive and more profitable due to higher levels of productivity and stronger market ties. Industrial agriculture (agro-exports, palm, and biofuel crops) is included in this category. The expansion of agricultural production in this category is based on two strategies: increasing the productivity of the land and labor, and increasing the area of production by converting forests to agricultural use. In contrast to the traditional, small-scale farmers, these producers practice monoculture (such as oil palm plantations).

Loggers: Loggers, most of who operate illegally, are the main direct cause of forest degradation. For example, in the Puerto Maldonado – Iñapari area in Madre de Dios, approximately 30% of the concessions in Brazil nut forests are affected by illegal logging. This group includes small-scale loggers, indigenous communities, concessionaires of non-timber products, and, in some cases, lumber companies. In most cases, timber extraction forms part of a diversified subsistence strategy.

Table 8. Summary of direct causes of deforestation and forest degradation in the Peruvian Amazon.



Indirect drivers of deforestation

The broad array of underlying causes of deforestation can be classified into the following groups: (1) social factors, connected primarily with population growth, poverty and social exclusion both within the Amazon as well as in other regions that expel migrants to the Amazon; (2) economic factors, including the low profitability of forest activities compared to other land uses, little or no access to markets for forest goods and services, and the growing

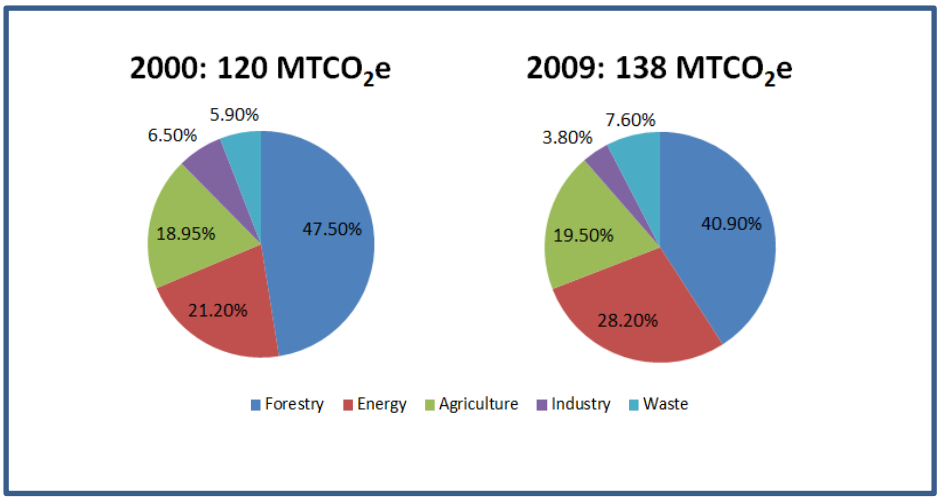
demand for products from land uses that compete with forest activities (like agro-fuels or industrial crops); (3) institutional factors, such as public policies and natural resource management based on uncoordinated and non-territorial sectorial approaches, contradictory or incoherent policies, the absence of land use planning, limited institutional capacity, the low level of monitoring, control, and sanctions of inappropriate land use, and the imperfect and incomplete allocation of rights to forest lands.

From a different perspective, the underlying causes can also be understood to be due to: failures in coordination attributable to, for example, the establishment of incoherent policies; failures of cooperation within the public sector and with the private sector; and market failures resulting in the low value and competitiveness of forests compared to other land uses.

Greenhouse Gas (GHG) Emissions

Net GHG emissions from Peru are estimated to total 138 million tons of CO_2e. The National Inventory of Greenhouse Gas Emissions reports that the main source of GHG emissions at the national level is the conversion of forests, as a result of a change in land use, mainly in the Amazon, while the principal source contributing to the removal of GHG are increases in forest and other woody biomass associated with secondary forests and reforestation. Net emissions of 56 365 Gg of CO_2e are associated with land use, land-use change, and forestry. Considering emissions only, without including removals, the LULUCF sector is responsible for 41% of total national GHG emissions. Agriculture is the second largest contributor, adding 26 948 Gg of CO_2e to the country's total, while energy is third in importance, being responsible for 24 085 Gg of CO_2e (Figure 8).

Figure 8. Generation of CO_2 emissions in Peru, by sector



Positive Trends

In contrast to the drivers of deforestation, there is a potential supply of emissions reductions associated with approximately 40 REDD+ projects which are being designed and implemented. The most important of these are national projects (29), early initiatives (12), national programs (2) and regional initiatives (3). In terms of territory, there are a number of initiatives in Madre de Dios (12) and Ucayali (11).

Additionally, there are nationwide processes underway that can support REDD+. At the national level, the institutional reforms related to forestry, the modernization of the State, and the growing use of the "Results-Based Budgeting" budgeting procedure could have a positive influence on simplifying the administration and availability of public funds for broad-based, integrated initiatives involving forests. Within this context, the decision on the part of the President of the Council of Ministers to implement a pilot program to modernize forest management in the Amazon regions is a concrete step forward.

Other legislative and institutional initiatives include the proposal of an ambitious reforestation program for the coming years by the National Reforestation Program and the recent introduction of legislation that can facilitate the establishment of forestry plantations.

Furthermore, steps are being taken to reduce informal mining activity and modify the distribution of mining royalties. These changes can contribute to reducing deforestation in certain zones (for example, in Madre de Dios) and increase the funds for alternative forms of development which are less dependent on deforestation.

As to the availability of funds for investment in "green" economic activities including forestry, the Ministry of Economy and Finance (MEF) is working on capital reforms which include establishing an alternative securities market. The latter could provide a key opportunity for mid-sized forest management companies and reforestation companies to leverage funds at a low cost through the sale of bonds. Likewise, Agrobanco is in the process of changing their loan policies to reduce the availability of loans for activities that promote deforestation and increase loans for sustainable agroforestry and forestry systems.

In the context of capital markets, based on its enormous natural resource capital and solid country risk profile, Peru is initiating steps to implement a national forests and climate change fund (Peru Forest Fund). This fund would facilitate the development of an internal market for carbon and other ecosystem services and would provide the necessary leverage to obtain international funds for REDD+ or other nationally appropriate mitigation actions (NAMAS) focused on mitigating climate change. However, at present there is no mechanism or official financial institution that can act as a catalyst for the forests and climate change fund, although there are regulated, state-run financial entities that are authorized to manage funds such as trusts with an investment grade risk profile similar to that of the Peruvian government (for example, Agrobanco, COFIDE, Banco de la Nación, FONAM, PROFONAMPE).

Finally, Peru's hosting of COP 20 may help in garnering support for these and other initiatives.

Deforestation in the Program Zones

Atalaya. For the last five decades, Ucayali has been the main logging region of Peru. Pucallpa is the capital city of Ucayali and is thus the center of the timber industry in Peru. The building of the Federico Basadre highway, seventy years ago, which runs from Lima to Pucallpa, provided access to the forests in the center and north of Ucayali and to neighboring regions such as Loreto and Huánuco, and led to the growth of agriculture in the areas along the highway. Currently, Ucayali is the fifth most deforested region of the country, with over 769,000 hectares of deforestation. What happened in Pucallpa appears to be happening now in the province of Atalaya which was recently connected to the national road network by the highway to Puerto Ocopa that significantly reduces the travel time to the coast and permits the transport of lumber by land rather than river.

The zone of intervention of this project is the province of Atalaya, specifically the district of Raymondi, which has an area of 1,235,074 hectares (31% of the total area of the province of Atalaya). In this district, 562,148 hectares (45.5% of the total land area) have been granted to 82 indigenous communities. Forestry concessions make up 33.8% (417,503 hectares) of the land area and only 1% (12,141 hectares) is agricultural. There is still considerable land (243,383 hectares) where land titling is not clearly defined or where rights have not been granted (Figure 9). The existence of a shorter and faster road to market and of large areas of relatively unexploited forests are the chief incentives for forest industries to move from Satipo to Atalaya, just as in the past the industries moved from the forests in the central part of the country to Pucallpa.

The risk presently by the Lima-Puerto Ocopa-Atalaya highway is compounded by: the scarce presence of the State in the region and weak forest governance in the province, due, in part, to low budgets and lack of available personnel to manage the natural resources; to illegal logging operations which have operated for many years and are well-established; and to the chronic lack of high quality information on which to base forest management. In the current scenario of little government oversight and control, it is very probable that the building of the highway will lead to migration and non-controlled and illegal occupation of the territory and to the expansion of illegal logging activity, resulting in patterns of deforestation similar to those that occurred along the Federico Basadre highway.

Additionally, sustainable forest management in Ucayali is uncompetitive due primarily to : i) unfair competition from illegal loggers in the concessions, communal territories and areas where rights have not been assigned, ii) slow

bureaucratic processes and obligatory administrative payments to the State, iii) lack of financial mechanisms that are appropriate to the needs, seasonality, and time frames of the forest sector, iv) obsolete machinery and equipment which increase the costs of extraction and transportation, v) the lack of secondary wood processing that increases transport costs to Lima, vi) the extraction of very few commercial timber species (only five of the twenty-one existing species are used), resulting in low volume of timber extraction and high costs per hectare.

As a result, regionally, only 67 concessions out of total of 155 are operating formally and they cover only a million of the 2.7 million hectares where concessions have been granted. This implies that most of the 500,000 m^3 of timber that is commercialized from Ucayali comes from non-sustainable sources: the deforestation rate on private agricultural properties (0.55%) is eleven times higher (0.55%) than in the region in general (0.05%). Studies show Atalaya as one of the primary areas of forest degradation in the country.

Figure 9. Land area and rates of deforestation in the zones of intervention.

TARAPOTO-YURIMAGUAS Area	FORESTED AREA (ha)	ANNUAL DEFORESTATION RATE 2000-2010 (%)
TOTAL	1,204,910	0,64
Timber concessions	54,052	0,26
Conservation concession	3,464	0,30
Non-Timber concession	3,860	1,34
Native communities	251,211	0,34
ACR Cerro Escalera	147,995	0,14
Rural holdings	70,439	2,22
Forest areas without assigned forest rights	673,889	0,78

ATALAYA AREA	FORESTED AREA (ha)	ANNUAL DEFORESTATION RATE 2000-2009 (%)
TOTAL	1,235,074	0,05
Timber concessions	417,503	-0,07
Native communities	562,148	0,10
Rural holdings	12,141	0,55
Forest areas without assigned forest rights	243,282	0,11

MADRE DE DIOS AREA	FOREST LAND AREA (ha)	ANNUAL DEFORESTATION RATE 2000-2010 (%)
TOTAL	1,776,182	0,19
Native communities	78,350	0,08
Timber concessions	786,327	0,02
Reforestation concessions	260	0,23
Conservation concessions	16,782	0,01
Ecotourism concessions	14,191	0,18
Non timber concessions-Aguaje palms	926	0,03
Non timber concessions-Chestnut	552,435	Measurement-NFMS (in progress) Registry (on implementation)
Non timber concessions-Shiringa	18,024	0,39
Rural holdings	160,588	1,91
Forest areas without assigned forest rights	148,299	0,29

Tarapoto-Yurimaguas The regions of San Martín and Loreto top the list of deforestation by department, having 1,448,118 and 1,069,625 hectares deforested, respectively. At present, the process of deforestation is spreading from the northeast of San Martín toward the Alto Amazonas province of Loreto, which is the most deforested province of the latter region. The direct causes of deforestation are primarily small-scale agriculture and livestock-raising, although there are a growing number of agri-industrial operations, primarily based on oil palm and hearts-of-palm. Seventy-five percent of the deforestation occurs on land areas of approximately half a hectare in size.

The zone of intervention of the project is the bi-regional Tarapoto-Yurimaguas area, with a total area of just over 1,200,000 hectares, 189,540 of which are already deforested. The annual deforestation rate of the San Martín-Loreto border area is approximately twice the average annual deforestation rate most recently reported by the Ministry of the Environment (0.14%). It should be noted that there are over 540,000 hectares (44.8%) with unassigned property rights in the zone (Figure 9).

Despite recent progress in improving the governance of the forest and environment sector within the zone of intervention, governance is still weak and is one of the principal causes for the illegal occupation and conversion of forest land of low agricultural potential. This land use conversion leads to the construction of illegal roads in these rural areas, followed by illegal logging, deforestation, social conflict, and more forest conversion. This situation is aggravated by the low budgets and insufficient personnel available for the management of natural resources, an

incomplete process of decentralization that lacks a clear definition of functions and competencies, and the delay in the initiation of operations of the new environmental, forestry, and agrarian institutions.

The process of illegal occupation of forest land is facilitated by the lack of forest land zoning/land use planning in the province of Alto Amazonas and a lack of planning with regard to road construction. Additionally, the purchase of land from small-farmers by businesses or more well-to-do farmers in order to obtain larger areas of land for agro-industrial purposes (mainly for the production of oil palm and hearts-of-palm) is creating a new source of pressure on the nearby forests by displacing the previous owners of the purchased land. The problems of governance (lack of investment in public institutions, slow decentralization processes, incomplete allocation of property rights) reduce the effectiveness of the range of instruments that presently exist for forest and environmental management.

In addition to actions related to improving forestry and environmental governance, it is necessary to promote economic activities that integrate processes of social inclusion, income improvement, and sustainable use of forest resources. In the zone of intervention, the forestry, agroforestry, silvopastural, and tourist value chains are still dominated by products with little added-value. As tends to happen in tropical areas, small-scale farmers and indigenous communities face a number of obstacles to establishing commercial transactions with companies for new products and to create new value chains. In general, their activities produce very low returns to land and labor. Agroforestry systems, which have relatively high potential productivity and profitability, also have high start-up costs, long payback periods, and are labor-intensive, which reduce the rate of adoption.

This situation is reflected in the current analysis of deforestation. The annual rate of deforestation on agricultural land is 2.22%, which demonstrates the rapid expansion of the agricultural frontier into forests located on farms, logging and other concessions, as well as land with unassigned rights. The latter areas have a deforestation rate of 0.78%, which is higher than the average rate of deforestation of forest concessions (0.30%) and the rate in indigenous communities (0.34%).

Puerto Maldonado-Iñapari and Amarakaeri Community Reserve. The forests of the Madre de Dios region are acknowledged as one of the global centers of biodiversity. Despite low levels of historic deforestation, forest conversion is increasing as a result of new infrastructure projects (paving the Southern Interoceanic Highway), high gold prices, and low levels of governance. From 1999 to 2009, more than 36,000 hectares were degraded due to the expansion of agriculture, livestock production, and alluvial mining. Additionally, 17,740 hectares were degraded due to non-sustainable extraction activities. This deforestation caused a total emission of 17 $MTCO_2e$.

The zone of intervention that has been prioritized in Madre de Dios is the Puerto Maldonado-Iñapari area, which covers a total of 1,776,182 hectares. To date, 93.5% of the area remains forested and the annual, overall deforestation rate is 0.19%, which is greater than the national average (0.14%). The land in the area is under timber (44.3%) and non-timber concessions (33.9%), and includes the largest area of Brazil nut (*Bertholettia excelsa)* concessions in the country (Figure 9. The rest of the area includes indigenous communities, agricultural properties, and areas with unassigned rights. The zone of intervention includes the Amarakaeri Community Reserve and seven associated indigenous communities (Kotsimba, Arazaire, Boca Inambari, Shiringayoc, San Jacinto, Tres Islas and El Pilar).

Forest and environmental governance in the area is weak. Achievements resulting from the implementation of the forest management instruments in forest and indigenous community concessions are being reversed by growing pressure from the direct drivers of deforestation, invasion of property, unmanaged burning, and illegal logging. This situation is worsened by the low budget and scarcity of government personnel available to manage natural resources, by an incomplete process of decentralization in which functions and competencies are not clearly defined, and by the delayed start-up of operations of environmental, forest and agrarian institutions. These conditions, couples with the overlapping land use rights and limited physical and legal land titling, create a complex and unfavorable scenario for slowing the process of deforestation and forest degradation.

In addition to weak governance, the sustainable use of forest resources or the recovery of degraded areas are characterized by low productivity and the presence of illegal logging. For example, the current Brazil nut and rubber concessions have very low productivity levels, ranging between $10 and $20 per hectare per year. Similarly, agroforestry systems with higher levels of productivity face obstacles related to their high start-up costs, long

payback periods, and labor-intensiveness. Furthermore, the linkages between the two primary forest products of the zone (wood and Brazil nuts) and value-added value chains are weak.
This situation is reflected in the analysis of deforestation. One of the highest rates of deforestation is in areas with unassigned land rights. Annual deforestation in those areas is 0.29%, resulting from illegal occupation of land for agricultural purposes and other non-formal uses of the land. On the other hand, timber concessions have an average annual deforestation rate of 0.02%, while the annual deforestation rate in Brazil nut concessions is 0.11% overall, but much higher (approaching 1%) in areas close to the Inter-Oceanic highway.

5.2 Assessment of the major barriers to REDD+
Please describe the major barriers that are currently preventing the drivers from being addressed, and/or preventing conservation and carbon stock enhancement from occurring.

The principal barriers to reducing deforestation and greenhouse gas emissions are institutional and political, legal, financial, organizational, and related to the limited capacities of producers and communities, and difficulties in accessing resources that would enable them to improve their production systems.

The institutional and political barriers include the following:

- Public policy, including budgeting policy, for forest land management is, in many cases, rigid, inappropriate for the context, contradictory, or even detrimental.
- There is lack of coordination among, and weak management of, the institutions involved in forest and climate change management.
- The management of forest and agricultural land suffers from the limited allocation of rights and the incomplete application of systems for land use planning, monitoring, control and supervision, resulting in the absence of conditions that enable investments and sustainable land use.
- The contribution of the forests to the national economy is not quantified nor is their value accounted for in the design and implementation of mega-projects. As a result, the undervaluation of the forests promotes their conversion to other uses.
- Poverty, a weak government presence, and lack of land use planning, in zones of internal immigration as well as emigration, lead to disorderly and poorly controlled processes of migration and use of land.
- The participation of the population in developing public policies for the management of forests in zones of internal immigration and emigration is very limited, a situation which is maintained by the limited access to information by these populations.
- A lack of flexibility in the use of public resources for forest investment hinders the improvement of the sector.
- There is a lack of public policies designed to generate incentives for the participation of the private sector in activities related to sustainable forest use.

The barriers to improving the productivity and competitiveness of forestry and agriculture in forest lands are:

- Scarce development and implementation of competitive production models.
- Lack of land titling and rights.
- Low level of capitalization, lack of technical knowledge, inadequate equipment, and limited management capacity on the part of the producers.
- Low investment capacity due to lack of appropriate financial instruments, limited access to credit, high risk, and lack of appropriate incentives to increase the participation of the private sector in activities related to the sustainable use of forests.
- Limited and weak linkages to commodity markets, especially those for new timber products, carbon, and other ecosystem services.
- High demand and markets for products produced by illegal activities (illegal alluvial mining, illegal crops) and for products produced without the inclusion of environmental criteria (oil palm, cacao, coffee and other crops).

The barriers related to capacity and access to resources by institutions, organizations, and producers are the following:

- Limited technical and management knowledge of the producers.

- Models of producer organizations are inefficient and unaligned to markets or opportunities available for low emissions production systems.
- Institutional capacities are emerging or incipient (such as the Regional Environmental Authorities - ARAs) or are unaligned with existing international requirements and opportunities.
- Lack of information and research regarding forest degradation, the relationship between forests and climate change adaptation, production alternatives, and value chains and markets.
- Scarce flow of and little access to commercial, technical, and financial information at all levels and between the levels. Low levels of information dissemination.

5.3 Description and justification of planned and ongoing activities under the proposed ER Program
Please describe the proposed activities and policy interventions under the proposed ER Program, including those related to governance, and justify how these activities will address the drivers and underlying causes of deforestation and forest degradation and/or support carbon stock enhancement trends, to help overcome the barriers identified above (i.e., how will the ER Program contribute to reversing current less sustainable resource use and/or policy patterns?)

The ERP, together with the FIP, will directly address the drivers and underlying causes of deforestation and barriers identified (Table 9) by creating enabling conditions (governance, innovation, coordination, capacity strengthening, and allocation of property rights) that will facilitate the implementation of actions aimed at reducing the pressure on the forests, controlling their use, and increasing the competitiveness of forest land.

Table 9. Summary of interventions in relation to causes of deforestation.

Causes	Interventions
Inadequate coordination of policies and institutions	Elimination of perverse policies favoring deforestation. Coordination of public institutions and policies for the management of forests, agriculture, and climate change.
Low forest and agricultural productivity and competitiveness	Development of financial instruments, technologies, and market linkages that are aimed at increasing productivity and profitability. Development of a low-carbon-emission economy.
Inadequate knowledge, capacity, and communication at the level of institutions, organizations, and other social actors	Technical assistance, formation and strengthening of institutions and organizations, incorporation of stakeholders in decision making bodies, public access to project and market-based information, training.

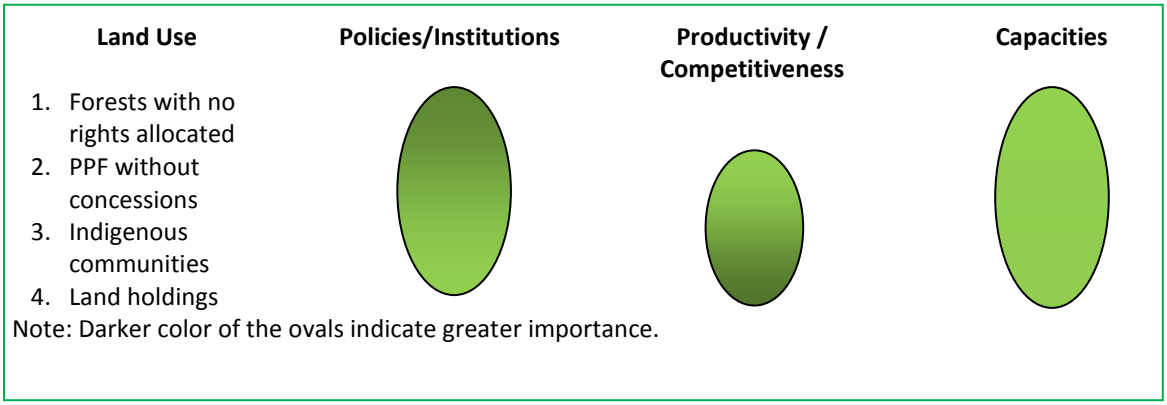
The interventions will be implemented in projects in each of the three zones, based on an integrated territorial approach. The projects will include: 1) the generation of enabling conditions that improve the control of forest land and facilitate private investment, 2) the development of innovative business models and value chains, and 3) the strengthening of capacities of institutions and producers and their access to resources and markets. Additionally, a series of activities in these areas will be undertaken at the national level in support the field activities. This component will strengthen the horizontal alignment of institutions and policies at the national level, the generation of improved knowledge and technology for production systems, and the development of financial instruments necessary to put improved technologies into practice.

The applicability of these interventions will vary according to the socio-environmental and land use characteristics (Figure 10). In established agricultural areas, the interventions should focus on promoting sustainable agricultural production systems such agroforestry, reforestation or the enhancement of secondary forests, and the technological development, innovation, and strengthening of capacities to increase competitiveness, sustainability and inclusion. On the agricultural frontier where there are significant forested areas, forestry and sustainable agricultural production systems should be promoted, with emphasis on granting rights to forest lands, increasing the competitiveness of productive activities, implementing an efficient system of land use monitoring and control, and developing enabling conditions related to public management. Finally, in relatively undisturbed forested areas, the

protection and conservation of forest ecosystems, including their sustainable use and monitoring, should be a priority. In all three scenarios, an effective system of monitoring, control and supervision of land use is required.

Figure 10. Spatial priorities of interventions.

- ❑ Four land use categories account for 85% of deforestation. Satellite image analysis should be used to identify "geographical hotspots" showing high deforestation rates.
- ❑ Policy and institutional issues are a priority due to their effect on land use, particularly where land rights are weak: forests areas with unassigned rights and non-concessioned Permanent Production Forests.
- ❑ Issues regarding productivity/competitiveness are more important where property rights, such as those of native communities and private holdings, exist.
- ❑ The need to increase institutions and producers capacity cuts across every land use category.



Description of interventions

Projects in each zone will consist of the following components:

Component 1: Governance and land use planning

Strengthening instruments for forest resource management: Support the processes of land use planning, the formulation of natural resource management tools, and the implementation of mechanisms to create access to land resources, using an intercultural approach where appropriate.

Legalization, titling and registration of property rights: These actions are aimed at supporting physical and legal land demarcation and titling, including the territories of indigenous communities and lands of small-scale producers.

Component 2: Increasing the value of environmental assets of the forests and degraded areas

The actions within this component are aimed at increasing the competitiveness of the sustainable forest use, supporting the establishment of agroforestry systems, and promoting other activities that are compatible with indigenous communities and small-scale producers, in collaboration with appropriate business partners. The following interventions are proposed:

a) Strengthen producer organizations in order to reduce transaction costs, increase the scale of production, improve negotiating power, develop strategic collaboration with businesses, and cover the costs of organization and legalization.
b) Foster the development of business management capacities.
c) Foster the adoption of new production technologies by producers.

Component 3: Capacity strengthening

This component is horizontal with the other two components and is aimed at strengthening technical, operational, and management capacities (roles, responsibilities and resources) of the regional authorities, local governments,

indigenous communities, organized civil society and the business sector that affect the forestry and agro-forestry sector.

Project 1. Integrated landscape management, Atalaya, Ucayali

In this zone, the ERP will: a) develop a participatory planning model for forest land use planning and community forest management; b) strengthen the land titling and property rights systems for forests belonging to the indigenous and small-farming communities; and c) strengthen the technical and internal governance capacities of the indigenous communities, local governments and other local stakeholders for sustainable forest management.

Specifically, the project will strengthen sectorial and inter-sectorial governance, land titling and/or the expansion of indigenous communities and small-scale producers, promote business models, and consolidate forest and environmental management instruments. Additionally, the project will work to reduce the gaps in the organization and productivity of community forest management and in linking indigenous communities to high added-value markets and suitable business partners in order to increase the competitiveness of sustainable forest use.

Project 2. Integrated landscape management, Tarapoto – Yurimaguas in the San Martín and Loreto regions

In this zone, the ERP is designed to contribute to overcoming the most important barriers that limit the reduction of deforestation and forest degradation described above. The project focuses on: a) reducing the pressure from deforestation and forest degradation through the implementation of an integrated land management model in the zone of intervention; b) supporting the process of legalizing, titling and registration of the property rights of the indigenous communities and other forest users; and c) recover degraded agricultural land areas through agroforestry, silvopastoral systems, and reforestation.

Specifically, the project will strengthen inter-sectorial landscape management, consolidate the instruments for forest and environmental management, provide support for the process of titling and/or expansion of indigenous communities and small-farmers, promote business models, formalize land titling for different stakeholders (land titles or land use contracts according to forest land use category), facilitate the adoption of efficient production technologies, and foster linkages between small-scale producers and indigenous communities with high value-added value chains.

Project 3. Integrated landscape management, Puerto Maldonado-Iñapari and the Amarakaeri Community Reserve and beneficiary communities in the Madre de Dios region

In this zone, the ERP will: a) increase the competitiveness of the use of timber and non-timber resources; b) strengthen the forest management capacity of native communities; c) strengthen forestry governance, including the capacities for monitoring and control within the framework of the decentralization of governance; and d) support processes to define land titling and territorial land use planning.

Specifically, the project will strengthen sectorial and inter-sectorial governance, support the titling and/or expansion of indigenous and small-farming communities as well as promoting the implementation of business models and the consolidation of instruments for forestry and environmental management. Additionally, the project will support the reduction of gaps in productivity, technological changes, and linkages between indigenous communities and small-scale producers with high value added value chains in order to increase the competitiveness of sustainable forest use and/or the recovery of degraded areas.

Expected Results

The direct results expected from the implementation of the ERP include:

- The reduction of approximately 24 MT of CO_2e emissions.
- The improvement of forest and environmental governance in the areas of intervention of the program.
- Clarification of land use tenure and titling and the establishment of land rights of forest-dependent individuals and communities in the zones of intervention of the program.

- Increased competitiveness of forest-dependent economic activities in the zone of intervention of the program
- Technological innovation and market development
- An increase in the availability of loans and funding for sustainable forest and agricultural production
- Improved technical, organizational, and administrative capacities of institutions, businesses, and producers

5.4 Risk/benefit analysis of the planned actions and interventions under the ER Program
Please explain the choice and prioritization of the planned actions and interventions under the ER Program identified in 5.3 taking into account the implementation risks of the activities and their potential benefits, both in terms of emission reductions and other non-carbon benefits.

The actions and interventions proposed in the ERP are innovative and require a high level of coordination and management, both external to the Program (for example, among the various levels of Government programs) and internally (with stakeholders and within the implementation team). The activities are focused on fostering and coordinating political and institutional change that will generate the enabling conditions needed to add value and increase the sustainable use of the forests, and on generating the capacities and linkages between communities, indigenous groups, producers, financial institutions and markets in order to increase the competitiveness of the productive activities. These two types of activities will operate hand in hand and will mutually reinforce each other.

There are three types of risks that could affect the implementation of the program and the results-based payments: (i) political/institutional, (ii) social, and (iii) operational. A brief description of the risks in each category follows.

Political/Institutional Risks

- Existence of political will and follow-up necessary to ensure the implementation of the government reforms and decentralization.
- The environment and agriculture sectors have transferred competencies to newly empowered institutions (for example, regional governments) for the implementation of activities in the forestry sector, however, the latter may face difficulties in fulfilling their mandate due to the lack of capacity or changes in regional policies.
- Although the MINAGRI is working to standardize the criteria and procedures for titling land in the country (which includes the three regions where the projects are being implemented), the process may take longer than currently estimated.

Social

- Social conflicts (such as informal miners) negatively affect the implementation of the projects.
- The megaprojects and Andean migration may result in negative impacts which could exceed the implementation capacity of the ERP projects. For example, the construction of roads that reduce transportation costs may favor increased migration resulting in increased deforestation and forest degradation.

Operational risks (technological, managerial, environmental, and social)

- Local organizations do not have enough resources (e.g. indigenous organizations have identified needs for specific and ongoing technical assistance, logistical capacity and other types of assistance) to participate effectively in the program. Additionally, migrants may be excluded from the projects as they may be unorganized.
- During project implementation, it is possible that women could be marginalized with regards to decision-making, training, land titling, resource management, and forest use.
- The implementation capacity of the Program may not adequately respond to the complexity and conceptual, technical, and institutional requirements of the FCPF.
- At present, there are insufficient baseline studies (social, economic and environmental), which hinder adaptive monitoring and management of the project and the evaluation of the results.
- During project implementation leakage of emissions and/or the displacement of the agents of deforestation and degradation agents may occur.

- The implementation of the Registry of emissions reductions may present defects or omissions that result in the double accounting of the reductions.

The evaluation of the likelihood and the level of control over such risks suggests that operational risks are of less magnitude than the political and social risks since the former are within the control of the project. Political risk is an intermediate level risk: although the institutional and regulatory complexity pose a great challenge, there is a formal commitment of the Government with regard to the proposed changes; moreover, key government entities (for example, the PNCBCC, the MINAGRI, the MEF, Regional Environmental Authorities and the Inter-regional Amazon Council – CIAM) are fully included in the management and implementation of the project. Social risks vary geographically (it is greater in Madre de Dios region due to the activity of illegal mining in the region); however, it is expected that the involvement of local groups, such as the REDD+ Roundtables and indigenous groups, in the REDD+ process will reduce the probability of significant social risk.

With regards to the interventions which focus on improving the enabling conditions and governance vs. those that improve production and competitiveness, the former pose a greater risk than the latter due to the complexity and inertia of the institutions and of Peruvian regulations. As a response, it is important that the Program strives to simplify its response to this complexity, focusing its interventions on the most important stakeholders (for example, MINAGRI, MINAM, MEF and the regional governments) as well as on critical points (for example, the public budgeting process and regional governments) where the Program can exercise a greater degree of influence, or where the payoffs to its efforts are greater. In any case, a focus on the enabling conditions that facilitate the achievement of the results and on governance is essential, despite the risks involved, due to their importance as the basis of the other interventions and the value that the success of such efforts would have for other regions of the country.

6. Stakeholder Information Sharing, Consultation, and Participation

6.1 Stakeholder engagement to date on the proposed ER Program

Please describe how key stakeholder groups have been involved in designing the proposed ER Program, and summarize issues raised by stakeholders, how these issues have been addressed in the ER Program to date, and potential next steps to address them.

Stakeholder engagement in the ERP is based on and is a continuation of that of the FIP and R-PP. During the design of the FIP PIN and R-PP, the Stakeholder Engagement Plan methodology was used to orient the ample participation of a diverse group of stakeholders, including*:* the Natural Resource and Environmental Management Offices of the Regional Governments, representatives of the productive sectors, heads of Protected Natural Areas, representatives of local governments, local and international NGOs, REDD+ and Indigenous REDD+ Roundtables, the indigenous organizations AIDESESP and CONAP, and the private sector. Additionally, the Executive Committee of the FIP included representatives of the MINAGRI, MINAM, MEF, the Ministry of Culture, the participating regional governments, and the indigenous organizations, AIDESEP and CONAP.

In addition to the aforementioned participation of stakeholders, the design of the ERP included two meetings and two workshops with civil society and indigenous organizations to socialize the proposal and elicit comments and inputs. The meetings focused on explaining the ERP process and its relationship to the FIP and the R-PP, and the presentation of the preliminary proposal. The workshops focused on incorporating the contributions of the participating groups in the ERP proposal.

The most important issues raised in these meetings were the following:

- The importance of a clear direction and political decisions regarding the REDD+ processes.
- The complexity of simultaneously implementing the R-PP, FIP, ENBCC and ERP programs.
- The reluctance of the indigenous groups to trade the emissions reductions generated from their lands as off-sets in international carbon markets.

- The importance for the indigenous groups of land titling and rights and compliance of social and environmental safeguards.
- The potential threat of invasion of the protected areas and the current impact of hydrocarbons and agro-industrial crops on indigenous territories.
- The issue of just compensation for forest conservation, especially in indigenous territories.
- The importance of leveraging the results of the ERP to benefit other zones.

The issues of complexity, political leadership, protection of the rights of the indigenous peoples and the corresponding safeguards and the drivers of deforestation have been incorporated in the proposal and interventions. For example, $14.5 million from the FIP budget has been earmarked for the titling of indigenous lands, governance, and community forest management within indigenous communities found in the pilot zones.

This PIN also contains various proposals for providing just compensation for the reduction of deforestation of indigenous lands as well as for preventing the sale of indigenous emission reductions in secondary markets. Possibilities related to the latter include the permanent removal of the emission reductions through their purchase by the international cooperation, bilateral agreements with private sector stakeholders interested in the voluntary reduction of their annual carbon footprint, and the use of the indigenous emission reductions to mitigate the environmental impact of Peruvian companies within the framework of the Peru Forest Fund that is presently being designed. In these cases, emission reductions sales contracts could include clauses specifying the permanent retirement of indigenous emissions reductions after the first sale.

6.2 Planned outreach and consultation process

Please describe how relevant stakeholder groups will participate in further design and implementation of the proposed ER Program and how free, prior and informed consultation leading to broad community support for the ER Program and key associated features, including the benefit-sharing arrangement, will be ensured. Please describe how this process will respect the knowledge and rights of Indigenous Peoples and local communities, by taking into account relevant international obligations, national circumstances and laws.

Stakeholder participation during the design and implementation of the three specific projects will be assured by the application of the Stakeholders Engagement Plan (SEP) and the formal inclusion of representatives of important stakeholders in the management structure at each level (national and regional) of the program.

The PNCBMCC will coordinate the implementation and application of the SEP. The tools used in the SEP will be adapted to each area of action, the type of stakeholder and their interests, and the opportunities present.

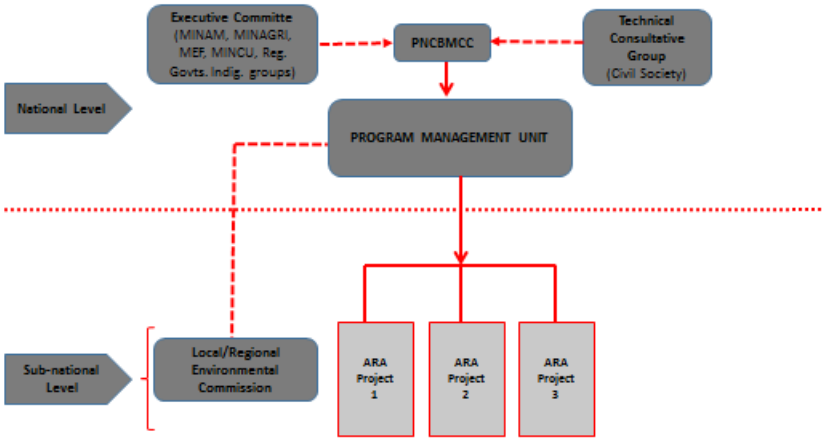
As part of this process, the indigenous organizations AIDESEP and CONAP will continue to participate in REDD+ and ERP planning at the national level. At the regional level, the SEP will seek to activate and strengthen synergies and interactions between the decentralized entities of the MINAM, the MINAGRI, the CIAM, regional and local governments, indigenous organizations, and private institutions that are directly and indirectly involved in forest management, especially during the definition of the Strategic Social and Environmental Assessment (SESA), reference levels, forest monitoring system, MRV, the management of risks and impacts, the distribution of benefits, and the feedback of results and information to the public in general.

During ERP implementation, three entities will provide direction, coordination, follow up, and technical advice to the Program and serve as channels for consultation and communication. The ERP Executive Committee (ERPEC), made up of representatives from the state institutions MINAGRI, MINAM, MEF and the Ministry of Culture, participating regional governments, and AIDESEP and CONAP will be responsible for the Program´s overall strategic direction and policies. The Technical Consultative Group (TCG), made up of representatives from civil society, will provide technical advice and monitor Program implementation and will represent the interests of the various stakeholders of civil society at the national level. Both will provide input to the Program Management Unit (PMU) within the PNCBMCC.

At the local level, Local Environmental Commisions (LECs), made up of representatives of relevant governmental institutions, indigenous groups, the private sector, NGOs, and other civil society actors, will play a role similar to that

of the TCG at the national level. The LECs will also provide information and feedback to the PMU at the national level in order to ensure the flow of information between the hierarchical levels and ensure broad-based support for the program (Figure 11).

Figure 11. PRE management structure including the participation of stakeholders.



7. Operational and financial planning

7.1 Institutional arrangements

Please describe the governance arrangements anticipated or in place to manage the proposed ER Program (committee, task force), and the institutional arrangements among ER Program stakeholders (i.e., who participates in this ER Program, and how, including the roles of civil society organizations and forest dependent communities).

The process currently underway in Peru aims to consolidate the PNCBMCC as the national entity responsible for REDD+ and the ENBCC, within the legal framework of the MINAM. As such, the PNCBMCC is charged with facilitating the development of a portfolio of initiatives aimed at ensuring the conservation of the forests and reducing deforestation and degradation and will be the lead institution of the Program.

Global ERP management will be the responsibility of the Project Management Unit (PMU) within the PNCBCC. Local implementation will be the responsibility of the participating regional governments and their relevant programs and the decentralized national programs in the corresponding sectors.

As explained in the previous section, the overall ERP management strategy will be the responsibility of the inter-sectorial ERP Executive Committee (ERPEC), which is responsible for making decisions regarding the design and implementation of the interventions. The ERPEC will be made up of representatives of the PNCBCC/MINAM, the Ministry of Agriculture and Irrigation (particularly the SERFOR), the Ministry of Economy and Finance, the Ministry of Culture (Vice Ministry of Intercultural Affairs), the regional governments of San Martín, Loreto, Ucayali, and Madre de Dios, and AIDESEP and CONAP. As such, the Committee will be a venue for coordination that will ensure the alignment of the sectorial policies and the objectives of the program. The TCG will complement the ERPEC at the national level by providing input from civil society; it will also monitor Program progress.

Implementers of the projects at the local levels will be the Regional Environmental Authorities (ARAs) of the regional governments, and their Territorial Management Units (TMUs). The ARAs will directly coordinate, via the Project Coordinator, with the LECs in each zone of intervention (Figure 11). Each LEC is responsible for facilitating the coordination among local or regional actors, linking the activities at the regional or local levels with the national level, advising local decision making, and monitoring the execution of project activities, achievements, and the

processes of consultation. The LECs will also attempt to identify early on eventual conflicts and resolve them accordingly. Additionally, the LECs will provide feedback to the PMU in order to assure the flue and integration of information to the national levels and assure widespread support of the Program.

The main potential governmental allies of the Program include: AGROIDEAS, the Land Titling and Registering Program of the MINAGRI, the MINAGRI-CAF Forestry Program, and the National Agricultural Innovation Program of the INIA.

Within civil society, the organization and actions of the project will be linked to the following stakeholders:

- The indigenous federations Shawi and Kukama in the Tarapoto-Yurimaguas zone; ORAU, FECONAPA and CORPIAA in Atalaya, and FENAMAD in Madre de Dios;
- Representatives of the forest business sector and the agroforestry sector such as the Yurimaguas firewood producers association and the Ucayali Forest Producers Association (APROFU);
- The REDD+ Roundtables and their members from San Martín, Loreto, Ucayali and Madre de Dios, especially the Jurisdictional REDD+ initiative supported by the San Martin Regional Government and the VCS Program and 14 early stage initiatives linked to REDD+ in the Madre de Dios region.

Additionally, efforts will be made to align the ERP with various sectorial measures being enacted by the State to deal with environmental problems and the sustainability of natural resources, and with CIAM´s efforts to build a shared environmental strategy and vision among the Amazonian regional governments. In this regard, the MEF is working on cross-cutting reforms which are being implemented by the "Results-Based Budgeting Program" which aims at strengthening the territorial focus of the State and integrating actions of the three levels of government as well as the sectors in pursuit of defined results.

7.2 Linking institutional arrangements to national REDD+ implementation framework
Please describe how the institutional arrangements for the proposed ER Program fit within the national REDD+ implementation framework.

The national REDD+ implementation framework (ENBCC) is currently being formulated by the PNCBMCC. Nevertheless, there is full agreement between the ERP proposal and the ENBCC´s overall objectives and strategy, which include REDD+. As such, the governance of the ERP forms part of the management and governance structure of the PNCBMCC; its implementation is also aligned with the the PNCBMCC´s strategic interventions.

The existence of the management entities (ERPEC and the PMU) of the ERP within the PNCBMCC ensures its close connection with the emerging ENBCC. In fact, the ERP will aid the PNCBMCC in achieving greater horizontal linkage and coordination among institutions and policies at the national level, and vertical coordination with the regional and local governments. Likewise, the important role of the regional governments, the national TCG, the LECs, the REDD+ and the Indigenous REDD+ Roundtables within the management, consultation and implementation structures of the ERP will all serve as a model for the alignment and participation of the stakeholders within the ENBCC.

7.3 Capacity of the agencies and organizations involved in implementing the proposed ER Program
Please discuss how the partner agencies and organizations identified in section 3.1 have the capacity (both technical and financial) to implement the proposed ER Program

The ERP will be implemented in a centralized manner by the National Forest Conservation and Mitigation of Climate Change Program (PNCBMCC), as part of MINAM, via its Project Management Unit (PMU). The PNCBMCC will have general, administrative, and financial responsibility for the Program.

The PNCBMCC has the following technical, financial and administrative capacity related to the management of projects and international cooperation:

Technical

Forest Mapping and Conservation Monitoring Unit
Sustainable Production Systems Promotion Unit
Capacity Strengthening Unit
Forest Conservation Formulation Unit
REDD+

Financial and Administrative
Finance and Administration Unit
Planning, Monitoring and Evaluation Unit
Legal Unit

These units include specialists in various forestry related themes (monitoring of deforestation, sustainable management projects and initiatives, strengthening and improving forest governance, REDD+, safeguards, and public investment projects) and in administration and financial management components such as logistics, hiring, accounting, financial management, budgeting, planning and public sector regulations.

To date, the PNBMCC has demonstrated the capacity to technically and financially manage a portfolio of projects that total approximately $212 million (Table 10). However, it recognizes the need to strengthen the administrative and technical capacities of the multiple national and sub-national entities that are responsible for aspects of the implementation of the ERP, especially those of the regional governments and the indigenous organizations. The strengthening of institutional capacity of these actors will include:

a. Improving organizational capacity
b. Improving inter-institutional planning capacity
c. Improving the capacity for managing shared financial resources

The Governors´ Climate and Forest Task Force (GCFTF) can play an important role in strengthening the regional governments through the exchange of experiences among the sub-national government members of the Task Force regarding the implementation of REDD+. The Loreto, San Martin, Madre de Dios, and Ucayali regional governments are members of the GCFTF.

7.4 Next steps to finalize the proposed ER Program implementation design (REL/FRL, ER Program monitoring system, financing, governance, etc.). Provide a rough timeline for these steps.

The next steps necessary to finalize the design of the ERP and complete the Readiness Package, include the following:

- Implement the Stakeholder Engagement Plan and the training component, in order to ensure effective participation and the inclusion of civil society in the final design and implementation of the ERP. The Plan should include modules for intercultural dialogue, conflict resolution, and for principle-based negotiation, which will help the stakeholders achieve agreements based on trust and cooperation.
- Finalize the creation of the ERPEC and the TCG at the national level and design a work plan for institutional and policy linkage and coordination among their members.
- Define in greater detail together with the national institutions, regional governments, the national and regional REDD+ and Indigenous REDD+ Roundtables, business sector, and civil society the composition of the LECs and begin to jointly design the interventions and implementation plans for each zone.
- Gather and analyze the data to update the reference levels for each zone.
- Complete and implement the national forest cover monitoring system, with the involvement of local and indigenous groups in monitoring and verification.
- Consolidate the implementation of the nested jurisdiction system for measuring forest cover and the reduction in emissions.
- Consolidate the National REDD+ Initiatives Information Platform and the National REDD+ Iniciatives Information Registry in a manner that will avoid: a) double or triple accounting of emission reduction; b) relative ambiguity regarding the ownership of reduced emissions; c) inconsistencies between the national

GHG inventories and the general RDD+ accounting and d) non-fulfillment of the socio-environmental safeguards.

- Design the SESA, including the plan for monitoring the indicators of both the safeguards and the non-carbon benefits and the plan for including and managing of these data in the National REDD+ Initiatives Information Registry.
- Align and coordinate the financing of the activities that will result in results-based payments from the Carbon Fund.
- Define the benefits distribution system.

These steps will require approximately 18 -24 months to complete (second semester of 2014 - first semester of 2016, see Figure 6 in Section 4.2).

7.5 Financing plan (in US$ million)

Please describe the financial arrangements of the proposed ER program including potential sources of funding. This should include both near-term start-up cost and long-term financing. If the proposed ER program builds on existing projects or programs that are financed through donors or multilateral development banks, provide details of these projects or programs, including their financing timeframe. Use the table in Annex I to provide a summary of the preliminary financial plan

The ERP builds upon a number of existing projects and programs. The most important of these is the FIP, since the investments of the FIP are focused on establishing the conditions that facilitate the reduction of emissions compensated by the ERP. Additionally, Peru has received investments for projects that are aimed at political and institutional reforms, the improvement of forest governance and the development of capacity for the implementation of REDD+ (Table 10).

The FIP will contribute $26.8 million in donations and $23.2 million in loans (Annex 1). A portion of the FIP funds will be used to generate enabling conditions (rights, policies, institutions and local governance) that facilitate private investment in projects linked to REDD+ (forest management, ecotourism, reforestation and agroforestry) in the zones of intervention. Funds will also be used to develop innovative business models, increase community, business, and producer management capacity, the development of financial instruments and new production technologies that will form the base for the developing private investment in the future. An additional $37.3 million in co-financing is provided by the Peruvian government, the IADB, JICA, the World Bank, KfW, the Moore Foundation and the FCPF (Appendix 2).

Within the FIP budget, $14.5 million has been earmarked for indigenous priorities: the titling of community land, governance, and community forest management. An additional $5.5 million within the Specific Donation Mechanism was negotiated to finance community land titling, community forestry management, and the further tailoring of REDD+ mechanisms in indigenous communities outside the areas of intervention.

As to the income expected from the ERP, these estimates will be calculated during the design phase of the projects. However, rough estimates indicate that approximately $110 million in income can be expected from forestry and agricultural activities (principally coffee and cacao combined with timber species, Brazil nuts, and timber production from forest concessions and CFM). Similarly, although there are no formal sales contracts for emission reductions as yet, it is estimated that income from the sale of carbon will be approximately $190 million (Annex 1; see also Sections 15.1 and 15.2). This income is associated with the sale of various types of carbon: conventional (e.g. produced by reforestation, agroforestry, o natural protected areas), “gourmet” (produced by communities and which combine carbon, biodiversity, and improved livelihoods), and “gourmet plus” (produced by communities in critical areas such as the upper reaches of watersheds or in buffer zones bordering areas of high biodiversity). The details of a system of differentiated carbon prices will be further defined during the ERP design phase.

The sustainability of the purchase of carbon emissions reduction is a key issue, since the FIP concludes in 2021, while the Carbon Fund ends in 2020 and will compensate only a part of the reduced emissions generated by the FIP.

At present, there are trends in Peru that may positively impact the availability of funds for REDD+ interventions after 2020 and perhaps even the purchase of emissions reductions. These include: the accumulation of capital in

Peruvian pension funds (AFP) and the scarcity of investment instruments, changes in MEF policies that will permit the expansion of available financial instruments, and a changes in the policies of the Peruvian banks (for example, Agrobanco) in favor of the financing "green" production systems. The ERP will support these initiatives through activities at the national level (see section 5.3).

There are a number of potential mechanisms to ensure the sustainability of compensation for emissions reductions generated:

a. The purchase of emissions reductions by international cooperation agencies (results-based payments),
b. Bilateral transactions with Peruvian private sector entities interested in neutralizing their carbon footprint,
c. Compensations for reductions of environmental impacts related to the extraction of non-renewable resources and infrastructure development in the country, and
d. Pension fund (AFP) investments.

These exchanges can be facilitated by the creation of a regulated venue for such transactions. At present, the country, through the project UNREDD/UNDP project is taking the first steps to design a trust fund (the Peru Forest Fund) to bring together suppliers and purchasers of emission reductions or other certified ecosystem services originating from forests.

Within this system, the production, verification and registration or certification of the emissions reductions, by schemes aligned with the methodological framework of the FCPF or the VCS, will facilitate transactions both within the country and at the international level. In turn, the certified reductions can provide a competitive advantage, both at the level of the participating producers as well as national sector levels (through NAMAs), in global markets that include such criteria in their value chains.

Table 10. Financing for REDD+/forest development activities.

Cooperation Agency	Amount (US$)	Description
KfW and Moore Foundation	7,564,410 (KfW) + 2,137,468 (Moore)	1. Estimate the reference level for forest cover and forest carbon, 2000-2011. 2. REDD+ training for specialists from regional governments, MINAGRI, MINAM, and the civil society. 3. Develop a national road map for the implementation of the nested jurisdiction approach for REDD+, with the Inter-regional Amazon Council (CIAM), the regions and other stakeholders. 4. Preparation of the conceptual framework, MRV working document, and reference levels. 5. Definition of principles, criteria and indicators for the preparation of the Map of Priority Areas with REDD+ Potential. 6. Diagnosis of REDD+ safeguards and the corresponding road map for their development and implementation. 7. Design and implementation of the National REDD+ Initiatives Registry.
Conditional direct transfers by the Government of Peru	25,472,788	Economic incentives channeled as direct support to indigenous communities for the conservation of forests through the implementation of actions and projects that maintain forest cover
FIP/IADB/WB	81,400,000	Consolidate forest conservation and the recovery of degraded areas via investments that increase the competitiveness of activities that are compatible with the sustainable use of the forests and the establishment of enabling conditions related to governance, land use planning, land titling, innovation, credit and market development
R-PP FPCF/World Bank	3,800,000	1. Institutional organization for REDD+ 2. National reference scenarios for GHG emissions from forests. 3. Implementation of the national forest monitoring system.
UNREDD/UNDP	295,150	1. Participatory strategy

Cooperation Agency	Amount (US$)	Description
(finalized)		2. Benefits distribution model. 3. Evaluation of risks of corruption. 4. Design of multi-sectorial monitoring mechanism for REDD+ initiatives.
UNREDD/UDDP	760,000	Contribute to the design of a national fund for REDD+ and the implementation of the Cancun Agreements: the preparation of a National REDD+ Strategy and the Safeguard Information System (SIS)
CAF	20,000,000	Recuperation and conservation of Amazon forests through the strengthening of public forestry institutions and by increasing the competitiveness of the forestry sector
GIZ	5,000,000	Consolidate a sustainable policy of economic compensation for the conservation of community forests, within the framework of the PNCBMCC.
JICA	58,934,152	Provide support to the PNCBMCC for forest conservation in the departments of Amazonas, Lambayeque, Loreto, Piura and San Martín, avoiding deforestation and degradation and fostering the sustainable use of the forests, thus contributing to mitigating climate change.
FAO/Finland	6,500,000	Implementation of the national forest inventory.
Hatoyama Initiative (now known as the JICA Forest Conservation Program)	10,600,000	Equipment and materials for forest monitoring and control (e.g. computers, satellite images, vehicles, etc.).
Various		The IADB is preparing a loan for the titling of rural properties in the Amazon, and the IADB and World Bank are preparing a loan for the National Program for Agricultural Innovation which will include support for forest management and agroforestry. The World Bank is also presently supporting the Fund for the Promotion of Natural Protected Areas of Peru (PROFONANPE) and the project for the Strengthening of Biodiversity Conservation through the National Protected Natural Areas Program (PRONANP).
TOTAL	**212,762,090**	

8. Reference Level and Expected Emission Reductions

8.1 Approach for establishing the Reference Emission Level (REL) and/or Forest Reference Level (FRL)
Please briefly describe how the REL/FRL for the proposed ER Program has been or will be established. Describe how the approach for establishing the REL/FRL is consistent with UNFCCC guidance available to date and with the emerging Methodological Framework of the FCPF Carbon Fund, and with the (emerging) national REL/FRL (or with the national approach for establishing the REL/FRL).

The formulation of forest and emission reference levels for the zones of intervention as well as at the national level incorporated IPCC Approach 3 and Tier 2 methods, as recommended in the FCPF Methodological Framework. The multi-temporal analyses of deforestation covered the period 2000 - 2009 for Atalaya, and 2000 - 2010 for the other zones, and were based on the analysis of LANDSAT images; 2009 and 2010 were used as reference years due to the lack of more recent data.

Peru is presently in the process of analyzing and interpreting satellite images from the Peruvian Amazon for 2012; it is expected that these results will be available by the end of 2014 at which time the deforestation rates can be updated and the methodologies for each of the three zones can be aligned. Reference levels for forest degradation in the Amazon are expected in 2015 (see section 9.1).

For each of the three zones of intervention, the annual percentage deforestation rate was established based on the difference in area (hectares) of forest cover between the years 2000 and 2009 or 2010, divided by the number of years in the sampling period and the initial forest area. The number of hectares deforested annually in in each zone of intervention was projected to 2021 by multiplying the annual percentage rate of deforestation by the number of hectares of remaining forest in each year.

Forest degradation was not estimated due to the lack of data. It is unlikely that degradation exceeds 10% of the total forest emissions from the three zones during the reference period. Nevertheless, relevant data for forest degradation for the Peruvian Amazon should be available in 2015 (see Section 9.1).

In order to convert hectares deforested to emissions, the number of hectares deforested in any year during the period 2016-2020 was multiplied by an emissions factor corresponding to the stock of forest carbon, 179 tons C/ha (ICRAF-Peru, unpublished data) and a conversion factor of 3.67 to convert C to CO_2 equivalents. These emissions were then summed over the zones to provide an estimate of total annual emissions in the Program area. Emissions reductions were calculated by multiplying total annual emissions of each of the three zones by an emissions reduction factor (50%), which was estimated during the FIP process.

8.2 Expected REL/FRL for the ER Program

Please provide an estimate of the REL/FRL for the proposed ER Program area. Even a very preliminary estimate would be helpful.

The deforestation reference levels, based on the historical forest cover data, for each of the three zones (Atalaya, Taraptoto -Yurimaguas, and Pto. Maldonado-Iñapari) are detailed in the Tables 11 – 13 below. The annual percentage rates are: 0.64% for Tarapoto- Yurimaguas, 0.05% for Atalaya, and 0.19% for Pto. Maldonado – Iñapari.

Figure 11. Land use categories and annual deforestation rates for Atalaya.

Atalaya Area	Forested Area (ha)	2000			2009			Annual Deforestation Rate 2000-2009
		2000 Deforestation (ha)	Remainging Forest (ha)	Others*	2009 Deforestation (ha)	Remaining Forest (ha)	Others*	
Total	1,235,074	39,476	899,607	295,991	43,215	895,868	295,991	0.05 %
Timber Concessions	417,503	4,883	317,805	94,815	2,864	319,824	94,815	-0.07%
Native Communities	562,148	18,271	407,882	135,995	22,046	404,107	135,995	0.10%
Rural Holdings	12,141	1,687	7,729	2,725	2,063	7,353	2,725	0.55%
Forest areas without wassigned forest rights	243,282	14,635	166,191	62,456	16,242	164,584	64,456	0.11%

Note: The FIP team determined that the trend in the annual rate of deforestation trend is 0.34%, principally due to the Pto. Ocopa-Atalaya road.

Table 12. Land use categories and annual deforestation rates in the Tarapoto-Yurimaguas zone.

Tarapoto-Yurimaguas Area	Forested Area (ha)	2000			2010			Annual deforestation rate 2000-2010
		Deforestation (ha)	Remainging Forest (ha)	Others*	Deforestación (ha)	Remainging Forest (ha)	Others*	
Total	1 204 910	127 138	1 003 254	74 518	189 540	940 852	74 518	0.64 %
Timber Concessions	54 052	113	53 931	8	1487	52 557	8	0.26%
Conservation Concession	3464	408	3016	40	496	2928	40	0.30%
Non-Timber Concession	3860	994	2637	229	1324	2307	229	1.34%
Native Communities	251 211	16 455	228 209	6547	23 982	220 682	6 547	0.34%
ACR Cerro Escalera	147 995	3176	115 756	29 063	4 731	114 201	29 063	0.14%
Rural Holdings	70 439	14 642	54 491	1306	25 470	43 663	1306	2.22%
Forests areas without assigned forest rights	673 889	91 350	545 214	37 325	132 050	504 514	37 325	0.78%

Table 13. Land use categories and annual deforestation rates in the Puerto Maldonado – Iñapari zone.

Madre de Dios Area	Forested Land Area (ha)	2000		2010		Annual Deforestation Rate 2000-2010
		2000 Deforestation (ha)	Remainging Forest (ha)	2009 Deforestation (ha)	Remaining Forest (ha)	
Total	1,776,182	84,868	1,691,314	115,967	1,660,214	0.19 %
Native Communities	78,350	1,069	77,281	1,715	76,635	0.08%
Timber Concessions	786,327	803	785,524	2,634	783,694	0.02%
Reforestation Concessions	260	0	260	6	254	0.23%
Conservation Concessions	16,782	191	16,591	208	16,574	0.01%
Ecotourism Concessions	14,191	303	13,888	549	13,642	0.18%
Non-Timber Concessions	926	43	883	46	880	0.03%
Aguaje palms	552,435	14,495	537,940	20,393	532,041	0.11%
Non-Timber Concessions Shiringa	18,024	712	17,312	1,367	16,658	0.39%
Rural holdings	160,588	57,555	103,033	75,454	85,133	1.91%
Forest areas without assigned forest rights	148,299	9,697	138,602	13,595	134,703	0.29%

Note of errata: The data for “Aguaje palms” refers to Brazil nut concessions; the data for “Non-Timber Concessions” are the data for aguaje.

As noted in Table 12, the projected reference level for deforestation in Atalaya should be adjusted upwards due to the following: 1) The long-term historical deforestation rates for Peru and Atalaya are low. 2) Paving of the Atalaya – Pto. Ocopa road will increase socio-economic pressure and deforestation in the Atalaya zone. Based on initial impacts from construction of this road, measured outside the district of Raymondi in an area of similar size compared with Raymondi, it is estimated that the annual deforestation rate in Atalaya will increase to 0.34%, which is much greater than the historical average. During the design of the interventions, recent and current deforestation

rates for Atalaya will be documented in order to update rates of deforestation and emissions expected in the near future.

An upward adjustment in the reference level for Atalaya, based on a projected annual deforestation rate of 0.34%, resulted in 8.22 $MTCO_2e$ of additional emissions during 2016-2020 compared to those estimated based on a deforestation rate of 0.05%. These additional emissions are under the allowable limit of 11.16 $MTCO_2e$ for 2016-2020 based on an allowance of 0.1% of the annual carbon stocks for the Program area (Table 14).

As a result of the application of the procedure describe in Section 8.1 above, the total emissions during 2016-2020 are: 18.79 $MTCO_2e$ for Tarapoto-Yurimaguas, 10.20 $MTCO_2e$ for Pto. Maldonado-Iñapari, and 1.46 $MTCO_2e$ for Atalaya, equivalent to a total of 30.45 $MTCO_2e$ during 2016-2020. With the adjustment, emissions from Atalaya are estimated at 9.70 $MTCO_2e$ and the new total is 38.69 $MTCO_2e$ for the 2016-2020 period.

Table 14. Comparison of adjusted emissions from Atalaya with the allowable upper limit specified by the Methodological Framework.

Year	Remaining forest (ha)	Forest C stocks ($MTCO_2e$)	Limit of upward adjustment based on 0.1% of stocks ($MTCO_2e$)	Difference in emissions between historical and adjusted rates of deforestation in Atalaya ($MTCO_2e$)
2016	3,421,432	2247.6	2.25	1.66
2017	3,409,544	2239.8	2.24	1.65
2018	3,397,709	2232.1	2.23	1.64
2019	3,385,928	2224.3	2.22	1.64
2020	3,374,199	2216.7	2.22	1.63
Total		**11,167.7**	**11.16**	**8.22**

It is estimated that the interventions in each zone will reduce the deforestation rate and emissions by approximately 50%, primarily through better monitoring, control and prosecution of land use, combined with incentives aimed at improving productivity. The total emissions reductions for the three zones of intervention for the period 2016-2020 are 19.35 $MTCO_2e$ and include: 4.85 $MTCO_2e$ from Atalaya, 9.4 $MTCO_2e$ from Tarapoto-Yurimaguas, and 5.1 $MTCO_2e$ from Pto. Maldonado-Iñapari. Table 15 details the estimated reduction targets and the emissions that can potentially be assigned to the ERP.

Of the total 19.35 MT emissions of CO_2 reduced, approximately half, or 10 $MTCO_2e$, will be assigned to the ERP. The remaining 9.35 $MTCO_2e$ can be offered to other donors or to other buyers of verified emission reductions (see Section 7.5).

Table 15. Emission reductions ($MTCO_2e$) generated and their partial assignment to the Emissions Reduction Program.

Zone	Total area (ha)	Remaining forest (ha), 2016	Deforestation rate 2000-2010	Emissions (2016-2020) ($MTCO_2e$)	Reduction in emissions (%, $MTCO_2e$)	Reductions assigned to C Fund ($MTCO_2e$) y % of emissions reductions
Tarapoto-Yurimaguas	1,204,910	905,294	0.64%	18.79	50% = 9.40	5.0 (53%)
Atalaya	1,235,074	892,734 874,761*	0.05% 0.34%*	1.46 9.70*	50% = 0.73 50% = 4.85*	2.0 (41%)*
Pto. Maldonado-Iñapari	1,776,182	1,641,377	0.19%	10.20	50% = 5.10	3.0 (59%)
Total	**4,216,166**	**3,439,405 3,421,432***		**30.45 38.69***	**50% = 15.23 50% = 19.35***	**10.0(51%)***

*Calculations based on upward-adjusted deforestation rates.

9. Forest Monitoring System

9.1 Description of approach and capacity for measurement and reporting on ERs
Please describe the proposed approach for monitoring and reporting the emission reductions attributable to the proposed ER Program, including the capacity of the proposed ER Program entities to implement this approach.

The National Forest Cover Monitoring System (SNMCF) is the entity in charge of monitoring forest cover in the country, and the National Forest Conservation and Climate Change Program (PNCBMCC) will be responsible for reporting the results. The SNMCF is being developed jointly by the Ministry of Agriculture and Irrigation, the Ministry of the Environment, and the Amazon Cooperation Treaty Organization (OTCA) and is aligned with the framework of the National Climate Change Strategy, the National Forest and Wildlife Plan and the National Environmental Action Plan. Additionally, it is linked to the National Forest Inventory and other national initiatives. The MRV system is considered part of the SNMCF.

At present, forest monitoring includes the following activities and information:

a. There are a variety of methods that are being applied at the national and regional levels to estimate deforestation (CLASlite, Maryland, SEE5, Random Forests, etc).
b. There are two baselines of historical deforestation for the period 2000 – 2009 which were prepared by the MINAM. The data available for subsequent years are incomplete. Additionally, there are three regional baselines (San Martín, Madre de Dios and Cusco) for the period 2000 - 2009. Results for the Amazon will be updated to 2012 by the end of 2014.
c. MINAM and MINAGRI have a great deal of Landsat images that cover Peruvian territory. Additionally, there are high-resolution images that cover small parts of the Peru. Furthermore, the Rapid Eye images donated by the Japanese government are also available.

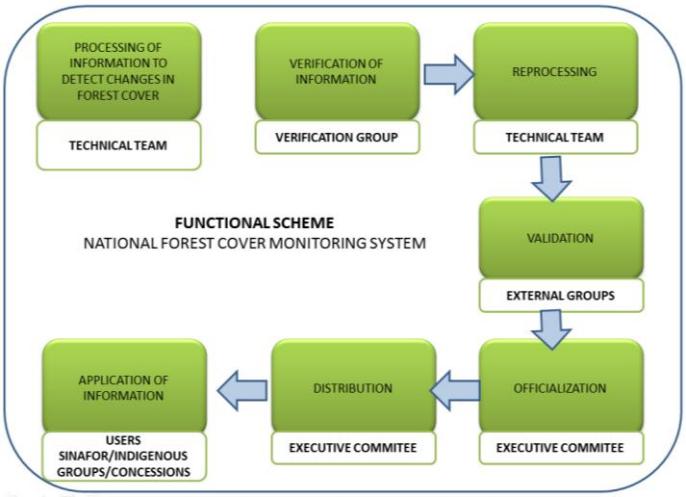
The SNMFC is being developed according to the established protocols (see Section 9.2), which are consistent with UNPCCC guidelines and the use of Tier 2 methods within IPCC Approach 3. High-resolution images of forest cover, in combination with the Peruvian carbon map, will be used to analyze changes in forest cover change and corresponding emissions. One output of the analysis is an early warning system that will be implemented at the regional level with the participation of the regional and local governments and community groups. Additionally, reference levels are expected to be developed for the Amazon region in 2014 (Table 16).

Table 16. Timetable for developing deforestation and degradation reference scenarios for the Amazon, dry and Andean forests.

Year Expected	Reference Scenario
2014	Deforestation of Amazon forests based on historical trends
2015	Deforestation of dry forests based on historical trends
2015	Degradation of Amazon forests
2016	Deforestation of Andean forests, based on historical trends
2016	Degradation of dry forests
2017	Degradation of Andean forests

The procedure for monitoring and reporting changes in forest cover (including deforestation and the area that is being recovered from secondary forests and through reforestation) is shown in the Figure below.

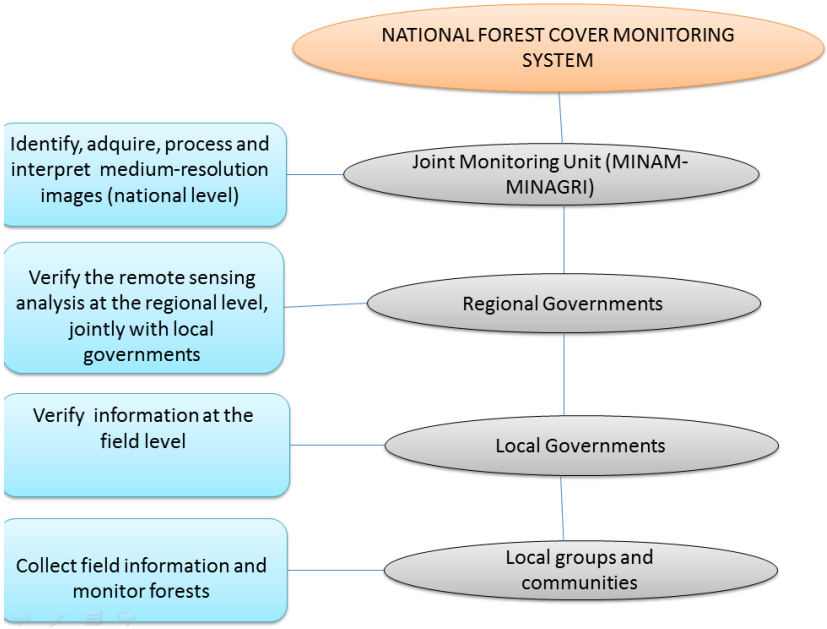
Figure 12. Functional scheme of the National Forest Cover Monitoring System.



- **Technical Team : MINAM – MINAGRI**
- **External: Consultants**
- **Verification Group: GORES – IIAP – SENANP, local groups**
- **Executive Committee: MINAM – MINAGRI**
- **Advisory Group: Multi-disciplinary experts**
- **Users: SINAFOR/CCNN/Fiscalia/Procuraduria/Concessionaires/MINCUL/others**

Figure 13 further details the linkage of the national and sub-national monitoring systems. National monitoring is based on the analysis of satellite images. Regional and local monitoring, which includes the participation of local groups, will verify the analysis produced at the national level.

Figure 13. Linkage between national and sub-national ER monitoring processes.



A step-wise implementation strategy for the SNMCF has been proposed through the year 2021, which includes the following phases:

- Initial Phase (2013): The National Forest Cover Technical Monitoring Team (MINAM, MINAGRI, OTCA) investigates and generates information.
- Transition Phase (2014 – 2017): The joint Forest Cover Monitoring Unit is implemented and is generating information through protocols that are consistent with the IPCC and other institutional arrangements.
- Final Phase (2018 – 2021): The agency or organization specialized in monitoring forest cover is operating and generating information in an ongoing manner.

In relation to the management and reporting of forest cover and emissions information, MINAM is currently developing the National REDD+ Initiatives Information Platform as the first phase of the National REDD+ Initiatives Information Registry, which will contribute to the transparency of information on REDD+ initiatives. The Registry will ensure that property rights to emission reduction are respected. It will contain information regarding reference scenarios, emission reductions achieved and the rights to the emission reductions in order to avoid: a) double or triple accounting of emission reductions; b) ambiguity with regard to the ownership of emission reductions; c) inconsistencies between national GHG inventories and the general REDD+ accounting and d) non-fulfillment of socio-environmental safeguards. Eventually, the Registry will include information on social, environmental and institutional impacts and non-carbon benefits gathered through the monitoring process. In the future, the National REDD+ Initiatives Registry may be linked to the National Registry.

9.2 Describe how the proposed ER Program monitoring system is consistent with the (emerging) national REDD+ monitoring system.

Forest cover monitoring within the three zones of intervention will be linked to the SNMCF and to the guidelines developed by the national MRV (Figure 12); both of which will use the same methodology (Tier 2 methods under the IPCC Approach 3). The SNMFC will analyze changes in forest cover over time based on satellite images; these changes will be verified by local stakeholders in the zone of intervention (Figure 13).

Likewise, the monitoring of safeguards and co-benefits within the ERP will be aligned with and will contribute to the national MRV system and to the National REDD+ Initiatives Registry (see Sections 9.5, 16.1 and 17.1).

9.3 Describe how the proposed ER Program monitoring system is consistent with UNFCCC guidance available to date and with the emerging Methodological Framework of the FCPF Carbon Fund.

Both the ERP and SNMCF monitoring systems were designed to serve the needs of a broad range of demands in the country with regard to monitoring and managing forest resources. The ERP monitoring system is consistent with that of the SNMCF, since both apply Tier 2 methods from the IPCC Approach 3, as recommended in the FCPF Methodological Framework in determining reference levels and subsequent changes in forest cover and emissions; both also incorporate the principles of transparency, exhaustiveness, coherence, comparability, and accuracy.

During ERP implementation, deforestation will be monitored during the first year and annually thereafter, using the Tier 2 methods and the IPCC Approach 3. The emission factors contained in the Peru´s carbon map will be used to calculate carbon stocks.

9.4 Describe any potential role of Indigenous Peoples or local communities in the design or implementation of the proposed ER Program monitoring system.

The Amazon Indigenous REDD+ proposal, backed by AIDESEP and CONAP, will be the basis to ensure the participation of the indigenous groups in the monitoring processes. The proposal is an initiative that seeks to value the integral nature of the ecosystem services provided by the indigenous forests and territories, and proposes the

adoption of an integrated, broadly focused vision that takes into account other goods and services provided by the forest.

The proposal underscores the participation of indigenous communities in decision-making bodies; the application of "early" safeguards; territorial security; informed, free, prior, and binding consent; macro-monitoring of existing forests and conservation of ecosystem services, and a public, regulated, equitable and transparent public financing mechanism that does not depend on the market and ensures that REDD+ operators are subject to public regulations.

Funds from the FIP budget in the amount of $14,500,000 will be allocated to indigenous organizations for: community titling, governance, and community forest management. The $4 million budget assigned to community forest management will include two important elements for the monitoring process:

1) Forest oversight groups
2) Fostering a scheme of indigenous promoters

The first element is based on experience from Ucayali and is an excellent means for developing the field monitoring capacities of indigenous organizations. Likewise, the promotion of the indigenous promoters has been shown to be an effective mechanism for monitoring forest activities within indigenous communities. Examples include the indigenous communities of Puerto Esperanza in Ucayali and Bélgica in Madre de Dios.

These experiences will be included in the design and implementation of the ERP monitoring system.

9.5 Describe if and how the proposed ER Program monitoring system would include information on multiple benefits like biodiversity conservation or enhanced rural livelihoods, governance indicators, etc.

Past consultation processes have identified a series of potential indicators for monitoring non-carbon benefits such as biodiversity as well as socio-economic, governance, and institutional capacity strengthening (see Sections 13.1 and 16.1 and Table 18 in section 16.1). During the design of the ERP, the indicators will be further defined and subsequently included in the MRV system, and a baseline and monitoring methodology will be developed. Indicator monitoring is a technical task that will be managed by the MINAM with the participation of the indigenous communities and the REDD+ and Indigenous REDD+ Roundtables. Other institutions, such as environmental rights NGOs, universities, international organizations, indigenous organizations that can contribute information will also be included.

10. Reversal

10.1 Activities to address risks of reversal of greenhouse gas benefits
Please describe major risks of anthropogenic and non-anthropogenic reversals of greenhouse gas benefits (from e.g., fire, agriculture expansion into forest, changes in commodity prices). Also describe any activities or design features in the proposed ER Program that are incorporated to minimize and/or mitigate the anthropogenic risks or reversals, and how these activities are consistent with the design features of the (emerging) national REDD+ strategy to address risks of reversal.

The greatest risk of reversal of the project is migration to the project zones, driven by road construction, and increases in the opportunity costs of activities that compete with forest conservation. The risks in each project zone and the actions to minimize them are summarized in Table 17. In general, the design and implementation of better governance of land use is a critical measure for avoiding reversal of the reductions in emissions or maintaining it at a minimum. These measures may include the elimination of perverse policies that foster deforestation and the establishment of criminal or administrative sanctions for violations related to land use.

Should reversal occur, there are various mechanisms, such as the use of insurance policies, the establishment of a national buffer fund, and the use of interest accruing from investments of the trust fund (Peru Forest Fund) financed by payments for emissions reductions or environmental services, to compensate these losses.

Table 17. Displacement risks in the project zone.

Zone	Risk	Measures
Atalaya	The improvement of the Satipo-Atalaya highway will create pressure on the forests due to increased access to lands and increased value of agricultural and livestock products. These factors, coupled with the development of industrial forestry in Atalaya, could increase the intensity of illegal lumber extraction and the reversal of sustainable forest management.	Oversight and control of land use should focus on the zone directly influenced by the highway. Development of more efficient silvicultural systems that increase timber extraction per hectare. Promotion of forest clusters in the region, based on the application of successful prior experiences. Application of the monitoring system with an emphasis on early warning protocols. Focus efforts on the zones most at risk to deforestation.
Tarapoto- Yurimaguas	Increased migration from the Andean region and an increasing influence of agricultural megaprojects, such as oil palm production, are the main risks related to reversal.	Implement zoning, land use planning, land titling, and control and oversight in the areas of direct intervention as well as in surrounding areas.
Puerto Maldonado-Iñapari	The construction of the Inter-Oceanic highway will lead to the opening of secondary roads which, together with the demand for agricultural products in nearby population centers such as Puerto Maldonado, will create pressure on the sustainable use of forests or agricultural land.	Oversight and control should focus on the zone of direct influence of the highway and the secondary roads. Development of silvicultural production systems that are more efficient and that increase timber extraction per hectare. Development of sustainable agroforestry systems. Application of monitoring systems, with particular emphasis on early warning protocols.

11. Displacements

11.1 Description of the potential risks of both domestic and international displacement of emissions (leakage)
Please describe the potential risks of both domestic and international displacement of emissions from the proposed ER Program activities. Then also describe how the proposed ER Program activities will minimize the risk of

domestic displacement and international displacement (if applicable), via the design of the proposed ER Program and the ER Program activities and the selection of locations. For sub-national programs, pay special attention to identifying domestic risks of displacement of emissions, the proposed ER Program activities to mitigate these risks, which otherwise would contribute to fewer net emission reductions generated by the proposed ER Program, and how these activities are consistent with the design features of the (emerging) national REDD+ strategy to address risks of displacement.

The implementation of the Program at the sub-national levels includes areas of approximately 1 – 2 million hectares each. As a result, the risk of displacements or leakage, primarily domestic, is relatively high. Areas most at risk to displacement include lands with unassigned rights in the vicinity of the zones of intervention or where lands are titled, but productivity and income are low.

In general, the risk of displacement can be reduced by the application of improved land use governance mechanisms in the zones of intervention as well as the surrounding areas. The risk of displacement can also be reduced through increases in agricultural and forest productivity in the project zones and the promotion of alternative and sustainable land use outside the project areas. State, regional and international cooperation budgets should also allocate funds to "leakage belts" in order to implement zoning activities, territorial land use planning, titling, control and oversight.

The program will identify and establish "leakage belts" where risks of displacement are high. Displacement will be monitored via the forest cover monitoring system in these belts as well as the intervention areas, and its occurrence will be reported in the MRV and National REDD+ Initiative and Information Registry.

Should displacement occur, it will be compensated by reductions in the payments for emission reductions or payments from insurance policies, a buffer fund, or the interest earned on capital contained in the Peru Forest trust fund.

12. Expected emission reductions

12.1 Expected Emission Reductions (ERs)

Please provide an estimate of the expected impact of the proposed ER Program on the REL/FRL (as percentage of emissions to be reduced). Based on this percentage, also estimate the volume of ERs, as expressed in tonnes of CO_2e, that would be generated by the ER Program:

a) up to December 31, 2020 (currently the end date of the FCPF)
b) for a period of 10 years; and
c) the lifetime of the proposed ER Program, if it is proposed to continue longer than 10 years.

Table 15 in Section 8.2 presents the estimated emission reductions for a the 2016-2020 period. Estimated reductions are 19.35 $MTCO_2e$: 4.85 $MTCO_2e$ in Atalaya, 9.4 $MTCO_2e$ in Tarapoto-Yurimaguas, and 5.1 $MTCO_2e$ for Pto. Maldonado-Iñapari.

Given that the ERP ends in 2020, one year before the FIP, estimated emissions reductions during the lifetime of the latter are estimated at 22.57 $MTCO_2e$. The reductions for a 10 year period are estimated at 38.7 $MTCO_2e$.

12.2 Volume proposed for the FCPF Carbon Fund

Please explain the portion of the expected ERs that would be offered to the Carbon Fund, and if other carbon finance providers or buyers have been identified to date, the portions of the expected ERs that would be offered to them.

Approximately 50% (equivalent to 10 $MTCO_2e$) of the emission reductions generated will be offered to the Carbon Fund (Table 14). As indicated in Sections 7.5, 15.1, and 15.2, the emission reductions can be categorized into different types, having different prices, depending on their origin (e.g. the State, private sector, or small farmers) and related co-benefits: conventional (resulting from reforestation, agro-forestry or protected areas); "gourmet" (from communities, combining carbon, biodiversity, and livelihoods); and "extra gourmet" (communities in critical zones such as headwaters of watersheds or buffer zones adjacent to high biodiversity protected areas).

The details of a differentiated emissions pricing system will be defined during the design of the projects, but is made more difficult by the paucity of formal markets. The most recent purchase by the Disney Corporation of emissions from the Alto Mayo protected area in San Martin was associated with a price of approximately \$7/ton CO_2e. These emissions can be categorized as "gourmet", due to the existence of multiple non-carbon benefits. Based on this admittedly limited reference point, prices for emissions reductions from the interventions are likely to be in the range of \$4 - \$10/$MTCO_2e$ (see alos Sections 15.1 and 15.2).

Although buyers have not yet been identified for the surplus reductions (9.35 $MTCO_2e$) that the Program could generate, the intention is that the implementation of the ERP will stimulate a system of environmental compensations at the regional or national level, potentially involving the Peru Forest Fund (which is presently being designed), or the country´s participation in international carbon markets. As to the latter, it should be clarified that the indigenous organizations are reluctant to sell their reduction in these markets because this opens the door to potential conflicts regarding their territories. The indigenous communities feel that emission reductions originating from their lands should be directed to multilateral funds or other mechanisms that permanently remove the reductions after the first sale, thus avoiding the possibility of their resale in secondary carbon off-set markets. If the reductions were handled in that manner, the indigenous emission reductions could be sold to private companies interested in reducing their annual carbon footprint, to systems of compensation for environmental impact caused by mega-projects or the extraction of non-renewable natural resources, or to buyers willing to sign contracts with non-transference clauses for the reductions sold.

The verification and certification of emissions in systems similar to that of the FCPF Carbon Fund or the VCS will facilitate these transactions both within the country and at the international level, regardless of the type of buyer. It should be noted that the emission reductions that are reported and verified will be registered with the National REDD+ Initiatives Registry in order to avoid: a) double or triple accounting of the reduction of emissions; b) relative ambiguity regarding the ownership of the reduction of emissions and c) inconsistencies between national GHG inventories and the general REDD+ accounting.

13. Preliminary assessment of the proposed ER Program in the context of the national Strategic Environmental and Social Assessment (SESA) and the Environmental and Social Management Framework (ESMF)[1]

13.1 Progress on SESA/ESMF

Please describe the country's progress in the implementation of SESA and the development of the ESMF, and their contribution or relationship to the proposed ER Program.

The objective of the SESA is to identify the main environmental and social risks and impacts of the implementation of REDD+ and measure and mitigate these impacts through structures, policies and activities specified in the Social and Environmental Monitoring Framework (ESMF)[1]. Thus, the importance of the SESA cuts across all components of implementation of the FIP/PRE and their specification is an important input for the design and implementation of the ESMF and for the monitoring of the proposed safeguards.

[1] The SESA is the assessment process to be used in FCPF REDD+ countries during R-PP implementation and REDD+ readiness preparation. The ESMF is an output of SESA that provides a framework to examine the issues and impacts associated with projects, activities, and/or policies/regulations that may occur in the future in connection with the implementation of the national REDD+ strategy but that are not known at the present time.

In general, the design of the SESA will be consistent with the social and environmental standards of Peruvian law (Law of Prior Consultation, No. 29785 and the corresponding regulation, established through Supreme Decree No. 001-2012-MC), the UNFCCC safeguards approved in Cancun, the safeguards of the ILO Convention No. 169, and other relevant policies of the World Bank and the IADB, including the Environmental and Safeguard Compliance Policy (OP-703), the Policy for the Management of Risks from Natural Disasters (OP 704), the Forest Development Policy, the operational policy regarding Indigenous Peoples and the Strategy for Indigenous Development (OP 765), the operational policy on Gender Equity in Development (OP 761), the Involuntary Resettlement Policy (OP 710) and the Information Access Policy (OP 102), as well as sectorial policies in Rural Development (OP 752) and Forest Development (OP 723)of the IABD. As to the World Bank, the design will comply with the World Bank safeguards for Indigenous Peoples (OP/BP 4.10), Involuntary Resettlement (OP/BP 4.12), Forests (BP 4.36), Physical and Cultural Heritage (OP/BP 4.11), and Natural Habitats (OP 4.04). Due to the importance of the indigenous populations of the forest, Peru will pay special attention to the standards regarding indigenous peoples.

To date, the activities related to the design and implementation of the SESA are limited primarily to communication, technical assistance and training related to its preparation, the preliminary identification of potential impacts, and the initiation of the process of aligning the Cancun, FIP, SESA and ENBCC safeguard standards. Additionally, during the R-PP and the preparation of the FIP PIN, the principal institutional, social and private sector stakeholders who could be impacted by the REDD+ activities were identified. Further development of the SESA as well as the ESMF will be undertaken during the design of the ERP during 2014 and 2015.

Taking into account the World Bank's Common Approach, the criteria that should be considered in the formulation of the safeguards include the following:

Social criteria:

- Prior participation and consultation, in accordance with national law
- Consideration of vulnerable groups
- Support land tenure and rights
- Improve living conditions and labor rights
- Representation.

Environmental criteria:

- Mitigation of environmental impacts
- Conservation of biodiversity and other ecosystem services
- Avoidance of the reversal and displacement of emissions

Process Criteria:

- Inclusion of safeguards in policies, law and regulations
- Obligatory transparency mechanisms
- Participation of stakeholders
- Monitoring and reporting system (safeguards information system)
- Grievance and conflict resolution mechanisms
- Monitoring and evaluation of safeguard compliance
- Application of the Voluntary Guidelines and those of the Indigenous Forum on Biodiversity within the framework of the Convention on Diversity and the Cancun safeguards.

Once the social and environmental safeguard priorities are defined at the national and sub-national levels through participatory processes, the Social and Environmental Management Framework (ESMF) will be developed. The Framework will define the linkage among actions, institutional arrangements, policies, competencies and the procedures necessary to implement the REDD+ safeguards.

In general, the processes for the preparation of the SESA will include the following:

i. The identification and analysis of the principal social and environmental issues related to deforestation and forest degradation, the agents involved and their causes, including the issues related to the applicability of the safeguards.

The analysis will include topics such as land tenure, the distribution of benefits, access to resources, and the potential impacts of interventions (social and environmental baseline). (**Completed**)
ii. The diagnosis of political, legal and institutional aspects related to the preparation of the ENBCC and the design of the ERP proposal. (**In progress**)
iii. The evaluation of existing capacities and capacity gaps to deal with social and environmental issues. (N**ot yet begun**)
iv. The development of frameworks and policies to mitigate and manage social and environmental risks that have been identified and to ensure safeguards. (**In early stages**)
v. The establishment of dissemination, information, communication and consultation mechanisms with relevant stakeholders for each of the previous steps. (**Exists, but not in use**).

The following tools should be developed for SESA implementation:

a. Establish a new organizational framework for SESA (for example, specific groups within the REDD+ Roundtables, advisory services through the REDD+ Technical Group, the role of the executive committees and the ECs). (**Partially in progress**)
b. Prepare a SESA procedure manual that includes the incorporation and monitoring of results of the ENBCC. (N**ot yet begun**)
c. Define grievance procedures and conflict resolution mechanisms. (N**ot yet begun**)
d. Establish linkage with the SNMCF, MRV, the National REDD+ Initiative Information Registry, and with the PMU and the regional government management entities. (N**ot yet begun**).

The ESMF is based on the results of the SESA and is an instrument for ensuring safeguard application and monitoring. The ESMF will include a monitoring system that will enable social and environmental evaluation, with respect to the baseline, of the impacts and risks of REDD+ activities, including the cumulative and indirect impacts and non-carbon benefits. Likewise, the ESMF should specify the procedures and policies related to the following topics:

- The social and environmental framework for the indigenous peoples.
- Analysis of the use and access rights to land and other natural resources.
- Impact of legal and institutional decisions on indigenous rights.
- Tenure of community land and other resources, keeping in mind aspects of gender and biodiversity.
- The involuntary displacement or loss of access to natural resources including the designation of protected areas and parks.
- Identification of measures to align activities or mitigate socio-environmental impact of activities of non-forest sectors, especially transportation infrastructure, among others.
- Plans to overcome institutional gaps and strengthen stakeholder capacities.
- Plans to promote the participation of affected groups.
- Mechanisms for the engagement of stakeholders, and for the resolution of conflicts and grievances.
- Mechanisms to protect areas of high biodiversity and cultural value.

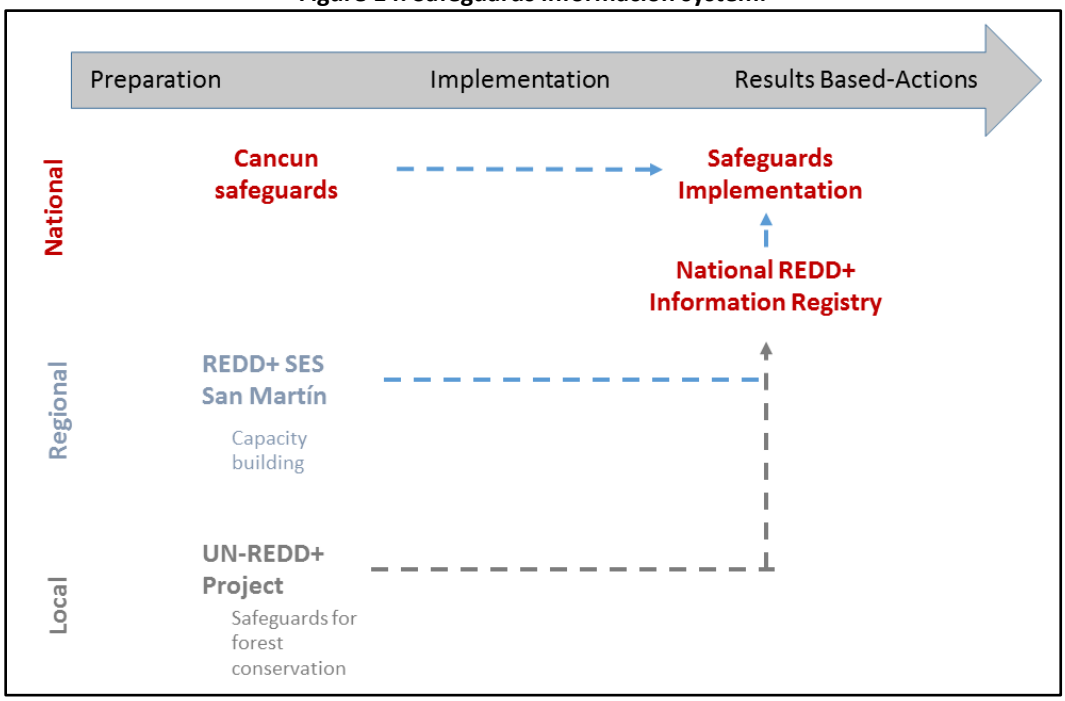
The SESA and ESMF will be closely linked to the MRV system, since the MRV, in addition to its emphasis on forest cover and carbon emissions, should include social and environmental impacts (for example, biodiversity, water, local income, sources of work) which are important at the local, regional and national levels. Thus, it is essential that the stakeholders at these levels participate in the MRV via the SESA and ESMF. The REDD+ and Indigenous REDD+ Roundtables (and their SESA subgroups) and the meetings indigenous communities and organizations are ideal venues for these activities.

13.2 Incorporation of SESA outputs and/or outcomes into the proposed ER Program
Based on the progress outlined in 7.1, please describe how the proposed ER Program is expected to make use of the outputs and/or outcomes of the SESA process. Provide an analysis of the ways in which activities planned under the proposed ER Program will rely on the measures and procedures included or to be included in the ESMF. Are there likely to be any gaps or issues regarding the compliance of the proposed ER Program activities with applicable safeguard standards, including the UNFCCC safeguards?

The SESA process will provide valuable information to the ERP during the design phase of the interventions via the identification of potential impacts, non-carbon benefits, and communities affected by the interventions. Likewise, it will channel recommendations from these communities into the design process.

During the implementation of the ERP, there will be constant feedback between the Program and the SESA/ESMF via the monitoring of environmental and social indicators. This monitoring will ensure that the activities of the ERP are in line with the safeguards specified in the SESA/ESMF. The information collected will be reported and stored in the National REDD Initiative and Information Registry (Figure 14). Additionally, the SESA and ESMF will serve as adaptive management tools that will facilitate the identification of potential problems and areas for improvement within the ERP and will measure the effectiveness of the responses to those problems. In a complementary manner, the policies and procedures specified in the ESMF should guide the formulation of responses to those problems and serve as instruments for the implementation of corrective measures, especially those related to the criteria mentioned in Section 13.1.

Figure 14. Safeguards información system.



13.3 Feedback and grievance redress mechanisms
Please describe the mechanism(s) that are or will be put in place to resolve any disputes regarding the proposed ER Program.

The design and implementation of REDD+ and its safeguards requires ongoing feedback from stakeholders. The inclusion of a feedback and grievance mechanism will help in resolving disputes as well as ensuring transparency.

The design of the mechanism to resolve conflicts and grievances will incorporate existing regulations and mechanisms. These include:

- The existing standard for access to public information,
- The Office of the Ombudsman and its mechanisms for filing complaints or reporting issues for subsequent investigation.
- INDECOPI and its specialized tribunals for the resolution of complaints regarding issues that restrict free competition.

- The Office of Social and Environmental Affairs, of MINAM, and the National Dialogue and Sustainability Office of the PCM are other entities that should be aligned in order to monitor, channel and support the resolution of conflicts and complaints in the process of REDD+ implementation.
- The Strategic Environmental Evaluation (EAE) specified in the National Environmental Management System.
- The agreement between the MINAM and the Office of the Ombudsman to jointly prevent and resolve socio-environmental conflicts.

Clearly, these norms and mechanisms need to be aligned and coordinated.

14. Land and resource tenure

14.1 Rights to territories and land, and mitigation benefits

Please describe the land use and land tenure context of the proposed ER Program, and if and how rights to territories and land and mitigation benefits from REDD+ are reflected in traditional practices and codified in legal and/or regulatory frameworks.

In the Peruvian Amazon, there are 25 million hectares of forestlands to which no legal rights have been allocated. A large part of this area has been settled from time immemorial by indigenous peoples who claim title to these lands. Today, these areas are being heavily deforested, at an annual deforestation rate of 0.24% in territories without allocated rights (Table 7 in Section 5.1), compared with an average rate for the country of 0.14%. Allocation of property rights, especially in forestlands without allocated forest rights, is essential if emissions stemming from deforestation are to be reduced.

Judicial assurance of rural land tenure, especially of native communities with land claims awaiting decisions by the state (as AIDESEP and CONAP point out), is an enabling condition for a significant percentage of public forest conservation policy. Judicial assurance of rural lands permits the use of forest resource management instruments, such as, for example, monitoring, enforcement and compliance with laws for the protection of forest resources, as well as policy that promote sustainable forest use (for example, community forest management, program of payments for environmental services).

A number of laws and institutions affect land rights, tenure, and use. Chief among them, the new Forestry Law (29763) recognizes a series of rights related to the use of forest land, including that assigned to indigenous forest communities (11.5 million ha) and territorial reserves for indigenous peoples in voluntary isolation; these lands include 11.5 million ha and 1.8 million ha, respectively (Table 7, Section 5.1). At a general level, the Forestry Law recognizes the following rights: participation of stakeholders in decision making related to forest land use; prior consultation of indigenous peoples regarding use of their land (in line with Law of Informed, Prior Consent); equity of access (including gender considerations) to forest resources, opportunities for development and the distribution of benefits; and the recognition, respect, and valuation of forest cultures, especially traditional knowledge in the management and use of forest resources and biodiversity.

More specifically, the Law recognizes the rights of rural or indigenous communities to the exclusive use of the ecosystem goods and services associated with titled land or to which they have usufruct rights. As part of these rights, indigenous communities can possess, access, and use production and protection forests to assure traditional uses and lifestyles. They can manage forests within their communal lands according to their cosmovision, cultural and spiritual values, and traditional uses, and are responsible for determining the internal use, management, and control of their communal lands according to traditional uses, norms, and organizational structures. Within this framework, the State has the obligation to strengthen communities´ capacities for forest management and commercialization and to incorporate traditional knowledge in technical norms that regulate community forestry management. In a complementary fashion, the Law of Indigenous Communities and Agrarian Development of the Jungle (Law 22175) is aimed at fostering agricultural development of indigenous lands via projects for the integral and integrated use of natural renewable resources.

In general, the MINAGRI has overall responsibility for land titling; within the Ministry, the General Bureau of Land Use Planning (DGOT) has responsibility for environmental mapping, land use planning, and land use zoning. The Vice Ministry of intercultural Affairs within the Ministry of Culture has overall responsibility for indigenous affairs and serves as the principal public authority on matters of prior consent.

At present, the land surveying, titling, and registration process is being restructured under MINAGRI. Past loans from the IADB under the Land Titling and Registration Program (PTRT) have helped to title 2 million and survey 2.5 million of 3.6 million properties. The third phase of this program is presently under negotiation; goals include surveying, titling, and registering 536,000 of 1.6 million properties outstanding, 270 of 735 untitled rural communities (of a universe of 6,025 communities), and 100 of 237 untitled or unregistered indigenous communities of a total of 1535 indigenous communities.

Currently, there are approximately 1,300 titled native communities, but not all have geo-referenced survey information, nor are all registered in the Public Registry. In the opinion of the indigenous organizations, the number of untitled indigenous communities is greater than the 237 mentioned above. They have identified 988 communities that have yet to be recognized or titled, and the establishment of 8 communal reserves and 5 territorial reserves is pending.

Within this sometimes complicated milieu, a primary focus of the ERP interventions in the three zones is defining and titling land with unassigned rights, since half of current deforestation is associated with that land tenure category (see Section 5.1). Another priority is the titling and registration of indigenous lands, since 13% of deforestation is associated with indigenous lands (see Section 5). Indigenous territories represent a significant portion (15%) of the Amazon forests and 45% of the zone of intervention in Atalaya, 21% of the Tarapoto-Yurimaguas zone and 4% of the Pto. Maldonado – Iñapari zone. However, despite their importance, their current legal status is uncertain, as noted above. The exact determination of titled land or land use rights granted to the indigenous communities is of vital importance both to indigenous groups and for the design of the ENBCC, since these rights affect how land can be used. The lack of survey and titling information has resulted in an increase in social conflicts arising from the invasion of lands by internal immigrants and the overlapping of rights among indigenous communities, rural populations, and forest concessions, among others.

As a result, the ERP will pay special attention to the survey, titling, and assignment of rights to indigenous lands, and will design solutions that can be applied and replicated nationwide. This will be aided by the FIP, since $7 million are allocated to the titling of indigenous lands within the zones of intervention and a part of the $5.5 million of the Specific Donations Mechanism will be allocated to the same purpose outside the zones of intervention.

15. Benefit Sharing

15.1 Description of envisioned benefit-sharing arrangement for the proposed ER Program.
Please describe the benefit-sharing arrangements that are envisioned to be used for this proposed ER Program.

The proposal for the distribution of benefits is in an early stage of preparation. This proposal will be based on the regulatory framework provided by the new Forestry Law which recognizes the rights of interested citizens to participate in decision making related to the definition, application, and monitoring of policies and measures related to forest use and management, and equitable access to development opportunities and the distribution of benefits. The Law also recognizes the benefits derived from the economic use of ecosystem services as a usufruct right awarded by the State to individuals, rural or indigenous communities, or concessionaires.

The system´s final form will be influenced by considerations related to the types and costs of the benefits produced and the form and distribution of compensation. With regards to costs, the establishment of enabling conditions (e.g. policies, improved governance, monitoring systems, inventories, capacity improvement, and land titling) entails significant indirect costs at various jurisdictional levels that are difficult to quantify, but are essential to achieving

emissions reductions. On the other hand, direct costs related to management systems that produce the desired benefits are more easily estimated. Although complete cost recovery via compensation for emissions reductions is unlikely, it is important that stakeholders recognize that indirect and direct costs exist at various jurisdictional levels.

Besides costs, a system of compensation should also account for carbon and non-carbon benefits. The reduction of deforestation reduces GHG emissions, but can also have positive effects on biodiversity, the maintenance of critical areas for the provision of ecosystem services, and the well-being of forest dwellers. These additional non-carbon benefits can be factored into the prices of emission reductions. For example, "gourmet" carbon reductions produced in association with assorted non-carbon benefits of biodiversity, protection of critical areas, and livelihoods, could be expected to command a higher price than conventional carbon (for example, from reforestation or sustainable agroforestry systems) that has little impact on other non-carbon benefits.

The form of compensation for emissions reductions may be monetary or non-monetary. Non-monetary compensation can include things such as infrastructure, technical assistance, or other services provided to local communities. Hence, the form of compensation may vary with the type and interests of the stakeholders involved.
Finally, attention must be paid to the distribution of the benefits. Currently, the use of the REDD+ nested jurisdiction approach for benefits distribution is being discussed. In this system, a portion of the payments received for emissions reductions will be used to compensate the creation of enabling conditions and other transaction costs at the national, regional, or local levels, with the remaining portion of the payment being assigned to projects and stakeholders directly involved in reducing emissions. Experience from Acre, Brazil, suggests that a simple system for benefit distribution, whereby the majority of the payments are received by those directly responsible for emissions reductions, may be desirable.

Clearly, these issues require more in-depth discussion with the stakeholders before consensus is reached. Key participants in this process include representatives of the Ministries of Environment, Agriculture and Irrigation, Economy and Finances, and Intercultural Affairs, CIAM, the regional governments, indigenous organizations such as AIDESEP and CONAP, members of the REDD+ and Indigenous REDD+ Roundtables, and other civil society organizations. It is envisioned that this process will occur during the next 18 months.

15.2 Link between the envisioned benefit-sharing arrangement and the activities in the proposed ER Program. *Please explain how these benefit-sharing arrangements would support the activities identified in section 5.3 to address the drivers of deforestation and forest degradation. Identify, if possible at this stage, potential issues or constraints that may emerge in development of the ER Program that could need additional progress in order to effectively implement the benefit-sharing mechanisms.*

The benefit sharing arrangement should compensate efforts resulting in reductions of emissions and, at the same time, encourage future implementation of REDD+ mechanisms. As indicated in the Section above (15.1), a nested jurisdictional approach that takes into account the partial costs of improvement in enabling conditions, those of REDD+-associated transactions (e.g. monitoring costs), as well as direct costs of reducing emissions would provide incentives in support of Program activities related to improved governance and coordination, increased productivity and profitability of sustainable forestry and agricultural production systems, and the strengthening of capacities of diverse actors at various levels. These incentives could be monetary in nature, thus helping allay implementation costs, or could take the form of provision of services (e.g., technical assistance, training) to stakeholders. They should also stimulate adoption by new stakeholders.

As indicated in Tables 15 and 18 and section 16.1, carbon and non-carbon benefits are expected to vary among the three zones of intervention. Carbon benefits are expected to increase in the order Atalaya, Pto. Maldonado-Iñapari, and Tarapoto-Yurimaguas (Table 15), while non-carbon benefits will vary depending on the type of benefit and the intervention zone (Table 18 in Section 16.1). In the majority of cases, benefits will be produced at the local level; in some cases of non-carbon benefits such as improved land titling and assignment of land rights, the establishment of enabling conditions, and market Innovations could have positive impacts at higher jurisdictional levels as well.

There are various issues related to the design of the distribution of benefits that should be resolved during the design phase of the ERP. As indicated in Section 15.1 above, achieving consensus with regards to the distribution of benefits among jurisdictional levels, including the magnitude and the form of the benefits, may be problematic due

to the complexity of the issue itself as well as the number and diversity of stakeholder interests involved. In order to respond to this situation, the participatory design of a transparent and simple solution (for example, determining a percentage of the benefits to be assigned to each jurisdictional level, with a higher percentage being assigned to the local level, as in Acre, Brazil) may facilitate agreement on this matter. Clearly, a participatory approach is needed in order to achieve broad support among the Program´s diverse stakeholders.

A key question related to benefit distribution is the magnitude of the benefits required by stakeholders involved in sustainable forest management, agroforestry system, conservation, and reforestation in order to induce a virtuous cycle whereby compensations for the reduction of emissions result in greater income and competitiveness in "green" markets, which in turn stimulate further efforts to reduce emissions. Clearly, the determination of the magnitude of payments required to produce a system with positive feedback is an essential aspect of the design of the benefit sharing arrangement that will be discussed in the coming months.

15.3 Progress on benefit-sharing arrangements
Describe the progress made thus far in the discussion and preparation of the benefit-sharing arrangements, and who has been participating in this process.

As indicated in Section 15.1, there are various proposals and issues under discussion related to benefit-sharing arrangements, some of which have been discussed with AIDESEP and CONAP. These include: the magnitude and form of compensation and the structure of benefit distribution. The main participants in this process include: PNCBMCC, MINAM, MINAGRI, MEF, the Vice Ministry of Intercultural Affairs, CIAM, regional governments, AIDESEP and CONAP representatives, and the civil society. Although the progress made to date is incipient, the goal is to have the design for the distribution of benefits completed by the end of 2015.

16. Non Carbon Benefits

16.1 Expected social and environmental benefits
Please describe the environmental and social benefits, other than emission reductions, that the proposed ER Program is planning to achieve; and any other ways in which the ER Program would contribute to broader sustainable development.

During past consultations, a number of institutional, environmental and social non-carbon benefits were identified (see Table 18 below); of these, criteria related to biodiversity and indigenous peoples were explicitly incorporated in the process of prioritizing the zones of intervention. Various non-carbon benefits, including those related to land rights and titling and the improvement of enabling conditions and governance, cut across zones of intervention and levels of governance. On the other hand, the importance of non-carbon benefits related to biodiversity, indigenous groups, the competitiveness of agriculture and forestry, and markets are more local in nature and will vary with the zones of intervention.

During the design of the ERP, these benefits will be discussed and prioritized with local stakeholders. It will also be necessary to specify in greater detail the indicators and baselines, the monitoring and measurement methodologies and the participation of local groups in their application, and the plan for their inclusion in the MRV system and in the National REDD+ Initiative and Information Registry.

Additionally, as mentioned in section 15.2, the implementation of the ERP may produce non-carbon benefits on a large scale, such as increased producer competitiveness and increased national competitiveness in "green" value chains and markets. Methodologies for measuring these benefits need to be developed.

Table 18. Non-carbon socio-economic, environmental, institutional, and governance benefits identified and their importance in each of the zones of intervention.

Benefit	Indicator	T-Y	Ata.	MDD
Poverty reduction among indigenous peoples	i) Men and women's income, assets and/or access to natural resources. ii) Changes in access to basic services.	I	H	H
Reduction of the loss of biodiversity and maintenance of forest ecosystem services.	i) Variation in forest fragmentation (rate and area) and/or conservation rate based on demonstration plots. ii) Reduction in the rate of native forest loss in the area of intervention.	I	I	H
Enabling conditions consolidated through use of instruments, policy and institutions for sustainable forest landscape management.	i) Approved instruments for facilitating land use planning processes. ii) Agreements between the MINAM, MINAGRI and regional governments on REDD+ matters. iii) National Monitoring, Reporting and Verification System (MRV) established.	H	H	H
Empowerment of indigenous peoples and other local actors in forest management.	i) # of community forest management plans with Assembly approval. ii) # of communities participating in added-value chains. iii) Development of national legislation for community forest management. iv) Operating community forest management instruments (regulation and application). v) Percentage of indigenous women participating in the activities and decision-making of their organizations. vi) Percentage of rural women participating in the activities and decision-making of their organizations.	I	H	H
Investment in forest governance (improvement of forest and environmental governance).	i) Forest planning agreements. ii) Operating conflict resolution mechanisms. iii) Number of conflicts handled and pending. iv) Operating forest oversight bodies. v) Community early warning anticorruption mechanisms.	H	H	H
Improved land titling and assignment of land rights	i) Number of titles or other rights of use or access to land and natural resources granted to men and/or women. ii) Number of titles or other rights of use or access to land and natural resources granted to native communities. iii) Number of ha of legally titled land.	H	H	H
Greater competitiveness of sustainable use of forest lands.	i) Venture capital earnings invested in forests. ii) Productivity increase per hectare of forest or area of agriculture production. iii) Economic profitability of activities supported by the project.	H	L	I
Innovation and impact on markets (business model and technological improvement).	i) Number of people or communities adopting innovative management technologies and models. ii) Participation in new markets and opening of new niches. iii) Credit for sustainable agricultural or forestry management.	H	L	I

Note: H = High, I = Intermediate, L = Low; T-Y = Tarapoto-Yurimaguas, Ata. = Atalaya, MDD = Madre de Dios (Pto. Maldonado-Iñapari),

16.2 Diversity and learning value
Please describe the innovative features of the proposed ER Program and what learning value the proposed ER Program would bring to the FCPF Carbon Fund.

The most innovative characteristics of the ERP proposal are: 1) the efforts to include the indigenous communities in the decision-making related to the design, management and implementation of the interventions; 2) the synergy and complementarity between the FIP and ERP program that result in greater effectiveness and efficiency in the use of national and international cooperation funds; 3) inclusion of the concept of differentiated payments for the types of carbon within the benefit distribution system; 4) the effort to link the payments for emissions reductions of by the ERP with a broader national system of payments for ecosystem services (the Peru Forest Fund), and 5) emerging steps in using the ERP as a step to improve the country's competitiveness in low emissions global markets.

Additionally, it is estimated that the program will create solutions to various problems that affect deforestation and emission in the LULUCF sector in Peru:

- The lack of effective coordination, both vertical and horizontal, between the institutions and policies.
- The strengthening of new local institutions (such as the ARAs and the REDD+ Roundtables) so that they can assume greater responsibility for implementing REDD+ interventions.
- The inclusion of and strengthening of diverse stakeholders, especially the indigenous communities which have been historically marginalized from such processes and is inadequately prepared to handle the challenges involved.
- The emphasis on improving enabling conditions and local governance as a key to reducing deforestation and improving productivity in production systems within forest lands.

It is expected that these processes will prepare the way for low-emissions-development in the Peruvian Amazon and at the national scale. Payments for emission reductions to producers will help to improve their competitiveness in markets based on sustainable or "green" supply chains. The reduction of carbon emissions from the Amazon forests also represents a reservoir of relatively cheap carbon that can help neutralize the carbon footprint of other domestic sectors that emit carbon and thus improve national competitiveness in global markets.

The experiences from the ERP can also serve as a seed for the development of a national market for emissions reductions, payments for environmental services, and environmental compensation, which will help give greater value to the forests and thus aid in reducing deforestation.

17. Progress on registries

17.1 National registry
Please include a short description of the relationship of the proposed ER Program to national REDD+ activity management arrangements, and if the proposed ER Program will be part of any system to track REDD+ or other emissions reduction activities (e.g., a REDD+ registry).

Currently, the MINAM is developing a National Information Platform for REDD+ initiatives as the first phase in the National REDD+ Initiatives Information Registry, which will contribute to the transparency of information related to REDD+. In this phase, the Registry consists of a list of REDD+ projects, but eventually it will contain more detailed information generated by the ERP and by other projects regarding reference scenarios, emission reductions achieved, SESA impacts, non-carbon benefits and property rights to reduced emissions, in order to avoid: double or triple accounting of emission reductions; b) ambiguity with regard to the ownership of emission reductions; c) inconsistencies between national GHG inventories and the general REDD+ accounting and d) non-fulfillment of socio-environmental safeguards. In the case of the reductions of emissions from indigenous communities the Registry should include annotations related to the permanent removal of the emission reductions after the first sale.

The Registry will be aligned with the National Network of GHG Inventories, proposed by Peru within the framework of the Second National Communication on Climate Change, and will contain information regarding GHG emissions by sector. A legal version of the proposal has been prepared and is being analyzed in order to put it into effect. Eventually, the REDD+ Registry should analyze the possibility of merging with the National Public Registry.

18. List of acronyms used in the ER-PIN

Please include an explanation of any institutional or other acronyms used. Add rows as necessary.

Acronym	Meaning
AFP	Pension Fund Administrators
AGROIDEAS	Compensation for Competitiveness Program
AGRORURAL	Program for Agrarian Rural Productive Development
AIDESEP	Interethnic Association for the Development of the Peruvian Amazon Forests
ANA	National Water Authority
ANP	Protected Natural Area
APROFU	Association of Forest Producers of Ucayali
ARA	Regional Environmental Authority
BAU	Business-as-usual
CAF	Andean Community for Development
CCNN	Indigenous communities
CENAGRO	National Agriculture and Livestock Census
CFM	Community forestry management
CGFFS	Forest and Wildlife Management Committee
CIAM	Amazon Interregional Council
COFIDE	Development Finance Corporation
CONAFOR	National Forest and Wildlife Council
CONAP	Peruvian Confederation of Amazonian Nations
COP	Conference of the Parts
CORPIAA	Regional Coordinator of Indigenous Peoples, AIDESP, Atalaya
CO2e	Equivalent carbon dioxide
DGAAA	General Bureau of Agrarian Environmental Affairs
DGCCDRH	General Bureau for Climate Change, Desertification and Water Resources
DGEVFPN	General Bureau of Natural Heritage Assessment, Valuation, and Financing
DGFFS	General Forestry and Wildlife Bureau
DGOT	General Bureau for Land Use Zoning
DRA	Regional Agrarian Bureau
EAE	Strategic Environmental Evaluation
EC	Executive Committee
ENBCC	National Forests and Climate Change Strategy
ENCC	National Climate Change Strategy
ER	Emissions Reductions
ERP	Emissions Reduction Program
ERPEC	Emissions Reduction Program Executive Committee
ER-PIN	Emissions Reduction Project Idea Note
ESMF	Environmental and Social Management Framework
FAO	Food and Agriculture Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
FECONAPA	Federation of Native Communities of the Province of Atalaya
FENAMAD	
FIP	Forest Investment Program
FMT	Facility Management Team of the Forest Carbon Partnership Facility
FONAM	National Environment Fund
GCFTF	Governors´ Climate and Forest Task Force
GEF	Global Environmental Facility
GHG	Greenhouse Gas Emissions
GIZ	German Society for International Cooperation
Gg	Gigagrams
GL	Local governments

GOREs	Regional governments
GR	Regional governments
IADB	Inter-American Development Bank
IIAP	Peruvian Amazon Research Institute
IIRSA	Initiative for the Integration of the Regional Infrastructure of South America
ILO	International Labor Organization
INDECOPI	National Institute for the Defense of Competition and the Protection of Intellectual Property
INEI	National Institute of Statistics and Information
INIA	National Institute for Agrarian Innovation
IPCC	Intergovernmental Panel on Climate Change
JICA	Japanese International Cooperation Agency
KfW	German Development Bank
LEC	Local Environmental Commission
LULUCF	Land use and land-use change and forestry
MEF	Ministry of Economy and Finances
MINAGRI	Ministry of Agriculture and Irrigation
MINAM	Ministry of the Environment
MINCETUR	Ministry of Foreign Commerce and Tourism
MINCUL	Ministry of Culture
MRV	Monitoring, Reporting, and Verification System
MTCO2e	Million Tons of Carbon Dioxide equivalents
NAMA	Nationally Approved Mitigation Action
NGO	Non-governmental organization
ODA	Overseas Development Assistance
OEFA	Office of Environmental Evaluation and Control
ORAU	AIDESP Regional Organization, Ucayali
OSINFOR	Supervisory Body for Forest and Wildlife Resources
OTCA	Organization of the Treaty for Amazonian Cooperation
PC	Participants Committee of the FCFP
PCM	Presidency of the Council of Ministers
PIN	Program Idea Note
PlanCC	Climate Change Planning Project
PMU	Program Management Unit
PNCBMCC	National Program for Forest Conservation and Climate Change Mitigation
PPF	Permanent Production Forests
PROFONAMPE	Fund for the Promotion of Natural Protected Areas of Peru
PRONANP	National Program of Protected Natural Areas
REDD+	Reducing emissions from deforestation and forest degradation
R-PIN	Readiness Program Idea Note
R-PP	Readiness Preparation Proposal
SENACE	National Service for Environmental Certification
SEP	Stakeholders Engagement Plan
SERFOR	National Forest and Wildlife Service
SERNANP	National Natural Protected Areas Service
SESA	Strategic Environmental and Social Assessment
SFM	Sustainable forest management
SINAFOR	National System for Forest and Wildlife Management
SINEFA	National Environmental Assessment and Control System
SNIP	National Public Investment System
SNMCF	Nation System for Forest Cover Monitoring
TCG	Technical Consultative Group
TMU	Territorial Management Unit
UGFFS	Forest and Wildlife Management Units

UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
UNREDD	United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
VCS	Voluntary Carbon Standard
VCS-JNRI	Voluntary Carbon Standard- REDD+ Nested Jurisdiction Initiative
WB	World Bank

ANNEX I: FINANCING PLAN SUMMARY TABLE

Expected uses of funds	Description	2015	2016	2017	2018	2019	2020	2021	Total
Costs related to developing the ER Program (e.g., monitoring costs)	Donation IADB (Includes Participation Plan and design of the projects)	1.95	1.95						3.9
Operational and implementation costs	Total			16.68	16.68	16.68	16.68	16.68	83.4
Financing costs (e.g., interest payments on loans)	IADB loans have a 10 year grace period								
Other costs	*(please explain)*								
	Total uses	**1.95**	**1.95**	**16.68**	**16.68**	**16.68**	**16.68**	**16.68**	**87.3**
Expected sources of funds	**Description**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**Total**
Grants	*FIP/]IABD*	1.95	1.95	4.58	4.58	4.58	4.58	4.58	26.8
	Counterpart funds			7.46	7.46	7.46	7.46	7.46	37.3
	Sub-Total	**1.95**	**1.95**	**12.04**	**12.04**	**12.04**	**12.04**	**12.04**	**64.1**
Loans	*FIP/IABD*	0	0	4.64	4.64	4.64	4.64	4.64	23.2
Revenue from REDD+ activities (e.g., sale of agricultural products)	*Cacao*	0	0	-385.7	137.9	65.5	178.4	109.6	105.7
	Castaña	0	0	0	5.45	5.45	5.45	5.45	21.8
	CFM	0	0	0	10.52	10.52	10.52	10.52	42.08
	SFM	0	0	0	17.34	17.34	17.34	17.34	69.36
	Total			**-385.7**	**171.21**	**98.81**	**211.71**	**142.91**	**238.94**
Revenue from sale of Emission Reductions (contracted)		0	0	0	0	0	0	0	0
Revenue from sale of additional Emission Reductions (not yet contracted)	Due to the absence of formal markets, prices for carbon vary widely. We use an estimate of $\$7/TCO_2e$.	0	0	37.8	37.8	37.8	37.8	37.8	189
	Total sources (before taxes)	**1.95**	**1.95**	**-331.22**	**225.69**	**153.29**	**266.19**	**197.39**	**515.24**
Net revenue before taxes (=total sources – total uses)		**0**	**0**	**-347.9**	**209.01**	**136.61**	**249.51**	**180.71**	**427.94**

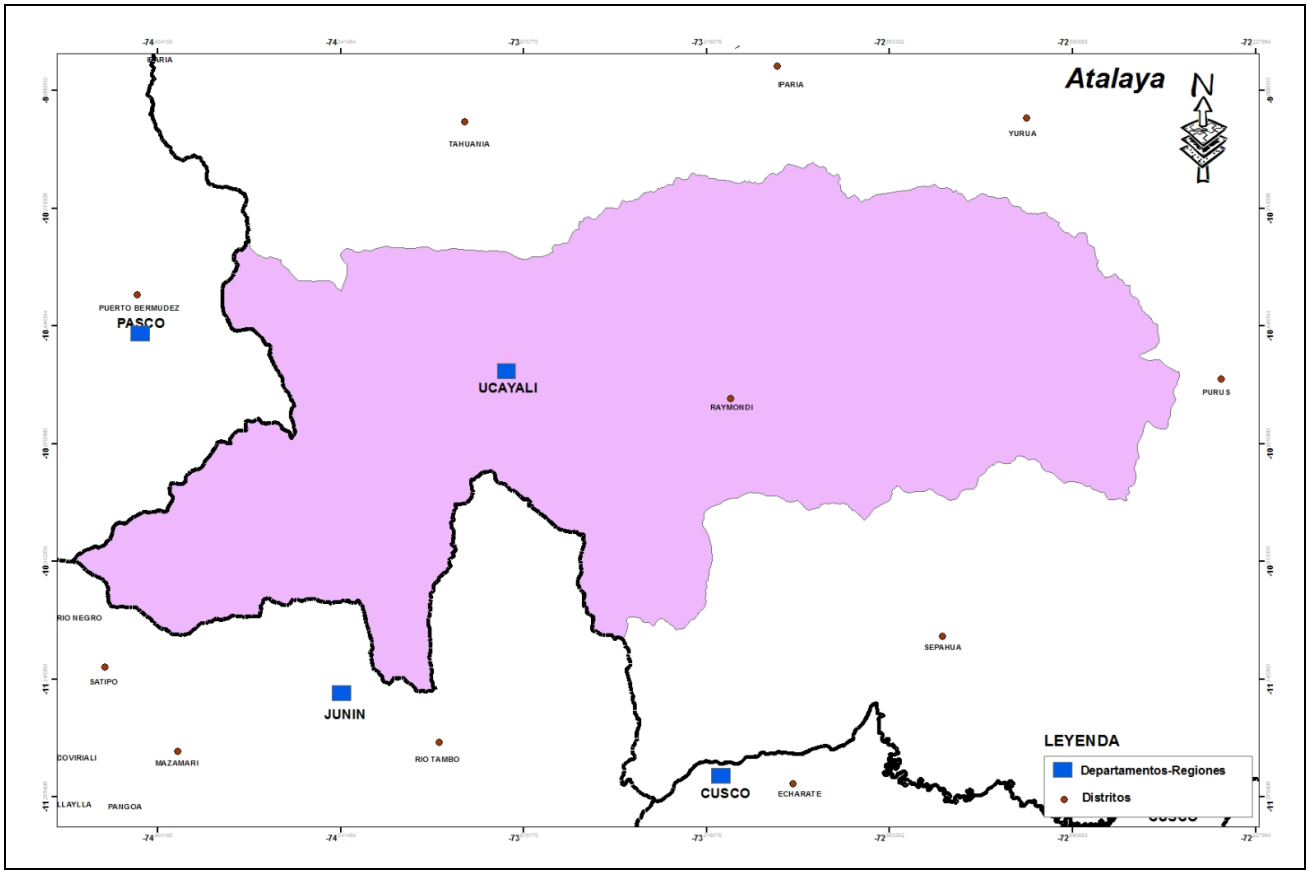
ANNEX 2. FINANCIAL PLAN FOR THE FOREST INVESTMENT PROGRAM IN PERU

	Outcomes	MDB	Expected Allocation of funds from the Forest Investment Program (US$)			Expected Co-finance (US$)	Co-financing partners**	Total (US$)
			Grant	Loan	Total			
Project # 1: Integrated forest landscape management along the main route between Tarapoto and Yurimaguas in the Regions of San Martin and Loreto	Governance and land use planning	IDB	6,000,000	4,400,000	1,600,000	1,000,000	GoPE	2,600,000
	Legalization, titling and registration of property rights				4,200,000	1 000 000	IDB	5,200,000
	Enhancement of the value of environmental assets of forests and degraded areas				4,700,000	5,300,000	GoPE, JICA	10,000,000
	Project Management		1.000,000	0	1,000,000	0	NA	1,000,000
	Stakeholder Involvement Plan (PIA)		800,000	0	800,000	0	NA	800,000
	Project design		370,000	0	370,000	0	NA	370,000
	Sub-total (US$) Project # 1.		**8,170,000**	**4,400,000**	**12 570 000**	**7 300 000**		**19,870,000**
Project # 2: Integrated landscape management in Atalaya, Ucayali Region	Governance and land use planning	BM	4,000,000	6,400,000	1,800,000	2,500,000	GoPE	4,300,000
	Legalization, titling and registration of property rights				2,000,000	2,000,000	IDB	4,000,000
	Enhancement of the value of environmental assets of forests and degraded areas				6,600,000	500,000	WB, JICA	7,100,000
	Project Management		1,000,000	0	1,000,000	0	NA	1,000,000
	Stakeholder Involvement Plan (PIA)		800,000	0	800,000	0	NA	800,000
	Project design		400,000	0	400,000	0	NA	400
	Sub-total (US$) Project # 2.		**6,200,000**	**6,400,000**	**12,600,000**	**5,000,000**		**17,600,000**

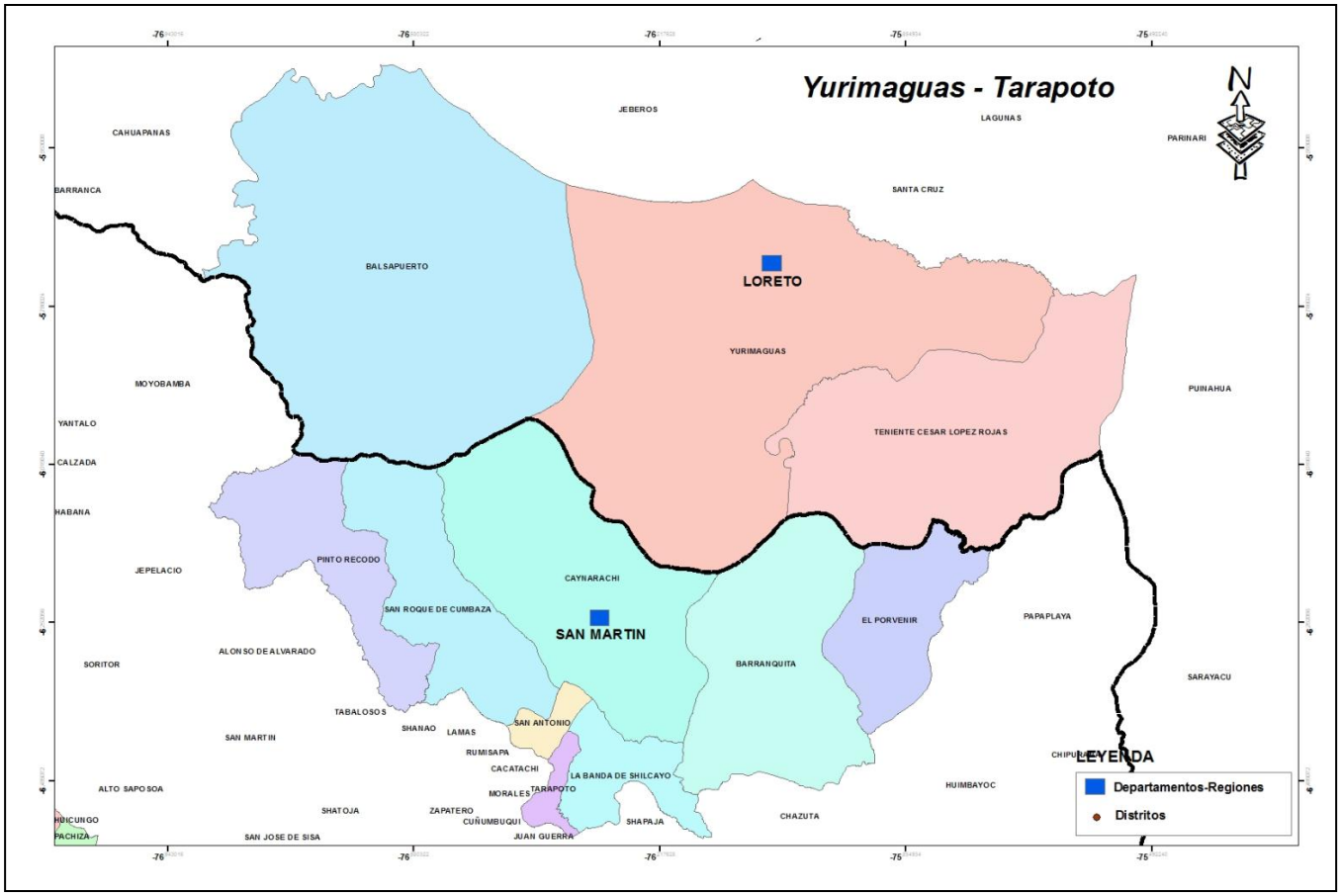
Outcomes		MDB	Expected Allocation of funds from the Forest Investment Program (US$)			Expected Co-finance (US$)	Co-financing partners**	Total (US$)
			Grant	Loan	Total			
Project # 3: Integrated landscape management along the main route between Puerto Maldonado and Inapari and in the Amarakaeri Communal Reserve and beneficiary communities in the Region of Madre de Dios	Governance and forestry planning	IDB	3,500,000	6,700,000	1,400,000	8,000,000	IDB, GOPE	9,400,000
	Legalization, titling and registration of property rights				1,500,000	1,000,000	IDB	2,500,000
	Enhancement of the value of environmental assets of forests				7,300,000	5,300,000	IDB, JICA	12,300,000
	Project Management		1,000,000	0	1,000,000	0	NA	1,000,000
	Stakeholder Involvement Plan (PIA)		800,000	0	800,000	0	NA	800,000
	Project design		370,000	0	370,000	0	NA	370,000
	Sub-total (US$) Project # 3.		**5,670,000**	**6,700,000**	**12,370,000**	**14,000,000**		**26,370,000**
Project # 4. Strengthening of national forest governance and innovation	Policy reforms and strengthening of forest management tools	IDB	5,000,000	5,700,000	1,000,000	1,000,000	FCPF	2,000,000
	Legalization, titling and registration of property rights				500,000	1,000,000	IDB	1,500,000
	Deforestation monitoring				3,500,000	4 000 000	FCPF, KfW, Moore, JICA	7,500,000
	Innovation and technology transfer				3,700,000	2,000,000	IDB, WB	5,700,000
	Innovation in finance mechanisms				2,000,000	3,000,000	GoPE	5,000,000
	Project Management		1,400,000	0	1,400,000	0	NA	1,400,000
	Project design		360,000	0	360,000	0	NA	360,000
	Sub-total (US$) Project # 4.		**6,760,000**	**5,700,000**	**12,460,000**	**11,000,000**		**23,460,000**
Total (US$) of the Forest Investment Plan			**26,800,000**	**23,200,000**	**50,000,000**	**37,300,000**	**14 projects**	**87,300,000**

- Define in greater detail with the national institutions, the regional governments, the national and regional REDD+ Roundtables and the Indigenous REDD+ Roundtables, the business sector, and civil society the make-up of the TCG and ECs, and initiate with them the design and implementation of the interventions in each zone.
- Design in detail the management structures of the ERP at the national and sub-national levels.

ANNEX III: Zone of intervention: Atalaya



ANNEX IV: Zone of intervention: Tarapoto - Yurimaguas



ANNEX V: Zone of intervention: Madre de Dios